

■

# TOWARDS AN INCLUSIVE, INNOVATIVE CANADA

AN INNOVATION PROJECT DISCUSSION PAPER

## **ACKNOWLEDGEMENTS**

First, we need to thank the Canada 2020 team for their hard work in organizing the innovation project and the roundtables across the country where we collected our data. This would not have been possible without Tom Pitfield, Tim Barber, Susan Smith, Melanie Coulson, Alex Paterson, Emilie Montour and Sydney Maxwell. Tim, Melanie and Alex joined Mike Moffatt on the road to participate in our roundtables and this discussion paper, the website, and our Big Ideas are stronger for it. As well, we need to thank the hundreds of participants at our roundtables across the country, who took time out of their very busy schedules to give us their insights on where we might find the bottlenecks to innovation in their industries.

Secondly, we must thank the copyediting, translation and design team who spend hours working on the Innovation Project. This includes Le Collectif Design, Phil Lizotte (Layout), Janet Hunter and Heather Blumenthal (Copy) and Nancy Massé and Magali Lemay (Translation).

We also want to thank the Canada 2020 project partners: Google, Genome Canada, Canadian Association of Petroleum Producers, Rogers Canada, Communitech, TD Bank, Shopify and Johnson & Johnson. This project would not have been possible without your support.

---

# ABOUT THE CANADA 2020 INNOVATION PROJECT

We know that to be competitive, Canada must innovate more — or risk being left behind. With this in mind, Canada 2020 launched its Innovation Project, devoted to studying and discussing Canada's innovation agenda — the risks, the opportunities, and key factors involved in making Canada a more innovative nation.

We launched Phase 1 of this project in June 2016, with our 'Being Innovative' event. We also convened a large team of Canadian policy makers, business and community leaders and innovators to examine how to make Canada a global leader in innovation.

From these events, we developed an outline for the Canada 2020 Innovation Project; a plan to define and promote innovation in Canada through research, roundtable discussions, surveys, measurement and public engagement. We decided the project should be inclusive, collaborative and, above all, innovative.

To ensure the Innovation Project is itself innovative, the consultative process has been designed to be agile, organic, and ever-changing. Canada 2020 doesn't believe the discussion around innovation in Canada can conclude in a set amount of time — it is a conversation that continues, and builds on itself. This discussion paper is a part of this ongoing conversation.

Since the project's launch, Canada 2020 has hosted three major conferences, each designed to explore important topics impacting Canada's innovation agenda. We traveled to Silicon Valley to hear from innovative Canadian entrepreneurs, investors and thought leaders. Over the summer, Canada 2020 also travelled to eight Canadian cities to speak with key stakeholders in sectors ripe for innovation. While the sectors themselves were very different, common themes emerged: talent and immigration, availability of venture capital and Canadians' aversion to risk. You can read more about those discussions at [www.innovationproject.ca](http://www.innovationproject.ca)

While these conversations were invaluable, they are just the starting point of an important discourse around innovation in Canada. Not all of these discussions will be hosted by Canada 2020 and we look forward to learning from the many conversations and reports being generated by other think tanks, academic institutions and governments.

Phase 2 of Canada 2020's Innovation Project will document the findings of the project to date and the 3rd Annual Canada 2020 Conference in early November will mark the start of this more public discourse around innovation in Canada, what it means and where our country needs to go. To stimulate this conversation, we will present a series of 10 "Big Ideas" to help grow and support innovation in Canada. We hope that some of these ideas, together with our ongoing conferences and roundtable discussions, will lead to the kind of passionate and informed debates that Canada 2020 was mandated to facilitate.

—

## EDITOR'S NOTE

As part of the Canada 2020 Innovation Project, we asked Mike Moffatt, Senior Associate at Canada 2020 and Director at the Lawrence Centre at Western University's Ivey Business School, and Hannah Rasmussen, Director at Projection North and Professor at Western University's Brescia College, to consider how to foster innovative growth in Canada.

We chose to highlight this discussion paper at our annual conference because we feel it eloquently captures Canada's need to innovate, while also highlighting important goals we should keep in mind. Specifically, Moffatt and Rasmussen highlight the importance of economically inclusive and autonomy-enhancing innovation.

Moffatt and Rasmussen argue that focusing on who benefits from innovation is critically important and that greater individual choice, with inclusive economic growth for everyone, must be a primary consideration for any innovation strategy. The paper also looks at the importance of innovation in Canada, and what an innovation agenda should accomplish.

This paper is the first of a series of papers Canada 2020 will publish around innovation in Canada and we hope you hope you'll share your opinions on this and future papers, through social media, or online at [www.innovationproject.ca](http://www.innovationproject.ca)



# TOWARDS AN INCLUSIVE, INNOVATIVE CANADA

BY MIKE MOFFATT  
SENIOR ASSOCIATE, CANADA 2020  
DIRECTOR, LAWRENCE CENTRE  
IVEY BUSINESS SCHOOL, WESTERN UNIVERSITY

AND HANNAH RASMUSSEN  
DIRECTOR, PROJECTION NORTH  
PROFESSOR, WESTERN UNIVERSITY

99.3554

108.365

---

# INTRODUCTION

The word “innovation” is ubiquitous. The Canadian government has declared for itself an “Innovation Agenda,” and to be more competitive, Canada must innovate more — or risk being left behind. In June 2016, Canada 2020 launched a multi-phased project on innovation. As part of that initiative, we present this Interim Report for Canada 2020, as well as recommendations centred around 10 Big Ideas to improve Canada’s innovation performance. Those can be found at [innovationproject.ca](http://innovationproject.ca). We’d love to hear your thoughts on these ideas; you can share your opinions online.

To develop our set of 10 Big Ideas, we needed to determine what being more innovative is meant to accomplish. In this section, we describe the two goals that Canada’s innovation agenda should achieve. First, a focus on who benefits from innovation is critically important. We would consider this project a failure if the benefits of innovation simply went to a global elite, the so-called “one per cent.” Canada needs to ensure that our innovation is economically inclusive:

**Economically inclusive innovation** is any innovation that, through market forces, leads to a combination of increased access to high-quality goods and services, higher wages or expanded job market opportunities for both the middle-class and the poor.

However, in our view economic inclusion is not enough, and solutions that simply redistribute the gains from innovation may be counterproductive. The lessons of Brexit and “ketchup patriotism” are that automation and globalization not only have economic consequences, but also arouse a yearning for a sense of control in those left behind. In our view, Canada’s innovation agenda must not only be economically inclusive, it also must be autonomy enhancing:

**Autonomy-enhancing innovation** is any innovation that translates into greater choice and more opportunities for individuals, families and/or local communities to develop and follow their economic and social goals and that creates or strengthens the causal links between the choices made and the outcomes achieved by those actors.

We then needed to consider how these ideas and the overall benefits of innovation can be communicated to the broader public. For too many Canadians, the word “innovation” means the automation that saw their job replaced by a robot, or the supply-chain innovations that cost them their job to a plant in China or Mexico.

We then set out to collect the information and data we needed to begin to generate the ideas. Because of the importance of knowledge spillovers, innovation is often the product of industry clusters, so clusters were a logical place to conduct our research. Mike Moffatt and the Canada 2020 team held a series of cluster roundtables across the country, from Halifax’s arts and digital creative cluster to Vancouver’s cleantech community. At each of our roundtables, we asked our private- and public-sector participants what they saw as the bottlenecks to innovation in their industry. You can learn more about those conversations and what they taught us, and the common themes that emerged on our website, at **[innovationproject.ca](http://innovationproject.ca)**

The 10 Big Ideas you can find at [InnovationProject.ca](http://InnovationProject.ca) are designed to accelerate innovation in Canada. They take a firm-centric view of innovation and do not limit their recommendations to reforms that can be carried about by the federal government, as we believe all levels of government, along with firms, institutions of higher education institutions and Canadians all have a role to play in making Canada more innovative.

This interim report is intended to be the beginning of a conversation on innovation, as we recognize that no one has a monopoly on the ideas and information needed to make the country more innovative.

---

## OUR MISSION

Our mission is to increase innovation in Canada by creating a set of Big Ideas that, if enacted, would have measurable results, whose benefits would be well understood, and that would increase the economic well-being and personal autonomy of the middle class and those working hard to join it.

The focus on who benefits from innovation is critically important. For us to consider innovation successful, the benefits must be widely distributed across Canadian society. In addition, we believe that looking at these benefits in purely economic terms is not enough; rather the innovation must include finding ways to put more control back into the lives of the middle class, who have seen it eroded through a combination of globalization and automation.

---

## OUR FOCUS: ECONOMICALLY INCLUSIVE AND AUTONOMY-ENHANCING INNOVATION

---

### ECONOMICALLY INCLUSIVE INNOVATION

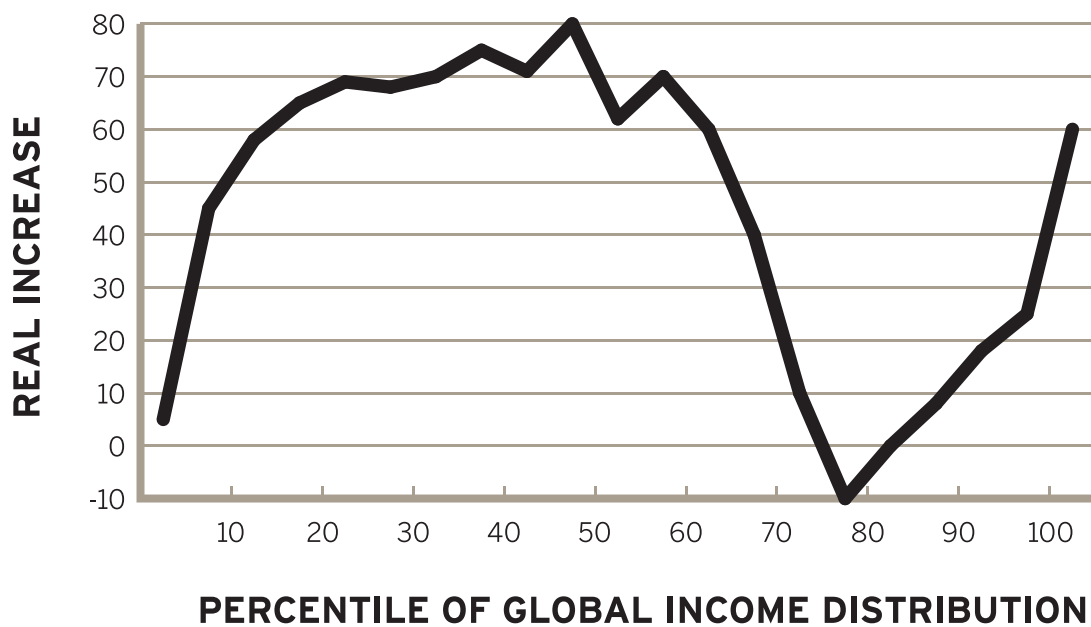
For too many Canadians, the word “innovation” means the automation that saw their job replaced by a robot, or the supply-chain innovations that sent their job to a plant in China or Mexico.<sup>1</sup>

<sup>1</sup> Earlier versions of this discussion appear in M.P. Moffatt, “Halting trade won’t solve globalization’s problems,” TVO website (2016) and M.P. Moffatt, “The small but significant Brexit-like backlashes in Canada,” TVO website, M.P.Moffatt (2016).



The way innovation is communicated to the broader public colours a significant portion of the negative connotations the word holds for many. There is, however, an important economic component, famously illustrated by Branko Milanovic's elephant graph:<sup>2</sup>

**CHANGE IN REAL INCOME BETWEEN 1998 AND 2008 AT VARIOUS PERCENTILES OF GLOBAL INCOME DISTRIBUTION (CALCULATED IN 2005 INTERNATIONAL DOLLARS)**



Note: The vertical axis shows the percentage change in real income, measured in constant international dollars. The horizontal axis shows the percentile position in the global income distribution.

<sup>2</sup> Branko Milanovic, "The greatest reshuffle of individual incomes since the Industrial Revolution," VOX CEPR's Policy Portal (2016a).

As Milanovic explains in his book *Global Inequality: A New Approach for the Age of Globalization*,<sup>3</sup> the gains of 30 years of globalization and automation have gone to two distinct groups. The first are the people around the global median in income, nine-tenths of whom are from Asian countries, mostly India and China, which are represented by the body of the elephant. The second group is the global one per cent, which appears as the trunk of the elephant. The group centred around the 80<sup>th</sup> percentile of the global income distribution have received no real income gains since the 1980s. This group is disproportionately made up of low- and middle-income earners from fully developed countries like Canada. While middle-income earners in Canada have fared better than most, this was thanks in large part to a quintupling of world oil prices between 2002 and 2008, a trend we are unlikely to see again.

If the gains from innovation are not economically inclusive, there are likely to be unintended consequences. In an address to the Parliament of Canada, U.S. President Barack Obama warned of the dangers when the benefits of automation and globalization are not broadly shared.<sup>4</sup>

The world is more prosperous than ever before. But alongside globalization and technological wonders, we also see a rise in inequality and wage stagnation across the advanced economies, leaving too many workers and communities fearful of diminishing prospects not just for themselves but, more importantly, for their children.

And in the face of such rising uncertainty, it is not enough to look at aggregate growth rates or stock prices or the pace of digital innovation. If the benefits of globalization accrue only to those at the very top, if our democracies seem incapable of assuring broad-based growth and opportunity for everyone, then people will push back out of anger or out of fear.

We agree with the president: increasing innovation, by itself, is not enough. The goal must include fostering economically inclusive innovation.

While economic well-being is a necessary condition for creating support for an innovation agenda, it is not a sufficient one.

<sup>3</sup> Branco Milanovic, *Global Inequality: A New Approach for the Age of Globalization*, Harvard University Press, Cambridge, 2016b.

<sup>4</sup> Barack Obama, "Speech to the House of Commons," *Maclean's*, 2016.

## AUTONOMY-ENHANCING INNOVATION

One potential solution to the benefits of innovation not being broadly shared would simply be to redistribute from the economic winners to those left behind. However, as economist Will Davies wrote in a thought-provoking piece on Brexit,<sup>5</sup> defining inclusion in solely economic terms misses the larger picture:

Labour's solution [to the economic crises of the 1970s] was to spread wealth in their direction using fiscal policy: public sector back-office jobs were strategically relocated to South Wales and the North East to alleviate deindustrialisation, while tax credits made low productivity service work more socially viable. This effectively created a shadow welfare state that was never publicly spoken of, and co-existed with a political culture which heaped scorn on dependency.

This cultural contradiction wasn't sustainable and nor was the geographic one. Not only was the "spatial fix" a relatively short-term one, seeing as it depended on rising tax receipts from the South East and a centre-left government willing to spread money quite lavishly (albeit, discreetly), it also failed to deliver what many Brexit voters perhaps crave the most: **the dignity of being self-sufficient, not necessarily in a neoliberal sense, but certainly in a communal, familial and fraternal sense.**

Although these forces do not yet appear to have Brexit-sized political implications in Canada, we believe they exist and are growing here, as shown by *ketchup patriotism*.

<sup>5</sup> Will Davies, "Thoughts on the sociology of Brexit," Political Economy Research Centre website (2016).

-

## LEARNING FROM LEAMINGTON

In 2014, Heinz, the flagship company in Leamington, Ont., for more than 100 years, closed its tomato processing facility, costing the small community 750 jobs. The plant was reopened with a reduced workforce, by Highbury Canco, to manufacture tomato paste. The fortunes of the plant were boosted when French's announced in early 2015 that it would be sourcing from Leamington to produce its ketchup. In early 2016, in a Facebook post, Oakville, Ont., native Brian Fernandez encouraged Canadians to "support Canadian workers and tomato farmers" and purchase French's, not Heinz. The post quickly went viral, and ketchup patriotism was born.

Some commentators dismissed the Buy French's campaign as mindless patriotism. Others scoffed and pointed out that part of the production process took place in the United States, and French's parent company was based in Britain. These commentators missed the point.

Southwestern Ontarians felt helpless as the twin forces of automation and globalization, along with a petro-fuelled Canadian dollar, saw the closing of not just Heinz in Leamington, but Navistar in Chatham, Ford in Talbotville and Electro-Motive Diesel in London, to name just a few. Citizens felt powerless as local manufacturing icons closed down, based on decisions made in faraway board-rooms. Yes, buying a four-dollar bottle of ketchup was not going to solve all of the region's problems, but it was at least something an ordinary Canadian could do to try to regain manufacturing in an area that had suffered so badly.

-

## AUTONOMY AND THE DESIRE TO REDISCOVER CONTROL

The linkages between globalization and a loss of opportunities (or control) go beyond ketchup patriotism and are a common theme in post-Brexit writing from the U.K. In a piece for the *Financial Times*, former British prime minister Gordon Brown argued for a "programme that shows how an open global economy can maximise the opportunities and minimise the insecurities of the unskilled, the poorly educated and those currently losing out."<sup>6</sup> Like Will Davies, writing on Brexit, we would take the issue further than economic insecurities and frame the issue around autonomy, as Will Davies has in writing on Brexit:

<sup>6</sup> Gordon Brown, "Leaders must make the case for globalisation," *Financial Times Opinion* (2016).

In this context, the slogan “take back control” was a piece of political genius. It worked on every level between the macroeconomic and the psychoanalytic. Think of what it means on an individual level to rediscover control. To be a person without control (for instance to suffer incontinence or a facial tic) is to be the butt of cruel jokes, to be potentially embarrassed in public. It potentially reduces one’s independence. What was so clever about the language of the Leave campaign was that it spoke directly to this feeling of inadequacy and embarrassment, then promised to eradicate it. The promise had nothing to do with economics or policy, but everything to do with the **psychological allure of autonomy and self-respect**. [UK Independence Party leader Nigel] Farage’s political strategy was to take seriously communities who’d otherwise been taken for granted for much of the past 50 years.

A body of evidence is emerging that suggests personal autonomy, not money, is the key to individual happiness in developed countries, which Ronald Fischer and Diana Boer describe in their meta-analysis in the *Journal of Personality and Social Psychology*:

What is more important: to provide citizens with more money or with more autonomy for their subjective well-being? In the current meta-analysis, the authors examined national levels of well-being on the basis of lack of psychological health, anxiety and stress measures ... The authors found that individualism was a consistently better predictor than wealth ... The overall pattern strongly suggests that greater individualism is consistently associated with more well-being. Wealth may influence well-being only via its effect on individualism.<sup>7</sup>

Ultimately, if we are going to improve the lives of the middle-class and the poor, we must focus on increasing their autonomy, their ability to make choices that positively affect the lives of their families and communities. Increasing their wealth is one way of doing this (as Fischer and Boer note), but Brexit teaches us that simply providing financial compensation for globalization- and automation-based economic decline is not enough.

<sup>7</sup> Ronald Fischer and Diana Boer, “What Is More Important for National Well-Being: Money or Autonomy?” *Journal of Personality and Social Psychology*, pp. 164-184. (2011).



---

## TOWARDS A HUMAN-CENTRED INNOVATION

The goal of innovation should be to make humanity better off. In a thought-provoking essay, Lewis J. Perelman has argued that too often innovation has been about anything but improving humanity:

Innovation traditionally was viewed as a linear process: from basic research to technology development and on to test/evaluation, demonstration, deployment, commercialization, and ultimately, market penetration. And perhaps, if successful, market saturation, obsolescence, and finally replacement. Human (and social) factors — needs, desires, demands, behaviour — were considered either not at all or intuitively, anecdotally, coincidentally, mechanically, and often reactively.<sup>8</sup>

We wholeheartedly agree with Perelman's call for human-centred innovation. Past innovation, while creating economic growth, led to increased automation and globalization, which led many to feel "left behind." How can Canada ensure that future innovation, a necessary ingredient for further economic growth, does not lead to increased feelings of a loss of control among the "middle class and those working hard to join them?" Addressing these tensions and promoting economically inclusive and autonomy-enhancing innovation policies are at the core of our 10 Big Ideas, which you can find at [InnovationProject.ca](http://InnovationProject.ca).

<sup>8</sup> Lewis J. Perelman, "Toward Human-Centered Innovation," Innovation's Vital Signs Workshop, 2007.

## AUTHORS

### **Mike Moffatt**

Dr. Mike Moffatt is Senior Associate at Canada 2020. He is also an Assistant Professor in the Business, Economics and Public Policy group at Ivey Business School at Western University, where he teaches courses in international trade and firm-level strategy. Mike is Director of Ivey's Lawrence National Centre for Policy and Management, a public policy centre that is tasked with bridging the gap between business strategy and government policy. Prior to joining the Lawrence Centre, he conducted his public policy research at the Mowat Centre, Ontario's non-partisan, evidence-based voice on public policy, where he held the title of Chief Economist.

### **Hannah Rasmussen**

Dr. Hannah Rasmussen is Director of Projection North, an independent public policy think tank located in London, Ontario. Projection North's policy areas of expertise include information and data policy, open data and policy coherence. Prior to founding Projection North, Hannah was a research fellow for the Committee on Coherence at Scale for Higher Education for the Washington, D.C.-based Council on Library and Information Resources. Hannah holds a Master of Library and Information Science from Western University and a Doctorate in Business Administration (Information Systems) from Ivey Business School; she was a Postdoctoral Fellow in Knowledge and Library Services at Harvard Business School.



Canada 2020 is Canada's leading, independent, progressive think tank working to redefine the role of the federal government for a modern Canada. Founded in 2006, Canada 2020 has spent a decade publishing original research, hosting events, and starting conversations about Canada's future. Canada 2020's goal is to build a community of progressive people and ideas that will move and shape governments.

[www.canada2020.ca](http://www.canada2020.ca)

 [@canada2020](https://twitter.com/canada2020)

 [@can2020](https://www.instagram.com/can2020)

 [facebook.com/canada2020](https://www.facebook.com/canada2020)

302-35 O'Connor St.  
Ottawa, ON  
K1P 5M4  
Canada

