



## 1. PROMOTE INNOVATION AND HARNESS THE POWER OF DATA

Canada's innovation agenda must leverage the private sector and help companies get from idea to product. In 2017, we will press for an innovation strategy that recognizes the disruptive capacity of existing technology employed in new ways. Harnessing the power of “big data” and ensuring data are secure will be critical to competitive success.

Innovation is often misdefined as invention. This narrow definition overlooks the need to actually implement new ideas. For decades, government policy has focused on breakthrough science as the standard for innovation. While scientific advances are a vital part of innovation, they add value only when we put these new ideas to work. Financial support of innovation must go well beyond funding research projects to ensuring new ideas find their way onto shop floors and shop shelves.

Data is the new oil—it fuels decision-making in every sector of the economy. It is used to develop new products, identify new markets and provide services to our customers. The new world of data offers a competitive advantage to the businesses that can harness it rapidly and effectively. And it can empower small businesses as much as large enterprises.

In its October 2015 report, *Data Driven Innovation: Big Data for Growth and Well-Being*, the OECD notes that “large data sets are becoming a core asset in the economy, fostering new industries, processes and products and creating significant competitive advantages. For instance: In business, (it) promises to create value in a variety of operations, from the optimization of value chains in global manufacturing and services to the more efficient use of labour and tailored customer relationships.” Canadian competitiveness will require us to build our capability to innovate rapidly to deploy new technology, improve industrial processes or exploit market opportunities.

The “Internet of Things” (Internet-enabled devices, appliances and sensors) is expanding exponentially—6.5 billion devices in 2016 and somewhere between 50 and 100 billion devices by 2020. The Internet of Things really comes together with the connection of sensors and machines, by gathering data and putting it to work. By 2025, when the Industrial Internet is broadly implanted, it will have created an estimated \$43 trillion globally in sectors like manufacturing, industrial activities, transportation

and healthcare. Wise decisions made now about the flow of data, measuring everything from temperature to the movement of goods and services to human behaviour, will improve our ability to innovate long into the future.

Unlocking the full potential of data requires a balanced ecosystem based on trust among individuals, government and the private sector. Effectively and securely using personal data requires both transparency and accountability. Governments around the world are grappling with finding the appropriate—and balanced—level of regulation.

In Canada, our principles-based data protection legislation has evolved incrementally and proportionally. However, the global landscape is changing. In Europe, the General Data Protection and Privacy Regulation (GDPR) will be coming into force. The recently negotiated Privacy Shield, regulating data transfers between the United States and the EU, is still being implemented. In Canada, Europe and elsewhere, the requirements for the local storage of data reflect outdated approaches to personal information and information security.

At the same time as governments restrict the use of data by business, there is an increasing interest in access to personal information by law enforcement and national security organizations.

The privacy of personal information is not an absolute right that overrides all other interests. However, law enforcement and national security organizations must not demand access into commercial data stores or oblige businesses to work with security agencies without appropriate legal processes. We must distinguish between private and personal information and balance the expectation of privacy and the right to use personal information through fair exchange.

In 2017, we will press the Canadian government to promote a balanced environment here and abroad that both addresses public interest concerns and unlocks the full potential of data-driven innovation for business.