





# The COVID-19 Crisis and Policy Preferences of Canadian Technology Scale-ups

Steven Denney and Viet Vu

## **Executive Summary**

The COVID-19 pandemic presents specific challenges to Canadians and businesses. 'Canada's COVID-19 Economic Response Plan' is the federal government's response to the crisis. The Economic Response Plan is meant to provide program supports for businesses to weather the storm. This report assesses the perspective of Canadian technology scale-ups: what is their top economic concern and what do they think about the federal support being offered? Further, what do they think about the government response overall? Is there anything more that the government should do to support scale-ups?

The Innovation Policy Lab at the Munk School of Global Affairs and Public Policy, in collaboration with Methodify by Delvinia, established a new mechanism for eliciting feedback from Canadian scale-ups. Based on a poll of 42 CEOs or firm executives of Canadian technology scale-ups taken between Friday March 27 and Monday March 30, 2020, we find the following:

- Majority of respondents cite 'revenue' as their top concern right now, not payroll or other business concerns
- Among government support available, 'interest free loans' are most supported
- When given an open-ended question, most respondents are positive about the government's response but are unclear how scale-ups in particular will be supported
- When asked what more government should do, one-quarter of those who answered think the government should consider procurement options

Based on our findings, the set of policies that the federal government has proposed does alleviate short term cost concerns by technology scale-ups. However, technology scale-ups are also looking towards the future, in order to ensure a stable revenue stream.

## Introduction

We are all being impacted by the COVID-19 crisis both personally and professionally. While my company is fortunate to be managing through this crisis better than some, I wanted to do my part, as a CEO of a Canadian technology scale-up, to support the information flow between industry and government and be part of the solution to help flatten this pandemic and mitigate the long term economic damage. I presented the idea of conducting this poll with the Steven Denney, to use my technology to quickly collect the feedback from other scaleup CEOs, and for him to quickly turn around a report that shares the data and provides a scholarly perspective on the results from a policy perspective. I am glad that he saw the importance of this initiative and jumped at the opportunity to be involved. I hope this will become a regular vehicle to provide government with data that offers the unique perspective of technology scale-ups. Collecting data in real time that can validate, guide, or challenge decisions and supports the efforts of organizations like the Council of Canadian Innovators, which is doing a great job at providing a direct line of communication between government and the technology scale-up community. I know that together we will manage through this crisis and my goal is to use my technology platform to do my part to bring the voice of scale-up CEOs with the perspective of policy experts to support our governments as they try to make the best decisions for all Canadians.

I am thankful to Steven Denney and David Wolfe from the Innovation Policy Lab at the Munk School of Global Affairs and Public Policy at the University of Toronto and Viet Vu from the Brookfield Institute for their leadership and commitment to participating in this initiative.

Adam Froman CEO Delvinia

## Background<sup>+</sup>

Amid the economic impact of the COVID-19, the governments the world over are implementing measures to support its citizens and businesses. On March 18, 2020 the government of Canada unveiled a set of measures meant to support Canadians and businesses, the point of which is to either help bring economic stability or otherwise freeze the economy. 'Canada's COVID-19 Economic Response Plan' represents the federal government's response to this unprecedented crisis.<sup>1</sup>

With the support of Methodify by Delvinia, researchers associated with the Innovation Policy Lab at the Munk School of Global Affairs and Public Policy have created a mechanism to elicit insight, quickly and reliably, from the technology scale-up community to inform public discourse and government policymaking on how best to support Canadian businesses during the COVID-19 crisis. This effort is part of a broader research programme focused on scale-up firms, especially those in technology industries, as firms at Canada's innovation frontier.

In this brief, we report responses from 42 CEOs, C-Suite executives, or persons authorized to speak for the firm about the state of their business and their opinion regarding the government's response. Respondents were asked to identify their top business concern and then evaluate federal support being offered to businesses under the Economic Response Plan. Following these questions, respondents were provided with two open-ended questions. The first question asked respondents to provide their thoughts on the government's response. The second open-ended question asked respondents what more they thought should be done to help their firm. The poll was conducted prior to the federal government's update to the wage subsidy support, which was announced on Monday, March 30, 2020.

The purpose of this report is to provide a primer on the perspective of Canadian technology scale-ups amid the COVID-19 crisis. These insights, though specific to technology scale-ups, are still of importance in guiding the most impactful policy responses for scale-ups overall and should be read as the opinion of firms well beyond the startup and early growth stages of the firm lifecycle. The views presented herein were collected between March 27-30, 2020.

# **Findings**

# Top concern

Following a brief introduction, we asked businesses to report their top concern as a result of disruptions brought on by COVID-19. We specifically asked companies to report *only* their top concern, as businesses may be facing multiple challenges at this time. As shown in Figure 1, the majority of respondents chose 'revenue' as their current #1 concern, though a non-trivial number are also concerned about long term growth.

<sup>&</sup>lt;sup>+</sup> We would like to thank Natalie Kam of Delvinia for her assistance in designing and implementing the poll.

<sup>&</sup>lt;sup>1</sup> Read about the plan here: https://www.canada.ca/en/department-finance/economic-response-plan.html.

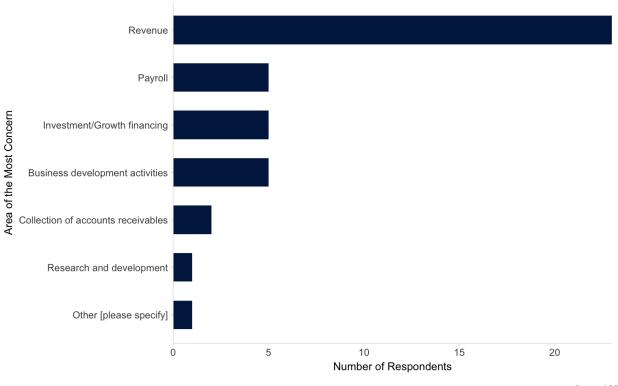


Figure 1: Top business concerns reported by technology scale-ups in Canada

[n = 42]

# Evaluation of available federal support

Next, we asked respondents to indicate how helpful each item of support offered under the 'COVID-19 Economic Response Plan' is to their firm. Information on the plan was provided, including the update by the federal government on March 27, 2020. Response options were ordered from 'Not helpful at all' to 'Very helpful,' with options for 'Don't know/Unsure' and 'Doesn't apply to my firm.' Eight items in total were provided, categorized by the type of program supports offered, as outlined below.

## **Avoiding Layoffs**

- Extended Work-Sharing program
- Wage subsidies

#### **Access to Credit and Cash Flow**

- Interest-free loans
- Loan guarantees
- Tax deferrals

## **Macroeconomic Stability**

- Insured Mortgage Purchase Program (funding to banks and mortgage lenders)
- Bank of Canada actions (lower interest rates, support for financial markets, liquidity for financial institutions)
- Lowering the Domestic Stability Buffer

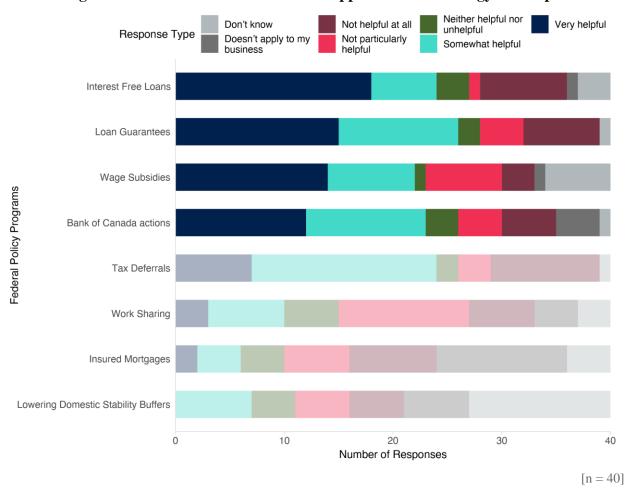


Figure 2: Policies that received broad support from technology scale-ups

Of the interventions already unveiled by the federal government, provision of interest free loans, loan guarantees (for financial institutions), wage subsidies, and monetary policies decisions by the Bank of Canada received the clearest endorsement from the respondents. It is noteworthy that these actions cover a wide set of transmission channels, from ensuring macroeconomic and financial stability (Bank of Canada actions as well as loan guarantees), to direct cash and payroll support (interest free loan and wage subsidies). Interestingly, despite payrolls not being the top concern for businesses, wage subsidies still appear as a policy that garnered high support from businesses.

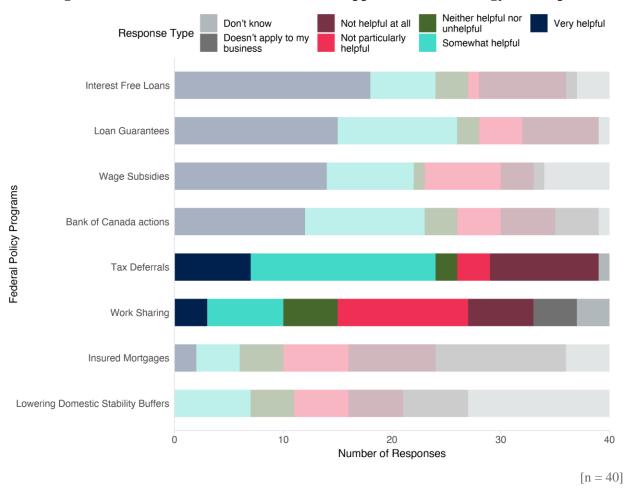
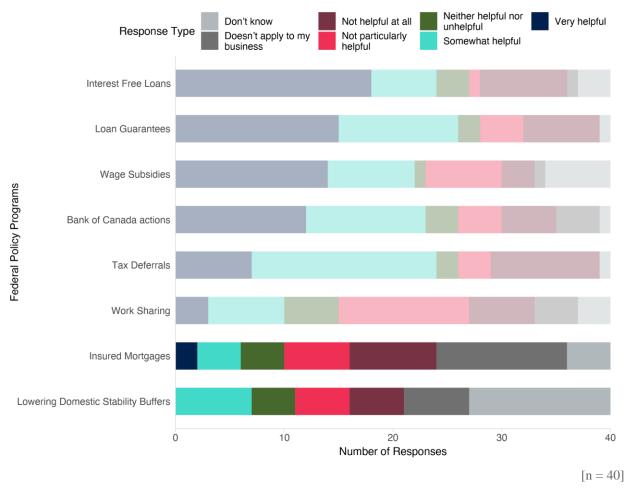


Figure 3: Policies that received lukewarm support from technology scale-ups

Tax deferrals and work sharing, two support programs for which there are existing infrastructure to support received lukewarm reception from technology scale-ups. It is worth noting that these are in similar categories of ensuring improved cash flows to businesses. Such lukewarm reception could therefore relate to structural issues with the design of the program prior to COVID-19.

Figure 4: Policies where their relevance was not immediately clear to technology scale-ups



Finally, two programs that had the lowest level of saliency as to its direct impact on businesses were insured mortgages purchase programs, as well as a directive to lower the domestic stability buffers. These are perhaps not surprising, given the non-linear transmission mechanism towards ensuring financial stability.

# **Open-Ended Questions**

## Government Response

Following multiple choice questions about the respondent's top concern and evaluation of federal support, respondents were prompted with two open-ended questions. The first asked for the respondent's thoughts on the government's response to support Canadian businesses. The second asked whether there was anything else the government should be doing to support businesses through the COVID-19 crisis.

Responses to the first question were generally positive, with some respondents identifying certain program supports (e.g., tax deferrals, interest-free loans) as helpful and others were simply pleased that the government was acting quickly, and in response to industry feedback. Cynthia Hastings-James, co-founder and owner of BestLifeRewarded Innovations Inc., a firm providing science-based and technology-enabled wellness programs, is cautiously optimistic. She wrote:

Gratefully, we are in a position of recurring revenues and can 'weather the storm' for now. Our challenge is business development and new revenue generation with most potential client organizations at a complete stand-still. It's encouraging that government is listening to and addressing concerns of tech and small businesses that serve as the backbone of the Canadian economy. Tax deferral and interest-free loans are most helpful to us at the moment.

Several noted they were waiting on additional information on supports like the wage subsidy, for which additional information has since been released.<sup>2</sup>

Others were positive in their overall appraisals but were less optimistic that any of the program supports being offered will help scale-up firms. One Ontario-based CEO noted, "They are doing very well, but we need more clarity and, so far, I have not been able to verify there is any meaningful support for the high growth technology companies." Respondents like Kevin Edwards, CEO of SkipTheDishes, a food delivery app, were more pessimistic about the government's ability to understand what scale-ups need, saying:

I remain concerned that this government does not understand the liquidity/cash-flow needs of businesses. It's important to provide support to Canadians in dire straits as a result of the crisis - but in the end what is critical is ensuring we have strong stable companies in all sectors able to hire back laid off workers because they have been able to sustain themselves when the dust finally settles.

Some respondents were more direct – many technology scale-ups are not eligible (or don't perceive themselves to be). One CEO of a large technology scaleup put it bluntly: "No support whatsoever." Ian Paterson, CEO of Plurilock, a digital security firm, agreed and with reason, writing: "Tech companies focus on growth, not profitability. The \$10B to BDC + EDC [for

<sup>&</sup>lt;sup>2</sup> See 'Helping Businesses Keep Their Workers' from the COVID-19 Economic Response Plan: <a href="https://www.canada.ca/en/department-finance/news/2020/03/canadas-covid-19-economic-response-plan-support-for-canadians-and-businesses.html#Helping\_Businesses\_Keep.">https://www.canada.ca/en/department-finance/news/2020/03/canadas-covid-19-economic-response-plan-support-for-canadians-and-businesses.html#Helping\_Businesses\_Keep.</a>

direct lending and other financing] is *not available* to us" (respondent's emphasis). Mr. Peterson's sentiment about scale-ups being excluded was shared among many.

# Additional support

What, then, did respondents think could be done to address perceived shortcomings? Several of them underscored the need to get employment subsidies in place, and to make eligibility and payout schedules clear. A few respondents encouraged the government to leverage existing program supports, such as relaxing SR&ED tax credit eligibility and immediately paying out claims or expanding and accelerating direct funding through the Industrial Research Assistance Program (IRAP). One CEO suggested using these programs as validation mechanisms for viable firms, as both programs include relatively intrusive vetting processes. "Interest-free loans and cash subsidies [for] existing vetted clients of programs (IRAP, etc.), immediate payment of SRED claims," they wrote.

Notably, desire for demand-sides measures, specifically procurement, stood out as one of the more salient requests for additional government support. Of the 28 respondents who provided feedback to the question about additional government support, 25% cited government procurement. To respondents, it addresses the demand problem and should target firms with proven market viability (i.e., scale-ups). "Create demand in ways that are targeted at specific scale-ups," wrote one CEO. "Buy domestically on all fronts," said another.

# **Policy Implications**

Given the speed at which the Canadian government has introduced program supports and ongoing updates to program criteria, opinions will likely change as CEOs and firm executives learn more about what is available, whether their firm qualifies, and how best to access and use supports.

From the insights gained through this poll, it is clear that policies that support short term cost for businesses, including improved cash flow and ensuring staff payroll, are positively received by businesses. However, it is also clear that technology scale-ups are thinking long-term: while they are concerned about costs, they are more concerned about having a secure revenue stream post-crisis. The severity of economic downturn as a result of COVID-19 is not yet clear, and businesses are concerned that even post crisis, demand may not return to a pre-crisis level. As a result, policymakers should look towards developing (or identifying existing) policies that create or ensure economic demand.

## Why are (Technology) Scale-ups Important?

Scale-ups are by definition businesses that have proven market viability. Labelled 'threshold firms' by the Science Council of Canada in the 1980s,<sup>3</sup> and often referred to as 'high-growth' firms,<sup>4</sup> scale-ups are enterprises defined by significant gains in employment (or turnover) over time.<sup>5</sup> Firms within the 90th percentile of the growth distribution (or higher), research finds these firms not only have a disproportionate impact on job creation and revenue generation, but also productivity gains.<sup>6</sup> Accordingly, there is an interest in ensuring scale-up firms can survive through the current crisis and that support is available to minimize long-term economic damage to these firms. Ongoing research by the report's authors, using business microdata that covers the entire universe of firms, finds definitive evidence that scale-ups are both rare (3-5% of all firms in Canada), and that, compared to non-scale-ups, have a disproportionate impact on revenue generation and job creation, innovate more, and are more productive (especially technology scale-ups).<sup>7</sup>

While responses from non-technology scale-ups are of interest, the focus of the research programme has been to build the most robust dataset about Canadian technology scaleups, something which does not currently exist. We think this effort is of even greater importance now than it was before the COVID-19 crisis. Further, although the sample we explore in this brief is limited to technology firms, we believe the insights presented in this report are relevant to the scale-up community more broadly.

<sup>&</sup>lt;sup>3</sup> Guy P.F. Steed, Threshold Firms: Backing Canada's Winners (Science Council of Canada, 1982).

<sup>&</sup>lt;sup>4</sup> Eurostat and OECD, *Eurostat-OECD Manual on Business Demography Statistics* (European Communities/OECD, 2008), 1–5; and Arnobio Morelix, E.J. Reedy, and Joshua Russell, *The Kauffman Index of Growth Entrepreneurship* (Kauffman Foundation, 2016).

<sup>&</sup>lt;sup>5</sup> The OECD (2007) defines high-growth firms as "All enterprises with average annualized growth [in revenue or turnover] greater than 20 percent per annum, over a three-year period" and with at least 10 employees in the first year of observation. Eurostat and OECD, *Manual on Business Demography Statistics*, 62. In this report we use a modified version of the OECD's revenue-based definition.

<sup>&</sup>lt;sup>6</sup> For employment and revenue impact, see: John Haltiwanger, Ron S. Jarmin, and Javier Miranda, "Who Creates Jobs? Small versus Large versus Young," *Review of Economics and Statistics* 95, no. 2 (2013): 347–61; Patrice Rivard, *The Contribution to Canadian Net Employment Change by High-Growth Firms* (Innovation, Science and Economic Development Canada, December 2017); and Viet Vu and Annalise Huynh, *Scale-up Activity in Ontario* (Brookfield Institute, 2019). For productivity impact, see: Jun Du and Yama Temouri, "High-growth firms and productivity: evidence from the United Kingdom," *Small Business Economics* 44 (2015): 123-143; and John Haltiwanger, Ron S. Jarmin, Robert Kulick, and Javier Miranda, "High Growth Young Firms: Contribution to Job, Output, and Productivity Growth," in *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges*, John Haltiwanger, Erik Hurst, Javier Miranda, and Antoinette Schoar (eds.) (University of Chicago Press, 2017), 11-

<sup>&</sup>lt;sup>7</sup> These insights will be further explored in "Scale-up Activity in Canada," a joint IPL-Brookfield Institute report by Steven Denney and Viet Vu (forthcoming 2020).

## Methodology

Between March 27-30, 2020, CEOs or C-suite level executives at leading Canadian technology firms across the country were asked to provide their opinion regarding the impact of the COVID-19 crisis on their business and what the government is doing to support them.

In addition to confirming the firm is a technology (or technology-enabled) firm, participants were asked about their average yearly total revenue growth between 2017, 2018 and 2019; as well as their employment at the end of 2019. Firms that reported less than 20% average yearly growth or have less than 10 employees in 2019 were excluded from the results. We did not confirm employment at the start of the three-year observation period, as asking executive-level individuals to recall such specific information is prone to significant recall concerns and thus measurement error. Following completion of the poll, we asked permission to continue contacting the respondent for future polls such as these, as well as permission to share identifiable information for quoting open-ended responses.

Recruitment was through two ways. Direct emails to CEOs and executives of Canadian technology firms who participated in previous research<sup>8</sup> and through an open link, promoted by various industry actors and organizations. Through these combined recruitment methods, we received 42 complete responses from firms we classify as scale-ups.

## **Firm Characteristics**

The vast majority of companies reported in this brief are headquartered in Ontario (n=34). One respondent came from a firm with an HQ in Québec, four from Manitoba, and three from British Columbia. Just over half of the companies (n=23) were founded in the past decade, with almost all companies having been founded after 2000 (four were founded pre-2000). The median firm employed 75 people, with some firms having more than 500 employees. The smallest firms in the sample had between 10 and 20 employees (n=4).

<sup>&</sup>lt;sup>8</sup> These individuals were interviewed as part of "The Scale-up Challenge for Canada: Obstacles to High-Growth Technology-based Firms and the Policy Response," a Mitacs Accelerate Grant research project, initiated and funded by Delvinia and managed through the Innovation Policy Lab, at the Munk School of Global Affairs and Public Policy, University of Toronto.

## **About the Authors**

#### Steven Denney, Ph.D.

#### Postdoctoral Fellow - Innovation Policy Lab

Steven is a Postdoctoral Research Fellow in the Innovation Policy Lab at the Munk School of Global Affairs and Public Policy, University of Toronto. Steven's research lies at the intersection of migration, identity, and entrepreneurship, with a focus on Northeast Asia and North America. Funded by a Mitacs grant, he is currently managing a multi-year study of Canadian high-growth firms. Steven holds a Ph.D. in Political Science from the University of Toronto, an M.A. in Global Affairs and Policy from Yonsei University, and a B.A. in Political Science from Harding University.

steven.denney@utoronto.ca | @StevenDenney86

#### Viet Vu

#### **Economist - Brookfield Institute**

Viet is an Economist at the Brookfield Institute for Innovation + Entrepreneurship. Viet is interested in how governments and companies can intentionally design policies and markets to drive human behaviour. He is also fascinated by how the world adapts to the emergence of new types of markets as legal frameworks often lag behind. Viet holds a Master of Science in Economics from the London School of Economics & Political Science and a Bachelor of Arts in Economics with Honours from the University of British Columbia.

viet.vu@ryerson.ca | @vviet93

## **About the Innovation Policy Lab**

The Innovation Policy Lab (IPL) at the Munk School of Global Affairs and Public Policy is committed to applying novel methods and disciplines to the study and teaching of innovation and its impact on economic opportunity and society. The IPL focuses on core questions in a number of areas including innovation and growth, innovation and inequality, globalization and innovation, social innovation, new technologies and their impact on society, innovation in traditional industries, and arts and innovation. Since our aim is also to effect change, we pay particular attention to the role of public policy in nurturing innovation, while at the same time enhancing its positive impacts on society and limiting its negative consequences.

# **About Methodify**

Methodify by Delvinia is a research platform that connects brands to consumers to gain actionable consumer insights in hours. With a full range of industry-proven research methods, Methodify enables marketers and researchers to automate their research process and gain consumer insights within hours. For more, visit <a href="mailto:methodify.it">methodify.it</a>.

#### **About Delvinia**

Delvinia is a research tech and consumer data collection company that is transforming how data is collected and used to underpin business decision-making at every level. The company has spawned a successful portfolio of products and services, including Methodify.it, a research automation platform preferred by consumer insight professionals globally. For more information on Delvinia's suite of products and services, visit <u>delvinia.com</u>.

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