

大成 DENTONS

Dentons Annual Data Summit

Promotion
/Research
/Business
/Development
/Engineering
/Manufacturing
/Planning

The 10 principles of Canada's Digital Charter

Source: Innovation, Science and Economic Development Canada

1. Universal Access:

All Canadians will have equal opportunity to participate in the digital world and the necessary tools to do so, including access, connectivity, literacy and skills.

2. Safety and Security:

Canadians will be able to rely on the integrity, authenticity and security of the services they use and should feel safe online.

3. Control and Consent:

Canadians will have control over what data they are sharing, who is using their personal data and for what purposes, and know that their privacy is protected.

4. Transparency, Portability and Interoperability:

Canadians will have clear and manageable access to their personal data and should be free to share or transfer it without undue burden.

5. Open and Modern Digital Government:

Canadians will be able to access modern digital services from the Government of Canada, which are secure and simple to use.

6. A Level Playing Field:

The Government of Canada will ensure fair competition in the online marketplace to facilitate the growth of Canadian businesses and affirm Canada's leadership on digital and data innovation, while protecting Canadian consumers from market abuses.

7. Data and Digital for Good:

The Government of Canada will ensure the ethical use of data to create value, promote openness and improve the lives of people—at home and around the world.

8. Strong Democracy:

The Government of Canada will defend freedom of expression and protect against online threats and disinformation designed to undermine the integrity of elections and democratic institutions

9. Free from Hate and Violent Extremism:

Canadians can expect that digital platforms will not foster or disseminate hate, violent extremism or criminal content.

10. Strong Enforcement and Real Accountability:

There will be clear, meaningful penalties for violations of the laws and regulations that support these principles.

For more information, visit <https://www.ic.gc.ca>

Canada's Digital Charter in Action: A Plan by Canadians, for Canadian

Source: [Innovation, Science and Economic Development Canada](#)

Minister's Message

In 2016, we started a conversation with Canadians on how to foster innovation to build a stronger, more competitive Canada. Together we developed the Innovation and Skills Plan. This plan reflects our commitment to a partnership-driven approach to build innovation ecosystems in Canada and deliver simpler, more efficient and more coordinated supports to firms at all stages of growth and Canadians at every stage of their lives. It is with this same mindset that we move forward on how to make Canada a leader in today's data-driven, digital global economy.

The National Digital and Data Consultations, launched June 19, 2018, are part of our commitment to continuing to work together to make Canada a nation of innovators. We asked Canadians across the country to share their unique perspectives and ideas on what are some of the challenges and areas of opportunity for Canada in this time of transformation. Canadians responded — from small business owners and multi-national companies; students, teachers, and researchers; innovators and entrepreneurs; and everyone in between.

Canadians shared their optimism about the great social and economic potential for Canada in this digital age. But they also shared their concerns about ensuring that youth are prepared for the workplace of the future, that employees are supported in learning new skills for career changes throughout their lives, and that all Canadians are connected to more fully participate in, and benefit from, the digital economy. They told us that businesses, especially SMEs, need support to embrace digital technology adoption. And, most prominently, we heard that getting data right is a key priority for Canadians.

Data is a powerful tool. It has the potential to drive ground breaking research and innovation, supporting robotics, artificial intelligence (AI) and the Internet of things. There are, however, real concerns amongst Canadians about how personal data could be used, and that measures are in place that protect Canadians' privacy and security. Simply put, that the way forward on data collection, management and use must be built on a strong foundation of trust and transparency between citizens, companies and government.

There are also real concerns about violent extremist content online. I was proud to accompany the Prime Minister to Paris in May 2019 where Canada signed the Christchurch Call to Action, a global pledge to work toward eliminating terrorist and violent extremist content online.

I believe that innovation is not possible without trust. Trust and privacy are key to ensuring a strong, competitive economy and building a more inclusive, prosperous Canada. As our world continues to evolve and becomes increasingly more digitized, we must remain proactive, fostering a flexible environment where Canadians can seize the benefits available through the digital economy while maintaining a protective framework that supports our fundamental Canadian values. Addressing digital and data transformation means looking at complex policy questions with no simple, one-size-fits-all response and ensuring that our solutions are based on shared priorities to support our companies and citizens, with trust and privacy at their core. We are committed to principles to guide how data, trust and privacy fit into our plan to grow our economy through innovation and build sustainable growth by leveraging digital and data transformation — as a nation, we can't afford not to get this right.

This is why we are moving forward with an ambitious, aspirational principled approach to digital and data transformation in Canada. The principles are the foundation for a made in Canada digital approach that will guide our policy thinking and actions and will help to build an innovative, people-centred and inclusive digital and data economy. This balanced approach strives to set out the building blocks for a foundation of trust for this digital age that unlocks Canada's innovation potential.

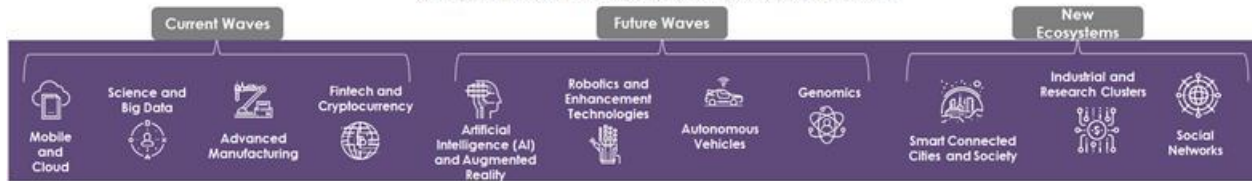
A New Digital Revolution

We are living in an age that is in many ways defined by the rapid acceleration and convergence of disruptive technologies. These technologies are now an integral part of Canadians' everyday lives. From GPS, to mobile banking, to social media, digital technologies are revolutionizing the way Canadians access information, shop, live, socialize and work. People are creating more data than ever before, spanning a wide range of industries, which if harnessed can be used to advance human knowledge and understanding, improving the ability to analyze challenges, deliver meaningful, user-driven services, and increase productivity and efficiency. Advancements in areas including robotics, AI, quantum computing, and nanotechnology are leading to groundbreaking discoveries with significant economic and social benefits. But while these technological achievements are in many ways enriching society, this transformation also brings with it challenges and uncertainty that Canada must be prepared to address.

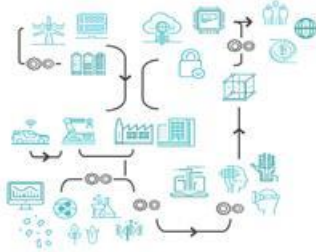
No sector of the economy has been untouched by digital transformation. Automation, digital platforms, and other disruptive technologies are transforming existing industries and opening up new markets, but are leaving some feeling uncertain about how this will affect them going forward. New business models, such as those that drive the gig economy and the sharing economy, are providing new opportunities for people to choose how they participate in the labour market, but also challenging traditional notions of work. And there is concern around the impact that technological disruption will have on the labour market.

Embracing digital and data-driven technologies provides an opportunity to push the boundaries of what is possible. It will enable Canada to create new business opportunities, foster new, high-value jobs, improve the collective ability to be leaders of change, and create a better quality of life for all. It also means Canada needs a cohesive vision for its digital future that builds on the country's strengths, is flexible and nimble in reducing barriers to innovation, encourages a thriving and secure innovation-based marketplace, and ushers in a new era of Canadian global competitiveness. This means ensuring the workforce has the right skills and supports to be able to quickly respond to change and a strong pipeline of Canadian talent. Most importantly it must be inclusive of all Canadians, taking a partnership approach that ensures everyone has a role to play and is well positioned to benefit.

MAKING CANADA A COMPETITIVE, DATA-DRIVEN, DIGITAL ECONOMY NATIONAL DIGITAL AND DATA CONSULTATIONS



Technologies are reshaping the way people live and connect, the nature of work and industrial production



- Big Data: 90% of the world's data created in the last 2 years
- 80B connected devices by 2025
- Industrial robots to reach 3M by 2020
- AI – Global GDP 14% higher in 2030
- Nearly 10% of jobs automated
- 2B active Facebook users
- 4B Google search per day – 1.2T annually
- Cybercrime to cost \$6T annually by 2021



For more information, visit <https://www.ic.gc.ca>

Strengthening Privacy for the Digital Age

Source: *Innovation, Science and Economic Development Canada*

Proposals to modernize the *Personal Information Protection and Electronic Documents Act*

Introduction

Technology has long brought enormous benefits, along with profound changes, to almost every aspect of human life. Much as the printing press revolutionized society starting in the 15th century, the digital revolution has had, and will continue to have, an enormous impact on daily life. Business, communications, entertainment, transportation, banking, education, health care, our interpersonal interactions and our physical movements — almost every aspect of our lives is mediated by digital technology. And with those interactions, enormous amounts of data about individuals is being created and harnessed for a vast array of purposes.

Digital and data-driven technology is already empowering science, supporting innovation, and driving economic growth. For example, advancements in areas including robotics, artificial intelligence (AI), quantum computing, and nanotechnology are leading to ground-breaking discoveries with significant economic and social benefits. But while these technological achievements are in many ways enriching our society, this transformation also brings with it challenges and uncertainty that we as a country must be prepared to address. In response to this, some stakeholders have called for the Government to adopt a National Data Strategy.

On June 19, 2018, the Government of Canada launched its National Digital and Data consultations to demonstrate its commitment to continuing to work together to make Canada a nation of innovators. As we noted in *Canada's Digital Charter in Action: A Plan by Canadians*, for Canadians, we asked Canadians across the country to share their unique perspectives and ideas on what are some of the challenges and areas of opportunity for Canada in this time of transformation. And we received a resounding response — from small business owners and multi-national companies; students, teachers, and researchers; innovators and entrepreneurs; and everyone in between.

Canadians shared their optimism with us about the great social and economic potential for Canada in this digital age. But they also shared their concerns about how personal data could be used. Simply put, the way forward on data collection, management and use must be built on a strong foundation of trust and transparency between citizens, companies and government.

Trust is indeed the lynchpin of the digital and data-driven economy. Yet, clearly, individuals' trust is at risk. Popular media is rife with stories of data breaches; misuse of personal information by large companies; foreign interference, and malicious actors; cyberbullying; along with increasing concern about the impacts of the digital and data revolution on issues ranging from our mental health ^{Footnote1} to democratic institutions ^{Footnote2}. Ineffective or inconsistent security hygiene; a lack of competition; and business models that are based on surveillance of individuals ^{Footnote3} have left individuals increasingly wary of how the products and services on which they now depend for nearly all aspects of their activities are collecting and using their personal information.

Trust, the Digital Economy and the Personal Information Protection and Electronic Documents Act

In the early days of the commercial Internet, when e-commerce was emerging, the Government of Canada enacted the *Personal Information Protection and Electronic Documents Act* (PIPEDA) to ensure trust in the emerging economy. Its stated purpose is:

to establish, in an era in which technology increasingly facilitates the circulation and exchange of information, rules to govern the collection, use and disclosure of personal information in a manner that recognizes the right of privacy of individuals with respect to their personal information and the need of organizations to collect, use or disclose personal information for purposes that a reasonable person would consider appropriate in the circumstances. ^{Footnote4}

A principles-based, technology-neutral law, PIPEDA ^{Footnote5} applies to a wide-range of commercial activity, and is overseen by an Agent of Parliament, the Office of the Privacy Commissioner of Canada. In the nearly 20 years since it came into force, commercial activity has evolved rapidly and in ways unforeseen. Based on the internationally accepted privacy principles contained in the Organisation for Economic Co-operation and Development (OECD) *Guidelines on the Protection of Privacy and Transborder Flows of Personal Data*, (Privacy Guidelines) ^{Footnote6}, the 10 interrelated privacy principles (and related sub-paragraphs) in PIPEDA guide organizations' personal information handling activities. One of these principles, Knowledge and Consent, along with a limited set of exceptions to consent, authorize those activities, which are required to be "appropriate in the circumstances." The rest of the principles, such as accountability, openness, accuracy, access, safeguards, redress, among others, are intended to ensure that organizations treat personal information in a manner that is fair and understandable to the average person and in keeping with their reasonable expectations. The law has been applied to a wide variety of business activities, including in the context of trans-border data flows, and has proven to be reasonably nimble in the nearly 20 years of its existence.

That said, it has been criticized ^{Footnote7}, particularly in terms of its consent regime and enforcement model, for not providing the kinds of incentives in a data- and digitally-driven economy to ensure that organizations are in compliance. The House Standing Committee on Access to Information, Privacy and Ethics, has also recommended updates to improve individual control and organizational transparency, in order to strengthen privacy protections in an age where individuals feel a lack of control and understanding. The Government of Canada has stated its agreement with recommendations made in several recent Parliamentary reports ^{Footnote8} that changes are required to Canada's federal private-sector privacy regime to ensure that rules for the use of personal information in a commercial context are clear and enforceable and will support the level of privacy protection that Canadians expect.

The principles outlined in Canada's Digital Charter, along with their supporting activities, collectively provide the foundation for achieving a strong and vibrant digital economy for Canada. The reform of PIPEDA must contribute to achieving the outcomes related to these principles. PIPEDA, as a key element of Canada's marketplace framework, must also contribute to achieving an inclusive digital economy that provides a level playing field, fairness of opportunity, enhanced security and privacy, predictability for business, and international competitiveness.

Canada is facing these opportunities and challenges in parallel with other leading nations as part of a global innovation race. Our global competitors are taking aggressive action in terms of supporting trust and privacy to lead in a data-driven, digital global marketplace.

Next generation privacy and e-protection laws, specifically in the European Union but also in the United States, are impacting domestic policies and practices. There is a desire for an approach to personal information protection in the private sector that meets Canada's needs and remains interoperable with leading jurisdictions. While there is commonality amongst privacy statutes in Canada and abroad, a number of important distinctions between Canadian and international frameworks are challenging the goal of an integrated digital economy both at the domestic and international levels.

The Government is considering how best to modernize its private-sector policy and regulatory framework in order to protect privacy and support innovation and prosperity. In short, the goal is to respect individuals and their privacy by providing them with meaningful control without creating onerous or redundant restrictions for business; enable responsible innovation on the part of organizations; and ensure an enhanced, reasoned enforcement model.

Specifically, the Government is proposing clarifications under PIPEDA that detail what information individuals should receive when they provide consent; certain exceptions to consent; data mobility; deletion and withdrawal of consent; incentives for certification, codes, standards, and data trusts; enhanced powers for the Office of the Privacy Commissioner; as well certain modernizations to the structure of the law itself and various definitions. The proposals outlined in this paper fall within a broader conceptual framework, detailed in Annex A, for advancing policy work in the digital and data context.

With this discussion paper, Innovation, Science and Economic Development (ISED) Canada is continuing the dialogue on "Trust and Privacy" that was initiated in the Data and Digital consultations in 2018. This paper outlines a series of policy considerations related to specific proposals that would serve to enhance consumers' control, enable responsible innovation and enhance enforcement.

The Government is also studying potential reforms to the *Privacy Act*, which governs the personal information-handling practices of federal institutions. That initiative is being led by Justice Canada, working closely with the Treasury Board Secretariat.

For more information on the proposal, visit <https://www.ic.gc.ca>.

Terms of reference of the Government of Canada Advisory Council on Artificial Intelligence

Source: Innovation, Science and Economic Development Canada

1. Objective

To create more jobs for Canadians; to further Canada's position as a global leader in artificial intelligence (AI) development and research; to better support entrepreneurs and scale ups; to ensure Canadians have the education and skills they need to succeed in a changing economy.

2. Mandate

The mandate of the Government of Canada Advisory Council on Artificial Intelligence (the *Advisory Council*) will be to build on Canada's strengths in AI, to identify new opportunities in the AI sector and to make recommendations to the Minister of Innovation, Science and Economic Development and the Government of Canada more broadly including but not limited to:

- a. How to ensure Canadians benefit from the growth of the AI sector.
- b. How to harness AI to create more jobs for Canadians, to attract and retain world-leading AI talent, to ensure more Canadians have the skills and training they need for jobs in the AI sector; and to use Canada's leadership in AI research and development to create economic growth that benefits all Canadians.

Program of Work

- a. The *Advisory Council* will be a central reference point to help inform the Government of Canada's development of AI-related policy. The work of the *Advisory Council* will build on the Pan-Canadian AI Strategy, which aims to increase the number of highly-skilled researchers and graduates and to enhance Canada's research capabilities in the AI sector. The program of work of the *Advisory Council* includes, but is not limited to:
 - i. Monitor the development of Canada's AI sector; advise the Government of Canada on innovative approaches to developing applied AI, basic research and development, intellectual property retention, commercialization, collaboration, adoption, marketplace frameworks, talent and scale-ups;
 - ii. Advise the Government of Canada on opportunities and best practices in the AI sector that will benefit Canadians;
 - iii. Inform government policy in AI-related fields and in the integration of AI into a variety of sectors.
- b. The *Advisory Council* will establish a Working Group to focus on commercializing value from Canadian-owned AI and data analytics, to create economic growth that benefits all Canadians. This Working Group will build on the work started by the Digital Industries Economic Strategies Table, which increases collaboration between industry and government.
- c. The *Advisory Council* may establish other Working Group(s) to advance specific areas of its mandate as set out as illustrative lists under section 3(a).

- d. The *Advisory Council* will provide advice on the work flowing from the *Canada-France Statement on AI*, including guidance and recommendations to the Canada-France Task Force that is supporting the creation of the International Panel on Artificial Intelligence (IPAI), which aims to support and guide the responsible adoption of AI that is human centric and grounded in human rights, inclusion, diversity, innovation and economic growth.
- e. The *Advisory Council* will support the Minister of Innovation, Science and Economic Development and the Government of Canada more broadly on Canada's AI engagement in various international fora such as the G7/G20, the OECD, the World Economic Forum, as well as with provinces, territories and municipalities.
- f. In carrying out its mandate, the *Advisory Council* may occasionally be asked to provide or contribute to reports, and issue discussion papers on options, recommendations, and advice.
- g. Acknowledging that AI is evolving, the Program of Work will be reviewed annually and updated in light of new challenges and opportunities.

For more information on the terms of reference, visit <https://www.ic.gc.ca>.

EU Ethics Guidelines



Adam Allouba, Partner, Dentons

Incorporating ethics into your AI project isn't just a moral question, it's also a cornerstone of any legal compliance framework. From ensuring algorithmic transparency, to obtaining individuals' consent for the use of their personal information, to training your AI on unbiased data sets, a legal approach means an ethical approach.



Hélène Beauchemin, Legal Counsel, Stradigi AI

At Stradigi AI, we believe that addressing ethical concerns goes hand in hand with solving legal issues. More and more often, the legal answer is the ethical one (and vice-versa). We're honoured to have contributed to the development of these guidelines, which offer a rigorous and principled approach to tackling the ethical issues that inevitably accompany AI.

Dentons Data – Solutions for every business

Dentons Data combines sophisticated legal advice with best-in-class process management and IT forensics capabilities to provide end-to-end solutions for the problems faced by businesses in the digital age. Our modular approach allows you to choose from the below list of off-the-shelf solutions.

End-to-End Privacy and Cybersecurity Readiness and Response Solution



Evaluate

- Build **Risk Framework** of obligations, including **Third Party Data Assessment** and **IT Security Assessments**
- **Integrated Risk Analysis** providing legal and technical advice to address your obligations
- **Digital Resilience Assessment** for senior leadership
- **Privilege Playbook**

Prepare

- **Prepare Incident Response Plans** and keep them current with our innovative audit and update service
- **Data Breach Playbook**
- **Customized Cyber Simulations**
- **Advanced Retainer Solution**
- **Modular and scalable privacy, CASL, and data security programs, policies, and training package and review of existing materials**
- **Dentons nimble privacy impact assessments**

Respond

- Dedicated **response team, across multiple jurisdictions, including a Coordinating Counsel Service**
- **Litigation and regulatory management services** and deep experience with investigations, class actions and litigation
- **Crisis Management Services**
- **Post-Incident Learning**

Data Strategy Solution



- Develop your **Goals and Objectives Framework**
- Creation of a **Data Map**, in particular with respect to regulated information (e.g., personal information)
- Development of a **Comprehensive Data Inventory**
- **Value Roadmap** of how best to extract value from data, including data enrichment options, and how IT architecture may need to evolve to support that
- **Data Protection and Retention Solution** (including defensible destruction, retention schedules, anonymization and exception management)

Compliance Blueprint Solution



Compliance agility assessment to help business with understanding the organization's ability to meet regulatory expectations, including:

- Gap analysis and growth readiness report
- Board oversight
- Governance model and key accountability
- Risk assessment, including a measurement of compliance risk
- Monitoring and testing to confirm compliances with regulations and effectiveness control
- Issues management track and remediation
- Change management

More solutions to come ...