

TECHNATION^{CA}

The Innovation Adoption Program (IAP)

2021 Federal Budget Proposal

The Innovation Adoption Program

A proposal for Canada's economic recovery

TECHNATION is proposing a national program that leverages one of the most powerful economic levers that the Government has – its purchasing power - to drive economic recovery for Canada's small and medium sized enterprises (SMEs), implement 'virtual shovel ready' projects, and transform the way that government serves its citizens.

The Challenge

Procurement is one of the biggest and most underrated economic levers of government – the largest purchaser of good and services in Canada. Federal purchasing was estimated at **\$23 billion** in 2017 – making the federal government a powerful customer with the ability to shift markets, and launch, grow, or save businesses.

Yet, Canada's most promising technology start-ups and growth companies **do not bid** for the more than **\$6.8 billion** spent annually on technology projects, because processes are too long, costly, complex, and onerous for their business. This is a long-standing and widely acknowledged challenge for Canada's technology sector.

Effectively delivering a contract for Canada's federal government provides significant credibility for an SME – which can leverage into further contacts in the \$3.5 trillion global public sector solutions marketplace.

More immediately, when government adopts technology solutions developed by Canada's technology scale-ups and SMEs, it represents valuable growth opportunities with immediate positive dividends for businesses.

Over the longer-term, more access to federal purchasing will help ensure companies are in a stronger position to commercialize their solutions and grow technology innovations in Canada, instead of seeking other markets like the US to take their cutting-edge ideas to the next level.

For Canada's small and medium technology businesses – who often struggle to remain cash flow positive even when they appear healthy and growing – the economic slowdown resulting from COVID-19 has caused significant challenges for Canada's technology industry. Many technology SMEs, along with their innovative goods and services, are at risk of, at best, being swallowed up by large companies, or at worst, closing their doors entirely. These companies represent quality, high paying jobs in a top growth sector that impacts not only world-leading tech hubs in the GTA, Kitchener-Waterloo, Ottawa, Vancouver and Montreal, but cities in every corner of Canada.

By combining its digital transformation agenda with that of economic development, the federal government has the power to support these companies through this crisis, and ensure they emerge strongly positioned to help drive Canada's economy forward and create quality jobs.

The COVID-19 crisis has triggered the need for rapid digital transformation by government. Technology solutions are urgently needed to meet demand surges and challenges related to:

- A public sector workforce that must be able to function seamlessly when working remotely;
- Urgently deliver needed government programs and benefits;
- Supply chain challenges;
- Capturing and leveraging health, social and economic data;
- Ensuring cyber security and privacy protection by default; and
- Provide Canadians with services they need through their phones and computers.

These represent 'virtual shovel-ready' projects that can propel economic growth by engaging Canada's IT sector and deliver long-term benefits for Canadians.

The Opportunity

An immediate and significant opportunity exists for the federal government to stimulate the economy, ensure the recovery of Canada's technology sector, rapidly adopt technology solutions that are urgently needed, and create a 'new normal' of nimble, agile government procurement integrating cutting-edge innovations into public service delivery, while fueling economic growth.

COVID-19 has changed the way that the federal government and the Canadian public thinks about procurement. Governments have streamlined previously complex procedures, and many Canadian entrepreneurs have pivoted their business models to produce 'made in Canada' PPE and other solutions to aid in the health crisis.

This urgent and aggressive approach, however, has not yet been applied to technology procurement. As Canada shifts its focus to economic recovery and the longer-term implications of COVID-19, it's time to elevate this aggressive adoption of digital solutions to the national agenda.

The Government of Canada has taken important steps to move forward in new ways with the technology industry towards this goal. Shared Services Canada (SSC) has collaborated with TECHNATION to pilot agile federal procurements that leverage a new joint government-industry digital marketplace that is open, universally accessible, and can place hundreds, even thousands of technology solutions and capabilities at the government's fingertips. This collaborative platform can provide a foundation for the implementation of this proposal.

Canada's digital economy generates over 1 million jobs, contributes over \$120 billion annually to GDP, invests \$4.9 billion annually in R&D, and has taken over as the biggest economic sector driving Canadian economic growth. It's the leading creator of high-quality, well-paying middle-class jobs, driving year-over-year job gains and wage growth outpacing other parts of the private sector. It's estimated that every one per cent increase in digital adoption, could have a direct \$2.5 billion impact on the economy.

However, COVID-19 has placed the digital economy at significant risk – especially our SMEs that house world-leading innovations capable of driving massive Canadian job growth in the

future. Now more than ever, Canada's technology SMEs need their government to be buyers and adopters of their technology solutions. This is a once-in-a-mandate opportunity to use readily-accessible public sector tools to build a world class Canadian Digital Government and grow the Canadian technology sector at the same time.

Proposal

A national *Innovation Adoption Program* should be included as a key pillar of the Government of Canada's economic recovery plan. The program would involve four main components:

- **Defined Needs:** Define public service's top priorities for digital transformation and technology adoption to transform enterprise infrastructure and government services.
- **Dedicated Funding:** Dedicate a significant proportion of federal stimulus/recovery funding for the federal government to procure and adopt solutions - including support of innovation in other jurisdictions - needed from Canada's technology sector.
- **Transformed Procurement:** Expend these funds through modernized procurement approaches that are agile, streamlined, and accessible to SMEs with limited available time and resources. Define problems (challenges), not solutions, to empower the problem-solving capacity of the technology sector.
- **Executed Projects:** Align economic opportunities that federal purchasing power represents with urgent needs of government for digital solutions to execute virtual-shovel ready projects delivered by technology SMEs across Canada.

A multi-departmental, coordinated approach will help to ensure the success of this proposal.

- ***Shared Services Canada***, and the ***Treasury Board of Canada Secretariat's Office of the Chief Information Officer Branch***, under the direction of the Minister of Digital Government, can work collaboratively within government and industry to define the public service's most pressing technology needs. They can also seek alignment with the federal government's enterprise approach to digital public sector transformation, as well as other ongoing initiatives.

Areas where Canada's technology SMEs are particularly ready and capable of providing solutions to government include:

- Ensuring the public sector workforce is equipped effectively to work remotely and ensure service continuity in the face of any short and long-term crisis.
- Tackling challenges related to supply chains, health, economic, and socio-economic data, contact tracing, information sharing, and more.
- Improving efficient delivery of government programs and benefits to Canadians.
- Providing Canadians with access to the solutions that they need through their phones, smartphones, and computers.

Examples of 'virtual shovel-ready' projects could include:

- Innovative health technologies supporting the management of COVID-19 (e.g. contact tracing).
 - Digital applications to connect Canadian citizens with government services provided by any of the 101 federal departments, agencies, boards, commissions, and crown corporations (e.g. Employment Services).
 - Citizen relationship management software and programs
 - Software as a Service (SaaS).
 - Big data management and predictive analytics to support health and socio-economic strategy.
- **Public Services and Procurement Canada (PSPC)** – Under the direction of its Minister, PSPC can build on recent transformations in federal procurement, which have enabled the government to rapidly access COVID-19 products and solutions and make them available to Canadians, by pursuing a similar approach to technology adoption through this new national program.

New and promising approaches towards challenge-based and agile procurement can help public servants find fast and reliable solutions, cut through the complexity of available technology offerings, and ensure Canada's technology SMEs have improved access to offer their solutions to government and to Canadians.

Key components of the Innovation Adoption Program's (IAPs) procurement approach should include:

- **Leveraging TECHNATION's new national [TECH2GOV Digital Marketplace](#)** to help shape, promote, and deliver successful procurements.

Government often doesn't have a clear line of sight into solutions are coming or currently in the marketplace impacting challenge or requirements-based competitions. In some cases, it can be difficult to cut through the complexity of hundreds, if not thousands of technology offerings to get a clear picture of what is available in the market to serve a specific need. Or, it can be easier to draw up procurements based on what is familiar.

The joint-government industry digital marketplace enables government to easily comprehend and engage with qualified SMEs who specialize in solving the problems they face. TECH2GOV is a free, objective, open and universally accessible national digital dashboard and registry that will place a full suite of technology solutions and capabilities across Canada at the government's fingertips.

- **Building on recent agile procurement pilot processes and challenge-based procurement approaches** to make IAP procurements more nimble, accessible, and effective.
- **Placing aggressive timelines on IAP procurements.** Procurement processes are too lengthy and costly for many SMEs to see through – Canada's former CIO, Alex Benay, was quoted saying "...it takes three years to create the project

requirements, and two years to buy the solution.”

- **Signaling the marketplace.** Procurement processes are too unpredictable; without clearer medium-term line of sight on where exactly federal technology transformation is headed, and what types of solutions the government plans to buy, it's hard for technology SMEs to be ready for procurement opportunities. Government can clearly signal the areas in which it intends to buy solutions through the IAP and address this long-standing challenge. If industry knows what the federal government needs and plans to buy, they will adjust as necessary to provide it.
- **Funding serious contenders.** Participating in federal procurement processes, especially late stages of bid consideration, can be extremely costly for technology business. The federal government can address this problem and inject capital into the digital economy by funding the participation of SMEs that are short-listed for consideration on an IAP procurement.
- **Addressing known administrative challenges** associated with procurements, including excessive red tape and paperwork, as well unreasonable requirements like unlimited liability that disincentivize collaboration between the public and private sectors, whilst doing little to protect government.
- **Innovation, Science, and Economic Development Canada, the Department of Finance, and Small Business, Export Promotion and Trade** and their respective Ministers can all play a role coordinating the development, execution and promotion of this program, while ensuring ample engagement with industry to identify 'virtual shovel-ready' projects and innovative solutions to immediate needs that are available in the digital marketplace.