

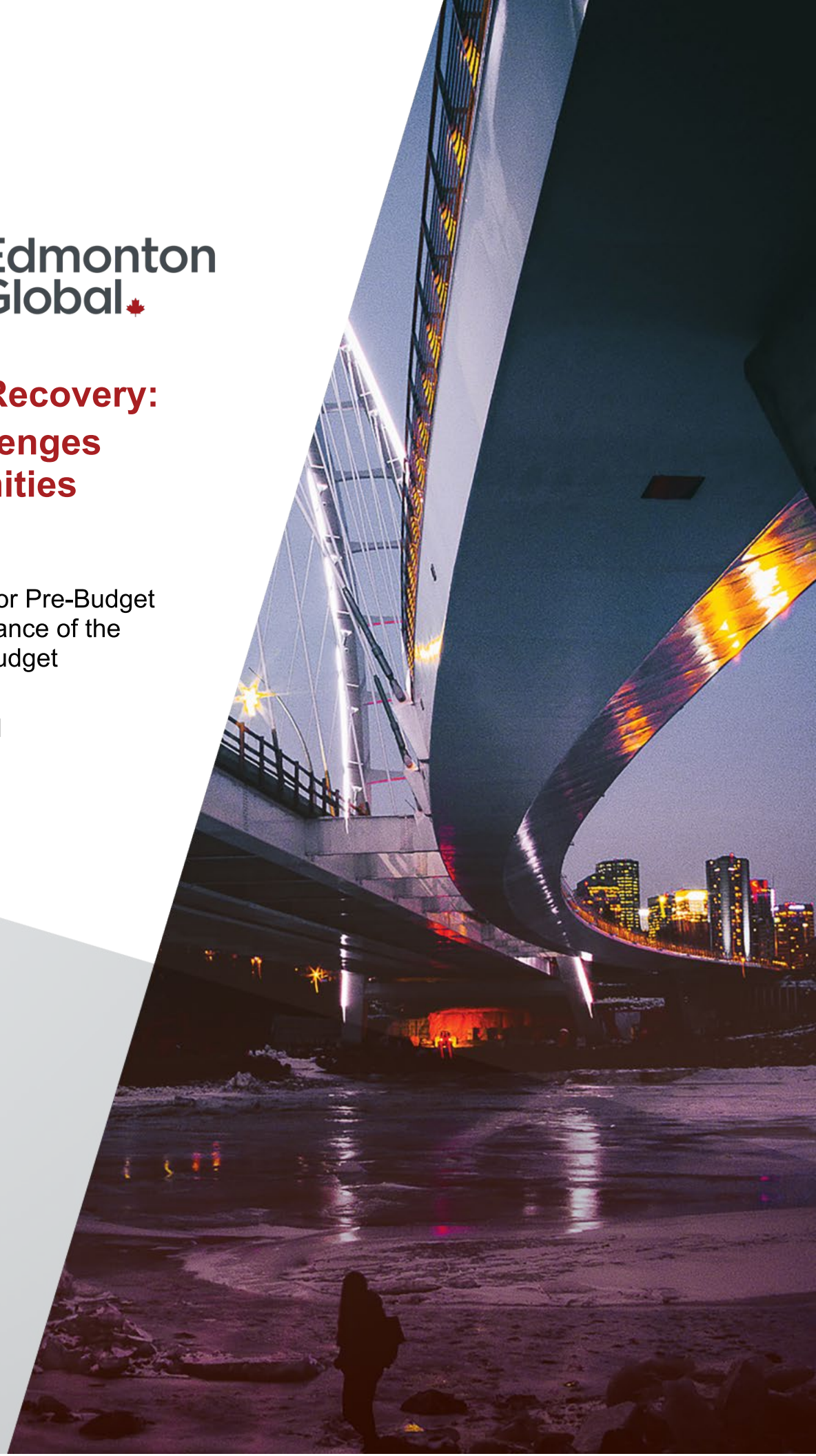


The Road to Recovery: Turning Challenges Into Opportunities

Written Submission for Pre-Budget
Consultations in Advance of the
Upcoming Federal Budget

By: Edmonton Global

August 2020



Recommendations for Canada's Road to Recovery

Recommendation 1:

That the Government of Canada invest \$21.8 million as a one-time grant for scaling up Alberta's pharmaceutical manufacturing capacity. The grant would be stackable with any provincial program and eligible applicants would include industry consortia of local producers, supply chain partners, multi-national players intending to expand or establish their Canadian presence, researchers, and any other relevant industry participants. The model would be flexible and adaptable to ensure maximum growth in the sector.

Recommendation 2:

That the Government of Canada re-establish the Digital Technology Adoption Program with a \$320 million investment over four years and incorporate recommendations from the program review to remove barriers for small and medium-sized enterprises (SMEs) who want to adopt new digital tools to increase their productivity and global competitiveness.



EDMONTON GLOBAL is a regional economic development organization for the Edmonton Metropolitan Region established by 15 municipalities to radically transform and grow the regional economy through investment attraction and trade.

Finding Opportunity in Crisis

We could not have predicted what has happened over the past months, but we can be the architects of the kind of economic future we want for our country and for Canadians today and generations to come.

If Canada wants to emerge from the crisis stronger and more globally competitive, we need to examine our competitiveness against the emerging global trends and make strategic investments that will have the most significant and long-term economic impact.



Global Trends and Opportunity

Digital transformation across all industries and sectors

By some estimates, COVID-19 has sped up timelines for technology adoption by businesses by as much as five years across all sectors and industries.¹

“You see the acceleration of digitization happening tremendously, especially with SMEs. Southeast Asia is probably ten years behind China in digitization, but Covid accelerated everything.”

-Grab CEO Anthony Tan

Consumers are looking online for products and services

Since February, Canada's e-commerce volume has doubled. Nearly half of all consumers were first-time online buyers of new products or services and as many intend to continue².

“In Japan, our e-commerce business is up 50%, our travel business is down 90%.” - Rakuten CEO Hiroshi Mikitani

Supply chains are being digitized and relocated

Supply chain policies have returned to the top of the agenda and shifting approaches have the potential to reshape trade and foreign direct investment flows. Businesses will focus on their strategic footprint more than low-cost operations and supply chain shifts could benefit Canada with a rise in near-shoring to the United States.

Manufacturers who previously looked at data, internet of things (IoT), and robotics to drive efficiency now see them as tools to increase resiliency during uncertain times. Industrial products and pharmaceutical manufacturers are looking to smart factory initiatives while consumer-oriented companies are focused on demand-sensing technologies and preventative maintenance solutions for machinery and equipment.

¹ COVID-19: The unexpected catalyst for tech adoption. (2020, March 16). Nielsen Global Connect | Nielsen Global Media – Nielsen. <https://www.nielsen.com/us/en/insights/article/2020/covid-19-the-unexpected-catalyst-for-tech-adoption/>

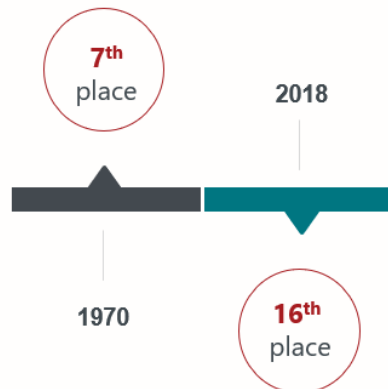
² Canadian e-commerce sales have doubled since pandemic began, study finds. (2020, April 1). Jon Mace | BNN Bloomberg. <https://www.bnnbloomberg.ca/canadian-e-commerce-sales-have-doubled-since-pandemic-began-study-finds-1.1415880>

Canada's Competitiveness

Our productivity lags behind global peers

Canada's productivity growth rate has been diminishing over time.

Global labour productivity rankings



Labour productivity growth is an important indicator of competitiveness in a jurisdiction and is driven largely by increases in output per worker (value-added activity), education and experience of the workforce and improvements in technology.



Productivity growth rate compared to G7 nations

The Road to Recovery

Governments and businesses surviving – and in some cases thriving – are those who have been able to defy the status quo, disrupt their business models and adapt to new realities through innovation and technology. They are creating entirely new industries and products and transforming existing ones.

The jurisdictions coming out of the crisis soonest and strongest are the ones who leverage massively scalable digital and network infrastructure, use technology to link across industries and ecosystems, innovate fast and operationalize even faster.



Innovation will be the key to turning this economic disruption into opportunity, but it will require significant and immediate investments in supports.

This will accelerate adoption of the next generation of technology and digital tools and help our SMEs scale and become more globally competitive.

Recommendation 1: Support Scaling Up Alberta's Value-Added Pharmaceutical Manufacturing Capacity

That the Government of Canada invest \$21.8 million as a one-time grant for scaling Alberta's pharmaceutical manufacturing capacity. The grant would be stackable with any provincial program and eligible applicants would include industry consortia of local producers, supply chain partners, multi-national players intending to expand or establish their Canadian presence, researchers, and any other relevant industry participants. The model would be flexible and adaptable to ensure maximum growth in the sector.

This one-time investment from government would yield immediate dividends for Alberta and all of Canada including:

- The ability to produce drugs that are in short supply domestically;
- Creation of immediate, full-time, high-paying jobs – including high value job options and diversification opportunities for the oil and gas sector workforce;
- Scaling our existing companies, making them more attractive for foreign investment, expansion, partnership and export;
- Improving our value proposition for foreign direct investment in this sector, which is projected to continue to grow globally;
- Expanding our local capacity to take commercialization and productization farther, enabling us to scale intellectual property coming out of universities and capture clinical trial phase production that we are currently giving away to other jurisdictions; and
- Enhancing the ecosystem to better support pharmaceutical, biotechnology and other life sciences entrepreneurs to start up and scale up.

Why Alberta? Why Now?

Alberta's \$16.2 billion advanced chemistry industry is second only to Ontario's in Canada. While predominantly focused on basic chemicals, the value-added production of pharmaceuticals is something that the province is well-positioned for, as evidenced by pharmaceutical giant Gilead's growing investment in the province over the past 15 years.



For the first time in decades, availability of critical medicines has become a news-leading issue. The pandemic offers a catalyst for Canada – and particularly Alberta – to establish itself as a leading destination for pharmaceutical manufacturing and innovation.

Canada was already experiencing shortages of certain drugs prior to the pandemic's disruption. We can produce those drugs in Alberta for Canadians and attract development and commercialization of more pharmaceutical products by scaling up our existing infrastructure.

Applied Pharmaceutical Innovation (API) in Edmonton is a not-for-profit institute housed at the University of Alberta that helps commercialize pharmaceuticals and is co-ordinating labs across the Edmonton Region to manufacture the drugs needed to put people on a ventilator.

"The shortage of these drugs is expected to continue over the next two years as COVID-19 wreaks havoc on typical supply and demand.

"Alone we don't have the capacity, but as a consortium, we're able to pull together all the required components to manufacture drugs to meet shortages and likely provide enough of the ventilator drugs for the entire Canadian market."

~Andrew MacIsaac, CEO, API

Major industrial players across Canada—including in the petrochemical, manufacturing, and oil and gas sectors—recognize the value of establishing pharmaceutical manufacturing in Alberta.

"As part of our strategic planning process, Spartan is developing business outside of our traditional industries and we see pharmaceutical manufacturing as one of the highest potential areas. Alberta's strengths that led the province to become a leader in the oil and gas can be channeled into the advanced manufacturing processes of pharmaceuticals in ways that will create lasting growth for many in this province."

**Jim Parsons, VP of Business Development,
Spartan Controls**

"We are committed to supporting Canadians and their healthcare suppliers through our development center and sterile production facility located in Boucherville, Quebec... As a key player in the Canadian healthcare system, we are looking forward to working with governments in Canada towards further promoting local production of medicines in their territories."

**Michel Robidoux, President and General Manager,
Sandoz Canada**

"As a local manufacturer of chemicals for research and industry we have been keenly aware of the potential to grow our presence in the market and we feel that production in Alberta would address many of the gaps in the global supply chain, ensuring security of supply and providing significant opportunity for Albertans.... There is a bright future for Alberta in the manufacturing of pharmaceuticals. It's what encouraged us to grow and keep our company here for the past decade, and with support from your government we believe much more is possible for us all."

**Mohammad Rahim, PhD, Founder & Chief Scientific Officer
Rane Pharmaceutical**

"Alberta has always had very high potential for the production of pharmaceuticals. We're a testament to that. The access to skill chemists, inputs, good access to global markets, and the low cost of doing business have kept us here for over 40 years. However, in all our history, we've never seen a potential opportunity like the one before us now as a result of the COVID-19 pandemic." **Glenn Weagle, PhD, EVP Technology and Innovation**

General Intermediaries of Canada

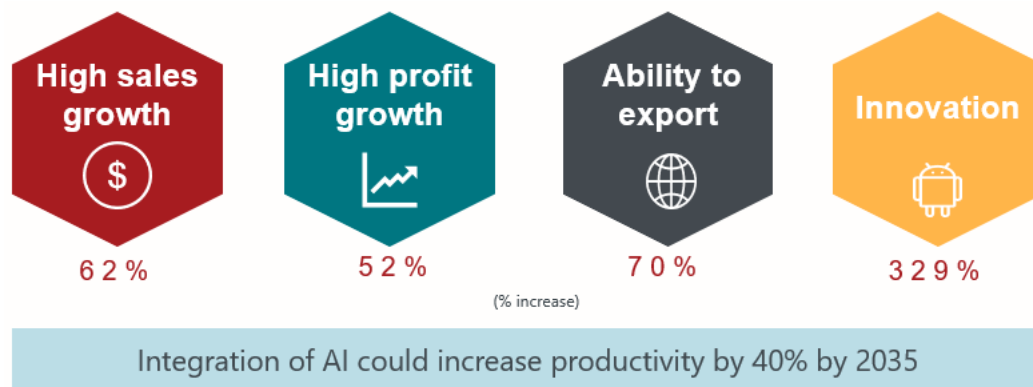
Recommendation 2: Supporting Technology Adoption Among SMEs

That the Government of Canada re-establish the Digital Technology Adoption Program with a \$320 million investment over four years and incorporate recommendations from the program review to remove barriers for small and medium-sized enterprises (SMEs) who want to adopt new digital tools to increase their productivity and global competitiveness.

Now is the time to close the productivity gap between Canadian SMEs and their global competitors around the rest of the world before it becomes an insurmountable chasm. Adoption of digital technology in our SMEs is one way to narrow the gap.

Businesses who increase their use of technology substantially are nearly twice as likely as other businesses to see strong growth and optimism about the future.

In fact, a BDC study found that over the past three years, digitally advanced companies were more likely to experience:³



However, less than half of SMEs in Canada have “functional” websites actively selling their goods and services.⁴

Businesses surveyed identified **two significant barriers** to technology adoption, and digitization – cost and workforce skills and competencies.⁵

Barriers to Technology Adoption



³ European Parliament. (2019, July). *Economic impacts of artificial intelligence (AI)*.

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637967/EPRS_BRI\(2019\)637967_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637967/EPRS_BRI(2019)637967_EN.pdf)

⁴ *Strong online presence drives growth: BDC study*. (2019, July 9). BDC.

https://www.bdc.ca/en/about/mediaroom/news_releases/pages/strong-online-presence-drives-growth.aspx

⁵ *Accelerator 2.0 A Call to Action Report*. (June 2018). Canadian Supply Chain Sector Council.

The Digital Technology Adoption Program Pilot (DTAPP) ran from 2011-2014 and helped SMEs accelerate the adoption of digital technologies through a \$100,000 non-repayable grant covering 80% of direct labour and 75% of sub-contractors. The program engaged colleges to build awareness and support skill development and implementation. Together, this program effectively addressed both the cost and skills barriers identified by SMEs.

The program evaluation conducted in 2019 stated:

Based on the evidence that there is a need for the federal government to support productivity improvements in SMEs, that productivity can be improved through the adoption of digital technology and the lack of a national level program to encourage SMEs to adopt digital technologies, it is recommended that DTAPP be continued as a permanent program.

In a post-COVID economic reality where digitization is being accelerated across all sectors and sizes of business, Canadian SMEs need this kind of support now more than ever to survive and thrive in our new digitally-driven reality.

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