BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

A Progress Report on the BAI PMF Pilot
April 2019
ABOUT THIS REPORT

In Budget 2016, the Government of Canada announced its commitment to work with stakeholders to develop a performance measurement framework for business accelerators and incubators (BAIs) in Canada. The first step toward increased collaboration among BAIs in Canada to create a national solution for data collection and performance reporting took place on February 10, 2017 in Toronto, Ontario. Leaders from 18 BAIs discussed opportunities and challenges of creating a national performance measurement framework.

A BAI Steering Committee consisting of a representative group of BAI leaders and policy makers was subsequently formed to continue an inclusive national discussion and provide leadership in crafting a national performance measurement solution that works for the BAI community and its partners in government. The Committee’s overarching mandate has been to work alongside the Government of Canada in partnership to a) establish a performance measurement framework, and b) pilot a performance measurement platform for BAIs. The primary output of the Committee’s work was a Performance Measurement Framework (PMF) launched in February 2018.

The pilot remains ongoing, with data collection for the year 2017 now complete. Beginning in January 2019, the project partners and the participant community began gathering feedback on the initial stages of the pilot process. Part I of this report provides a synthesis of feedback received from government partners and industry stakeholders, documents the progress achieved to date, and catalogues some ongoing challenges that will be addressed as the pilot progresses. The feedback and learnings from the pilot, in turn, have been consolidated and integrated into an updated version of the performance measurement framework – termed “PMF 2.0.” As a next step, this new and refined version of the framework will be implemented for data collection in year 2 of the PMF pilot, alongside a national roll-out.

In addition to presenting an updated survey instrument with clear definitions for the key performance metrics, this document serves as an operating manual for the BAI performance measurement process. As such, Part II of the report provides the necessary background for onboarding new BAI participants and government partners, including the initial rationale for establishing a national performance measurement framework and a simple logic model that guides the design of the PMF. The report describes the approach for collecting, analyzing and reporting the data, including the methodology that will be used by approved researchers to produce the descriptive statistics and econometric analyses that will illuminate the relationship between BAI programs and the economic performance of client firms. Finally, the report details the operations and administration of the performance measurement platform, including processes for obtaining consent to share information and protecting the confidentiality of data.

The report was authored by Anthony Williams, president and co-founder of the DEEP Centre, with input from the project partners and participants in the BAI PMF.
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PART I. MANDATE AND PROGRESS TO DATE

Public sector organizations have long recognized the need to develop and deploy performance measurement systems to ensure that they have timely, strategically focused, objective and evidence-based information on their performance, in order to produce better results and remain high-performance organizations. Nowhere is this arguably more important than when it comes to ensuring that public investments in innovation and economic development establish a robust foundation for developing the companies, jobs and industries of the future. With this goal in mind, the Department of Innovation, Science and Economic Development (ISED) has been working with a representative group of policy leaders and stakeholders to develop a performance measurement framework for business accelerators and incubators (BAIs) in Canada. This framework will enable companies to choose their best options for support, help BAIs to benchmark their performance and improve their programming, and assist governments at all levels to increase the effectiveness of public investments in this area.

To date, the work of the BAI community and its partners in government has resulted in the development of a standardized reporting framework that establishes consistent definitions for job creation, revenue generation, investment and other outcome-related metrics; a common performance measurement platform that streamlines the collection, analysis and reporting of data; and a pilot process that was launched in early 2018 that provided a representative group of BAIs with an opportunity to test and refine the framework before rolling it out on a national basis. Other deliverables to date include a set of agreements to govern the collection and reporting of client data and an agreed process and methodology for analyzing the economic impact of BAIs.

This report is intended to guide the BAI community and its partners in government as they proceed with the next phase of building a national performance measurement solution. It presents an updated Performance Measurement Framework (termed BAI PMF 2.0) which will form the basis of a national performance measurement solution, documents the progress achieved during the pilot process, and reflects the key decisions and design inputs of the pilot participants and public sector partners. Specifically, the report:

- Outlines the rationale for establishing a national PMF, describes the feedback and action items that informed the development of the BAI PMF 2.0, and provides a simple logic model that guides the ongoing design and implementation of the PMF.
- Provides clear definitions for the metrics that the BAI PMF 2.0 will draw on, identifies the sources for those metrics (companies, BAIs, Statistics Canada, etc.), and describes the methodology for collecting, analyzing and reporting the data.
- Provides a synopsis of the aggregate statistics generated from the pilot data.
- For reference purposes, details all the processes for data collection, analysis (by approved researchers and how they can assess the data), reporting, and administration of the performance measurement framework, including processes for obtaining consent to share information, protecting the confidentiality of data and producing descriptive statistics.
1.1 RATIONALE FOR A NATIONAL PMF

What qualifies as success for start-up assistance organizations? And how should a national framework measure this success? PMF participants and public sector partners have broadly agreed that the essential measures of success for BAIs are linked to the growth and competitiveness of incubated/accelerated firms. If incubators and accelerators are successful in selecting and nurturing promising business ideas, incubated firms, on average, should enjoy higher survival rates, grow faster, employ more people and attract more capital than a comparable cohort of non-incubated firms.

Leading incubators and accelerators collect data to document these outcomes because the data tells a powerful story. They can use it to hone and improve their programming, to benchmark their performance, and to market their achievements to clients, funders and stakeholders. More broadly, performance data can illuminate the important role BAIs play in nurturing growth-oriented technology firms—firms that will help generate the jobs and innovation to fuel Canada’s economic prosperity. In fact, all concerned stakeholders—BAIs, their current and prospective clients, and their funding partners in government and the private sector—stand to benefit substantially from the ability to document this value creation in a credible and consistent way.

In designing the measurement framework to capture the economic benefits that BAIs create, however, it became clear that the various stakeholders – including diverse BAIs across Canada – have differing mandates, objectives and clientele, and therefore prioritize different outcomes and measures of these outcomes. And while majority of BAIs participating in the pilot project already collect performance data, most are measuring their performance using a diverse and (often) inconsistent range of metrics and with widely varying levels of success in obtaining data from their clients.

A broad consensus has now emerged that a national performance measurement framework for Canada offers a better way forward. There is growing agreement that a common subset of the metrics that BAIs track – while not exhaustive – provide a reasonable starting point for defining success. Moreover, BAI leaders understand that a national framework for performance measurement could streamline reporting requirements and generate a range of other key benefits for the BAIs, their clients and the start-up ecosystem as a whole.

The benefits envisioned include:

- **Improving economic impact analysis**: A consistent, national performance measurement approach would allow BAIs to better evaluate their impact on client performance and on the broader economy, both locally and nationally. As an industry-led effort, a national framework would also ensure that the metrics used to evaluate performance are measuring the right outcomes (i.e., the outcomes that create the most value for BAI clients and stakeholders) and are appropriately calibrated to the services BAIs deliver and the context in which they deliver them.

- **Increasing transparency**: Improved data collection and reporting of economic impacts, in turn, would better inform firms in their search for support, provide the transparency that public and private funders require to allocate resource efficiently, and allow BAIs themselves to benchmark their own performance against their peers.
- **Enabling collaboration**: BAI's would also be able to showcase their areas of comparative strength—by sector, growth stage or connections—which could facilitate collaboration among BAI's and other ecosystem participants, including investors and government service providers.

- **Facilitating learning and continuous improvement**: Simultaneously, public reporting on outcomes will allow BAIs to share best practices and benchmark their performance against organizational leaders (domestically and internationally), thereby facilitating a process of learning and continuous improvement.

- **Positioning and marketing of Canada as a destination for start-up activity**: A national dashboard highlighting the activities and achievements of Canada’s BAIs could help tell a powerful story to the world and thereby attract international participants to the ecosystem, including founders, investors and corporate partners.

- **Reducing administrative burdens**: Finally, the Canadian ecosystem is complicated by its multiplicity of funders, and a subsequent proliferation of different demands for different data. This reporting burden puts a significant strain on the resources of Canadian BAIs. A national framework holds the potential to simplify and streamline performance reporting for BAIs by creating a consistent set of metrics against which to report and (in some circumstances) a unified reporting solution that would deliver one set of annual results to all relevant stakeholders.

With these benefits in mind it is worth clarifying how the PMF will be used to inform policy and funding decisions. The purpose of a standardized national measurement framework is to generate consistent and reliable data about the economic impact of BAIs, for the benefit of BAIs, companies seeking BAI support, and governments that fund BAIs. Analysis performed using the data collected from BAI clients during the pilot period – including the production of descriptive statistics and econometric modelling using linked datasets by ISED, Statistics Canada and/or approved researchers – will not be used to evaluate the performance of individual BAIs. It will, however, be used to inform robust conclusions about the role BAI programs play in firm growth and how to most effectively support innovative growth-oriented firms in Canada. For policymakers in particular, the objective is to use the PMF to evaluate the overall effectiveness of national funding programs, identify policy gaps and frame responses that boost the performance of Canada’s business support ecosystem.

With respect to future funding applications for individual BAIs, it is expected that BAIs will present their performance data in a manner consistent with the PMF and, when applicable, use the framework to report their performance against specific program funding they receive. In doing so, BAIs and their partners in government can achieve greater alignment on reporting requirements and eventually reach a point where BAIs can enter data points once for multiple audiences and purposes.

In the interest of enabling fair and effective funding and policy decisions, BAIs will need to work closely with governments and other funding partners to interpret the data collected through the PMF. What constitutes high performance for BAIs will always be subject to variations across regions (e.g., population densities, funding models, and proximity to complementary business support services), sectors and level of ecosystem maturity, among other things. It is incumbent upon all stakeholders to recognize that while performance benchmarks across ecosystems are useful, caution should be exercised to ensure that data is interpreted using a sophisticated and nuanced approach that takes context into account. For this
reason, the pilot process was designed to enable a representative group of BAIs and policymakers to incrementally test, evaluate and refine the processes for data collection, analysis and reporting to ensure that the PMF informs fair and effective decision-making by all relevant stakeholders.

1.2 DESIGNING THE PERFORMANCE MEASUREMENT FRAMEWORK

The process for developing a performance measurement framework for BAIs in Canada has unfolded over three stages to date, with phase I of the pilot stage (stage 3) having been completed in March 2019, and a second phase of the pilot planned for the remainder of 2019. The key stages are detailed below.

1. **BAI Engagement (Autumn 2016).** During the Autumn 2016, the Department of Innovation, Science and Economic Development (ISED) met with representatives from Canada’s entrepreneur support ecosystem at three informal roundtables to discuss how government, entrepreneurs, investors and industry could work together to establish a national performance measurement framework for Business Accelerators and Incubators (BAIs). During the consultations, stakeholders expressed a willingness to collaborate on a national scale and, more specifically, to advance a national discussion on best practices in performance measurement.

2. **National Dialogue (February 2017).** With the support of ISED, an industry-led group of BAIs took the next step toward framing a national solution for data collection and performance reporting by hosting a national discussion on February 10th in Toronto. Representatives from 18 organizations spent the day discussing BAI activities, opportunities and challenges, and exploring the benefits and challenges of creating a national performance measurement framework. The session provided a baseline understanding of what metrics BAIs are currently collecting and for what reasons. It also helped participants to develop a shared understanding of how a national performance measurement framework could provide value to the community and its funders, as well as the challenges and obstacles that would need to be overcome to make industry collaboration successful.

2. **Steering Committee and Feasibility Study (April – December 2017).** In April 2017, a BAI Steering Committee consisting of a representative group of BAI leaders and policy makers formed to continue an inclusive national discussion and provide leadership in crafting a national performance measurement solution that works for the BAI community and its partners in government (see Appendix D for a list of Steering Committee and various Working Group members). The Committee’s overarching mandate is to work alongside the Government of Canada in partnership to a) establish a performance measurement framework, and b) pilot a performance measurement platform for BAIs. It’s first step was to initiate a feasibility study, during which the Committee drafted a list of common performance metrics and selected a platform for data collection and reporting. With the platform selected and metrics defined, the Committee proceeded to upload a set of test data to the platform with the objective of assessing the appropriateness of this metrics list for the pilot, and refining processes for data sharing and analysis.

3. **Pilot Project, Phases I and II (March 2018 – March 2020).** The primary output of the work of the Committee was an initial version of the Performance Measurement Framework (PMF) that was
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operationalized as a pilot beginning in March 2018. During this period, a platform provider was selected to host the pilot process, the initial version of the measurement framework was finalized, and BAIs from across Canada were invited to participate in the pilot. Participation in the pilot was – and remains – open to BAIs across Canada, with efforts made to ensure that the participant community reflects the diversity of programming models and services offered by BAIs, along with the key economic sectors and regions of the country. Over the course of 2018, participating BAIs completed their organizational profiles and uploaded their company benchmark and 2017 program data to the data sharing platform (see sections 2 and 3 for details about the platform and section 1.3 and 1.4 below for a brief summary of the key findings from the pilot process). Phase II of the pilot will continue for a second year, allowing more BAIs from across Canada to upload their performance data from calendar year 2018.

4. Pilot Phase I and II Evaluation and Reporting (March 2018 – March 2020). Beginning in January 2019, participating BAIs and government partners worked together to evaluate the pilot process and identify valuable lessons and insights for managing a national performance measurement process with an expanded group of BAI participants. As part of the evaluation, BAIs were consulted on how best to govern and manage the performance measurement framework and reporting process on an ongoing basis. The results of the phase I pilot and evaluation are summarized in section 1.5 of this progress report. In parallel, ISED will produce an additional report analyzing the data collected from participating BAIs. Section 1.4 of this report details, and where possible demonstrates, the types of descriptive and econometric analyses that are possible using the data and other linked datasets from Statistics Canada and other federal partners. The phase II evaluation and reporting process will commence in January 2020, once all of the 2018/19 data is collected from participating BAIs.

5. National Rollout (April 2020 and beyond). Following the pilot and evaluation phase, project partners will build on the success of the pilot to operationalize a full national rollout of the PMF. Key activities will include further encouraging government programs across levels of government to adopt the metrics defined in the PMF to assess BAI programs, and making ongoing adjustments to the framework as appropriate.

Table 1: Activity Breakdown – BAI Engagement, Feasibility Study, Pilot and Rollout Phases

<table>
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<th>ACTIVITY</th>
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| 1. BAI Engagement & National Dialogue (Fall 2016 to March 2017) | • Convened a national discussion on best practices in performance measurement.  
• Consulted BAIs on their willingness to develop a national performance measurement framework.  
• Hosted a national dialogue to share best practices on BAI performance measurement.  
• Enlisted a small, but representative group of BAIs to proceed with a feasibility study. |
| 2. Steering Committee & | • Established a BAI Steering Committee and working groups.  
• Forged agreement on standardized metrics, measurement tools and platform. |
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| Feasibility Study (April to Dec 2017) | • Conducted a test run of data collection and reporting with Hockeystick platform.  
• Reported on PMF progress and learnings to date. |
|-------------------------------------|--------------------------------------------------------------------------------------------------|
| 3. Pilot Program Phase I and II (March 2018 to March 2020) | • Enlist a nationally representative group of BAIs to participate in the pilot.  
• Pilot the performance measurement framework and data collection process over two collection and reporting cycles (i.e., 2017 and 2018 BAI program cohort/entrant data).  
  • March - Dec 2018: BAIs completed their organizational profiles and uploaded their 2017 program cohort/entrant data.  
  • March 2019 – March 2020: BAIs will upload 2018 Q1-4 BAI program cohort/entrant data for those with a quarterly reporting cadence. BAIs that collect data on an annual cycle will upload their 2018 data in Q1/2 of 2019. |
| 4. Pilot Phase I and II Evaluation and Reporting (February to April 2019 and February to April 2020) | • Produce analysis and BAI performance report.  
• Identify opportunities, challenges and tips for managing the data collection and reporting process with expanded number of BAI participants.  
• Calibrate performance metrics and processes based on insights and lessons learned from the pilot.  
• Gather feedback on the suitability of the data sharing platform for subsequent phases. |
| 5. National Rollout (April 2020 and beyond) | • Make necessary adjustments to the PMF and platform.  
• Further encourage federal and provincial government programs to adopt the metrics defined in the PMF to assess BAI programs  
• Formalize governance/stewardship.  
• Recruit additional BAIs to participate in the national rollout.  
• Continually monitor and make adjustments to the PMF to ensure it remains useful to its stakeholders. |

### 1.3 KEY OUTPUTS FROM PHASE I OF THE BAI PMF PILOT

Phase I of the pilot conducted between March 2018 and March 2019 provided the BAI community and its partners in government with the opportunity to test a common performance solution by uploading an initial set of data to a shared data collection platform. The objective of this exercise was to assess the appropriateness of this metrics list for a national performance measurement solution – including the clarity of questions, number of questions, and areas for analysis – and to refine the processes for data collection, sharing, and analysis.

Along the way, ISED and the participant group reflected on the broader purpose and objectives of a national performance measurement framework and problem-solved a variety of technical and operational issues that arose during the pilot. What follows is a brief overview of some of the key outputs from Phase I of the pilot.
Defining a measurement framework. Among the first tasks for the Steering Committee was defining a common set of performance metrics and complementary survey instruments for data collection. An updated version of the metrics framework is outlined in section 2 (performance metrics) and in appendixes A and B (the questionnaires for data collection). A consensus was reached that the performance metrics for Phase I of the Pilot would focus on a core set of financial indicators linked to the annual revenues, employment, capital raised and the intellectual property portfolio of client companies. A key challenge going into the pilot was arriving at common definitions for these indicators. While BAIs generally track the same outcomes (e.g., client revenues, employment and investment), they do so using different methods and differing indicators. Considerable time and effort went into crafting acceptable definitions for each metric. For example, how to define a job and which number of hours constitutes full-time employment; how to parse differing types of investment capital; and whether to track indicators using a calendar year or fiscal year. Other challenges included defining an approach to collecting information about founder demographics and establishing a common industry/sector list to ensure that both BAI programs and client firms could be categorized the same way. The effort to reach consensus on these issues ensured that BAIs participating in the pilot tracked the same indicators using the same definitions and methods over the same time period. However, the pilot experience highlighted the need to further refine the framework to both streamline the questionnaire and clarify or modify the definitions for certain metrics.

Selecting and operationalizing the data sharing platform. With respect to data collection and storage, it was determined that the pilot data would be aggregated into a secure central platform that complements established platforms/processes used by mature BAIs. For BAIs, the data platform solution had to be low-cost, secure, convenient and useful. For BAIs with existing CRM solutions and data management systems, it was also important that participation in the pilot would not require BAIs to transition to a new platform. For the federal government partners, it was important that the platform provide a secure and trusted environment for hosting and visualizing data on servers located in Canada, as well as a secure data export function to provide approved analysts with convenient access to data. With these criteria in mind, ISED and the BAI Committee considered several available data platforms and, for a variety of reasons discussed further in section 3, chose Hockeystick as the data sharing platform for the pilot. Hockeystick subsequently worked to customize its platform and interface for purposes of collecting, aggregating and exporting client data with the group of BAIs participating in the pilot.

Designing an approach to data collection and analysis. Having defined metrics and selected a platform, the BAI Steering Committee and its partners in government proceeded to work on designing the data collection process and determining how data collected during the pilot would be analyzed. The details of the data collection process are outlined in section 2, however, it was determined that pilot data would be collected from BAI client companies for two full reporting cycles covering calendar years 2017 (pilot year one) and 2018 (pilot year two). With regard to data analysis, the Committee agreed on three fundamental points. First, that the purpose of the data analysis is to draw robust conclusions about the economic impact of BAIs, for the benefit of BAIs, companies seeking BAI support, and governments that fund BAIs. Second, in the interest of enabling longitudinal analysis, strict protocols to protect client confidentiality will be followed to link the data collected to Statistics Canada and other Government of Canada sources using client names and business numbers. Third, that data analysis should be performed by a reliable,
committed party capable of consistent interpretation of data. For the purpose of the pilot, it was determined that ISED will manage the data analysis and reporting process and work in partnership with Statistics Canada approved researchers.

**Recruiting participants and preparing for the pilot.** With the platform selected and metrics defined, the BAI Steering Committee and its partners in government invited BAIs from across Canada to participate in a one-day forum in Toronto in February 2018 with the objective of educating BAI leaders about the pilot process and obtaining their input in order to make final adjustments to the metrics framework and the processes for collecting and analyzing performance data. Key challenges for the meeting included tweaking the metric definitions and survey instruments based on the input from the participants; working with Hockeystick to ensure the platform would meet the needs of BAI participants; reviewing precisely how and with whom client data will be shared; determining how and when to obtain client consent to aggregate data using Hockeystick and to share data with the federal government for the purpose of research; and communicating the rationale and objectives of the pilot to the broader BAI community, while enlisting a larger group of organizations to participate. Following a successful conclusion to the meeting, there was broad enthusiasm across the BAI community for participating in phase I of the pilot.

**Collecting and uploading 2017 performance data.** Following the February 2018 meeting, thirty BAIs formally agreed to participate in the pilot process. These organizations were first onboarded onto the platform (Hockeystick) and asked to complete their BAI profiles, which includes information on the programs for which they subsequently submit client data. Only a portion of the BAIs that agreed to participate in the pilot – approximately 2/3rds – were able to submit client data for the 2017 calendar year. This was due primarily to: a) having missed the ‘window’ to collect 2017 data as part of their annual collection processes and; b) not having the requisite consent agreements in place to share previously collected data. Notably, in an effort to reduce respondent burden, ISED and the project partners did not ask organizations to go back and collect new data for the 2017 period or obtain consent to share data that had already been collected from companies. Instead, BAI participants were asked to implement the PMF survey on a go-forward basis, starting in the next calendar year. Throughout the remainder of 2018, the Steering Committee co-chairs provided direct assistance and support to BAIs to encourage survey completion and problem-solve implementation challenges. The final deadline for submitting 2017 data was Thursday November 15th.

**Analyzing the performance data.** In July of 2018, a meeting was held with Statistics Canada, ISED and a working group of BAI pilot members. The meeting provided an opportunity for BAIs to better understand the importance of data confidentiality at Statistics Canada, the agency’s process for analyzing confidential micro-data (along with its process for approving external research projects using the data) and the measures it deploys to maintain the confidentiality of the data it holds about Canadian companies. Feedback from participants indicates that this meeting raised the level of confidence BAIs felt in contributing their client data to the pilot project and enabled BAIs to better reassure their client companies that the confidentiality of their data would be protected (see discussion in Section 2.3). By November 2018, 20 BAIs had submitted data for the first year of the pilot. This yielded 699 company-level records that included company identifiers that could be used by Statistics Canada to link the data with administrative datasets. Submissions that did not include identifying information required to link the
datasets within the secure environment at Statistics Canada were necessarily discarded. The micro-data was subsequently submitted directly to Statistics Canada for analysis by approved researchers. The preliminary findings from this analysis were presented at the BAI PMF Mini-Summit on February 20, 2019 in Waterloo. Highlights from the findings are presented in section 1.4 below.

**Gathering feedback on phase I of the pilot.** During the course of phase I of the pilot, ISED gathered feedback from both pilot participants and other federal partners to inform this release of the ‘2.0’ version of the BAI PMF framework. The February 20th 2019 mini-summit in Waterloo also provided an opportunity for BAI participants to provide their feedback on the pilot experience, including the survey instrument, the process for collecting and analyzing performance data, the implementation support provided by ISED and Hockeystick, and potential future direction of the performance measurement framework. Finally, a short survey was administered by Chris Diaper of TEC Edmonton to solicit input from BAIs that participated in the phase I of the pilot. These various sources of feedback and input have been synthesized and are summarized in section 1.5 below.

**Refining the measurement framework.** The final step in phase I of the pilot was to implement changes to the measurement framework and data collection process to respond to issues either observed during the pilot or raised by BAIs in the subsequent feedback session. Most of the changes reflected in version 2.0 of the PMF were implemented to simplify and streamline the survey instrument, to lessen the data collection burden on BAIs and client companies and, in some instances, to clarify questions that had caused confusion or ambiguity. These changes are reflected in this document and will be operationalized for phase II of the pilot.

### 1.4 KEY FINDINGS FROM THE ANALYSIS OF PILOT DATA

Having collected the 2017 data from 20 BAIs, Statistics Canada and ISED worked together to link the data to administrative files within Statistics Canada and generate a series of descriptive statistics. For example, the growth profiles of BAI clients based on key performance indicators such as revenue and employment growth were used to compare BAI clients to the general population of firms. These analysis and reporting exercises did not produce a definitive view of the economic impact of BAIs, but they do help illustrate the kind of data-driven insights that can be expected once the PMF expands in scale and assembles a large enough pool of data over time. A sample of some of the key statistics and insights from the pilot data are described below. A full presentation of the findings from the data analysis is available as a companion document on the ISED website.¹

The data collection phase yielded 699 company-level records that included company identifiers that could be used by Statistics Canada to conduct an analysis of the data. From this sample, a subset of 571 companies could be linked to official data sources, including the Business Register (BR), the General Index of Financial Information (GIFI), and the Horizontal Review of Innovation and Clean Technology Programs. Of these, 522 companies were selected for further analysis.

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To facilitate a rough comparison, ISED used Statistics Canada administrative data to create a benchmark group. This is a sample of 429,000 companies with less than 100 employees that can be compared to the BAI survey respondents on a variety of metrics. In the future, more sophisticated control groups will be created, controlling for additional factors such as sector and age.

Firm Demographics

The first analysis compared the firm demographics of the benchmark population with the cohort of BAI-supported firms. The sector distribution revealed that BAI-supported companies are more likely to be technology focused than firms in the broader benchmark population (see chart 1). The age distribution shows that BAI-supported firms are younger than the population of companies in the benchmark group, with the majority being under 5 years old (see chart 2).

Chart 1: Sector distribution of supported firms.

Chart 2: Age distribution of supported firms versus the benchmark population.
Firm Growth Rates

An analysis of employment growth in the two populations found that BAI companies were significantly more likely than the benchmark to have increased employment and achieved high-growth status for employment over both one and three year periods (chart 3). 19% of firms in the sample of BAI-supported companies would classify high-growth companies based on the standardized definition, compared to only 1.5% of firms in the benchmark population. That means for companies with less than 10 employees, they added 8 or more employees over a rolling three-year term. For companies with more than 10 employees, the growth rate achieved 72% over a three year period. An additional 45% of the BAI companies witnessed one year of employment growth but did not meet the stricter definition of high-growth firms. Taken together, this indicates that 64% of BAI companies were experiencing some level of growth over either a one or three year period.²

Chart 3: Employment growth of supported firms versus the benchmark population.

Chart 4: Revenue growth of supported firms versus the benchmark population.

As depicted above, a similar pattern emerges in the analysis of revenue growth. On this metric, 15% of BAI companies met the Organization and Economic Cooperation and Development (OECD) definition for high growth firms, meaning they have achieved at least 20% annualized revenue growth over a period of three years. An additional 47% of BAI-supported companies did not meet the strict definition for high-growth firms, but nevertheless experienced some revenue growth (>10%) over a one-year period. As with employment, a significantly higher share of the BAI companies were classified as either high growth firms or as firms experiencing one year of revenue growth, relative to the population benchmark group.

Data on year-over-year growth rates remain exploratory at this stage. In particular, it is worth noting that high growth rates experienced by BAI companies when compared to the benchmark group could be associated with a range of factors not controlled for in this analysis – such as firm age and sector. Future analysis will establish a more rigorous control group for comparison. Nevertheless, the analysis does provide a preliminary profile of BAI firms, indicating that a significant percentage of these companies are experiencing some degree of employment and/or revenue growth.

Engagement with Government Programs

To better understand how and to what degree BAI companies interact with federal government innovation programs, BAI PMF data was linked with data collected through the Horizontal Business Innovation and Clean Technology Review. Data from the Horizontal Review includes program data provided by 22 federal government departments and crown corporations. However, crown corporations – such as the Business Development Bank of Canada and Export Development Canada – were not included as part of the BAI company data analysis.

The analysis found that 50% of BAI companies had engaged with some form of federal government innovation programming, significantly more than the population benchmark group (2%). With respect to program interactions – defined as an individual instances in which a firm received government program support – the most frequent occurred with the National Research Council of Canada (70%), followed by the federal regional development agencies (12%) the National Sciences and Engineering Research Council (8%) and Global Affairs Canada (6%).

BAI Impact and Net Promoter Analysis

Finally, an analysis of client satisfaction among BAI-supported companies presents a considerably positive view of the role these support organizations are playing in helping their clients create viable companies. Client companies were asked to rate the impact of BAI services on their chances of success and to characterize how likely they are to recommend the BAI’s services to others. The results suggest that 76% of client companies think that the BAI program they participated in had either a ‘significant’ or ‘vital’ impact on their chances of success (Chart 5) and that 66% of BAI client companies can be classified as promoters, meaning that they are highly likely to recommend the BAI program to others (chart 6).

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1 In this case, an interaction is an instance in which a firm received support through a federal government program. In this analysis, individual may receive more than one instance of support.
Chart 5: What impact has this BAI had on your chances of success?

Chart 6: How likely are you to recommend this BAI to others?

Key Conclusions and Future Potential

It is important to bear in mind that the observations and descriptive statistics above are drawn from a relatively small pool of companies (522 in total) and roughly 10% of BAIs in Canada (or 20 out of an estimated 220+ BAIs operating in Canada). Nevertheless, the analysis of the pilot data highlights some interesting preliminary findings. Among others, these include that:

- BAIs are working with young, technology-focused companies.
- BAI companies are significantly more likely to be growing in employment and revenue and to be achieving high growth, companies to the benchmark group.
- 76% of company respondents describe their BAI program as being either ‘significant’ or ‘vital’ to their success.
• A majority of respondents indicated they would be likely to recommend their BAI program to others.

Going forward, the ability to collect data on a larger number of supported companies linked to a larger number of BAIs, and to track the same population of firms over time, will yield richer insights into Canada’s startup ecosystem. For example, it will be possible to track the growth and survival rates of companies over time. The ability to segment the sample by sector, region and BAI program types (among other variables) will permit analysis of growth trajectories for different types of firms and different types of BAI supports. A larger dataset will present opportunities to compare the population of BAI-supported companies to various control groups on the broader population of Canadian SMEs. It will also be possible to link the dataset on BAI-supported firms to additional administrative datasets and third party databases, including those focused on venture capital (VC) and angel investment.

1.5 PARTICIPANT FEEDBACK AND LESSONS LEARNED FROM THE PILOT

In parallel with the data analysis and reporting activities, participating BAIs and government partners worked together to reflect on the pilot process and identify valuable lessons and insights for managing a national performance measurement process with an expanded group of BAI participants. This section details the findings from a participant survey, a feedback session held at the BAI mini-summit on February 20, 2019 and a series of one-to-one interviews. It also outlines the improvements that have been made to the PMF and data collection process in response to the feedback received from the community of participants.

Findings from the Participant Survey

Following the conclusion to the data collection phase, TEC Edmonton administered a short survey to better understand how BAI participated in the pilot, to identify challenges encountered by participants, and to solicit input from BAIs on accommodations that would enhance phase II of the pilot. A total of 20 BAIs responded to the survey.

Data collection methods for phase I

The first section of the survey asked respondents to provide further details on how they went about collecting and submitting 2017 data to the PMF pilot. Among other things, this included the number of data sources consulted to complete the questionnaire, the method for submitting data to Hockeystick, and whether this method would be scalable to a larger number of firms. For the purpose of this report, the main finding of interest is that only some of respondents (4/20) were confident that the method used to collect the 2017 data would be scalable to a larger number of firms. Four BAIs indicated that they thought process was not scalable, and a further six said ‘maybe’ or they ‘weren’t sure’.

Data collection methods and challenges for phase II

The next batch of questions asked respondents to provide further details on how they intend to collect
and submit data for phase II of the pilot. 10 of 20 of the BAI respondents indicated that they intend to use an annual survey to collect data from client companies, while 8 plan to use a mixture of methods, and 2 collect data on a quarterly basis.

Participants were asked whether there are any specific questions or issues that may prevent their organizations from collecting and submitting 2018 data for the PMF Pilot. The majority of BAIs (15 of 20) indicated there were no questions or issues that would inhibit their participant. For the remainder, BAIs cited service level agreements that prohibited the sharing of client data and low response rates from client companies as key challenges. Participants were also asked what kind of supports would help them adopt the performance measurement framework for 2018. 11 of 20 BAIs indicated that a simple consent statement and communication tools to use with client firms would be helpful. Other requests included a reduction in the length of the survey instrument (7/20 BAIs) and greater clarity for some of the questions (7/20 BAIs).

Data confidentiality

BAI participants were asked whether they think the involvement of Statistics Canada in the pilot process will give the majority of their clients’ confidence that their data will be stored and used in a secure and appropriate manner. Seven BAIs answered affirmatively, 11 were unsure and 2 said that the involvement of Statistics Canada in the pilot process would not be a major factor.

Data utility and opportunities for national analysis

BAI participants were asked whether and how they planned to use the data collected for the PMF pilot. The majority of BAI respondents indicated that they are using the data in their reporting activities to government partners and other sponsors and many are also using the data to inform their program marketing materials and funding/grant applications. A smaller number of respondents indicated that they are beginning to use the data to inform strategic decision-making, shape future programming, identify service gaps, and implement quality control processes.

BAI participants were also asked whether there were specific questions they would like to be able to answer using the data collected at the national level. Participant responses included:

- Better understanding which programs/organizations are providing the most efficient and effective support for startups.
- Determining the degree to which a venture's growth trajectory is positively affected by participation in a BAI, and specifically how those trajectories are typically affected.
- Using the data to feed benchmarking initiatives like Startup Genome and to enable BAIs to benchmark their impact on company success and growth against other BAIs across Canada.
- Building a national picture of how many tech startups exist in Canada, how many people they employ, and their growth rates over time.
- Comparing the growth performance and valuations of BAI-supported companies with similar cohorts of non-BAI companies in different industry segments.
Feedback from the BAI Mini-Summit and Participant Interviews

The February 20, 2019 Mini-Summit in Waterloo provided an additional opportunity for BAI participants to provide their feedback on the pilot experience, including the survey instrument, the process for collecting and analyzing performance data, the implementation support provided by ISED and Hockeystick, and potential future direction of the performance measurement framework. BAIs were also consulted on how best to govern and manage the performance measurement framework and reporting process on an ongoing basis. A series of one-to-one interviews were also held with officials representing the regional development agencies (RDAs) participating in the BAI PMF Mini-Summit.

The feedback and insights received from BAI participants and government partners has been synthesized into six categories.

Utility of the PMF for BAIs

There was broad agreement among the BAIs that participation in the pilot created value for them that went well beyond their pre-existing data collection and reporting activities. That value manifested in several different ways.

- **Enabling program analysis.** Rather than evaluating the impact of their BAI as a whole, several organizations noted that the PMF got them doing a program-by-program analysis for the first time. “Getting feedback on the individual programs is valuable,” said one BAI leader. “We need to use data to understand what is working so that we can refine our programs over time. We want to establish KPIs to evaluate whether we should be dropping some programs or adding to others.”

- **Introducing new indicators and milestones.** For BAIs that were already collecting and analyzing performance data, several that noted that the PMF introduced new indicators that they were not yet tracking. For example, many BAIs started tracking founder demographics for the first time using the PMF. “The demographic insights are very interesting,” said one BAI leader. “It leads to a better understanding to who we are supporting and how. We found quite a bit of attrition with women entrepreneurs and a big disparity generally between male and female founders.” Some BAIs are now actively thinking about how new data collected through the PMF can be used to develop internal milestones. Such milestones could be used to track things like how long it takes for supported companies in different sectors and different programs to go from incorporation to first sale. “We want to understand the hard outcomes and growth stage milestones that companies need to achieve to grow,” said one BAI leader. “If we can articulate and measure what the hard milestones are, we can design our programs to help them achieve those milestones.”

- **Fostering a performance management and customer service ethos.** Several BAIs noted that participation in the PMF was helping to instill a more rigorous culture of performance management in their organizations. “We want to track how companies are performing,” said one BAI leader. “This ties into our KPIs. We are a for-profit organization, so we need to track revenue and investment and the PMF provides an instrument to help us do that.” Another BAI leader reported how collecting the net promoter score encouraged program managers to seek more detailed feedback on entrepreneurs from each group, including promoters, passives and detractors.
• **Supporting internal training and program marketing.** Finally, one BAI noted that the PMF was supporting their internal employee training process by supplying the data they needed to train their staff on how to better support companies. Several BAIs also reported that they are now using the data collected through the PMF for promotional purposes.

**The measurement framework and survey instrument**

With its focus on revenue growth, capital investment and employment growth, there is broad agreement among the BAI participants that the measurement framework is focused on the right high-level metrics. However, there are some areas that BAIs pinpointed for improvement or further consideration.

- **Clarity.** Clear questions and good definitions are critical to getting reliable data back from BAI companies and to making the data collection experience as seamless and friction-free as possible. There was a sense among participants that some survey questions may have been too complicated and/or lacked clear definitions.

- **Parsimony.** BAIs would like to see a shorter and more streamlined survey instrument. Many feel that a shorter survey and a more intuitive structure would lessen the burden on respondents, generate better response rates and lead to a lower drop-off rate.

- **Early stage metrics.** At the risk of complicating or elongating the survey, a number of BAIs have noted that the measurement framework lacks metrics that work well for organizations and programs that principally work with early stage, pre-revenue companies. As one participant put it, "We report back a lot of zeros because we have pre-revenue companies that have yet to raise capital." It was suggested that the PMF should try to account for how early-stage incubation and acceleration activities converts to greater economic impact later on in the company maturity cycle.

- **Leading versus lagging indicators.** On a related note, several BAIs noted that the majority of the metrics are lagging indicators. Measurable and sustained growth in revenues, capital investment and employment, for example, may not manifest until months or years after a client firm has left the BAI program. In the short term, these indicators are not very useful in determining whether a BAI program is working or not. Measures of client satisfaction such as the Net Promoter score and BAI impact question were cited as indicators that provide more immediate feedback on program success.

**Data collection process**

The data collection process for the PMF pilot generated the most discussion amongst participants, many of whom shared both concerns about the pilot experience and suggestions for how to improve the data collection process going forward. The key recommendations for improving version 2.0 of the PMF included the following:

- **Lessen the data collection burden as much as possible.** A key rationale and objective for the BAI PMF is to reduce the reporting burden on BAIs by aligning reporting requirements across funding partners in government. BAIs are eager for this reality to come to fruition and voiced their support for continued efforts to bring other government partners into year two of the pilot process. “We need a single process, with one annual request for data,” said one BAI leader, who also noted that operational costs are very high for managing the data collection process. However, it is not only...
BAIs that are feeling the data collection burden. Firms get inundated with requests too because they are getting requests from the multiple institutions that they have interacted with. “We need to make it as frictionless as possible,” said one BAI leader. “Don’t collect too much data and collect data that is meaningful.”

- **Provide tools to deal with concerns about data privacy and security.** BAIs noted that it was sometimes hard to convince clients that the confidential data they report will be safe and secure. Said one BAI leader: “For a lot of companies, they are concerned about big brother and the security of their data. They don’t want their data shared. They really worry about their competitors seeing their revenue numbers.” While BAIs understand the importance of managing client expectations and assuaging their data privacy fears, they don’t feel fully equipped to do so. As one BAI leader put it, “We had to do 6 months of work to get client companies to better understand how the data will be handled. We need a more succinct description of how the data flows from Hockeystick to ISED to Statistics Canada.”

- **Create a value proposition for the client firms.** While there was quite a bit of discussion about how to make the PMF valuable to BAIs, there has been less focus on how to make the data reporting process more valuable to client firms. BAI participants suggested that a greater focus creating direct value for the end client would not only boost the response rates, but also lead to better outcomes for the ecosystem. “How do we make it easy? How do we ensure they see it as a valuable exercise?” asked one BAI participant. Some noted that NRC-IRAP receives good data from client companies because the entrepreneurs don’t get the last cheque until they have supplied the data. As they put it: “The people with money have the leverage to get the data from client companies.” While the PMF process can’t deliver cheques to client companies, it can deliver benchmarking opportunities and valuable information about BAI services, ecosystem trends and other things that founders will find useful. The sooner these opportunities are realized, the easier it will be to get client companies across Canada engaged in the process.

Several BAIs shared lessons and strategies for increasing their survey response rates.

- **Include data reporting in client service agreements.** The BAIs that were most successful in their data collection efforts had already baked data sharing rights into their service agreements with client firms. Other BAIs were less fortunate, with some cases where existing client service agreements specifically forbade the sharing of non-anonymized performance data. As the pilot moves into phase II, BAIs without data collection and sharing rights embedded in their client service agreements are now having to update their agreements to accommodate this.

- **Use data collection as a way to build the financial literacy of client companies.** One BAI leader argued that it helps to get client companies accustomed to sharing their data early since they will face similar requests from VCs and Angels. “We argue with founders that they will need to share data with Angels and VCs, so they better get used to it. It’s an education process. We request data on a quarterly basis which makes it very similar to a board meeting cadence.” Others argued that regular data reporting instills good management discipline. “It is really important for companies to measure what they are doing and to hold themselves accountable,” said one BAI leader. “It’s not just about our organization telling our story and claiming successes. This is for the entrepreneurs. It’s building their financial literacy.”

- **Timing is important.** The advantages and disadvantages of annual and quarterly reporting were discussed, with arguments made on both sides. Some argued that quarterly was better, pointing...
out that annual collection creates a long lag for metrics that change quickly for fast moving companies. “The longer the lag in reporting, the less likely they are to answer correctly,” said one BAI leader. Some argued quarterly reporting generates a better response rate because data request comes while the BAI is still providing support or very shortly after the relationship has ended. “We get higher response rates when we have engaged with them recently,” said another BAI leader. Others argued that fewer touch points are better and that issuing surveys once a year is optimal, especially if BAIs can use the PMF to report to both levels of government at once.

- **Ensure that requests for data come from recognizable entities.** Finally, there was a recommendation to send surveys requests from recognizable entities and individuals. One BAI sends requests from the mentors who work directly with the client companies. “If they don’t know the entity or the individual,” said one BAI leader, “the response rate will be really low.”

**Implementation support**

A key piece of feedback from BAIs is that implementation support will be vital to a successful rollout of the PMF on a pan-Canadian basis. Many BAIs reported that the data collection process was time consuming, especially tracking survey completions, sending out reminders to client companies, and cleaning up data contributed by client companies. With the largest BAIs being an exception, many organizations do not have full-time staff members dedicated to data collection and reporting. Staff turnover and a lack of residual knowledge pertaining to the PMF pilot also turned out to be challenge. For example, a number of BAIs required multiple onboarding sessions as new recruits were brought in partway through the pilot process.

BAIs suggested that they need better communications materials to educate internal staff (including management and legal executives) and to support their outreach to client companies. BAIs also noted that they would like better visibility into the timing of key pilot activities so that they can allocate resources accordingly.

**Data analysis and reporting**

The February 20th meeting in Waterloo provided the first opportunity for BAIs to see ISED present an analysis of the data aggregated from phase I pilot. This was clearly a beneficial exercise for all involved as it became clear, even at this early stage, that the data would generate powerful insights regarding the role that BAIs are playing in supporting the growth of innovative, technology firms in Canada. Subsequent discussion with BAIs led to a couple of additional suggestions and issues for consideration.

- **BAI Benchmarking.** There is a clear appetite among BAIs for the PMF to enable benchmarking with their peers. For example, a taxonomy to distinguish BAI types could be used to delineate different company growth benchmarks for early stage incubators and later-stage business accelerators. It was also noted, however, that benchmarking on a program-by-program and sector-by-sector basis will only be possible once the PMF has collected a larger number of observations from a larger number of institutions in order to enhance the quality of the analysis and protect the anonymity of the participants.

- **Attribution.** It is a well-known fact that a lot of company founders bounce around a lot and touch many parts of the ecosystem. This creates a challenge in attributing the success of a given
company to an individual BAI. As one BAI leader put it, “The engagement of StatsCan will help with the authoritative nature of the data. However, there will be companies that will have worked with multiple different institutions and we will all try to claim credit for their successes.” Others called for less focus on claiming successes and more focus on building local ecosystems. “We hope that by collecting data we get a better sense of whether we are adding value,” said one BAI leader. “We have no other way to know whether we are doing a good job. I don’t need to broadcast the success. We should just focus on building the ecosystem.”

- **Customized BAI dashboards.** Several BAIs, especially those that have not invested in sophisticated CRM systems, are hoping that Hockeystick will develop a dashboard for analyzing and interacting with the data they collect through the PMF. Some suggested that creating dashboard capabilities for BAIs was one way to demonstrate value for the investment of time and resources BAIs put into participating in the pilot. It was noted that one challenge in building BAI-specific dashboards relates to the fact that doing so would require a non-trivial investment of time to validate and patch up the data contributed by client firms.

- **Potential sample bias.** Finally, it was suggested that there could be some bias evident in the results due to the underreporting of data by companies that are struggling and those that are super successful. Although based on conjecture, the assertion was that silent entrepreneurs (i.e., those that elect not to respond to survey requests) are usually not successful. On the other hand, it was suggested that super successful companies may also be reticent about contributing data for fear that confidential details could leak out to competitors.

**Future directions for the BAI PMF**

BAI participants in the pilot also provided suggestions on future directions for the PMF, beyond those already documented in the categories above. Ideas and suggestions from participants included the following:

- **Mapping Canada’s startup ecosystem.** Several participants would like the PMF to shed light on the overall size and shape of Canada’s startup ecosystem. They noted that it would be good to document the size of the technology startup population in Canada and the role of BAIs in shaping that population. For example: How many companies are entering BAIs? How many are exiting? How much entrepreneurial capacity are BAIs generating? What is the distribution of those companies across sectors and geography?

- **Understanding the startup support landscape.** On a similar note, several BAIs argued that it would be useful to have a way to better understand the pipeline or landscape of support organizations and programs in Canada. As one BAI leader put it, “We are doing discovery on programs the serve companies before they come to us, as well as where companies go for support after they leave our program. That will help us understand what companies already know and what they still need to learn. What fundamentals still need to be covered during our program? Right now, it is very hard for us to know who is doing what.”

- **Documenting service trends.** One BAI leader called for better insights into service trends across the startup support landscape. This particular BAI noted that they saw a huge influx of startups in 2013/14, a number which has been slowly tracking downwards since then. As a result, they are spending less time on high volume, light touch interactions and while the amount of time they spend with quality startups has gone up. There was a shared interest in knowing whether other
BAIs across Canada were seeing similar or different service trends in the sectors and geographies they cater to.

- **Managing scale with automation.** For the larger BAIs, data collection and reporting are challenging to do at scale. “We are dealing with 1,000 companies a year,” said one BAI leader. “It’s hard to do some of the follow-up for survey completions that one can do with a smaller number of companies.” It was suggested that potential solutions could involve finding ways to automate as much of the data collection process as possible.

- **Understanding exits and company deaths.** Finally, there was a call for better understanding the causes and circumstances of company deaths. While BAIs are understandably keen to track the success cases, very little attention is given to the companies that exit BAIs and fail to survive. “We don’t often follow-up with the companies that died,” said one BAI leader. “it’s hard to know what happened and why, but there could be some value in better understanding the challenges or issues that prevented the company from succeeding.”

**Key Improvements for the PMF 2.0**

A number of improvements for phase II of the pilot are either in the works or have already been implemented in response to the feedback from the community of participants. These measures address the core concerns raised by the participant community, including the following:

- **Onboarding materials and implementation support.** ISED has developed a package of onboarding and communications materials to educate BAIs about the PMF and to lessen the need for time-intensive direct outreach and support. A draft version of these materials was presented to BAI participants at the Mini-Summit. The team at ISED is also always available to provide support on the PMF itself, and Hockeystick is available to provide technical support pertaining to the data collection platform.

- **Addressing concerns regarding data security and confidentiality.** The aforementioned communications materials contain a clear explanation of the Statistics Canada’s approach to data protection and data management that should help alleviate concerns about data security and confidentiality. A similar description is available in Section 2.3 of this report. Additionally, Statistics Canada has prepared a presentation overview of its approach, which can be obtained from ISED upon request.

- **Obtaining consent to share data.** ISED continues to collaborate with the community on consent language and has developed suggested language that organizations can use. There are also a number of organizations that have implemented their own systems to ease the process of obtaining consent. BAIs are encouraged to communicate with one another other with respect to best practices. ISED can facilitate these conversations as appropriate.

- **Lessening the data collection and reporting burden.** Several steps have been taken to make the data collection process as efficient and streamlined as possible. First, the length of the survey for the PMF 2.0 has been reduced by eliminating low-response rate questions. ISED has clarified a number of questions where issues with interpretation have been identified. Second, BAIs that
have gone through the phase I process will have worked out some of the implementation kinks, created some institutional knowledge, and established better alignment between their internal data collection and CRM processes and the PMF. This should make year two of the pilot considerably easier. Third, the involvement of other government partners in the PMF will eventually streamline reporting requirements and further lessen the data collection burden on BAIIs and the implementation support burden on ISED.

1.6 DESIRED OUTCOMES FROM THE BAI PMF 2.0

The Logic Model, shown in Figure 1, identifies the linkages between the activities of the PMF Pilot and the achievement of its results/outcomes, including the next phases of implementation. In addition to a number of immediate and longer-term outcomes, the Logic Model highlights four overarching objectives for the BAI PMF 2.0. These include:

- An updated performance measurement framework, informed by the lessons learned from the pilot, with consistent metrics for measuring the impact of BAI programs on firm performance, along with clear definitions for each performance indicator;
- An updated process for managing the collection, aggregation and analysis of consistent data from multiple BAIIs across Canada using a data sharing platform that will streamline the data collection, analysis and reporting process;
- Shared commitment across the BAI community to using the lessons learned from the pilot to establish a sustainable institutional framework for rolling out the PMF on a national basis;
- And, over the longer term, enhanced, data-driven insights into the role of BAI programs in firm growth, and ultimately, superior economic growth enabled by the accelerated growth of high-potential firms working with BAIIs across Canada.
Figure 1: Logic model for the PMF 2.0.

As the Logic Model indicates, the inputs and participants for the PMF include a representative group of BAIs and the programs and services they currently offer to client firms, federal government partners (particularly ISED) and the data sharing platform supplier. The activities in phase I centred mainly on establishing the PMF (i.e., identifying the right metrics and survey questions), identifying a platform for the collection and aggregation of client data, enlisting BAIs to participate in the pilot, obtaining consent from client firms to use their data for the pilot and performing an analysis on the data collected. The inputs and activities represent the foundational steps taken by the project partners and ISED to create a PMF and conduct a test run of the data collection process.

For phase II, the activities include refining the measurement framework and data collection process, expanding the group of BAIs participating in the pilot, doing a second round of data collection and performing more sophisticated statistical analysis using a larger dataset linked to administrative datasets at Statistics Canada, and continuing to engage government partners across Canada.

The logic model indicates that the outputs are linked to the pilot process itself. It is expected that participating BAIs will work with their client firms to collect all of the data specified by the performance measurement framework (or request their client firms to upload the data) over two data collection and reporting cycles: one for 2017 BAI program cohort/entrant data and one for 2018 BAI program cohort/entrant data. In both instances, the data sharing platform provider will aggregate and collate the data and prepare it for export. ISED and Statistics Canada will download the data according to the protocols defined in Section 2 and produce a report. Following these steps, all parties will participate in an evaluation of the pilot outcomes and document the lessons learned.
As depicted in the logic model, the pilot phase is expected to produce a number of short and long-term outcomes as the BAI community works towards the realization of a national performance measurement solution for Canada. Immediate outcomes will be observable at the conclusion of the second year of the pilot in Winter 2019-20. Medium to long-term outcomes for the pilot are expected to take a year or more to manifest, with some outcomes – such as the use of data-driven insights to refine BAI programming and government investment priorities – taking several years to come to fruition.

The immediate outcomes for phase I of the pilot include:

- **Updated agreement by stakeholders on what metrics should be collected.** While the BAI Steering Committee and feasibility study ensured that a representative group of BAIs contributed to the process of identifying a common set of performance metrics for phase I, the experience of collecting 2017 data provided an opportunity to identify areas for improvement and implement changes to the performance measurement framework and survey instrument.

- **Updated agreement on standardized definitions for each metric in the PMF.** BAIs participating in the pilot also took the opportunity to provide useful input on the clarity and usefulness of the definitions provided in the BAI and company surveys.

- **An improved understanding of how the data will be collected, stored, and analyzed.** Processes for data collection, analysis and reporting have been designed, and partially tested during the feasibility study. Phase I of the pilot provided an opportunity to identify potential pain points and alleviate any concerns about data security and confidentiality, among other things, for phase II.

- **An improved understanding of what the frequency of data collection should be.** The default assumption is that company performance data points will be collected annually. BAI program profiles could also be updated once annually. However, the pilot led to further discussion about analytical or administrative reasons for collecting certain metrics more frequently.

- **A demonstration of success and lessons learned.** The successful collection and aggregation of consistent data from multiple BAIs across Canada demonstrated that performance measurement can work within a diverse ecosystem of BAIs. The subsequent Mini-Summit in Waterloo provided an opportunity to identify valuable lessons and insights for managing the national performance measurement process with an expanded group of BAI participants.

- **Shared commitment to building a sustainable institutional framework.** The successful run of the phase I pilot also set the stage for discussions between BAIs and their partners in government about how best to establish a sustainable institutional framework for the ongoing management of a national performance measurement process.

As the PMF moves into phase II, a number of additional outcomes will come to fruition. These include:

- **A consistent baseline for longitudinal data.** By using standardized metrics, Phase I helped establish a consistent baseline for collecting longitudinal data over a longer period of time. Phase II will further extend and enrich this baseline.

- **Linkages to other datasets for econometric analysis.** Phase I enabled researchers at Statistics Canada to successfully link the resulting database with other datasets held by Statistics Canada and to provide a demonstration of the types of descriptive analyses that are possible using the
BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

linked data. Phase II will provide an opportunity to test more sophisticated forms of analysis and to link the resulting data to additional datasets (for example, databases held by federal programs such as NRC-IRAP and industry associations such as the National Venture Capital and Private Equity Association of Canada).

- **Streamlined performance reporting.** Phase I of the pilot demonstrated to federal, provincial and municipal funding bodies how multiple government departments can use the national PMF to collect the same data through a single process and platform, thereby lessening the reporting burden on BAIs. Phase II presents an opportunity for these entities to engage more fully in the pilot process.

- **Enhanced insight into business growth and Canada’s broader economic performance.** Phase I of the pilot set the stage for developing a data driven understanding of the role of BAIs programs in Canadian firm growth. Phase II will set the stage for an enriched analysis with the possibility to establish industry benchmarks, highlight opportunities for collaboration and synergy between BAIs, and provide a window into the performance of high-potential sectors and regional tech clusters across the country.

- **Accelerated growth of supported firms.** Over time, insights on how to most effectively support innovative growth-oriented firms in Canada will help BAIs to refine their program offerings. Improved options for support, in turn, will ensure that firms get the targeted, high quality services they need to build world class ventures in a wide variety of high-potential sectors.

In summary, a national performance measurement framework will provide BAIs with reliable and comparable data on which to make sound decisions, as well as timely information on the relevance, success and cost-effectiveness of their programs and activities. A common evaluation framework and reporting process will also ease the administrative burden on BAIs, while providing governments and other funders with a rigorous and objective evidence base with which to assess the performance of BAIs and make informed resource allocation decisions. Entrepreneurs across the country will be better equipped to identify the best options for support at various stages of their entrepreneurial journey.

The work Canadian BAIs are doing together at the national level will result in many other tangible benefits for BAIs, their clients and the broader economy. These benefits include the ability to share best practices across institutions and jurisdictions, establish relevant performance benchmarks for different regions and sectors, enhance input into public policy, and position and promote Canada as a destination for start-up activity. Ultimately, this work will inform BAIs and the Government on how to most effectively support innovative growth-oriented firms in Canada and these insights, in turn, will help accelerate the growth of world class companies in a variety of high value sectors. In other words, the collaborative efforts to build a common system for measuring the performance of BAIs could herald the beginning of an exciting new chapter in the growth and evolution of Canada’s start-up ecosystem.
PART II. BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

Part II of the report provides a detailed overview of the BAI Performance Measurement Framework (PMF) 2.0 that was used as the basis for Phase I of the pilot and refined for the purposes of Phase II. In addition to presenting an updated survey instrument with clear definitions for the key performance metrics, this document serves as an operating manual for the BAI performance measurement process. As such, Part II of the report provides the necessary background for onboarding new BAI participants and government partners. Section 2 describes the approach for collecting, analyzing and reporting the data, including the methodology that will be used by approved researchers to produce the descriptive statistics and econometric analyses that will illuminate the relationship between BAI programs and the economic performance of client firms. Section 3 of the report details the operations and administration of the performance measurement platform, including processes for obtaining consent to share information and protecting the confidentiality of data.

2.1 KEY PMF DESIGN PRINCIPLES AND CONSIDERATIONS

The PMF is designed with four guiding principles:

1. To develop simple measures of performance that do not put an undue burden on BAI client firms or on the BAI organizations;
2. Whenever possible, to develop simple measures that are easily collected by BAI officials and the client firms themselves;
3. Collect measures that allow for linkages to Statistics Canada administrative data sets as well as other data sets to extend the data in scope and time that permits additional descriptive statistics and future econometric analyses; and
4. To only share client data to the extent necessary for the purposes of evaluating and improving the business incubation and acceleration services available to entrepreneurs and businesses in Canada.

Abiding by these principles will ensure that the PMF creates value for BAIs, their clients, partners and funders without imposing additional administrative burdens or compromising client confidentiality. In addition to these principles, a couple of additional high-level design considerations were very important in framing the PMF:

First, while the PMF delineates a core set of metrics focused on the economic performance of client firms, it does not cover all of the factors that could be deemed relevant in evaluating the performance of BAIs. Nor does it cover all of the data points and indicators that BAIs may require for internal management purposes or to satisfy the reporting requirements of particular funding partners. For example, the PMF does not call for systematic tracking of company success stories or a detailed analysis of client satisfaction...
with the programs and services that BAIs deliver. Nor does it call for any qualitative analysis of how BAIs interact with their local economic ecosystems and the benefits that those interactions generate. For the purposes of the PMF, it was decided that convergence on a common set of financial metrics would provide simple and useful measures for assessing the economic impact of BAIs and, furthermore, be easier to achieve across diverse organizations serving diverse clientele. BAIs are responsible for capturing any data that is beyond the scope of the PMF.

Second, the PMF is not designed to track the impact of all of the different services and programming that BAIs offer. For example, the BAI Steering Committee reached a decision to only include data on programs that deliver sustained interventions (e.g., education, advisory, coaching and mentoring services delivered over several months or more) that cater to growth-focused client firms. This means that activities and short-term interventions such as walk-in advisory services, conferences and lunch-and-learns will not be included in the data collected for the pilot. While such activities are an important part of the service mix that many BAIs offer, they are generally not the interventions that deliver the greatest economic impacts. In setting these interventions aside, the PMF can more clearly delineate that economic value that is generated from the substantive, growth-focused programming that BAIs offer.

2.2 PERFORMANCE METRICS AND DATA COLLECTION

Data collection for the PMF pilot is the responsibility of the participating BAI organizations and client firms. Representatives of each BAI organization are responsible for entering the BAI profile and company information being tracked by the PMF into the data sharing platform (i.e., Hockeystick for the purposes of the pilot). The first round of data collection for 2017 BAI program cohort/entrant data is complete. Data collection for 2018 BAI program cohort/entrant data is underway. In both instances, the information will be collected through two standardized questionnaires (Appendix A & B) administered by Hockeystick.

1) **BAI Profile & Program Questionnaire** (Appendix A) collects information about the structure of the BAIs (the organization profile) and the nature of the program(s) they offer to client firms (the program profile), including the types of firms and sectors BAIs target with their programs. Each participant will be required to have a Hockeystick account and will be responsible for completing the BAI questionnaire. BAIs are encouraged to complete more than one program profile.

2) **Company Questionnaire** (Appendix B) collects the client firm’s key performance indicators such as employment, revenue and investment, as well as the client’s business number and key characteristics such as their stage of development and the sector they work in.

**BAI Program Profiles**

Participation in the pilot is voluntary and BAIs can choose which of their programs to include in the pilot. As a starting point for data collection, BAIs participating in the pilot complete an organizational profile and a profile for each program for which they plan to contribute data. In choosing to include a program in the PMF, BAIs are responsible for ensuring recipients of these service offerings provide data for all of the questions and indicators included in the PMF. BAIs must also obtain consent from clients to share this data in a manner that is consistent with the guidelines for data disclosure defined in section 2.3 below.
As noted above, BAIs should only include data on programs that deliver sustained interventions (e.g., education, advisory, coaching and mentoring services delivered over several months or more) and that cater to growth-focused client firms. BAIs should not include programming or activities that deliver short-term interventions to transient clients (e.g., conferences, “lunch and learns” or walk-in advisory services).

Table 2 outlines the organizational and program details that BAIs will need to upload. To do so, BAIs will first need to establish a free account with Hockeystick, which serves as the data-sharing platform for the pilot.

### Table 2. BAI Organizational and Program Profiles.

<table>
<thead>
<tr>
<th>CATEGORY OF INFORMATION</th>
<th>INFORMATION REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Profile</td>
<td>• Legal name</td>
</tr>
<tr>
<td></td>
<td>• Year established</td>
</tr>
<tr>
<td></td>
<td>• Contact information</td>
</tr>
<tr>
<td></td>
<td>• HQ location (street address/city/province)</td>
</tr>
<tr>
<td></td>
<td>• Affiliation (e.g., university, community, private)</td>
</tr>
<tr>
<td></td>
<td>• Sources of funding (e.g., government, foundations, client fees, etc.)</td>
</tr>
<tr>
<td>Program Profile</td>
<td>• Program name</td>
</tr>
<tr>
<td></td>
<td>• Client intake (e.g., cohort-based or continuous intake)</td>
</tr>
<tr>
<td></td>
<td>• Program length</td>
</tr>
<tr>
<td></td>
<td>• Program type (e.g., co-working, business coaching, export support etc.)</td>
</tr>
<tr>
<td></td>
<td>• Target client development stage(s)</td>
</tr>
<tr>
<td></td>
<td>• Target sector(s)</td>
</tr>
<tr>
<td></td>
<td>• Program cost to client (e.g., fixed fee, variable fee, no fee, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Company funding available (Y/N)</td>
</tr>
<tr>
<td></td>
<td>• Type of funding (e.g., equity investments, grants, loans)</td>
</tr>
<tr>
<td></td>
<td>• Program delivery model (e.g., in-person, online)</td>
</tr>
<tr>
<td></td>
<td>• Average number of clients served through the program</td>
</tr>
</tbody>
</table>

### Client Firm Metrics

Client companies (or BAIs on behalf of their clients) will also complete profiles in order to provide a more complete picture of the ventures that are participating in BAIs programs. The client identifiers (noted in Table 3) will be collected. These identifiers will be used only by approved Statistics Canada researchers for the purposes of linking client data to administrative and external databases, in order to facilitate statistical and econometric analysis. The information collected about client company characteristics and client demographics will also permit researchers to generate a range of valuable descriptive statistics, which are detailed below in the section about data analysis and reporting. Outputs from this analysis will only be provided in aggregate form, with strict protocols in place to ensure the confidentiality of client data (see section: Statistics Canada Data Management Approach).
Table 3. Company Profiles.

<table>
<thead>
<tr>
<th>CATEGORY OF INFORMATION</th>
<th>INFORMATION REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Identifiers</td>
<td>• Business number</td>
</tr>
<tr>
<td></td>
<td>• Legal name</td>
</tr>
<tr>
<td></td>
<td>• Street address</td>
</tr>
<tr>
<td></td>
<td>• Contact information</td>
</tr>
<tr>
<td>Client Characteristics</td>
<td>• HQ location (city/province) in Canada</td>
</tr>
<tr>
<td></td>
<td>• Date of incorporation</td>
</tr>
<tr>
<td></td>
<td>• Year of first sale</td>
</tr>
<tr>
<td></td>
<td>• Stage of development</td>
</tr>
<tr>
<td></td>
<td>• Sector participation</td>
</tr>
<tr>
<td></td>
<td>• # of establishments in/outside Canada</td>
</tr>
<tr>
<td></td>
<td>• Support from public programs</td>
</tr>
<tr>
<td></td>
<td>• BAI program(s) affiliated with client firm</td>
</tr>
<tr>
<td>Client Demographics</td>
<td>• # of founders</td>
</tr>
<tr>
<td></td>
<td>• Gender of founders</td>
</tr>
<tr>
<td></td>
<td>• # of founders age 39 and under</td>
</tr>
<tr>
<td></td>
<td>• # founders born outside of Canada</td>
</tr>
<tr>
<td></td>
<td>• # of Indigenous founders</td>
</tr>
<tr>
<td></td>
<td>• # of founders for which this is their first venture</td>
</tr>
</tbody>
</table>

The primary objective of the performance measurement framework is to link BAI programs and services to quantifiable improvements in company performance, particularly growth-related outcomes related to annual revenues, employment and investment. As such, in addition to company profile metrics, the performance measurement framework outlines a number of performance indicators or metrics that participants in the pilot will be required to track. Each performance category features a number of key metrics.

The specific categories of metrics include the following:

- **Job Creation**: Measures of the total number of jobs created, including more specific measures of the types of jobs that have been created (e.g., full-time vs. part-time positions inside and outside of Canada)
- **Revenues**: Measures of any annual sales revenues, including a breakdown of domestic and international sources.
- **Investment**: Measures of the value and kind investment capital raised by companies.
- **Intellectual Property**: Measures of the number of patent applications filed and granted.
- **BAI Impact Assessment**: Measures the company’s subjective assessment of the impact of BAI programming on company performance.
## BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

Table 4. Performance Metrics.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>METRICS</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Full-time employment in Canada</td>
<td>• Full-time employees (≥30 hours pw) in Canada.</td>
</tr>
<tr>
<td></td>
<td>Part-time employment in Canada</td>
<td>• Part-time employees (&lt;30 hours pw) in Canada.</td>
</tr>
<tr>
<td></td>
<td>Number of employees outside of Canada</td>
<td>• Full and part time employees outside Canada.</td>
</tr>
<tr>
<td>Revenue*</td>
<td>Total annual sales revenue</td>
<td>• Total annual sales revenue in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Annual sales revenue outside Canada</td>
<td>• Total annual sales revenue outside of Canada in a calendar year (i.e., export revenue).</td>
</tr>
<tr>
<td>Capital Raised</td>
<td>Credit from financial institutions</td>
<td>• Financing received from bank loans and similar products in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Personal financing used towards the business</td>
<td>• Includes personal loans, lines of credit, credit cards and personal savings of business owners in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Capital from friends or relatives</td>
<td>• Financing received from friends or relatives of the business owner(s) in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Capital from public sources</td>
<td>• Funding received from public sources (e.g. federal/provincial/municipal loans, grants, subsidies, prizes and non-repayable contributions) in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Capital from angel investors</td>
<td>• Funding received from angel investors (e.g. individuals and groups unrelated to the business that provide financial backing and often advice) in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Capital from venture capital providers</td>
<td>• Financing received from venture capital providers in a calendar year.</td>
</tr>
<tr>
<td></td>
<td>Capital from crowdsourcing</td>
<td>• Financing received from crowdsourcing in a calendar year.</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>Patent applications</td>
<td>• Total # of patent applications in the previous calendar year.</td>
</tr>
<tr>
<td></td>
<td>Patents granted</td>
<td>• Total # of patents granted in the previous calendar year.</td>
</tr>
<tr>
<td>BAI Impact</td>
<td>Net promoter score</td>
<td>• Willingness to recommend the BAI programs to someone else (0-10 net promoter score format, 0 is low).</td>
</tr>
<tr>
<td></td>
<td>Impact assessment</td>
<td>• Assessment of the impact the BAI programs had on the company’s chance of success.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Minor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Vital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Don’t Know</td>
</tr>
</tbody>
</table>
* Revenue is defined as the total amount of money received by the company for goods or services sold. It also includes licensing revenues and is calculated before any expenses are subtracted. It does not include interest, equity investments, loans, grants or SR&ED.

In the 2017 survey, client companies had the option to include employment and revenue data for 2015 and 2016, thereby providing researchers with a better baseline against which to measure the impact of BAI services. Due to low response rates and in order to reduce the overall length of the survey, these questions have been eliminated for release 2.0.

Data Entry Options

For the purposes of the PMF pilot, there are two possible methods for collecting client data and entering it into Hockeystick. Regardless of the method, the BAI is responsible for securing the permissions from client companies to release the data to Hockeystick and, for the purposes of research, to Statistics Canada, ISED and approved researchers (see section 2.5 on data disclosure).

- **Entry by BAI**. BAI s can enter the client data on behalf of their client firms. This option will appeal to organizations that already collect information performance related data from client firms. For example, BAI s may choose to upload existing data to Hockeystick from their respective CRMs or performance management systems.

- **Direct entry by client firms**. BAI s can request their client firms enter their data directly into Hockeystick using a secure online form. Where necessary, the BAI is expected to validate the data provided by clients and fill in any empty fields.

The common data sharing platform is intended to reduce the reporting burden on BAI s and their clients. Every effort is being made to ensure clients and BAI s are only required to input information once. BAI s should choose the data collection method that is most consistent with this goal. Both BAI s and clients can call Hockeystick’s customer support team for assistance with any data entry questions or concerns. The ISED team is also available to provide support to BAI s as needed.

![Data collection, reporting and analysis process map.](image)

**Figure 2**: Data collection, reporting and analysis process map.
2.3 DATA DISCLOSURE, ANALYSIS AND REPORTING

Client data entered into Hockeystick is confidential and will be protected by Hockeystick’s platform security (see Section 3 below). Client data will only be made available for export and analysis according to a clearly defined set of rules for data disclosure and for protecting the confidentiality of data (see discussion below on Statistics Canada’s Data Management Approach). This section details the rules for accessing client data and the principles and methods for how data analysis will be performed. It also highlights potential linkages to external datasets and identifies a set of descriptive statistics that approved researchers can generate from the data.

Data Disclosure

As noted, the PMF pilot will require that the client firms of participating BAI organizations provide certain client company information for the purposes of evaluating the economic impact of the support programs and services offered by BAI organizations. This may include the name of the client company, the company’s business coordinates and website address, as well as financial information such as annual revenues, full and part-time employment and other relevant business information about the client companies.

The PMF defines four classes of information that will be subject to varying degrees of disclosure, as detailed below:

- **Client identifiers** includes any company information that could be used to identify the client firms, including its business number, company name, street address and contact information.
- **Client characteristics** help describe client companies but cannot be used to identify them. These include the year of incorporation, the client’s “development stage,” the number of establishments inside and outside Canada, the sector(s) in which the firm participates and the government programs from which the client has received support.
- **Client financials** includes information that will be used to evaluate the impact of BAI organizations. This includes data such as annual sales inside and outside of Canada, full and part-time employment, capital raised from different sources, as well as patent applications and grants.
- **Client demographics** includes information about the number of founders, their gender, if they are immigrants, and the number of Indigenous founders.

The PMF also specifies four main categories of stakeholders with which client data will be shared for the purposes of research, evaluation and performance improvement.

- **Statistics Canada (STC)**, including designated Statistics Canada researchers.
- **ISED and Approved Researchers**. Employees of the Department of Innovation, Science and Economic Development and Statistics Canada approved external researchers.
- **BAIs with client firms**. Specifically, the BAI organizations with a contractual support relationship with a client firm.
- **The Public**, including other BAI organizations participating in the PMF pilot and the public at large.

Table 6 depicts which stakeholders will have access to the firm level data collected as part of the PMF.
pilot. As the table outlines, identifiable micro-data will be available only to Statistics Canada researchers and will be governed by strict confidentiality measures. As a general rule, public reports assessing the economic impact of BAIs in Canada will only include aggregated descriptive statistics, and only in cases in which there are sufficient observations to maintain firm level confidentiality (see section on assessing impact and descriptive statistics below). The organizational and program profiles entered into Hockeystick by BAIs will not be subject to any special confidentiality considerations.

TABLE 6: Disclosure of Client Data

<table>
<thead>
<tr>
<th>CLASSES OF INFORMATION</th>
<th>METRICS/DATA</th>
<th>BAI w/ client firm</th>
<th>STC + approved researchers</th>
<th>ISED</th>
<th>PUBLIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Identifiers</td>
<td>• Business number</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>• Legal name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Street address</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contact information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client Characteristics</td>
<td>• HQ location (city/province) in Canada</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Aggregated at BAI, city, provincial &amp; national level</td>
</tr>
<tr>
<td></td>
<td>• Date of incorporation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Year of first sale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Development stage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sector participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of establishments in/outside Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support from public programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• BAI program(s) affiliated with client firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client Financials</td>
<td>• Jobs: full and part-time employment in/outside Canada</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Aggregated at BAI, city, provincial &amp; national level</td>
</tr>
<tr>
<td></td>
<td>• Revenue: sales in/outside Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Capital raised: gov’t, private equity, debt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Intellectual property: patent applications and patent grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client Demographics</td>
<td>• # of founder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Aggregated at BAI, city, provincial &amp; national level</td>
</tr>
<tr>
<td></td>
<td>• Gender of founders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of Canadian born founders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of Indigenous founders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of serial entrepreneurs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Statistics Canada’s Data Management Approach

To encourage broad client participation in the PMF, BAIs will find it helpful to convey some key facts about the role of Statistics Canada in the data analysis process.

First, to balance Statistics Canada’s extensive powers to collect information, the Statistics Act establishes rigorous legal obligations for Statistics Canada to keep information in trust and only use it for statistical purposes. Data obtained and kept by Statistics Canada cannot be used for non-statistical purposes (for example, by the CRA for tax assessment purposes). BAI clients who believe this will be much more likely to answer truthfully and cooperate with Statistics Canada. Much of Statistics Canada’s credibility rests on confidentiality protection as a bedrock condition of operation.

It is also important that BAI clients understand that Statistics Canada does not publish identifiable information. In addition, a number of policies govern employees’ activities. Only employees with a “need to know” have access to the agency’s data holdings, and the linkage of data to other sources must undergo a prescribed review and approval process, which involves the submission of documented proposals to senior management.

Linkages to External Datasets

The PMF will establish linkages to other data sets, including data held by Statistics Canada, federal and provincial support programs and third-party entities such as the Canadian Venture Capital and Private Equity Association (CVCA) and the National Angel Capital Association of Canada (NACO). Such linkages will improve the completeness and robustness of the data, enable researchers to extend the datasets in time and lessen the reporting burden on BAIs and client firms in cases where information can be sourced from existing datasets. To protect client confidentiality, all linkages to external datasets specified by the PMF will be performed by designated Statistics Canada researchers and subject to Statistics Canada’s rules and procedures related to confidentiality.

The four categories of external datasets include, but are not necessarily limited to:

- Statistics Canada (STC) Data, including a variety of micro-databases covering employer businesses in Canada.
- VC and Angel data drawn from databases maintained by CVCA and NACO.
- Federal Program Data from datasets maintained by Business Development Canada (BDC), Export Development Canada (EDC) and other federal programs such as the Industrial Research Assistance Program (IRAP) and the Regional Development Authorities (RDA).
- Provincial Program Data from provincial business support programs.

Table 7 shows the specific linkages envisioned between data collected from client firms and the external datasets held by partner institutions. The table only lists the metrics for which linkages to external datasets are possible. To reiterate, these linkages would be performed within the Statistics Canada secure environment.
Table 7: Linkages to External Datasets

<table>
<thead>
<tr>
<th>CLASSES OF INFORMATION</th>
<th>METRICS/DATA</th>
<th>Statistics Canada Data</th>
<th>VC + Angel Data</th>
<th>Federal Program Data</th>
<th>Provincial Program Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Identifiers</td>
<td>• Business number</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Legal name</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Street address</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• City/Province</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client Characteristics</td>
<td>• Year of first sale</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sector participation</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of establishments in Canada</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support from public programs</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Client Financials</td>
<td>• Employment in Canada</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Annual sales in Canada</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Capital raised – gov’t</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Capital raised – private equity</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Capital raised – debt</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Sources of financing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Data Analysis: Assessing the Impact of BAIs

As noted in section 1, analysis performed using the data collected from BAI clients during the pilot period – including the production of descriptive statistics and econometric modelling using linked datasets by ISED, Statistics Canada and/or approved researchers – will not be used to evaluate the performance of individual BAIs. It will, however, be used to help draw broader policy conclusions about the economic impact of BAIs, assess the effectiveness of national funding programs and identify policy gaps. As such, the pilot will provide the government with an opportunity to test and refine different approaches to generating useful descriptive statistics and econometric models that can inform the policymaking process. At the same time, BAIs and other approved researchers can put forward proposals for research that will leverage the PMF data to derive insights that will drive BAI performance improvements and create other benefits for Canada’s innovation ecosystems.

To assess the overall performance of the BAI industry and its ability to drive greater economic growth, three stages for measuring performance are being developed. The first two stages focus on early performance measurement within the first three years of the PMF while the third stage is focused on
econometric data analysis that can be conducted three to four years after a company enters a BAI.

In the first stage, it is proposed that within the first year of a firm joining a BAI, descriptive statistics are generated based on the completed information that the BAI/client enters into Hockeystick in accordance with the BAI PMF. Table 8 lists a number of possible descriptive statistics that could be generated from the data.

**Table 8: Descriptive Statistics**

<table>
<thead>
<tr>
<th>STATISTICS</th>
<th>CONTROL VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm age distribution</td>
<td>BAI Location Age Sector Founder Founder</td>
</tr>
<tr>
<td>International footprint</td>
<td>BAI Location Age Sector Founder Founder</td>
</tr>
<tr>
<td>Sectorial distribution</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Distribution of gov’t support</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Employment in Canada</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Employment outside Canada</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Number of high growth firms by employment</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Sales in Canada</td>
<td>BAI Location Age Sector Founder Founder</td>
</tr>
<tr>
<td>Sales outside Canada</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Number of high growth firms by sales</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Amount of capital raised by type (gov’t, private, debt)</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Patent distribution</td>
<td>BAI Location Sector Founder Founder</td>
</tr>
<tr>
<td>Distribution of company stage of development</td>
<td>BAI Location Sector Founder</td>
</tr>
<tr>
<td>Distribution of company founder profile (Gender, Diversity)</td>
<td>BAI Location Sector</td>
</tr>
</tbody>
</table>

The second stage (already demonstrated in phase I) involves linking data to administrative files within Statistics Canada (STC) and other data sources to extend the descriptive statistics both in scope and time. In this stage, for example, the growth profiles of BAI clients based on key performance indicators such as revenue and employment growth may be used to compare BAI clients to the general population of firms. In this case, NAICS (North American Industry Classification System) can possibly be used as a simple control.
variable. In phase II, additional control variables such as firm size and location may also be used for analysis. Depending on the quality of the data and the linkages that are possible, there may be a possibility to introduce some econometric techniques to compare the growth patterns of BAI clients over two-to-three years with other companies in the general population with similar characteristics.

Finally, after approximately four years, it may become possible to conduct a more rigorous econometric-based analysis. Using the more rigorous econometric-based analysis, a control group of non-BAI clients can be established. There are some substantial technical issues that need to be overcome to ensure that the characteristics of the population of the control group are a close match to the characteristics of the population of BAI clients. The researchers will work to develop advanced econometric techniques to identify the filters that will be used to identify the non-BAI clients that are closely matched to each of the BAI clients on a number of financial and non-financial factors. The statistically significant differences between KPI performance measures – such as revenue growth, employment growth, profitability, R&D expenditures – of the BAI client population to that of the control group can then be established. This analysis will provide an indication of the true economic impact of BAIs. This analysis will likely only be possible at the national level, and not at a regional or at the BAI level.

3. PERFORMANCE MEASUREMENT PLATFORM

This section describes the data sharing platform that will be used for the pilot and its administration. It also details all of the processes for gathering the consent to share information and protect the confidentiality of data (by firms, BAIs, researchers and Statistics Canada).

Following a review of available options, the BAI Steering Committee and its partners in government selected Hockeystick as the data platform for the Performance Measurement Framework feasibility study and pilot. With the support of the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) and the Lazaridis Institute, the Hockeystick platform is being made freely available to BAIs and their clients for the purposes of the pilot project. Indeed, Hockeystick has made a long-term commitment to provide free services to BAIs that is defined in the legal agreements that BAIs sign to register an account with Hockeystick.

In its review of available platform options, the Steering Committee’s decision at the outset of the pilot was guided by a number of key principles and requirements. These included:

- **Security.** The platform’s capacity to protect client confidentiality and securely host client data on servers located in Canada must be trusted by participating firms, BAIs and funding organizations.

- **Convenience.** The process for loading BAI and firm level data onto the platform should be easy and complement the existing CRM and data management systems used by mature BAIs.

- **Engagement.** The platform must be capable of influencing high-level of response and data entry rate with effective and easy-to-use survey tools.

- **Reporting.** The platform must possess reporting and data visualization capabilities that create value for the PMF audience, including individual BAIs, client firms and government partners.
• **Availability.** The platform must be available for adoption within a short time period.

• **Cost.** The platform must be low cost for firms and BAIs to use.

While other platforms met many of these requirements, Hockeystick was the only platform that could satisfy all of them, and particularly the requirement to securely host client data on servers located in Canada. It is worth noting that Hockeystick is also being evaluated as part of the pilot. Pilot participants will be asked to provide feedback on Hockeystick’s suitability for long-term use as a data platform for Canada’s national performance measurement framework.

### 3.1 PLATFORM DESCRIPTION

Hockeystick is used by venture capital funds, accelerators, angel groups, banks and government funders, to automatically collect financial data and produce insight via dashboards and portfolio reports. Hockeystick automates the reporting process, making it easy for innovation organizations, portfolio managers, companies and other users to comply with their reporting obligations. For the purpose of the PMF pilot, Hockeystick provides a secure, user-friendly and customized cloud-based data sharing platform that will facilitate and streamlines data collection efforts and information sharing across the BAI community and with government partners.

As noted above in the process map, financial data will be gathered from companies through surveys, documents and application integrations like QuickBooks Online, either by companies directly or by BAIs on behalf of their clients. BAIs will be notified when a report is filed or becomes late, and built-in reminders ensure that client companies file their data in a timely manner.

Hockeystick is able to switch between the two Canadian official languages in the UI and pull the content in that language for labels, buttons and messages. By default, Hockeystick will appear in English the first-time users login. However, one click of a link at the top right corner of the screen will automatically translate the interface into French.

### 3.2 DATA SECURITY

A key concern for BAIs and their client firms is the confidentiality and security of their data. Clients uploading their confidential financial information will rightly want assurances that their data will be protected from unauthorized access and malicious attacks. What follows is a brief description of Hockeystick’s approach to data security.

Hockeystick’s suite of applications is running on Amazon Web Services (AWS) platform and the data is hosted in AWS’s Canada Central region data centre. The data centers are located in Montreal and support a subset of the full AWS list of products.

Hockeystick has implemented numerous security controls to mitigate malicious attacks on its data. More specifically, Hockeystick has employed four levels of security to secure its data. The first level is the security controls that Hockeystick has leveraged from AWS. The second level is the hardening of all its servers from the OS level to the web and database server applications. The third level is using the OWASP...
Top Ten to drive code reviews with static code analysis (white-box testing) in conjunction with periodic black-box testing. The fourth level is the use of monitoring and alerting software. For more information on platform security, please contact Hockeystick management.

3.3 CONSENT TO SHARE INFORMATION

BAIs participating in the pilot will need to gather consent from their client firms to share information for the purposes of the pilot. This must happen before any client data is uploaded to Hockeystick, either by client firms directly, or by BAIs on behalf of their clients.

To facilitate the process of gathering consent for the pilot, ISED has drafted a consent form that participating BAIs can use with their client companies. Based on feedback from BAIs, this model consent form is being simplified for phase II of the pilot. The consent form describes the types of data that will be collected (e.g. founders demographics, company development stage, number of employees, revenues, capital and financing raised, etc.) and specifies with whom the data will be shared and how it will be used (e.g., with Statistics Canada where it will be viewed for research purposes to study how programs influence company growth, and, in anonymized format, with the department of Innovation, Science and Economic Development Canada, where it will be used to develop aggregate level reports on Canada’s BAI ecosystem).

4. CONCLUSIONS AND NEXT STEPS

Performance measurement is a vital part of building a robust and successful entrepreneurial ecosystem in Canada. For too long, many BAIs – and the public bodies that help fund them – have operated in the absence of sufficient data about the economic impact of business incubation and acceleration activities. Notwithstanding the efforts of many BAIs to measure the impact of their activities, a lack of consistent metrics across institutions and inadequate tools for collecting, compiling and analyzing the data from client companies has undermined the ability to accurately assess the economic benefits that BAIs create. A lack of coordination and collaboration on performance measurement has also resulted in lost opportunities to champion our achievements and to foster improvements in the performance of Canada’s entrepreneurial support system.

A Canada-wide system for performance measurement will yield many benefits. It will help program leaders and policymakers better measure and understand the factors that drive success. It will enhance the ability to identify and implement improvements in programming, to share best practices across institutions and jurisdictions, to systematically generate better outcomes and to market Canada as a dynamic place in which to start and grow a business. It will help firms make better decisions about where and how to access support. BAIs will be better equipped to benchmark their performance and to identify opportunities to collaborate. And, a commitment to openly reporting the results, will build public confidence in the economic benefits these organizations create for Canada.
The successful run of phase I of the pilot is already generating a shared commitment across the BAI community to using the lessons learned from the pilot to establish a sustainable institutional framework for managing the PMF on an ongoing basis. As such, a number of next steps will help the community shepherd the PMF beyond the pilot phase, as depicted in Figure 6.

With these foundational steps in place, the project partners will continue to invite BAIs from across the country to join in contributing their data to the performance measurement platform. Greater participation from an increasingly diverse group of BAIs will strengthen the analytical potential of the data and broaden the benefits of effective performance measurement to more regions and sectors of the Canadian economy. At the same time, it will be important to onboard government funding partners at various levels of government in order for BAIs to reap the true benefits of streamlined reporting.

In conclusion, the PMF pilot serves as a vital step forward in building a national performance measurement for BAIs across Canada. It will establish consistent metrics for measuring the impact of BAI programs on firm performance, along with clear definitions for each performance indicator. The pilot will also demonstrate the successful collection and aggregation of consistent data from multiple BAIs across Canada using a data sharing platform that will streamline the data collection, analysis and reporting process. The aggregated data will then be used to generate a wide range of descriptive statistics that will foster a better understanding of the role BAI programs play in firm growth. Ultimately, this work will inform BAIs and the government on how to most effectively support innovative growth-oriented firms in Canada and these insights, in turn, will help accelerate the growth of world class companies in a variety of high value sectors.
APPENDIX A: BAI QUESTIONNAIRE

(TO BE COMPLETED BY THE BAI)

SECTION 1 – ORGANIZATION PROFILE

Organization Name:

Year Established/Founded:

Primary Point of Contact

Given Name(s):
Family Name:
Email:
Phone Number:

Secondary Point of Contact

Given Name(s):
Family Name:
Email:
Phone Number:

Headquarters

Address:
City:
Province:
Postal Code:
Country:
Website:

Please select the affiliation of your organization.

Select all that apply:

- University-affiliated
- Community-based
- Private
- Other

What funding sources or revenue models apply to your organization?

Select all that apply:

- Federal government
• Provincial government
• City or municipal government
• Foundation, non-profit granting body
• Client fees
• Real estate
• Corporate sponsorship
• Accelerator fund (fund management fees and/or returns)
• Other
  o Please indicate the other revenue model or funding source: [text box]

SECTION 2 – ORGANIZATION PROGRAM PROFILE

Please complete a profile for each program available at your organization.

Program:

Intake Method

• Cohort-based
• Continuous Intake

Program Structure

• Structured and Time-bound
  o Length of Program
• Open-ended support services

Program Type

Select all that apply:

• Co-work/office space
• Laboratory space/maker space
• Business coaching/consulting/mentoring/leadership development
• Trade and export support
  <Includes: Business development missions, internationalization, and any other activities linked to international market development.>
• Networking events and key introductions
• Access to funding
• Regulatory assistance
• Intellectual property education and assistance
  <Includes: patent, trademark and copyright evaluation, intellectual property strategy, protection and licensing.>
• Practical prototype/MVP development assistance
• Other

Target Development Stage(s)

Which best characterizes the development stage(s) of the companies that this program targets?
BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

Select all that apply:

- Idea - Entrepreneur with idea; a solution in search of a problem.
- Discovery - Clearly articulated and plausible problem/solution statement and the capacity to test it.
- Validation - A minimum viable product and evidence that it solves a real problem for an identified market
- Efficiency - Initial traction in a receptive enough market to build a business in.
- Scale - Evidence that a scalable sales and marketing process has been established. Accelerating revenue/customer growth.
- Mature - Stable profit from year to year.

Target Sector(s)

Which sectors does this program target?

Select all that apply:

- Agriculture
- Advanced Materials & Advanced Manufacturing
  - <Excludes specifically forestry, agriculture, mining, clean technologies and life sciences.>
- Clean Technologies
  - <Technologies that protect and/or increase efficient utilization of land, water and air resources.>
- Consumer Retail
- Digital Media and Telecommunications
  - <Digital applications and content and information and communications technologies.>
  - <Excludes healthcare, agriculture, forestry, mining, financial services, education, social innovation, culture/recreation and energy-related solutions.>
- Education
- Financial Services
- Food & Beverage
- Forestry
- Life Sciences and Advanced Health
- Mining, Oil & Gas
  - <Includes extractive activities that would not fall under clean technologies.>
- Tourism and Culture
  - <Includes entertainment and sports.>
- Transportation
- Other
  - Please indicate the type of technology/business your program targets: (text box)

Program cost to client:

Select all that apply:

- Fixed fee
  - <For example, registration fees>
- Variable fee based on project scope
<For example, fee-for-service contracts>

- Equity from client company
- No fee to client

What type of funding is available, if any, through the program? Please select a range based on the approximate average value per recipient.

(Ranges: $1K-19K; $20K-49K; $50K-$99K; $100K-$249K; $250K+)

- No funding
- Equity investment
- Grants (e.g. seed grants, awards, subsidies, non-repayable contributions)
- Debt (e.g. repayable loans, lines of credit)

How is the program primarily delivered?

- In-person (e.g. entrepreneurs meet in person with fellow entrepreneurs, program facilitators, mentors and business advisors)
- Remote (e.g. your activities take place in a virtual/web-based space)

Indicate the annual average number of clients served by this program in a calendar year.
APPENDIX B: COMPANY QUESTIONNAIRE

(EXPLANATORY NOTE: Some data collection systems allow the information in Section 1 (BAI Profile) to be collected once, saved and sent back to companies in following years for review. If that is the case, the BAI administering the survey may seek to have clients simply review the company profile information annually, while still completing Section 2 (Company Growth) with updated annual data. For those using systems without this functionality, client companies should complete both Section 1 and Section 2 of the survey on an annual basis).

SECTION 1 – COMPANY PROFILE

(To be completed once by each client company, annually reviewed, and updated as required.)

Contact Information

Business Name
Business Legal Name:
CRA Business Number:

Primary Point of Contact
Given Name(s):
Family Name:
Email:
Phone Number:

Secondary Point of Contact
Given Name(s):
Family Name:
Email:
Phone Number:

Canadian Headquarters
Street Address:
City:
Province:
Postal Code:
Website:

Profile
Is your main corporate headquarters in Canada? Y/N
Year of incorporation: YYYY
Year of first sale: YYYY

Number of establishments in Canada:
Number of establishments outside of Canada:
Establishment – A firm can have multiple establishments or be a single establishment. An establishment is an economic unit, such as an office, a store, a farm, a mine, or a factory, that produces goods or services. It is the smallest production entity of a firm that is generally able to provide accounting information regarding the value of shipments (sales), direct costs, and labour costs.

Stage

Which best characterizes your development stage?

Choose from:

- Idea - Entrepreneur with idea; a solution in search of a problem.
- Discovery - Clearly articulated and plausible problem/solution statement and the capacity to test it.
- Validation - A minimum viable product and evidence that it solves a real problem for an identified market
- Efficiency - Initial traction in a receptive enough market to build a business in.
- Scale - Evidence that a scalable sales and marketing process has been established. Accelerating revenue/customer growth.
- Mature - Stable profit from year to year.

In which industry sectors do you have active products and/or technologies (select all that apply)?

- Agriculture
- Advanced Materials & Advanced Manufacturing
  - Excludes specifically forestry, agriculture, mining, clean technologies and life sciences
- Clean Technologies
  - Technologies that protect and/or increase efficient utilization of land, water and air resources.
- Consumer Retail
- Digital Media and Telecommunications
  - Digital applications and content and information and communications technologies.
  - Excludes healthcare, agriculture, forestry, mining, financial services, education, social innovation, culture/recreation and energy-related solutions.
- Education
- Financial Services
- Food & Beverage
- Forestry
- Life Sciences and Advanced Health
- Mining, Oil & Gas
  - Includes extractive activities that would not otherwise fall under clean technologies.
- Tourism and Culture
  - Includes entertainment and sports
- Transportation
- Other
  - Please indicate the type of technology/business your company targets: [text box]
BAI PERFORMANCE MEASUREMENT FRAMEWORK 2.0

Founder Demographics

- How many people founded your venture?
- How many founders are female?
- How many founders are currently age 39 and under?
- How many founders were born outside of Canada?
- How many founders are Indigenous Peoples, that is First Nations, Métis or Inuit? *(First Nations includes Status and Non-Status Indians)*
- What is the number of founders where this is their first venture?

SECTION 2 – COMPANY GROWTH
(to be completed annually)

Business Legal Name:

Is this business’s company profile up to date? <If YES, proceed to survey. If NO, update company profile>

What BAI programs has your business used in the previous calendar year?
*(Will match BAI Programs Profile)*

What BAI programs has this business used prior to the previous calendar year?

Job Creation

In the previous calendar year, how many employees did this business have?

Full time employees (≥30 hours per week) in Canada:
Part time employees (<30 hours per week) in Canada:

Number of employees (both full and part time) outside of Canada:

Revenue

In the previous calendar year, what was this business’s total annual sales revenue?

In the previous calendar year, what was the dollar value of this business’s sales revenue outside of Canada (i.e. export revenue)?
*<To calculate, please use your total export revenue as of December 31st of the previous calendar year. Use the Bank of Canada’s Currency Converter [here] and select ‘1 year’ for the date range.>*

Capital Raised

In the previous calendar year, please indicate the amount of financing, if any, received from the relevant funding sources for your business.

- No financing received
- Credit from financial institutions
  *(i.e. Banks, Caisses populaires, credit unions, Business Development Bank of Canada, Export Development Canada, Farm Credit Canada.)*
<Credit includes term business loans, non-residential mortgages, business lines of credit and credit cards.>
- Personal financing used towards your business
  <Includes personal loans, lines of credit or credit cards from financial institutions, and personal savings of business owners.>
- Financing from friends or relatives of business owner(s)
- Government: loans, grants, subsidies, non-repayable contributions, or prizes
- Financing from angel investors
  <An angel investor is an individual or group unrelated to the business that provides financial backing and often advice to a business. Do not include friends and relatives here.>
- Financing from venture capital providers
- Crowdsourcing
- Other

**Government Services**

In the previous calendar year, have you received services from any federal government agencies? If so, please specify below.

Select all that apply:

- National Research Council Canada – Industrial Research Assistance Program
- Export Development Canada
- Business Development Bank of Canada
- Trade Commissioner Service
- Federal Regional Development Agency
  - (Atlantic Canada Opportunities Agency (ACOA), Canada Economic Development for Quebec Regions (CED), Canadian Northern Economic Development Agency (CanNor), Federal Economic Development Agency for Southern Ontario (FedDev Ontario), Federal Economic Development Agency for Northern Ontario (FedNor), Western Economic Diversification Canada (WD))
- Canadian Institutes of Health Research (CIHR)
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Scientific Research and Experimental Development Tax Incentive Program
- Strategic Innovation Fund
- Other

**Intellectual Property**

In the previous calendar year, how many active patent applications did this business have?

<Each separate jurisdiction in which a patent application has been filed counts as a separate application, e.g. separate national filings in the US and Canada count as two.>

In the previous calendar year, how many granted patents did this business have?

<Each separate jurisdiction in which a patent has been granted counts as a separate patent, e.g. granted patents from the same patent family in the US and Canada counts as two.>
Impact

Would you recommend the BAI programs to someone else (0-10 net promoter score format, 0 is low)?

Choose from:

- 0 1 2 3 4 5 6 7 8 9 10

What impact has working with the BAI programs had on this business's chance of success?

Choose from:

- Negative
- None
- Minor
- Significant
- Vital
- Don't Know