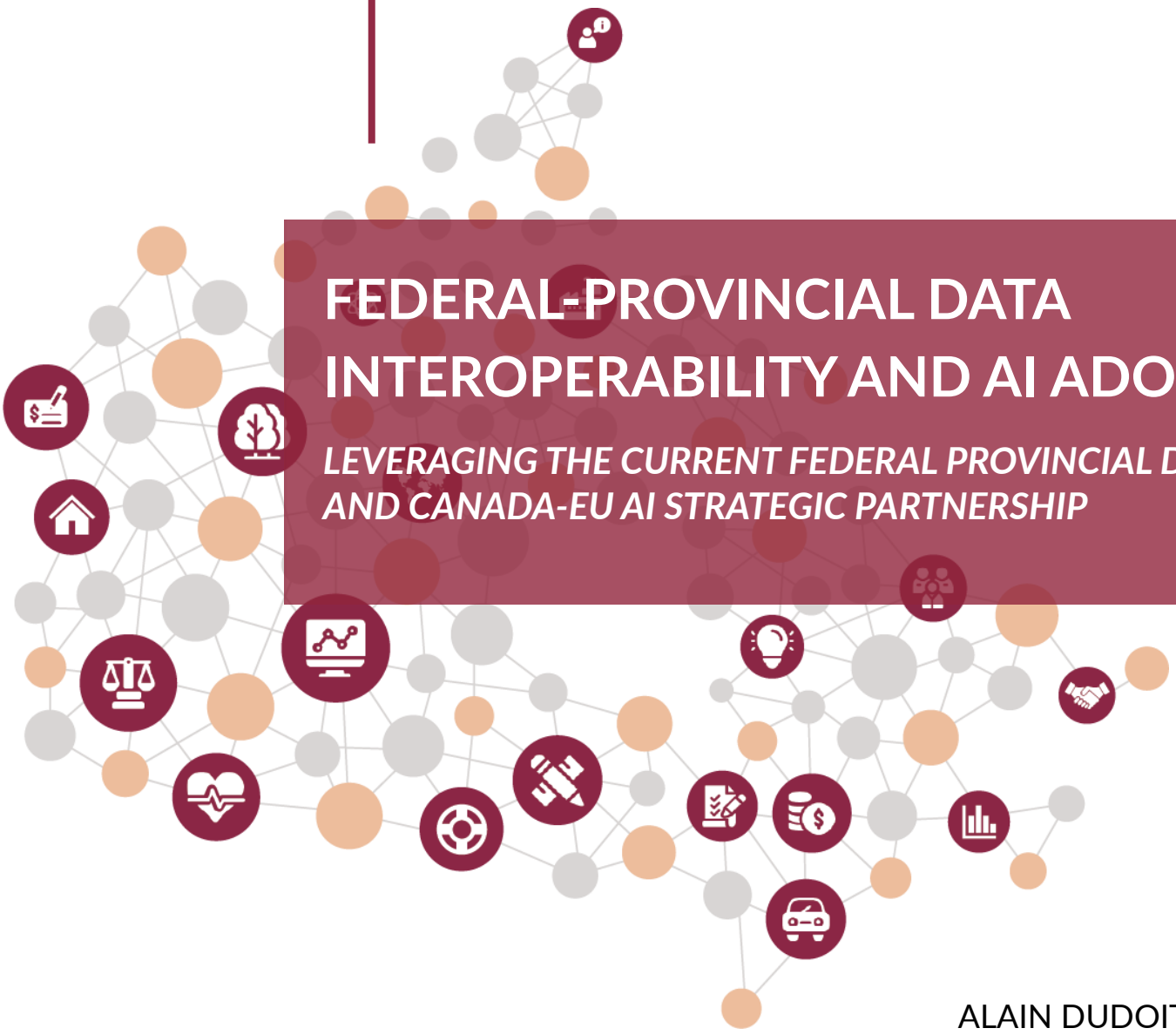
CIRANO
Knowledge into action

FEDERAL-PROVINCIAL DATA INTEROPERABILITY AND AI ADOPTION

LEVERAGING THE CURRENT FEDERAL PROVINCIAL DYNAMIC AND CANADA-EU AI STRATEGIC PARTNERSHIP



ALAIN DUDOIT

RB
2025RB-01
BURGUNDY REPORT

CIRANO
Knowledge into action

Les Rapports Bourgogne sont des documents de synthèse portant sur des questions d'intérêt général produits par des chercheurs et des fellows invités du CIRANO. Ils contribuent à alimenter la réflexion et le débat public sur des questions d'actualité.

The Burgundy Reports are synthesis documents written by CIRANO researchers and invited fellows on issues of general interest. Their aim is to encourage discussion and public debate on current issues.

Le CIRANO est un organisme sans but lucratif constitué en vertu de la Loi des compagnies du Québec. Le financement de son infrastructure et de ses activités de recherche provient des cotisations de ses organisations membres, d'une subvention d'infrastructure du gouvernement du Québec, de même que des subventions et mandats obtenus par ses équipes de recherche.

CIRANO is a private non-profit organization incorporated under the Quebec Companies Act. Its infrastructure and research activities are funded through fees paid by member organizations, an infrastructure grant from the government of Quebec, and grants and research mandates obtained by its research teams.

Les partenaires du CIRANO — *CIRANO Partners*

Corporate Partners — Partenaires corporatifs	**Governmental partners— Partenaires gouvernementaux**	**University Partners—Partenaires universitaires**
Autorité des marchés financiers	Ministère des Finances du Québec	École de technologie supérieure
Banque de développement du Canada	Ministère de l'Économie, de l'Innovation et de l'Énergie	École nationale d'administration publique
Banque du Canada	Innovation, Sciences et Développement Économique Canada	de Montréal
Banque Nationale du Canada	Ville de Montréal	HEC Montreal
Bell Canada		Institut national de la recherche scientifique
BMO Groupe financier		Polytechnique Montréal
Caisse de dépôt et placement du Québec		Université Concordia
Énergir		Université de Montréal
Hydro-Québec		Université de Sherbrooke
Intact Corporation Financière		Université du Québec
Investissements PSP		Université du Québec à Montréal
Manuvie		Université Laval
Mouvement Desjardins		Université McGill
Power Corporation du Canada		
Pratt & Whitney Canada		
VIA Rail Canada		

Le CIRANO collabore avec de nombreux centres et chaires de recherche universitaires dont on peut consulter la liste sur son site web. *CIRANO collaborates with many centres and university research chairs, list available on its website.*

Les idées et les opinions émises dans cette publication sont sous l'unique responsabilité des auteurs et ne représentent pas les positions du CIRANO ou de ses partenaires. *The observations and viewpoints expressed in this publication are the sole responsibility of the authors; they do not represent the positions of CIRANO or its partners.*

.

ISSN 1701–9990 (online version)

Alain Dudoit

CIRANO Invited Fellow and President of the Executive Committee of its ambassadors' Alliance.

Since his retirement from the Canadian public service in 2008, Alain Dudoit has been applying and sharing his vast international experience in innovation partnerships, his many professional achievements and an impressive business network in Canada and abroad.

Immediately following his retirement from the Canadian government, he was appointed Senior Associate Vice-President (Strategic Partnerships in Innovation) at McGill University. Since then, Alain Dudoit has been involved in the private sector as an independent entrepreneur and strategic advisor in international business and innovation network development for several companies and organizations in Canada, California, China, and Europe.

In 2017, Alain Dudoit completed his mandate as Senior Advisor to the QG100 Network, which he has developed and managed since its creation in 2010: a private grouping of Quebec business leaders in support of their global market development strategies. The success of this Network led Alain Dudoit to participate in the creation of a similar organization, OG100, in Ontario.

He has also been a lecturer (international competitiveness) at the Faculty of Management of McGill University and a guest lecturer at ENAP. He is also a strategic advisor to the Milken Institute of Santa Monica, a member of the Los Angeles Commission on Foreign Relations and a member of the Governance Committee, Center for Accelerated Growth, Office of the Government of Quebec in New York. Alain Dudoit is one of the main architects of the supply chain and artificial intelligence innovation supercluster, Scale AI. He is regularly invited to speak before national and international innovation panels.

During his long and successful public service career in Ottawa, Alain Dudoit has held several senior positions in the Privy Council Office, the Canadian International Development Agency, the Department of Finance and the Department of Foreign Affairs and International Trade. He has served Canada abroad as Minister Counsellor (Commercial and Economic Affairs) at the Canadian Embassy in Paris, Ambassador to the Czech and Slovak Republics in residence in Prague, Ambassador to the Kingdom of Spain and the Principality of Andorra in Madrid and Consul General in Los Angeles.

FOREWORD AND ACKNOWLEDGEMENTS

The growing influence of data on decision-making continues to deepen, as ever-increasing amounts are collected and analyzed. Over the next three years, more data will be generated than in the rest of human history, due in most part to advances in artificial intelligence.

This exponential growth presents both opportunities and challenges that the public sector, businesses and citizens must address with discernment as they shape the future of innovation, governance, and everyday life. The need to modernize and harmonize the data interoperability framework and support the responsible and coordinated adoption of artificial intelligence (AI) within and between federal, provincial, and territorial (**FPT)** administrations is more necessary than ever.

The willingness and ability of FPT governments to co-manage, share, and use evidence across jurisdictions are increasingly critical to national sovereignty, policy coherence, and public trust.
This report aims to contribute to the national debate. It proposes a pragmatic and forward-looking approach to strengthening FPT collaboration on data and emerging technologies.

Based on public sector values and drawing on 35 years of experience in the federal civil service and extensive research and consultation, this report outlines the structural and strategic dimensions of the reform needed to unlock the potential of data and AI to deliver better outcomes for the public. **An executive summary and background document are available separately.**

The analysis presented in this document draws on a wide range of sources. It includes Canadian public policies, international precedents, and practical cases, notably the development of the Scale AI proposal and CIRANO's hub dedicated to data science for trade and intermodal transport. It builds on several relevant publications by this institute (see bibliography). This document also draws on two confidential research projects and strategic advice as a project lead on digital research infrastructure in Canada, as well as on data interoperability and AI adoption in Atlantic Canada. Finally, the analysis incorporates key academic and policy publications and, most importantly, informal contributions from senior government officials, public service experts, and academics.

The proposed framework emphasizes that data interoperability and AI readiness are essential elements of the knowledge economy. These are not merely technical challenges, but governance and operational imperatives. Achieving this will require leadership familiar with these emerging technologies, shared FPT responsibility, and targeted investments in common infrastructure and public service capabilities.

I hope this report will foster constructive dialogue and timely action toward a more integrated, responsive, and future-ready public sector in Canada.
The development of this policy paper on FPT data interoperability and the adoption of artificial intelligence in the public sector has benefited from the ideas, insights and constructive comments received during a series of consultations between January and July 2025.

I would like to express my sincere gratitude to the senior federal and provincial officials who generously shared their time and insights. Their names are not identified to respect off the record discussions.

I am also grateful to several public sector experts and academic colleagues, whose contributions have enriched the depth and relevance of this work. I would like to thank the experts and academics, whose thoughtful contributions have helped to shed light on several key dimensions of the analysis: **Sandrine Dudoit,** PhD Executive Associate Dean, College of Computing, Data Science, and Society Professor, Department of Statistics, Professor Division of Biostatistics, School of Public Health-University of California, Berkeley; **Ömer Kaya** CEO at Global Advantage Consulting Group; **Tony Labillois**, former Director General of Legal, Diversity and Demographic Statistics Branch (retired) at Statistics Canada; **Jean-François Lépine,** Distinguished Journalist, Former Diplomat and Honorary Doctorate Recipient from Laval University; **Jim Mitchell,** Adjunct Professor at Carleton University and Former Senior Federal Public Servant. **Molivann Panot,** Project Director, CIRANO; **Shannon Storey,** President & COO of Global Advantage. **David B. Watters,** Founder and President of the Institute for Collaborative Innovation (ICI Canada). In addition to these valuable consultations, this policy paper draws on a thorough review of relevant professional and academic literature in the fields of data governance, public administration, intergovernmental relations, and artificial intelligence policy.

While these contributions have been essential to the development of the perspectives offered in this document, I remain solely responsible for the content, interpretations, and presentation of the final report.

Alain Dudoit
1 August 2025

Notes: The quality of the translation assisted by the DeepL Pro software and its consistency with the original text are the sole responsibility of the author. In the event of any discrepancy between the original work and the translation, only the text of the original work shall prevail.

ABSTRACT

Canada is at a critical juncture where major economic challenges and geopolitical tensions and the required transformation of public services require a new way of managing and operating federal-provincial-territorial (FPT) relationships. At the heart of this transformation is the imperative to establish public sector data interoperability. This approach not only enables more efficient service delivery and the adoption of AI but also contributes to national productivity and digital sovereignty.

At the centre of Canadian public sector governance and operations is the citizen, who is also the taxpayer (individual or business), consumer and end user of services provided by various levels of government: federal, provincial, territorial, and municipal. Citizens are entitled to continuous, efficient, safe, and reliable public services, regardless of jurisdiction. Meeting this expectation is a shared responsibility that no level of government can assume alone. The response requires a collaborative, whole-of-governments approach based on modern tools and coordinated strategies.

Despite efforts, Canada's intergovernmental relations remain hampered by fragmented and often outdated systems and a lack of cohesion in governance structures, which together prevent the scalable and adaptable use of data across jurisdictions. In response to these structural challenges and an increasingly unstable international environment, the current federal government has identified a set of strategic priorities that are inherently dependent on high-quality, integrated data systems: adapting to climate change, preparing for and managing crises, improving domestic trade; addressing housing and affordability; protecting our sovereignty; modernizing the public service; and accelerating AI-enabled innovation.

This report highlights that barriers to interoperability are primarily political and institutional rather than technical. Drawing on international models such as the European Union's Interoperable Europe Act and lessons learned from policy frameworks put in place by the United Kingdom, the G7 and California, the report proposes a Canadian path rooted in federated governance, modular agreements and data architectures based on trust, respect for jurisdictional responsibilities and individual rights.

The report recommends two urgent measures: concluding an FPT agreement on data interoperability and creating a permanent FPT board on AI and interoperability. These initiatives are not mere technical adjustments: they are strategic and fundamental to any nation-building project. They respond to the Prime Minister's call to identify projects with lasting benefits.

The proposed FPT interoperability framework agreement aligns directly with the national interest designation criteria set out in Part 2 of Bill C-5, the Building Canada Act. It strengthens Canada's autonomy, resilience, and security by supporting the sharing of cyber-resilient infrastructure and the coordination of emergency response capabilities. It also offers clear economic and institutional benefits by improving service delivery, facilitating labour mobility, and fostering conditions conducive to productivity growth through AI.
This is not a marginal reform, but a fundamental change: a transformation of how governments collaborate, guided by the principles of transparency, subsidiarity, and shared objectives.

To quote this document:
Dudoit, A. (2025). Federal-Provincial Data Interoperability and AI Adoption: Leveraging the Current Federal-Provincial Dynamic and Canada-EU AI Strategic Partnership (2025RB-01, Rapports bourgogne, CIRANO.)
https://doi.org/10.54932/ZJFX8315

TABLE OF CONTENTS

Why, now?

Context: Starting point and opportunity

A stark warning and a historic opportunity

Canada is at a critical juncture. Domestically, the fragmentation of public services and intergovernmental relations is eroding public trust in institutions and undermining productivity. Externally, growing geopolitical tensions and the volatility of the US administration threaten Canada's economy and sovereignty.

The election on Monday, 28 April, of a minority government led by Mark Carney marks a turning point in an extraordinary period of transition for Canada. The existential crisis facing the country is a stark reminder of the vulnerabilities of our national cohesion (Angus Reid Institute, 2025a) (Angus Reid Institute, 2025c), productivity and the dysfunction of Canadian intergovernmental relations in the design and implementation of their respective public policies. This is both a stark warning and a historic opportunity.

The unprecedented national crisis and extraordinary transition we have entered must lead to a bold transformation not only of the federal public service, but also of the management of intergovernmental relations in Canada. This renewal cannot happen without a fundamental change in how governments at all levels collaborate, share knowledge, and leverage their collective data resources. Data is no longer a secondary asset; it has become the foundation on which sound policy, economic resilience, innovation, and public trust are built.

Bill C-5[1], *Unity of the Canadian Economy: An Act to Enact the Free Trade and Labour Mobility Act and the Building Canada Act*, received Royal Assent on 26 June 2025. Part 1 of this two-part legislation enacts the *Free Trade and Labour Mobility Act* and establishes a legislative framework to remove federal barriers to interprovincial trade in goods and services and to improve labour mobility within Canada. Part 2 enacts the *Building Canada Act, which* authorizes the Governor in Council to add the name and a brief description of a project to a schedule to that Act if the Governor in Council is of the opinion, after considering certain factors, that the project is in the national interest (Parliament of Canada, 2025). This summer, as required by the *Act,* the Government of Canada is undertaking consultations with the provinces, territories, and Indigenous rights holders to develop an initial list of projects of national interest.

Factors to be considered in these discussions and decisions include the extent to which the project can:

- Strengthen Canada's autonomy, resilience, and security.
- Provide economic or other benefits to Canada.
- Have a high likelihood of successful implementation.

[1] Implementation of Bill C-5 Unity of the Canadian economy

- Promote the interests of Indigenous peoples.
- Contribute to clean growth and the achievement of Canada's climate change objectives.

The Liberal election platform**, "**Canada Strong [2]," states that the new government will work with provinces, territories and Indigenous peoples to establish a list of nation-building projects that transcend provincial and territorial boundaries and deliver significant economic and strategic benefits to Canadians (Liberal Party of Canada, 2025).

The mandate letter[3] sent on 21 May 2025 by Prime Minister Carney to his cabinet members defines the context as a generational challenge:

> "Canada faces a series of crises. In a more dangerous and divided world, geopolitical risks are emerging and threatening our sovereignty. The global trading system—which has contributed to our country's prosperity for decades—is undergoing its most significant transformation since the fall of the Berlin Wall. Canada's long-standing low productivity growth is affecting public finances, making life less affordable for Canadian families, and threatening the sustainability of essential social programs that Canadians rely on.
> The new federal government has a tremendous responsibility to address these challenges with care and determination, and with fundamentally different approaches to governance.
>
> We must redefine Canada's international, trade and security relationships. At the same time, we must develop a defence industrial policy that makes Canada safer, allows us to fulfil our responsibilities to our allies, and helps us build our economy.
> Canada must build a huge amount of new infrastructure at a pace not seen in generations. This includes infrastructure that will allow us to diversify our trade relationships, become an energy superpower in clean and conventional energy, restore housing affordability, and protect our borders and communities.
>
> **The scale of this infrastructure development, combined with the transformative nature of artificial intelligence (AI),** will create the opportunity for millions of Canadians to find new and rewarding careers, provided they have timely access to the education and training they need to acquire the necessary skills.
>
> **The government itself must become much more productive by deploying AI on a large scale, focusing on** results rather than spending, and using scarce public funds to encourage multiple private investments" (Office of the Prime Minister of Canada, 2025a).

---

[2] A Strong Canada: Mark Carney's Plan to Stand Up to Donald Trump and Build a Stronger Canada. Liberal Party, 19 April 2025 (highlights on data and artificial intelligence in background document).

[3] Mandate Letter; Office of the Prime Minister of Canada; 21 May 2025

The Prime Minister's 2025 mandate letter identifies seven priorities, all of which require a public sector with digital capacity and increased AI (Office of the Prime Minister of Canada, 2025a):

1. A new economic and security relationship with the United States and its allies
2. Building a unique Canadian economy (domestic market)
3. Reducing costs for Canadians
4. Making housing more affordable
5. Protecting sovereignty and security
6. Attract talent and ensure sustainable immigration.
7. Spend less on government while stimulating growth.

EACH OF THESE STRATEGIC PRIORITIES DEPENDS, AT THE OPERATIONAL LEVEL, ON STRONG FEDERAL-PROVINCIAL-TERRITORIAL COLLABORATION ON DATA AND A SHARED DIGITAL INFRASTRUCTURE:

The proposed FPT interoperability framework agreement aligns directly with the national interest designation criteria set out in Part 2 of Bill C-5, the Building Canada Act. It strengthens Canada's autonomy, resilience, and security by supporting the sharing of cyber-resilient infrastructure and the coordination of emergency response capabilities. It also offers clear economic and institutional benefits by improving service delivery, facilitating labour mobility, and fostering conditions conducive to productivity growth through AI.

The framework is fully achievable and ready for implementation, as it builds on existing federal digital policies, provincial initiatives, and emerging common standards. In addition, it advances Indigenous data sovereignty in line with **PCAP** principles and promotes digital collaboration between nations. Finally, it supports clean growth by enabling coordinated emission tracking, climate data sharing, and integrated green infrastructure planning.

The Speech from the Throne[4], "Building a Stronger Canada: A Bold and Ambitious Plan for Our Future," delivered in Ottawa on Tuesday, 27 May 2025, states in its introduction:

> "We must face reality: since the Second World War, our world has never been so dangerous and unstable. Canada faces challenges that are unprecedented in our lifetimes.
> Many Canadians are anxious or worried about the radical changes taking place around the world. While profound change is always unsettling, it also offers exceptional opportunities. An opportunity for renewal. An opportunity to think big and act even bigger. An opportunity for Canada to undertake the most significant transformation of its economy since the Second World War. (Privy Council Office, 2025)"

[4] Building a Strong Canada: A Bold and Ambitious Plan for Our Future Speech from the Throne, opening the first session of the 45th Parliament of Canada, 27 May 2025. ISSN 1493-356 X Cat. No. SO1-1F-PDF

The seven strategic priorities set out for 2025—spanning economic resilience and national security—are both bold and necessary. However, their successful implementation depends on a fundamental shift in how federal, provincial, and territorial governments work together. No single jurisdiction can deliver these outcomes in isolation.

The Prime Minister's mandate letter is achievable, but only through a coordinated reform agenda centred on public sector data interoperability and AI-enabled service delivery. This includes shared digital infrastructure, integrated data ecosystems, and co-governance frameworks that transcend jurisdictional boundaries.

AI-enabled services such as predictive analytics for wildfire management, automated eligibility screening for income support programs, and virtual assistants for multilingual citizen engagement are already demonstrating how technology can enhance service delivery across jurisdictions. For FPT partners, embracing these innovations is not optional—it is essential to meet the complex demands of Canadians in a digital age.

"Artificial intelligence (AI) presents a historic opportunity for Canada to address its productivity decline and change its economic trajectory. Until now, policy has largely focused on advancing Canada's role as a research leader, investing in computing power and addressing AI risks. Far less attention has been paid to driving economy-wide AI adoption. Yet history teaches us that most of the gains from general-purpose technologies are gained through broad-based adoption. Moreover, this is the only way to ensure that the benefits of AI are widely distributed across society.[5]" (Blit, Samson, et al., 2025)

In today's data-driven world, the growing complexity of the challenges facing Canada requires effective federal-provincial-territorial (FPT) coordination more than ever. However, for decades, FPT relations have been characterized by a patchwork of bilateral agreements and siloed programs.

This fragmented approach has contributed to persistent productivity delays, duplication of effort, and a disjointed experience for Canadians seeking services. The governance models that once served us are now outpaced by the scale and complexity of the challenges we face; they require seamless coordination and real-time collaboration.

The FPT public sector is responsible for implementing most, if not all, of these strategic priorities: creating a single Canadian economy requires removing digital and regulatory barriers through interoperable data and complementary AI tools. Addressing the cost of living and housing crises requires integrated services delivered quickly and at scale across jurisdictions.

Strengthening Canada's sovereignty and security depends on complementary data systems and collaborative information sharing. Attracting talent and creating new industries, meanwhile, require coordinated workforce development and recognition of credentials, supported by shared digital platforms.

---

[5] For more information the newly created Canadian AI Adoption Initiative (CAIAI) brings together experts and organizations from across the country to provide advice and support toward the shared public interest objective of widespread AI adoption throughout the economy. For further information, **see support exhibit 1 in the separate backgrounder.**

The intergovernmental system is structurally ill prepared, with most jurisdictions operating with legacy systems that are not interoperable. AI adoption remains low and uneven. This is particularly the case outside the federal government and a few leading provinces and municipalities. There is no national framework for FPT data interoperability.

The mandate letter, the Speech from the Throne and Bill C-5 emphasize digital transformation, improved citizen services, government productivity, and intergovernmental cooperation, particularly in the areas of the economy, health, and the green transition. Implementing these priorities requires operational capacity that is not possible with current, which are often public sector operating models, which are often siloed redundant or out of sync between levels of government.

Data interoperability enables public administrations to share, cross-reference and reuse data in real time to deliver more targeted, efficient, and consistent services. AI in the public sector relies on accessible, structured, and interoperable data to produce analyses, forecasts, or personalized services (e.g., virtual agents, fraud detection, and automated allocations). Without this interoperability, AI becomes ineffective or risky (bias, opacity, processing errors).

Governments are facing increasingly complex, cross-cutting, and fast-moving challenges (climate change, health crises, cybersecurity, and interprovincial mobility). These challenges exceed the individual capacities of ministries or jurisdictions and require a structured collective response. A shared digital infrastructure (e.g., common platforms, federated digital identities, open data catalogues) and intergovernmental co-governance are modern and proven tools for addressing these challenges.

Canadian federalism is based on a constitutional division of responsibilities. Without effective co-governance mechanisms, any attempt to integrate data or services is either blocked or ineffective. Examples such as the digital identity governance framework pan-Canadian and the FPT Digital Health Initiative demonstrate that cooperation is possible, but slow and fragile without clear and stable political commitment.

We can imagine a Canada where a small business in Quebec can easily access Ontario regulatory permits through a single digital platform, or where health, housing, and immigration services work in unison to reduce costs and accelerate outcomes for families.

The current intergovernmental system, which is reactive and siloed, must evolve into a proactive, results-oriented partnership. This means moving beyond annual funding negotiations to multi-jurisdictional agreements focused on shared goals and measured outcomes. It also means jointly investing in AI capabilities that enable all governments—federal, provincial, territorial, and Indigenous—to leverage automation and predictive analytics.

The time to act is now: public trust is[6] eroding, and Canadians increasingly view FPT relationships as dysfunctional (Angus Reid Institute, 2025b).

[6] Faced with institutional mistrust and political opposition, is there a way back in this divisive era? Angus Reid Institute 10 April 2025 (in English only)

Digital transformation is stalled, as fragmented data systems are holding back progress on AI, public sector reform, and regulatory consistency. Canada's digital sovereignty is threatened by disruptive policy measures taken by the United States, which require a strong and coordinated Canadian response.

The Prime Minister's mandate letter provides the alignment needed for a comprehensive review of productivity across federal operations, a dedicated office for digital transformation at the centre of government, and a commitment to identify nation-building projects with cross-jurisdictional scope (Office of the Prime Minister of Canada, 2025a).

Reports from the Organisation for Economic Co-operation and Development (OECD) and the Canadian Advisory Council on Statistics highlight that Canada's structural productivity deficit is exacerbated by the fragmentation of the public sector (OECD, 2019)[7].

Crucial importance of the FPT data interoperability framework and its governance regime

The benefits of data interoperability between federal, provincial, and territorial governments, which are not well known, include more consistent and complementary services, better decision-making and better outcomes for citizens and businesses. Realizing these benefits requires shared rules, trust, and infrastructure.

Without these, we face fragmented systems that do not "talk" to each other, redundant data collection and frustration for citizens, inconsistent service delivery across jurisdictions, and delays in coordinating responses to national issues (e.g., public health, major crises, climate, and labour shortages). The relevant data sets cover key areas co-managed by multiple levels of government.

Interoperability and national priorities: A strategic imperative

Canada has a once-in-a-generation opportunity to establish a framework for FPT data interoperability and align the deployment of artificial intelligence (AI) through a productivity-focused transformation of its public sector.

Progress in this transformation will depend on sustained collaboration between governments, supported by shared technology aligned with common or complementary outcomes. This approach not only reflects sound governance practices, but also strengthens the foundations for more resilient, responsive, and forward-looking FPT data interoperability. It should be recognized as a fundamental element of the government's seven strategic priorities. It must undoubtedly be one of the projects of national interest envisaged by the C5 legislation.

[7]**Key findings from the OECD**: Improving access to and sharing of data and from the Canadian Advisory Council on Statistics (two relevant studies). For more information,**see support exhibit 2 in the separate backgrounder**

As public expectations rise and geopolitical and economic pressures intensify, FPT interoperability is no longer a policy option. It is becoming a national imperative. It promotes intergovernmental solidarity, supports inclusive innovation, and underpins the transformation needed to modernize the Canadian federation and its economy.

From trade to housing, digital public services to immigration and security, coordinated data exchange is essential to achieving large-scale results. Enabling secure, rights-respecting, real-time data sharing between governments is essential to delivering transparent, citizen-centric services, creating a single, productive internal market, responding to national emergencies and cross-border challenges, and enabling evidence-based decisions on climate, health, labour, and economic policy.

Without bold change in how governments work together and share data, progress on key national goals will remain limited. Public trust in governments' ability to deliver on their promises will continue to erode. The promise of AI and data-driven productivity will remain out of reach without a reliable, collaborative, and interoperable digital foundation.

PART 1

The future is now.

This unprecedented moment in our history has accelerated Canada's "knowledge factory" with the production and dissemination of a wide range of publications, opinions and recommendations through the web and more traditional media. These professional contributions reflect a broad national consensus on the need for a comprehensive response that should go beyond tariff countermeasures. Canada's policy reset must go far beyond trade to respond to the shock effects of Trump (Stewart & O'Reilly, 2025).

A thorough review of relevant publications and targeted consultations with public sector executives and stakeholders indicate that there is unanimity on the need to reform the Canadian public service, although opinions legitimately differ on the nature and scope of this reform.

1.1. The future of public service is one of the key policy issues of our time.

Artificial intelligence (AI) and big data are transforming economies and societies and redefining competitive advantages, but their full potential is hampered by insufficient access to quality data and models. AI and data management have become a fundamental aspect of public sector governance and operations around the world.

The growing influence of data on decision-making continues to deepen, as ever-increasing amounts are collected and analyzed. Over the next three years, more data will be generated than in the rest of human history, largely thanks to advances in artificial intelligence (Yap, 2025).

For its part McKinsey &Company research shows that "by 2030, data centres are projected to require $6.7 trillion worldwide to keep pace with the demand for compute power. Data centres equipped to manage AI processing loads are projected to require $5.2 trillion in capital expenditures, while those powering traditional IT applications are projected to require $1.5 trillion in capital expenditures. Overall, that is nearly *$7 trillion* in capital outlays needed by 2030, a staggering number by any measure" (Noffsinger et al., 2025).

As highlighted by (Malik et al., 2025) on 2 April 2025, the purview of such a reform must shift from a focus on civil service staffing levels to a substantive dialogue on mission, governance, and effectiveness. *"Is the civil service ready for the big shift imposed by Trump?*" (May, 2025a). This question posed by Kathryn May remains very much open to debate today!

> *"We will need to think big and act bigger. We will need to do things that were once thought impossible, at a speed we haven't seen in generations."* Prime Minister Carney said in his victory speech on 29 April 2025 ("Prime Minister Mark Carney's Victory Speech," 2025).

> *"The Government will balance its operating budget over the next three years by reducing the administrative burden, capping the number of civil servants, eliminating duplication and deploying technology to increase productivity in the public sector." (Privy Council Office, 2025).*

The appointment, effective 7 July 2025, of Michael Sabia as Clerk of the Privy Council and Secretary to the Cabinet sends a strong signal in favour of the promised public service reform, with the launch of a comprehensive review of public spending to increase the productivity of the federal government. This review will focus on clear productivity targets by creating an iterative process that deploys the best approaches across the public sector.

"With Mr. Sabia at the helm, Canada's exemplary public service will advance projects of national interest, catalyze huge private investments to stimulate growth, and deliver the changes that Canadians want and deserve (Office of the Prime Minister of Canada, 2025b)."

As a long-time professional observer of the federal public service points out, this is not just any appointment. The Carney-Sabia combination will be felt deeply and quickly. Sabia could become the most important clerk since Gordon Robertson, according to Donald Savoie of the University of Moncton, who has written book after book on government dysfunction (May, 2025b)**.**

In the evolving landscape of federal governance, there is a growing consensus on the need to clarify and restore institutional boundaries between the Privy Council Office (PCO) and the Prime Minister's Office (PMO). Under recent administrations, the centralization of power within the Prime Minister's Office has raised concerns about the erosion of the PCO's non-partisan and political role and the marginalization of ministerial leadership.

Seasoned observers of public administration have noted that, during this period, the PCO has become overly involved in operational and political matters, often beyond its traditional mandate as the central coordinating body of the public service. This convergence of policy strategy and public administration has blurred lines of accountability and compromised the effectiveness of both institutions.

There is now a critical opportunity and urgent need to depoliticize the leadership of the public service and reaffirm the distinct and complementary roles of the PMO and the PCO. The PMO should focus on policy direction and strategic communication, while the BCP should be empowered to provide objective, non-partisan policy advice and ensure effective implementation across government.

The appointment of the new Clerk of the Privy Council offers an opportunity to restore this institutional balance while advancing a broader public sector modernization agenda. With extensive experience in both the public and private sectors, Mr. Sabia is well positioned to strengthen the policy and performance functions of the PCO, particularly in addressing long-standing challenges in federal-provincial-territorial (FPT) relations.

To do so, it must be recognized that the traits that characterize excellence in public sector leadership overlap significantly with those of their private sector counterparts. However, the political and operational context in which public sector leaders operate is much more complex and challenging, requiring a unique ability to deliver results while dealing with constraints and limitations.

At a time when the need for seamless digital collaboration and responsible innovation is more urgent than ever, the Privy Council Office (PCO) can play a transformative role by promoting a more collaborative and results-oriented approach. FPT engagement is essential, particularly in the priority areas of data interoperability and the ethical adoption of artificial intelligence. A revitalized PCO can serve as a catalyst for strategic coherence, ensuring that digital transformation efforts respect jurisdictional boundaries while promoting alignment and efficiency at the national level.

Rebalancing the PMO-PCO relationship and modernizing intergovernmental coordination are essential steps to restore public confidence, strengthen ministerial accountability and ensure that Canada's public service remains a high-performing, forward-looking and non-partisan institution equipped to meet the complex challenges of the 21st century. As part of the upcoming spending review, the government will explore opportunities to use AI to improve administrative productivity:

> "We will examine every new dollar spent through the lens of how AI and technology can improve service and reduce costs. *We will relentlessly pursue ways to make government more effective. The potential of AI to improve services and benefits must be considered in this work. By 2025, a modern, industrialised economy must integrate these technologies. This is how the government will improve service delivery, adapt to the speed of business, maximize efficiency and reduce costs" (Liberal Party of Canada, 2025).*

The ruling party sees AI as "the key to productivity, higher-paying jobs and new prosperity that will benefit everyone." The government will seek to harness the potential of AI to "reduce delays in government services and improve service delivery times (Liberal Party of Canada, 2025).

In this regard, the specific mandate of two ministers deserves our ongoing attention and support: Minister of **Government Transformation** Joël Lightbound and Minister of **Artificial** Intelligence **and Digital Innovation** Evan Solomon.

1.2. High-quality data is essential to Canada's economic success, and societal issues related to well-being require greater collaboration and better data sharing.

The public sector can play a key role in the responsible digital transformation of Canadian society and the economy, with a focus on AI. This unique lever of the FPT public service is based not only on its exclusive legislative and regulatory responsibilities, but also on its weight on the economy, its wide range of programs and services, and its massive data assets on all aspects of Canadian reality in its evolving national and global context.

"Harnessing the benefits of AI while mitigating the threats it poses will not automatically follow from the technology itself and its current form of siloed development. It will require a concerted effort to implement adjustments and controls across institutions, regulations, and technologies. ***Governments are best positioned to play a leading role in this coordinated effort****"* (Haddad et al., 2025).

Most studies and policy recommendations from Canada's "knowledge factory" focus exclusively on reforming the federal public service, often overlooking provincial, territorial, and municipal governments (Watters, 2025). While this focus may be justified by jurisdictional boundaries, it is harder to defend from the taxpayer's perspective. The persistent neglect of Canada's dysfunctional intergovernmental management, and its costly impact on citizens, deserve far more attention and action.

At the centre of Canadian public sector governance and operations is the citizen, who is also the taxpayer (individual or business), consumer and end user of services provided by all levels of government: federal, provincial, territorial, and municipal. Citizens are entitled to continuous, efficient, safe, and reliable public services, regardless of jurisdiction. Meeting this expectation is a shared responsibility that no single level of government can assume alone. It requires a collaborative, whole-of-governments approach based on modern tools and coordinated strategies.

In the federal system, data interoperability can play a central and enabling role: By directing public administrations to share information securely and responsibly across jurisdictions and mandates, interoperability helps eliminate fragmentation, reduce duplication, and deliver complementary, citizen-centred services.

The Canadian federal system, defined by a constitutional division of powers and separate sources of revenue, provides the autonomy necessary for innovation within each level of government, while creating an imperative for collaboration. Interoperable data infrastructure is the connective tissue that makes this collaboration possible at the operational level, enabling FPT partners to align policies, reduce administrative burdens and respond more effectively to common challenges.

In the conclusion of the Council's "Shaping Europe's Digital Future" on 9 June 2020, Member States unanimously called on the Commission to present concrete proposals on data governance and to promote the development of common European data spaces for strategic industrial sectors and areas of public interest (Council of the European Union, 2020).

On 6 October 2023, Member States adopted a **common position** on the legislative proposal establishing measures to ensure a high level of interoperability in the public sector across the EU. (Council of the European Union, 2023; European Commission: Directorate General for Digital Services, 2017).

It should also be noted that 27 EU Member States unanimously called for measures to improve data sharing at the European level. The 2024 European Council conclusions state that "*the EU must go further in developing a competitive, secure, inclusive and ethical digital world with world-class connectivity. Particular emphasis should be placed on access to, sharing and use of data, data security and AI in a trusted environment"* (Council of the European Union, 2024).

Sustained collaboration and a strong federal-provincial data-sharing ecosystem are essential to improving productivity, domestic trade, economic development, and international competitiveness across the country.

James R. Mitchell identifies ten new policy drivers that will shape public attitudes and expectations of government in 2025. These policy drivers are relevant to all levels of government in Canada. AI and data interoperability across federal, provincial, and municipal governments can significantly reduce the costs of public administration by streamlining processes, eliminating redundancies and improving the efficiency of service delivery (Mitchell, 2025).[8]

At the heart of this essential transformation is the urgent need to achieve **public sector data interoperability**. Without decisive action to modernize and interconnect public sector data systems, Canada will accelerate its strategic decline, economic stagnation and diminishing sovereignty. By improving data sharing across levels of government, Canada can effectively reduce administrative barriers, streamline processes, and foster productivity through seamless economic integration within our critical single domestic market: an essential contribution to economic resilience against external disruptions, such as rising protectionism in the United States. Canada can also assess and mitigate risks and more effectively address environmental, social, and economic issues that have significant economic impacts.

1.3. Data is the fuel for AI: implications for FPT data interoperability and AI adoption by the public sector in Canada

Artificial intelligence (AI) does not work without data, especially high-quality, representative, and up-to-date data. In the public sector, data is not just an administrative product: it is a strategic lever, essential for innovation, decision-making and smart public services. For AI to be reliably adopted in Canadian institutions, the interoperability of federal, provincial, and territorial (FPT) data is a prerequisite.

However, much of the data needed for AI remains fragmented across jurisdictions and departments, limiting its access and reuse across governments. Incompatible and non-standardized systems reduce the scope, accuracy, and fairness of algorithms, slowing their application in key areas such as public health, climate resilience, fraud prevention, and emergency response. Conversely, interoperable, and machine-readable data can be used to create large, coherent data sets that are representative of Canada's diversity, reducing systemic bias, improving decision-making, and ensuring greater equity in services.

[8] **James R. Mitchell: Organising Government for the 21st Century** first published: 15 April 2025 Canadian Public Administration: https://onlinelibrary.wiley.com/doi/10.1111/capa.70012 For more information, **see support exhibit 5 in the separate backgrounder.**

Interoperability is not limited to data sharing: it also increases the power of AI tenfold. Once systems and standards are in place, AI can automate information analysis, optimize service delivery, and improve operational efficiency. For example,

- automating benefit eligibility assessments using shared income and residence data.
- Detecting health anomalies across the province using integrated medical records.
- Predict infrastructure maintenance needs using geospatial data.

Large-scale data sharing also stimulates innovation between governments, universities, and businesses. Common FPT data platforms can support AI projects applied to national issues, policy modelling, or collaborative research. Access to standardized data reduces the time and cost of processing, which speeds up the development of solutions to emergencies and public priorities.

To ensure that these benefits are sustainable and responsible, safeguards must be built in from the outset: rigorous governance, privacy protection, and ethical safeguards. Poor quality or misused data can lead to biased or even harmful outcomes.

Common FPT data standards, privacy principles by design, digital identity frameworks, and clear consent and classification protocols are essential. They ensure the quality of interoperable data, as well as its auditability, traceability, and compliance, which are crucial for public trust and regulatory compliance.

In short, FPT data interoperability goes beyond technology infrastructure: it fosters collaboration, trust, and smarter public services. It enables the responsible adoption of AI for the benefit of Canadians, in line with national values and digital sovereignty.

In Canada, privacy protection is an integral requirement. Digital standards mandate transparency, and a consistent legal framework is in place: the Privacy Act applies to federal organizations, PIPEDA governs commercial uses, and several provinces have legislation inspired by PIPEDA.

Canada is therefore well positioned to become a leader in federated AI that respects jurisdictional responsibilities. A coordinated FPT approach to data interoperability would build a sovereign, ethical and common good-focused model, in line with the country's digital government ambitions.

PART 2

Problem statement—current state: dysfunction, fragmentation, missed opportunities and growing risks.

2.1. Dysfunction in federal-provincial-territorial (FPT) relations and data fragmentation

In Canada, according to a Fraser Institute study published in March 2024, public spending at all levels (federal, provincial and municipal) accounted for approximately 40.5% of the country's GDP in 2022, with total consolidated public spending expressed as a percentage of GDP (Fuss et al., 2024).

However, there is a systemic gap within the Canadian intergovernmental system in the absence of sustained and effective resource pooling to pursue common objectives in the face of major common challenges, such as data accessibility and sharing.
The lack of consideration, let alone concerted action, to establish a common FPT strategy on AI-related data is detrimental to Canada's interests.

Public sector data in Canada remains fragmented across federal, provincial, territorial, and municipal jurisdictions. It should be noted that the 31 federal-provincial-territorial (FPT) sectoral tables managed by the PCO's intergovernmental office replicate the siloed organizations within their respective jurisdictions.

None of the 31 FPT sectoral tables[9] have a consistent focus on public sector data interoperability in Canada as a shared strategic asset and enabler of AI digital transformation. A federal-provincial-territorial (FPT) symposium on digital trust and cybersecurity has been held annually since 2022. This event brings together ministers and deputy ministers from across Canada to collaborate on digital identity, cybersecurity, and emerging technologies. This initiative merits more formal recognition and longer-term institutional support, as will be demonstrated in Part 4.

This fragmentation limits the effectiveness of policy development, service delivery, and national resilience.

[9] **The 31 FPT sectoral tables managed by the PCO: For more information, see support exhibit 6 in the separate backgrounder.**

The Canadian domestic market.
A strategic asset under threat: the development of a single Canadian market is hampered by regulatory fragmentation and administrative inefficiencies. The lack of harmonized data sharing amplifies barriers to domestic trade, weakens labour mobility and limits AI-based innovation:

- Overlapping provincial regulations delay infrastructure projects.
- Disparate medical records complicate public health responses.
- Fragmented environmental data hinders climate action coordination.

2.2. Public sector data silos

Currently, the Canadian public sector operates with separate and siloed data infrastructures across jurisdictions.

These infrastructures are characterized by inconsistent data standards and governance frameworks, limited interoperability in key sectors such as healthcare, transportation, justice and skills development, and a heavy reliance on outdated legacy systems.

"Despite years of digital ambition, much of the government still runs on outdated systems. Fragmented data and rigid procurement rules slow down progress and drive-up costs.

The consequences are serious: Slower policymaking due to a lack of real-time data; fragmented public service delivery; redundant administrative costs and burdens for citizens and businesses; missed opportunities for AI-driven innovation.

Inaction not only frustrates citizens and businesses—it imposes hidden economic costs. Billions of dollars in untapped value are locked in inaccessible datasets, while public services continue to operate below potential efficiency and resilience thresholds. This is more than an inconvenience: it is a strategic vulnerability in an increasingly data-driven world" (Zhang, 2025).

Canada is making progress in AI governance within federal and provincial public services, but interoperability between different levels of government remains a challenge in the absence of detailed frameworks for secure, sustainable, and cross-sectoral data interoperability between federal, provincial, territorial, and municipal levels.

2.3. Barriers to data sharing

Even when data is structured, it cannot flow easily between departments or jurisdictions due to the absence of interfaces or the existence of proprietary interfaces. Many public sector data sources (registries, customer relationship management software, tax, and health systems) are still locked into operational platforms that are not designed for sharing. Without a shared integration layer (such as X-Road), organizations fall back on manual methods (e.g., sending spreadsheets by email) that are neither secure nor scalable.

It is often claimed that "data is inherently interoperable," but this view obscures deeper and more complex realities. In truth, data is not inherently interoperable, and in the Canadian FPT context, the main barriers today are infrastructural rather than semantic or structural.

2.4. Risks associated with using large integrated or mutually accessible data sets as a basis for AI-enabled Canadian governments.

Integrated and interoperable data systems are essential to support AI-enabled governance. However, they also pose significant risks that must be actively managed: privacy violations, algorithmic bias, loss of control over data, cybersecurity, loss of public trust, and technological dependence.

Although the Government of Canada has put in place various mitigation frameworks, their level of maturity and adoption remains variable.

The main risks and mitigation initiatives are summarized below:

1. **Privacy and surveillance**
   Risk: Data integration increases the risks of re-identification and "functional drift," or the use of data beyond its original purpose.
   Mitigation: The Privacy Act requires privacy impact assessments (PIAs). The Automated Decision-Making Directive imposes measures based on the level of risk. The Office of the Privacy Commissioner provides guidelines on de-identification and consent.
2. **Algorithmic bias and discrimination**
   Risk: Biases in data can reproduce or exacerbate inequalities in automated decisions.
   Mitigation: The TBS Algorithmic Impact Assessment (AIA) Tool, the Inclusive Data Charter, algorithmic audits, and investments in diverse data sets (by Statistics Canada, CDSE, etc.) aim to reduce these biases.
3. **Loss of local control and data sovereignty**
   Risk: Centralized systems may weaken the ability of provinces, territories, and Indigenous peoples to control their data.
   Mitigation: Respect for First Nations OCAP® principles (ownership, control, access, possession) is prioritized. Data governance partnerships are being established, notably through Indigenous Services Canada. The federal data strategy values local approaches.
4. **Cybersecurity and systemic vulnerabilities**
   Risk: Data centralization increases attack surfaces and the risk of major breaches.
   Mitigation: The Canadian Centre for Cybersecurity provides advice and conducts audits. Shared Services Canada and departmental IT officers are deploying a zero-trust architecture. The Digital Services Directive requires proactive risk management.
5. **Public trust and transparency**
   Risk: A lack of clarity on data use can undermine public trust and the legitimacy of institutions.
   Mitigation: The Automated Decision-Making Directive requires transparency measures (e.g., explainability statements). Use cases are published on Canada.ca. The Office of the Chief Data Officer and the Communications Community Office support public engagement.

6. **Technological lock-in and rigidity of solutions**
   Risk: Dependence on proprietary vendors or platforms can limit innovation, increase costs, and reduce flexibility.
   Mitigation: The cloud adoption strategy favours a modular infrastructure and open standards. The use of open technologies, shared services, and interoperability standards (such as the DXP platform and the pan-Canadian trust framework) enhances agility.

2.5. Growing risks to Canada's digital sovereignty

Artificial intelligence (AI) is rapidly transforming economies and reshaping governance around the world. It promises to revolutionize how governments deliver services, make policy decisions, and manage public resources. However, the effectiveness of AI depends critically on access to large volumes of reliable and interoperable data.

As noted in the Munich Security Report of 2025, President Trump's threats of "land grabs" give the impression that the United States is no longer "an anchor of stability, but rather a risk to be guarded against." The new US regime poses an imminent and direct threat to our sovereignty through the targeted and progressive use of economic force. In addition, the geopolitical climate is deteriorating. The rise of protectionism and punitive trade measures by the United States highlight the risks of digital dependence (Munich Security Conference, 2025).

Canada's excessive dependence on digital infrastructure owned by foreign interests further exacerbates the risks of fragmented governance.

Data must be considered a strategic asset for Canada's knowledge economy, and data centres located in Canada must be considered national security infrastructure. According to Statista's Cloudscene platform, in March 2024, the United States dominated the market with 5,388 data centres (representing 45% of the global total) out of more than 11,800 operational data centres worldwide. Canada has 336 (Taylor, 2025).[10]

Data sovereignty is essential for Canada to maintain control over critical information, foster innovation and protect the rights of its citizens and Canadian businesses. Confirming this sovereignty requires striking a balance between interoperability, security, and autonomy. In the context of Canada-US relations under the Trump administration, data sovereignty also serves as a safeguard against foreign interference, helping to secure Canada's domestic market and its broader strategic interests.

The digital dominance of the United States is becoming a geopolitical weapon **(Rohozinski, 2025).**

[10] **Statista: Data centres in the US**—statistics & facts. For more information, **see support exhibit 7 in the separate backgrounder.**

Both Democratic and Republican administrations now view artificial intelligence (AI) as a national security priority. The Biden administration's technological and economic agenda—from the CHIPS Act to export restrictions—has been aimed at preserving the United States' strategic advantage over China. This focus is intensifying under the Trump administration.

Silicon Valley, increasingly aligned with military interests, is moving closer to the Pentagon. This trend is encouraged by influential figures such as Elon Musk, Marc Andreessen and Eric Schmidt, who are calling on American technology companies to do their "patriotic duty" (Bego, 2025). In return, the Department of Defense is opening up widely to advanced civilian technologies, consolidating the power of large digital companies.

On **23 July 2025**, the White House published *Winning the AI Race: America's AI Action Plan*, an ambitious strategy focused on national security, which establishes AI as a pillar of state power. Rather than a public infrastructure, AI is now seen as a strategic resource to be developed and protected, on a par with energy and defence. The plan sets out **103 recommendations** organized around **three strategic pillars**:

1. Accelerating innovation through deregulation

The first pillar aims to stimulate innovation by removing previous constraints, such as Decree 14110 (Executive Order 14110 of October 30, 2023, 2023)[11], and by setting aside requirements relating to fairness, diversity, and the fight against disinformation. This regulatory shift is accompanied by strong support for open models (open source/open weight), which are seen as tools for technological influence and strategic independence.

Massive public investment is supporting the rapid deployment of AI in key sectors (health, defence, and energy) through regulatory sandboxes and federal centres of excellence.
Skills development is central, with new training and retraining programs in the affected sectors. AI is also seen as a catalyst for reviving research, life sciences, advanced materials, and manufacturing.

2. Building a national infrastructure for AI

This pillar provides for:

- A massive expansion of secure computing capabilities.
- The repatriation of semiconductor production.
- Reform of the energy network to meet AI-driven demand.

Cybersecurity is a key element, with investments in attack resilience, security by design, and national incident response capabilities.
Certain technical professions (electricians, data centre technicians, HVAC specialists) are now considered critical to supporting this infrastructure.

[11] Executive Order 14110 of October 30, 2023, "Secure, safe, and Trustworthy Development and Use of Artificial Intelligence," Federal Register 88 (210) 75191, www.govinfo.gov/content/pkg/FR-2023-11-01/pdf/2023-24283.pdf.

3. Extending the strategy geopolitically

The third pillar projects American power internationally through:

- A "full stack" export strategy to consolidate alliances and counter Chinese influence.
- Strict controls on exports of chips, computing power, and sensitive technologies.
- Risk assessments focused on foreign threats, particularly from China, and biosecurity, with mandatory AI tools to detect risks related to synthetic biology.

Impacts and risks to Canada

The US “Winning the AI Race” strategy signals a decisive acceleration in artificial intelligence development and deployment, anchored in a national security—driven innovation model. This model prioritizes rapid scaling, private—public partnerships, and minimal regulation to maintain global technological dominance.

While this approach may secure US leadership, it raises critical risks for Canada—particularly in the areas of data sovereignty, cross-border interoperability, and dependence on foreign AI infrastructure. This American shift requires a swift response. It is imperative to strengthen the national digital infrastructure and its cybersecurity; coordinate FPT efforts; and confirm a clear commitment with reliable partners to ensure that Canada’s AI trajectory remains sovereign, ethical, and competitive in a rapidly evolving strategic environment.

The US plan diverges sharply from the principles underlying Canadian AI governance, particularly regarding privacy, algorithmic fairness, and transparency. This widens the gap between Canadian standards (Automated Decision-Making Directive, Privacy Act) and emerging standards in the United States, complicating bilateral interoperability.

For Canada, and especially for the federal—provincial—territorial (FPT) public sector, the implications are direct:

- First, without robust Canadian interoperability standards, US cloud platforms and AI ecosystems could become default infrastructure for Canadian public services. These risk exposing sensitive citizen and government data to foreign jurisdictional claims under US law (e.g., the CLOUD Act).
- Second, the US is investing heavily in AI-ready data ecosystems and federal—state—private data integration. If Canada’s FPT systems remain fragmented, it will be harder to participate in international data collaborations on Canadian terms.
- Third, US AI models will increasingly be trained on vast, integrated data sets, giving them an accuracy and applicability advantage. Without coordinated Canadian data governance, AI adoption in our public sector risks becoming an import model, where decision-making tools are shaped by foreign priorities.

From a geostrategic perspective, the increasingly close alignment between artificial intelligence and US military priorities exposes Canada to several spillover effects. Canada could become a secondary market or even a testing ground for dual-use technologies, posing significant risks to technological sovereignty and national security. Furthermore, this environment is gradually limiting Canada’s room for manoeuvre in terms of regulation and technological diplomacy.

The scale of US investment in AI infrastructure and talent poses a direct challenge to Canadian competitiveness. Without a coordinated strategy among federal, provincial, and territorial governments, the country risks losing talent to foreign institutions while struggling to build a national infrastructure capable of meeting growing needs for high-performance computing and secure data management.

According to a study by the Centre for International Governance Innovation (CIGI), between 64% and 70% of Canadian Internet traffic passes through US territory, with a typical email crossing the border several times before reaching its domestic destination. The physical infrastructure landscape is even more concerning: all thirteen transpacific fibre-optic cables land on the west coast of the United States, and none end in Canada. Of the 14 transatlantic fibre-optic cables, twelve land on the east coast of the United States, while only two connect directly to Canada. Critical Canadian infrastructure, from energy networks to John Deere tractors, depends on digital services that are not owned or controlled domestically. Over 61% of Canadian businesses store critical data on US cloud services (Rohozinski, 2025).

Any decision to restrict access, whether through outright denial or punitive surcharges, would devastate the Canadian economy more effectively than any conventional customs tariff, crippling digital operations and exposing sensitive data to foreign surveillance. This threat is further exacerbated by the fact that the current US administration is erasing or compromising official US data across a wide range of areas, eroding the foundations of evidence-based policymaking.

Danielle Goldfarb's analysis highlights the urgency for Canada to respond to this US data crisis: "Instead of accepting blind spots in critical information, Canada should invest in safeguarding essential data and building the next generation of trusted public intelligence (Goldfarb, 2025).

In March 2025, 22 of the world's 25 largest companies (in terms of market capitalization) were based in the United States. No European or Canadian companies appear on this list (Broadbent, 2025). These direct threats have serious implications: exposure to foreign policy shocks (e.g., data sanctions, cross-border surveillance); weakened control over citizens' data privacy and security; economic vulnerability due to potential disruption of cloud-based business operations. Concerns about authoritarianism are very present in American politics (Wittes, 2025).

Matthew Tokson describes how the use of AI for surveillance is fuelling authoritarian abuses worldwide. He also identifies legal and legislative levers to curb this trend in democracies threatened by authoritarianism, drawing on a cross-analysis of AI, disinformation, social media, and the law (Tokson, 2025).

It is in this context that the Governor of California published a groundbreaking report on June 17, 2025, written by a group of renowned experts and academics, aimed at providing a framework for the responsible, safe, and ethical development and deployment of AI in California and beyond (Bommasani et al., 2025) (see page 27 section 3.3.4).

In this hostile environment, data sovereignty is not just a technical issue; it is a pillar of national sovereignty. Ensuring the interoperability of public sector data is a strategic imperative. Without decisive action to strengthen interoperability and digital resilience internally, the prosperity, sovereignty and effectiveness of Canada's public sector are seriously threatened.

Part 3

Conditions for success and international initiatives

3.1. Trust, the cornerstone of public sector data interoperability

Trust and institutional alignment are essential conditions for data sharing, even when technical standards are in place. Trust is based on mutual assurance between jurisdictions that data will be accessed, interpreted, and used in a lawful, secure, targeted manner and in accordance with established governance principles. It encompasses several dimensions: technical reliability, institutional legitimacy, legal clarity, and social acceptability.

In the Canadian context, where privacy laws, consent models and governance frameworks vary, trust becomes the cornerstone of an effective FPT data interoperability framework. The success of large-scale data sharing, therefore, depends on its consolidation across each of the following five pillars (Curry et al., 2022)[12]:

- Organizations: More organizations, businesses, universities, and governments need to rethink their strategies. This means adopting a data-centric and trust-based culture, exploring new data-driven business models, and leveraging new value streams.
- Data: The free flow of data relies on organizational strategies that integrate sharing methods (interoperability) and clear, standardized policies from the outset. These enable the market value of data assets to be better assessed. A CIGI study explores recent efforts to estimate the stock and flow of data in national accounts and proposes ways forward (Sargent & Denniston, 2023).
- Technology: Secure test environments are needed to foster the maturation of data-related technologies, access, and reliable algorithms (confidentiality, interoperability, security, quality). In addition, standardization activities must adapt more quickly to emerging norms and the identification of new standards.
- People: Data sharing must ensure privacy protection and, where appropriate, provide fair value or compensation. For the Canadian public sector to share data effectively within and across jurisdictions, its workforce must be strengthened and reskilled to meet the needs of an evolving labour market.
- Governance: The FPT data interoperability space builds trust by relying on the most advanced rules, guidelines, and regulations, both national and international (including those of the EU). It promotes common values, open participation, and transparent and fair rules of conduct.

[12] For more information, please see G7 Leaders' Statement on AI for Prosperity G7-leaders' Statement on AI-for-Prosperity and the Kananaskis Common Vision for the Future of Quantum Technologies.

Trust is the governance infrastructure that makes interoperability possible. Through jointly developed safeguards, clear legal alignment and strong public accountability, Canada can build a secure, equitable and functional digital federation. Provinces retain control of data while integrating with national licensing systems. Federal agencies use traceable and verifiable metadata when accessing regional data sets. Citizens have visibility into how their data is used, and recourse mechanisms are in place.

A successful FPT data interoperability agreement must build trust by emphasizing several interdependent elements:

- First, it relies on jointly developed governance frameworks, federated retention models, and modular adoption that respects jurisdictional autonomy. Shared legal interpretations and common safeguards are also essential to ensure the consistency and security of the system.
- Trust also requires harmonized interpretations and safeguards that take into account jurisdictional limitations and data retention requirements. Transparency plays a key role: decision-making processes, their justifications and audit trails must be made public.
- Data sharing must be gradual and explicit, based on assessed use cases, accompanied by metadata and clear consent frameworks. Security must be based on a zero-trust approach, rigorous authentication standards, and certified interoperability layers.
- Finally, sustained investment is needed in data literacy, intergovernmental partnerships, and long-term cooperation platforms. Clear communication, inclusive dialogue and the active participation of Indigenous peoples and groups seeking equity in governance are also essential.

To be effective, Canada's response must be flexible, results-oriented and fully interoperable across jurisdictions. Interoperability enables data to be accessed, shared and used effectively across systems, sectors, and governments. It is essential to overcome fragmented data governance structures and maximize the value of shared data.

The growth of Canada's digital economy presents a threefold challenge:	Digital challenges in Canada are influenced by three factors:
Limited availability of reliable, AI-ready data	Inadequate governance of interoperability efforts at all administrative levels: National, regional, local, and cross-sectoral.
Low data sharing between the public sector, the private sector and academia.	Lack of adherence to standards, common minimum interoperability specifications, and shared solutions.
Low data interoperability within and between public administrations, as well as in their interactions with citizens and businesses.	Lack of default "standard data design" and "interoperability by default" in policy design and implementation.

These factors lead to higher costs and lower efficiency at all levels of government. They also impose an administrative burden on citizens, businesses, and administrations themselves. At the same time, they hamper the potential for innovation and compromise digital sovereignty.

Data interoperability is essential for the effective development and implementation of public policies at all levels of government. It also supports optimal decision-making in the economic, environmental, and social fields, all of which have major repercussions.

3.2. Data standards and interoperability

In many cases, data is already interoperable. However, it is not inherently interoperable, either technically or semantically. For it to become interoperable, precise standards must be defined for its collection, formatting, organization, and documentation, i.e., metadata, which describes the data itself. Data quality is also a key issue.

High-quality data[13] only become truly interoperable when they are structured, framed, and exchanged in a way that allows for shared understanding and effective use between systems, organizations, or jurisdictions. Interoperability is therefore not a property of raw data, but a relational and systemic characteristic, for four main reasons:

First, the structure and format of the data matter. A simple spreadsheet containing names and addresses can become unusable if the fields are not named consistently if date formats vary or if encodings differ. Without metadata, even well-organized data can be unusable.

Second, semantic interoperability is essential. Different systems may use different terms to refer to the same concept—for example, "postcode" or "ZIP code." Data is only semantically interoperable if its meaning is understood in a consistent way.

Third, interoperability relies on protocols and shared governance. This is not just about file formats, but also APIs, access rules, privacy standards, and legal frameworks. In the Canadian context, FPT interoperability efforts require alignment between data standards, security models, and legal agreements across jurisdictions.

Finally, the context of use determines interoperability. Data that are interoperable in one domain, such as health, may not be interoperable in another, such as taxation, due to differences in ontologies and governance models specific to each sector.

Even when data is technically interoperable, FPT sharing initiatives will fail without the establishment of federated trust frameworks, common legal interpretations, a clear division of roles, and informed public consent.

This is precisely the mission of the proposed FPT Data Interoperability Council. It will aim to establish a national interoperability framework, develop sharing standards tailored to specific domains (rather than targeting all data at once), and strengthen the trust infrastructure, including through digital credentials and accountability mechanisms.

The European Union offers a mature model with its European Interoperability Framework (EIF), which operates at several levels: legal (harmonized laws for cross-border sharing), organizational (aligned

[13] Data quality is a characteristic of data defined by nine dimensions: accessibility, accuracy, completeness, consistency, comprehensiveness, interpretability, relevance, reliability and timeliness: Guidance on Data Quality, Treasury Board ISBN: 978-0-660-69835-9 10 January 2024.

processes, roles and agreements), semantic (meaning and classification of shared data) and technical (APIs, formats, protocols) (European Commission, n.d.).

3.3. International initiatives: Lessons from the EU, the United Kingdom, the G7 and California

Canada's international partners are taking decisive steps to align the adoption of artificial intelligence (AI) with robust data governance frameworks. Their approaches, while tailored to distinct legal and institutional contexts, share a common understanding: data interoperability is essential to unlocking the full value of AI in the public sector.

3.3.1. The European Union: A federated model for public sector data interoperability

The European Commission, with the unanimous support of its 27 Member States, is implementing a comprehensive AI strategy focused on excellence, trust, and responsible use of data. One of the cornerstones of this strategy is the European Data Strategy **(2020),** which envisages a single market for data—a market that enables secure and rules-based data flows across sectors and national borders, based on European values and fundamental rights (European Commission, 2025).

This vision is being realized through the creation of common European data spaces and sectoral ecosystems that facilitate the sharing and reuse of structured data. The Act on Interoperable Europe, in force since April 2024, provides a legal and technical framework for aligning national data systems while preserving sovereignty (European Commission, 2024).

The European Interoperability Framework (EIF) is particularly instructive for Canada, as it emphasizes the following points:

- Legal interoperability: harmonized legal environments and mutual recognition of rights.
- Organizational interoperability: alignment of processes and responsibilities between jurisdictions.
- Semantic interoperability: adoption of common definitions, vocabularies, and data standards.
- Technical interoperability: infrastructure enabling systems to communicate and exchange data securely (European Commission, n.d.).

By investing in open and federated digital infrastructure, the EU is improving the delivery of internal services, strengthening data protection, and increasing its strategic autonomy. Canada can draw inspiration from these principles, adapted to its constitutional division of powers, to establish an effective framework for FPT data interoperability.

3.3.2. The United Kingdom: A national AI strategy rooted in public sector reform

On 13 January 2025, the UK government unveiled its action plan on AI opportunities, which sets out ambitious goals: to make the UK a world leader in AI, accelerate the efficiency of the public sector and directly support the government's five national missions: boosting economic growth; making Britain a clean energy superpower; taking back our streets; removing barriers to opportunity; and building an NHS fit for the future, while reducing public sector administration (Department for science, Innovation & Technology, 2025).

One of the key lessons from the UK experience is the focus on measuring productivity in public services, a long-standing challenge in the absence of commercial value. The independent review by the National Statistician on the measurement of productivity in public services UK, published on March 13, 2025, builds on previous work undertaken by the Office for National Statistics (ONS) to improve published statistics (Office for National Statistics, 2025), drawing on the Atkinson review: Final report Measurement of Government Output and Productivity for the National Accounts (Atkinson, 2005) and the Bean Review (Bean, 2016).

3.3.3. The G7: a collaborative program for AI and data governance in the public sector

In December 2024, the G7 countries adopted a toolkit for AI in the public sector, a comprehensive guide designed to help policymakers and public sector leaders translate principles for safe, secure, and trustworthy Artificial Intelligence (AI) into actionable policies. AI can help improve the efficiency of internal operations, the effectiveness of policymaking, the responsiveness of public services, and overall transparency and accountability (OECD & United Nations Educational, Scientific and Cultural Organization, 2024).

Recognizing both the opportunities and risks posed by AI, this toolkit provides practical insights, shares good practices for the use of AI in and by the public sector, integrates ethical considerations, and provides an overview of G7 trends. It further showcases public sector AI use cases, detailing their benefits, as well as the implementation challenges faced by G7 members, together with the emerging policy responses to guide and coordinate the development, deployment, and use of AI in the public sector. The toolkit finally highlights key stages and factors characterizing the journey of public sector AI solutions[14]. A summary analysis of references to Canada is included in a separate backgrounder to this document.

[14] **OECD/UNESCO (2024), *G7 Toolkit for Artificial Intelligence in the Public Sector*, OECD Publishing, Paris,** https://doi.org/10.1787/421c1244-en. **For more information see support exhibit 8 on Canada in the separate backgrounder.**

As chair of the G7 in 2025, Canada played a leading role in developing the agenda. At the G7 Leaders' Summit, Prime Minister Carney reaffirmed Canada's commitment to multilateral collaboration: "In an increasingly dangerous and divided world, Canada is ready to lead (Office of the Prime Minister of Canada, 2025d).

The leaders of the G7 countries[15] have committed to:

- Accelerate the adoption of AI in the public sector to improve the quality and efficiency of services.
- Launch the G7 GovAI Grand Challenge and Rapid Solution Labs.
- Create a G7 AI Network (GAIN) to share scalable and open-source solutions.
- Invest in digital infrastructure, including language models and interoperability tools (Office of the Prime Minister of Canada, 2025c).

These commitments directly address Canada's need to establish an FPT framework for data interoperability, without which the G7 principles cannot be translated into coordinated national action.

3.3.4. California: Safeguards and Innovation at the Frontier of AI—Washington: AI as a Tool for Dominance

Artificial intelligence is transforming the world, and California is at the forefront of this evolution. As the world's fourth-largest economy and the cradle of the technology industry, the state is setting the tone for the safe and effective deployment of AI in the public sector (U.S. Government Accountability Office, 2023). It is home to 32 of the 50 largest AI companies in the world (Shrivastava, 2025). In addition to promoting responsible, ethical, and secure development, California is leveraging AI to improve government efficiency and support its public missions.

The California Report on Frontier AI Policy, published at the initiative of Governor Gavin Newsom and with the support of AI and public policy experts, offers recommendations to guide the development of evidence-based policies. It seeks to balance transparency, security, and the level of regulation in a rapidly evolving field. The report, which is currently open for public consultation, aims to establish realistic safeguards for the deployment of generative AI, based on an empirical analysis of leading models, their capabilities, and the associated risks (Bommasani et al., 2025).

In parallel, the California Council on Science and Technology (CCST) launched a Legislative Academy in July 2025 to strengthen understanding of AI issues among policymakers. The program, which will begin in the autumn and be fully operational in 2026, will include seminars, roundtables, and visits to innovative sites. It will cover topics ranging from the fundamentals of AI to algorithmic bias, employment impacts, and data protection. The Academy will then offer an annual, non-partisan, expert-led continuing education program to support elected officials in a rapidly changing technological landscape.

[15] For more information, please see the G7 Leaders' Declaration on AI for Prosperity and the Kananaskis Shared Vision for the Future of Quantum Technologies.

With more than 50 AI-related bills introduced during the 2025 legislative session, this initiative responds to an urgent need for reliable resources to guide safe, ethical, and effective public policy.

Two contrasting visions of AI governance in the United States

The US landscape of AI governance reveals two opposing paradigms. On the one hand, the national security-focused model, embodied by the US Federal Plan on AI (July 2025), emphasizes strategic advantage, innovation, and minimal regulation. On the other, a rights-based and precautionary model, illustrated by the California roadmap, the European AI Act, and emerging frameworks in Canada, prioritizes transparency, risk management, and the public interest.

In democratic terms, the security model centralizes executive power, limiting civilian oversight and transparency. Conversely, the precautionary model emphasizes accountability and control mechanisms, ensuring that the deployment of AI respects democratic values and legal safeguards. Without reform, this divergence undermines democratic compatibility.

In terms of public trust, the use of classified information and the lack of transparency in the security model fuel opacity and mistrust. The precautionary model, on the other hand, promotes citizen involvement and algorithmic explainability. Strengthening trust in a security framework therefore requires robust oversight and communication mechanisms.

Interoperability, standards, and possible convergence

International interoperability is also at stake. Sovereign approaches fragment standards and limit the portability of data and models. Conversely, the rights-based model seeks to converge towards multilateral standards, such as those of the OECD (GPAI). Without legal and technical bridges, interoperability remains a difficult ambition to achieve.

Regulatory philosophies also diverge: the paradigm of innovation first and voluntary compliance contrasts with risk- and rules-based frameworks, such as those in Europe and Canada. While both approaches can foster AI development, they are difficult to reconcile.

A potential area of common ground lies in the use of AI in the public sector. While the federal model emphasizes defence and infrastructure, cautious jurisdictions prioritize fairness, inclusion, and service transformation. Common objectives may emerge, particularly in the areas of digital identity, health, and public procurement.

The compatibility of these approaches will depend on the strength of shared commitments. The United States could rely on strategic alliances and trade agreements, while the EU and Canada are focusing on multilateral ethical standards. Conditional harmonization is possible if transparency and mutual accountability are built in.

The role of States and Provinces in AI governance

AI governance focused on national security can be aligned with democratic requirements and international cooperation; if transparency is enhanced, common standards are adopted, and robust safeguards are institutionalized. Otherwise, the risks of fragmentation and loss of trust will increase.

The California report on AI shows how subnational leadership can balance security, equity, and innovation in public services (Bommasani et al., 2025). In contrast, the US federal plan favours a security-focused approach, leaving little room for binding state regulation.

As in Canada, where provinces play a key role in consumer protection, fraud prevention and the defence of vulnerable populations, US States have democratic legitimacy to legislate on AI. Federal initiatives should not hinder these efforts, but rather promote interoperability between levels of governance, allowing local jurisdictions to regulate sensitive areas where public trust is at stake.

Regulatory diversity becomes a strength, provided it is based on common standards. It reinforces both democratic legitimacy and responsible innovation.

3.3.3. Key lessons: Relevance for Canada's FPT data interoperability framework

International experience shows that federated data governance is not only possible but effective, even in complex, multi-level systems. The European Union and the G7 demonstrate that political diversity is not an obstacle when it is based on common principles, robust legal frameworks, and interoperable infrastructure.

Interoperability is not limited to technical aspects: it is a strategic lever. It facilitates coordination between administrations, improves service delivery, reduces redundancies, and strengthens public trust in the digital government.

Three key success factors are emerging: the adoption of open standards, the establishment of a secure infrastructure and the recognition of clear data rights. These elements are becoming even more crucial as artificial intelligence becomes integrated into government activities.

Data must be viewed as a national strategic resource, not simply a by-product of administrative operations. This vision is at the heart of the most advanced international initiatives.

Finally, Canada's international commitments must be accompanied by enhanced national coordination. There is an urgent need to establish a common FPT framework agreement for data interoperability to achieve shared AI objectives, improve public services and strengthen Canada's global leadership role.

3.4. Canadian policies and initiatives

Canada has significant advantages, including world-class AI research capabilities and a base of competitive AI companies. CANARIE operates Canada's ultra-high-speed backbone network, connecting provincial and territorial research and education networks to each other and to global counterparts. It plays a foundational role in data sharing and collaboration across jurisdictions. This infrastructure is already used by federal departments, universities, and research hospitals, making it a natural backbone for any FPT-wide data interoperability strategy.

However, the adoption of AI applications by Canadian businesses and the public sector has been limited, and additional efforts are needed to encourage widespread adoption.
The proposed federal-provincial public sector data interoperability framework agreement builds on the strengths of Canada's national statistical system and public trust in the confidentiality and security of data and the reliability of the system's results.

Regular consultations with users ensure that the data produced meet the practical needs of stakeholders. **Statistics Canada** relies on internationally recognized methodologies, including those of the United Nations and the OECD. This methodological rigour ensures the accuracy and consistency of the data.

The agency ensures broad coverage by collecting data in many sectors—the economy, trade, demographics, health, and environment—and integrating both administrative and survey data to provide a more comprehensive view.

Governance is based on principles of transparency and independence. As an autonomous statistical agency, Statistics Canada publishes impartial reports. In addition, its open data policies facilitate access to information for decision-makers, businesses, and the public.

Finally, the agency has an advanced technological infrastructure with robust processing and analytical capabilities. It is increasingly adopting artificial intelligence, machine learning, and cloud computing platforms to enhance efficiency and innovation in data management.

Canada is a leader in statistical innovation and governance and actively participates in global statistical initiatives. Initiatives are being developed in collaboration with provincial/territorial statistical agencies for data sharing in selected sectors (e.g., justice, education, and health). Existing frameworks and standards should facilitate the integration of cross-sectoral data.

The new AI Strategy for the Federal Public Service 2025–2027 emphasizes its collaborative nature:
"We are collaborating on the adoption of AI with Indigenous and Canadian partners, other Canadian and international jurisdictions, and our colleagues across the public service." However, it excludes the adoption of AI by organizations outside the Government of Canada (Government of Canada, 2025c).

This strategy and its two predecessors, the 2018 Federal Public Service Data Strategy Roadmap (Privy Council Office, 2018) and the 2023–2026 Federal Public Service (Treasury Board of Canada Secretariat (TBS), 2024b), emphasize the importance of data sharing and collaboration between different levels of government. They, however, do not propose detailed strategies or measures specifically addressing data interoperability between federal and provincial public services.

Launched informally between 2021 and 2022, the Government of Canada Data Community (GCDC) has quickly established itself as a central platform for mobilizing and supporting data professionals within federal departments and agencies. Hosted by the Canada School of Public Service (CSPS) and aligned with the Government of Canada's Data Strategy, the CDGC plays a key role in realizing shared ambitions for data interoperability, responsible governance, and the ethical implementation of artificial intelligence.

Statistics Canada's report, entitled *Labour productivity measurement at Statistics Canada*, details the evolution of the agency's labour productivity program. It describes the methodologies and data sources used to measure productivity in the provinces and territories, discusses applications of provincial productivity data, and identifies key users of these statistics. This report provides valuable information on productivity trends in the Canadian public sector (Government of Canada, 2013).

On 24 June 2025, the Treasury Board of Canada Secretariat updated the Directive on Automated Decision Making. This revision, which is the result of the fourth review of the instrument, expands the scope of the directive to include more organizations and strengthens its alignment with human rights. It also introduces enhanced requirements for oversight, transparency, and quality assurance. These adjustments are intended to keep Canada at the forefront of artificial intelligence governance in the public sector by ensuring the responsible, fair, and consistent use of automated decision-making systems (Government of Canada, 2025d).

The Government of Canada is increasingly looking to use artificial intelligence to make or support administrative decisions to improve service delivery. The government is committed to using artificial intelligence in a manner consistent with fundamental principles of administrative law, such as transparency, accountability, legality, and procedural fairness, to ensure that decision-making processes are fair and impartial. Recognizing that this technology is evolving rapidly, this directive will continue to evolve to remain relevant.

3.4.1. Building on existing efforts and models

Efforts to achieve FPT data interoperability are underway in key areas such as transport, health, justice, labour mobility, and digital identity. Projects such as digital qualifications, business registers and shared data centres demonstrate technical capacity and growing political momentum in different jurisdictions.

Progress remains slow and fragmented, not because of a lack of innovation, but because of legal, structural and governance issues. Much of the necessary technology already exists. What is missing are legal frameworks, clear roles for data custody and management among different levels of government, and the shared accountability mechanisms needed to scale these initiatives across Canada.

Legal and policy reform is not a barrier to progress: it is an essential catalyst. Ambiguities regarding data ownership, privacy protection and jurisdictional authority continue to limit the effective application of technology.

Without coordinated reforms, even the best-designed pilot projects struggle to move beyond isolated initiatives. The goal is not to replace what already works, but to connect and amplify existing successes through a common foundation of interoperability.

The proposed FPT data interoperability framework would not seek to centralize data or impose widespread sharing. Rather, it would establish protocols, safeguards, and common terminology, clarify legal and governance roles, and enable targeted data exchanges. It would also provide reusable tools and trust frameworks to accelerate adoption. This approach would enable Canada to move from a set of fragmented projects to a coherent and resilient national digital ecosystem where data effectively supports public services, policies, and programs.

It is reasonable to expect that Statistics Canada would support a modular, trust-based interoperability framework if it promotes coordination without compromising data integrity or public trust. The agency has long advocated for better data harmonization across jurisdictions to support policy and program evaluation. It is therefore likely to welcome a federated, standards-based framework, particularly if it strengthens analytical preparedness, data quality and jointly developed safeguards. Two key findings from the Canadian Statistical Advisory Council support this assertion (Canadian Statistics Advisory Council, 2024):

"High-quality data are essential to Canada's economic success and well-being: Canada's economic, socio-demographic and environmental challenges are not new, but they have become more complex in a global society undergoing rapid technological change. Analysts need granular, real-time data to better understand the factors influencing these issues and identify which Canadians are most affected. High-quality data is essential for developing and implementing effective policies that support businesses and innovation, which are drivers of economic growth.

Societal issues require greater collaboration and better data sharing: the potential cost to Canadians of programs based on poor or incomplete data is enormous. Even in times of fiscal restraint, it remains cost-effective to modernize statistical and technical infrastructure and promote the data flows that are the foundation for understanding and solving important problems.

In a context of constraints, adaptable and creative funding is possible, particularly when based on a whole-of-government approach. When data is shared across jurisdictions, the ability to plan and evaluate program benefits increases significantly. This requires robust data governance and management models that Canadians trust, which ensure the security of their personal data, and that efficiently produce the detailed data of the required quality."

To fully leverage the FPT interoperability work already underway, Canada needs a more coordinated legal, policy and governance framework. An FPT data interoperability agreement would consolidate existing progress, ensure consistency between use cases, and mobilize institutional partners, including Statistics Canada, around a common vision: secure, scalable, and citizen-centric data interoperability.

The ten consensus priorities (Blit, Goldfarb, et al., 2025)[16] supporting the launch of **the Canadian AI Adoption Initiative** on 26 June 2025 are fully aligned with these key findings and complement the immediate actions and strategic proposals outlined in the following section.

[16] **Joël Blit, Danielle Goldfarb, Paul Samson, and Stephen Tapp; Maple Syrup, Hockey, and AI: Economy-Wide AI Adoption as a Nation-Building Project; 26 June 2025 —** The Canadian AI Adoption Initiative (CAIAI) See the list of 10 priorities in **support exhibit 1** in the separate backgrounder.

PART 4

Immediate actions and strategic proposals

To address current policy priorities, it is essential that Parliament quickly resume consideration of Bill C-27, the Canadian Digital Charter Implementation Act (2022). This legislation, which died on the Order Paper when Parliament was prorogued, sought to modernize the protection of personal information in the private sector, provided a framework for the responsible development of artificial intelligence, and gave concrete expression to the principles of the Digital Charter. Its consideration by the Standing Committee on Industry and Technology (INDU) was also interrupted (Government of Canada, 2022).

Although the Carney government has not yet officially reintroduced this legislation, it has committed to restarting the debate. A broad consultation is planned, including industry, academia, and civil society, to inform the drafting of the implementing regulations. This process will focus on identifying high-risk systems, developing standards and certification processes, the sanctions regime, and the role of the future AI Commissioner.

The new bill expected in the fall of 2025, when Parliament resumes, will need to be closely monitored. In this context, ensuring seamless data interoperability between federal and provincial governments is essential. It is a key condition for building a long-term prosperity agenda and strengthening a robust and competitive domestic market.

By improving data sharing between different levels of government, Canada can effectively reduce administrative barriers, streamline processes, and promote seamless economic integration within our vital single domestic market. Now is the time to build bridges to reform intergovernmental relations (Wesley, 2020).

The proposed federal-provincial initiative on data interoperability should be a key part of this effort. It aims to simplify data sharing by creating shared hubs, allowing provinces and the federal government to access standardized data in real time across strategic sectors. It will improve efficiency by reducing duplicate data storage and processing, leading to cost savings and better coordination. It will also support AI and innovation by enabling AI-driven policy analysis and service optimization at all levels of government.

The governments of Canada and the provinces must work together to create a single internal market; treat data as a shared strategic asset; and improve interoperability between different levels of government (federal, provincial, territorial, and municipal). To build a resilient and digitally sovereign Canada, three mutually reinforcing actions are proposed in this section.

4.1. Conduct a comprehensive mapping of public sector data ecosystems[17]

Objective:

Identify existing assets, redundancies, gaps, and opportunities in federal, provincial, and territorial governments to inform interoperability initiatives in strategic sectors of the economy and society.

Key expected results:

- Data asset inventories: Catalogue essential data sets, infrastructure, and governance models.
- Gap analysis: Highlight interoperability gaps and prioritize areas for action.
- Sectoral roadmaps: Develop targeted plans for priority areas (e.g., real-time health data exchange, facilitation of interprovincial trade).

This mapping exercise would form the empirical basis for the establishment of an integrated and interoperable FPT data infrastructure.

4.2. Federal-provincial-territorial (FPT) agreement on data interoperability and AI adoption[18]

Objective:
The objective is to establish a harmonized, secure, and sustainable federal-provincial data ecosystem that supports the modernization of public services, domestic trade, and innovation, and strengthens citizen trust.
Approach:
This objective can be achieved through a framework agreement between the federal, provincial, and territorial governments. Such an agreement would recognize public sector data as a shared strategic resource and lay the legal and operational foundation for transparent and secure data sharing. Given the strong protection of provincial jurisdictions, it is essential that the framework emphasize a collaborative and voluntary model rather than a structure imposed by the federal government.
This model should avoid regulatory overreach by presenting the initiative as a joint federal-provincial investment rather than a nationalized, top-down data policy.
Participation could be encouraged through economic incentives, such as dedicated federal funding for provinces that choose to participate, targeted at areas such as cloud infrastructure, cybersecurity, and AI innovation hubs.
The model should also respect regional differences, allowing provinces to prioritize sectoral data hubs best suited to their needs and strategies.

[17] **Proposed mapping**: For more details, please refer to **support exhibit 9 in the separate backgrounder,**
[18] For more detailed information, **see support exhibit 10 in the separate backgrounder**.

4.2.1. Share all data?

A key question that is not addressed in this document is which data should be shared. The operational answer requires expertise from specialists in each area covered by the proposed framework agreement. Furthermore, a "share everything" approach under the FPT data interoperability framework agreement could face obstacles. These obstacles stem from real or perceived differences between jurisdictions in terms of privacy protection, sectoral mandates, and custodian responsibilities.

However, these differences are neither unique to Canada nor insurmountable. It is important to distinguish between data interoperability and simple sharing. Technical and semantic interoperability is already in place in several areas within jurisdictions. The real challenge lies in governance, legal harmonization, and trust, rather than technical capabilities.

The proposed framework agreement would enable the establishment of a federated interoperability system that does not require "all data" to be shared, but rather focuses on shared protocols and definitions, acceptance models for data exchange between FPT partners, and common criteria such as those put forward by the Open Government Working Group of Canada: Criteria for High-Value Data sets. These criteria help identify high-value data sets and priority areas, such as those proposed in 2022 by the Treasury Board Secretariat (Treasury Board of Canada Secretariat (TBS), 2024a).[19]

An FPT framework agreement is possible not as a rigid mandate, but as a flexible governance model based on international best practices and sectoral approaches based on risk assessment. Interoperability does not mean widespread data sharing, but rather secure, regulated and purpose-driven exchanges. It provides a common, concrete, and practical basis for the responsible and reliable use of data in the public interest.

The proposed approach emphasizes governance and flexibility FPT: it establishes a federated and modular approach to interoperability; it allows jurisdictions and domains to voluntarily adopt shared solutions and protocols; it builds trust through jointly designed safeguards, data-sharing agreements, and oversight mechanisms; it focuses on enabling use case-specific and purpose-limited access to data.

Faced with even greater diversity in national legislation, sectors and data retention, the European Union has adopted the Interoperable Europe Act (2024). This law does not impose generalized sharing of all data, but creates common interoperability frameworks, legal trust mechanisms and reusable solutions to enable cross-border and cross-sector collaboration (European Commission, 2024). The EU's Interoperable Europe Act demonstrates that modular interoperability based on trust can work in complex federated environments.

The EU example shows that political will, jointly designed governance, and interoperable solutions by design can enable federated data collaboration without compromising privacy or data sovereignty.

Canada can draw on this experience to create a model that respects its federal nature while advancing collective outcomes, as called for in the Prime Minister's mandate letter on seven strategic priorities.

[19] **TBS and high-value data sets,** for more information, **see support exhibit 11 in the separate backgrounder.**

Key elements:
The legal and policy foundations of the initiative must involve the development of a framework to harmonize rules on privacy, data governance, and access to information across jurisdictions. This architecture must preserve individual rights while enabling secure and efficient data sharing.
In terms of organizational structure, the roles and responsibilities related to data management must be clearly defined between the federal government and the provinces and territories.

Effective governance mechanisms are needed to foster cooperation and ensure accountability between jurisdictions. On a technical level, common data formats, taxonomies, and exchange protocols, such as open standards and secure APIs, should be adopted. New digital initiatives in government must incorporate the principle of interoperability from the outset to ensure the sustainability of integration efforts.

The infrastructure of this data ecosystem would be federated. It would be based on sectoral data centres, for example, in the areas of health, environmental monitoring, internal trade logistics, supply chains and professional mobility. These centres would operate under federated governance models, allowing provinces to retain control of their data while ensuring secure sharing with federal authorities and other provinces.

To further motivate provincial participation, the agreement should include economic incentives, such as federal funding to support cloud upgrades, strengthen cybersecurity, and establish AI innovation hubs.
To maintain trust and ensure ongoing effectiveness, robust compliance and continuous improvement mechanisms would be needed. Regular audits, performance measures, and a clear dispute resolution framework should be integral parts of the agreement.

Inspired by the European interoperability framework, the proposed Canadian federal-provincial-territorial agreement would respect constitutional jurisdictions while creating a coherent and functional national data ecosystem. This joint venture is not intended as a political initiative, but as a practical framework for public service management, aimed at improving the coordinated and effective use of AI and data in the delivery of services to Canadians.

The proposed federal-provincial joint venture will ensure more coordinated and effective use of AI and data in the delivery of public services across the country. This is as much a political responsibility as it is a public service management responsibility.

4.2.2. Intra- or inter-jurisdictional interoperability?

A strategic tension persists between the urgency of national economic integration, aimed at a single domestic market and a fluid supply chain, and the uneven pace of digital modernization across jurisdictions. Coordination between jurisdictions is essential to ensure that internal efforts are part of a coherent interjurisdictional vision. Locally developed governance frameworks and software infrastructure must be able to serve as a foundation for data sharing between jurisdictions, avoiding the need to start from scratch with each initiative.

As highlighted in the Prime Minister's mandate letter and the Speech from the Throne, inaction is no longer an option. Without bold transformation of FPT intergovernmental relations, the government's seven priorities will remain unfulfilled, and public confidence will continue to erode. The tone and content of these documents reflect a clear recognition of the urgency to act. The country's social, economic, and technological challenges require a coordinated FPT response.

These issues go beyond traditional constitutional frameworks. To achieve the government's priorities, seamless interoperability between governments is essential. However, current practices, which are fragmented, siloed, and lack common standards, undermine the effectiveness of public policies and the citizen experience.

This situation hinders innovation, increases administrative duplication, heightens the risk of digital exclusion, and weakens governments' accountability. Persisting in inaction means accepting the failure of government commitments and exacerbating the lack of trust in public institutions. The legitimacy of the government now depends on its ability to act in a coordinated, transparent, and equitable manner.

Only an ambitious transformation of intergovernmental relations, based on enforceable agreements, shared infrastructure, and common data governance, will enable the government's ambitions to be realized. This requires a cultural shift, but also a strengthened capacity for collaboration, accountability, and joint action.

The federal and provincial governments have made the creation of a unified internal market and an interoperable supply chain a priority. However, highly fragmented data, technology, and service governance is back holding these goals. The strength of the domestic market and the digital economy will depend on the robustness of the foundations for interoperability, both within and between jurisdictions.

The fastest and most sustainable path to national interoperability is through a sequential approach, targeting priority sectors and supported by tailored incentives. This strategy rests on two pillars: clear national ambition and complementary modernization plans in each jurisdiction. It includes pilot projects in key sectors, starting with jurisdictions that are ready to align. It is crucial to prioritize funding for internal interoperability, APIs, common standards, and data management, while ensuring consistency with national objectives. This approach also relies on continuous learning: evaluating the results of pilot projects and then scaling up successful models across the country.

A gradual, jurisdiction-based approach not only supports the goal of a single internal market but also helps accelerate its realization. This market is a strategic lever acknowledged by FPT governments as a national priority. It can drive reforms in internal data governance. Aligning economic and digital agendas reinforces political commitment and improves coordination across departments.

National ambition requires step-by-step preparation. Canada's vision for interoperability must be progressive, with early adoption in key sectors by jurisdictions that are ready. Sector-specific pilot projects, such as digital freight corridors or cross-border permits, will demonstrate the value of interoperability and build momentum. Modernization must be strategic and targeted: governments should focus their efforts on areas with a high impact on national competitiveness, such as transport data, logistics, business registration, labour mobility, or skills recognition.

External interoperability relies on strong internal capacity. Ministries within the same jurisdiction (transport, licensing, economic development, etc.) must first be able to share and interpret data among themselves before considering real-time exchanges with other jurisdictions. Without this foundation, national interoperability remains technically fragile and operationally inconsistent.

Incentives can accelerate local reforms. Federal investments in interoperability should be conditional on specific internal milestones: establishment of APIs, data catalogues, adoption of metadata standards, deployment of common models and shared services (digital identity, secure data centres, etc.). These measures reduce duplication and help administrations achieve national objectives more quickly.

4.3. Creation of a permanent FPT board for data interoperability and AI adoption

Optimal interaction with the proposed Federal Digital Transformation Office (DTO)

Objective: To establish a high-level body to guide, coordinate and oversee FPT public sector initiatives on AI adoption and data interoperability.

How? Transform, through the proposed agreement, the annual symposium on digital trust and cybersecurity, into a permanent federal-provincial-territorial council. This council would bring together senior officials responsible for AI adoption, data governance, digital government development, digital sovereignty, and public service delivery. It would function as a forum for ongoing coordination on these strategic issues.

Considerations:

The governing party's policy platform (Strong Canada) includes a commitment to create a dedicated digital transformation office (DTO)[20] at the centre of government, with a mandate to "proactively define, implement and expand technology solutions and eliminate redundant and unnecessary red tape." This welcome initiative aims to improve the delivery of public services for all Canadians and reduce barriers to businesses operating in Canada, which will support the growth of our economy. "*This is about fundamentally transforming the way Canadians interact with their government, ensuring timely, accessible, and high-quality services that meet the needs of Canadians" (Liberal Party of Canada, 2025).*

[20] **Digital Transformation Office (DTO),** for more information, **see support exhibit 10 in the separate backgrounder.**

A strong and coordinated relationship between the DTO and the FPT Board for AI Adoption and Data Interoperability is essential to delivering consistent, modern, and citizen-centric digital government services across all jurisdictions in Canada. Their partnership will accelerate innovation, reduce duplication, and ensure equitable access to technology-enabled public services across jurisdictions.

The proposed Digital Transformation Office and the Federal-Provincial-Territorial Board for AI Adoption and Data Interoperability share complementary mandates focused on modernizing public service delivery through technology and data.

Their interaction should be deliberate, institutionalized and collaborative for several strategic reasons:

Optimal strategic FPT collaboration	Collaboration framework
• **Aligned missions**: both aim to improve public services through AI and data technologies. • **Interjurisdictional delivery**: many services require integration across federal and provincial boundaries. • **Efficiency**: reduce duplication, streamline investments, and accelerate scalable innovation. • **Trust and standards**: consistent governance builds public trust.	• **Formal liaison**: Joint secretariat, shared staff, or observer role. • **Joint strategic planning**: Develop common roadmaps and priorities. • **Common platforms**: Use common test environments, acquisition tools, and pilot projects. • **Standard setting**: Joint development of an AI and data interoperability standard.

4.3.1. Practical aspects and implementation of software[21]

The establishment of a reliable and efficient software infrastructure for data management and sharing is essential to any federal-provincial-territorial (FPT) agreement on interoperability. The need for concrete solutions is clear.

While this document does not aim to make specific technical recommendations, it is worth highlighting the existence of proven solutions, such as X-Road or eDelivery data exchange layers (DXLs), designed to enable secure and standardized data sharing over the Internet.

However, a software platform is only one element of a broader ecosystem. It does not replace a legal framework or data governance. To be effective, the software infrastructure must be based on harmonized standards, common vocabularies, and trust agreements. However, not all provinces have the maturity or capacity to adopt such systems.

Adoption will therefore need to be gradual and supported by adequate funding. FPT partners will need to agree on how to deploy open-source solutions such as X-Road (centralized, local or hybrid hosting), the types of data to be shared, the applicable legal bases and the management of sensitive data according to jurisdiction.

[21] **Practical aspects** for more information, **see the support exhibit 11 in the separate backgrounder.**

The proposed interoperability framework will accompany any technical deployment by providing guidance on

- the harmonization of legal interpretations,
- aligning semantic models (metadata, standards), and
- the design of interoperable institutions.

The framework agreement aims to establish a common FPT foundation for privacy, policy, law, and governance, based on a highly secure software infrastructure. This will enable real-time data exchange between jurisdictions, while ensuring a high level of operational security.
A solution such as X-Road, or an equivalent layer, could play a central role at three levels:

a) Shared services, hosted by a neutral and trusted entity, such as the governance model of the Canadian Institute for Health Information (CIHI).
b) Reference architecture, serving as a common basis for intergovernmental exchanges.
c) Modular infrastructure, allowing for gradual adoption by jurisdictions, with federal support and alignment with the joint roadmap.

To advance secure, interoperable, and sovereign AI capabilities in the Canadian public sector, the federal, provincial, and territorial governments should adopt a complementary
approach leveraging both the CANARIE Network and X-Road or its equivalent. CANARIE provides the ultra-high-speed backbone infrastructure necessary for large-scale data transport and federated platform connectivity, while X-Road offers a proven, open-source data exchange layer for secure, standardized API-based interoperability across jurisdictions.

Together, these systems form a multilayered foundation for national AI fabrics and potential AI gigafactories, aligned with the objectives of Bill C-5 and the Building Canada Act. This integrated infrastructure would support trusted data sharing, ethical AI deployment, and strategic autonomy, while enabling Indigenous equity participation and advancing Canada's leadership in digital governance.

4.4. Provide economic incentives for provincial and territorial participation.

Recognizing the strong protection of provincial data jurisdictions, the federal government should avoid a coercive approach and instead offer structured incentives.

Proposed mechanisms:

- Investments in cloud infrastructure: Federal funding for sovereign, interoperable cloud systems accessible at all levels of government.
- Improved cybersecurity: Co-investment in securing data flows and storage between jurisdictions.
- AI innovation centres: Funding for sector-specific hubs aligned with provincial priorities (e.g., agricultural innovation in the Prairies, AI in healthcare, the supply chain in the Greater Lakes-St. Lawrence region of Ontario and Quebec, etc.).

- **Flexible participation:**
  Provinces would have the autonomy to prioritize sectors and set their own timelines for engagement.

4.5. Deepening the Canada-EU Strategic Digital Partnership

The Strategic Partnership Agreement between Canada and the European Union provides a framework for in-depth and ongoing dialogue between experts from both sides (Government of Canada, 2025a). The Canada-EU Digital Partnership strengthens bilateral cooperation in key areas: artificial intelligence (AI), research on next-generation networks, intergovernmental connectivity, and cybersecurity. It also aims to support joint advances in quantum science, semiconductor technologies, digital platform governance, and secure digital infrastructure (Government of Canada, 2023).

Canada and the EU already share similar approaches to AI governance, digital rights, and data sovereignty. This common foundation makes the strategic partnership a relevant lever to support a federal-provincial initiative on data sharing and interoperability. The European regulatory approach (General Data Protection Regulation, European Regulation on Artificial Intelligence, Regulation on harmonized rules on fair access to and use of data) is more aligned with Canadian values and the Canadian AI Charter than that of the United States. Canada would benefit from deepening its collaboration with the EU to ensure interoperability between their respective digital markets. This concrete commitment would also diversify its strategic dependencies, thereby strengthening its economic and digital resilience.

As part of this strategic partnership, both sides have committed to promoting interoperable digital government services, harmonizing their approaches to digital identity, AI governance and data standards, and collaborating on cross-border trust and digital public infrastructure (Government of Canada, 2025b).

The new EU-Canada Strategic Partnership, launched in Brussels on 23 June 2025 (Joint Declaration: A Lasting Partnership, an Ambitious Agenda), marks an important step forward. It is based on shared values and a common commitment to a rules-based international order *(European Union & Government of Canada, 2025)*. Clause 19 of the Declaration confirms:

"We also remain committed to pursuing mutually beneficial collaboration on digital and tech policy issues and bolstering the bilateral digital trade relationship. Through the ***Canada-EU Digital Partnership****, we are already working hand in hand on concrete projects in crucial areas for a robust digital economy, such as research in cutting-edge technologies, and we look forward to Canada hosting the first EU-Canada Digital Partnership Council later this year.*

We intend to enhance cooperation on AI innovation, ***including collaboration on AI Factories, to link our high-performance computing infrastructure and to deepen research cooperation in strategic technology areas such as AI and quantum.***

We also intend to align our frameworks and standards in the regulatory field, to make online platforms safer and more inclusive, to develop trustworthy AI systems and to establish interoperable digital identities and digital credentials to facilitate interactions between our citizens and our businesses." (European Union & Government of Canada, 2025)[22].

The EU Gigafactories strategy aligns with these goals and offers opportunities for joint AI infrastructure projects, shared standards for data interoperability, and collaborative AI fabrics for public sector applications. The strategic Implications for Canada are significant and include a potential model for a possible national AI infrastructure project under Bill C-5, partnering opportunities for bilingual LLMs, climate modelling, and defence AI and a benchmark for aligning FPT data interoperability frameworks with international standards.

The European Union has adopted a Gigafactories strategy as part of its broader AI Continent Action Plan, and this initiative is highly relevant to the Canada—EU Digital Partnership and the proposed FPT data interoperability and AI adoption framework. The EU plans to invest €20 billion to build five flagship Gigafactories, each equipped with 100,000 advanced AI chips, integrating supercomputers, data labs, and energy-efficient data centres. These facilities are expected to quadruple Europe's AI compute capacity and serve as flagship projects for industrial coordination.

Canada should explore bilateral initiatives with the EU to co-develop AI gigafactories and harmonize data interoperability frameworks. This would strengthen sovereign AI capabilities and support strategic infrastructure development under the One Canadian Economy Act.

This development is particularly timely for the launch of the FPT framework agreement on data interoperability in Canada. The latter is inspired by the European Directive on the interoperability of public services (the Interoperable Europe Act, in force since 11 April 2024) (Regulation (EU) 2024/903 of the European Parliament and of the Council, 2024). The European Interoperability Framework (EIF) provides concrete guidance for the implementation of interoperable digital public services (European Commission: Directorate General for Digital Services, n.d.).

The strategic priorities to be pursued in this partnership include:

- Technical alignment, based on the adoption of standards compatible with the European data strategy and the Interoperable Europe Act.
- Exchange of expertise through regular workshops and study missions, bringing together decision-makers and technologists from both sides of the Atlantic.
- Joint research initiatives focused on AI governance, privacy-enhancing technologies, and innovation in digital infrastructure.

However, this cooperation will only bear fruit if the Canadian intergovernmental mechanism is fully committed to its implementation.

[22] The Annex — The New EU-Canada Strategic Partnership for the Future, included in the Joint Declaration: A Sustainable Partnership and an Ambitious Agenda, lists eight measures to "shape the digital transition and promote exchanges in education and innovation for future technologies."

Unlike the EU, which has centralized institutions with regulatory, budgetary, and normative powers, Canada operates within a federal framework. The success of such collaboration, therefore, depends on the ability of federal, provincial, and territorial governments to adopt a coherent position, implement joint initiatives and speak with one voice on the international stage.

Without clear, proactive and structured mobilization, the commitments made risk remaining symbolic or difficult to implement. Only through genuine alignment of priorities, resources and governance will Canada be able to become a credible, effective, and influential partner in this strategic area.

PART 5

Governance architecture

5.1. Principles of effective governance

The proposed governance framework is based on a set of fundamental principles designed to balance national coordination and respect for jurisdiction. First and foremost is a firm commitment to **jurisdictional autonomy**, ensuring that all data-sharing mechanisms respect the constitutional division of powers and the sovereignty of provincial and territorial governments.

Priority is given to a model of federated collaboration, based on cooperation without centralized control. The aim is to make interoperability a lever that strengthens, rather than replaces, the authority of jurisdictions. To achieve this, the proposed framework agreement encourages the adoption of open, technical, semantic, and legal standards, aligned at the international level, to enable effective data exchange.

The principles of transparency and accountability are equally essential. The governance structure will include independent oversight, regular audits, and public information mechanisms to maintain trust and legitimacy. Finally, privacy and security will be built into the design at all levels, with robust protections for data, privacy rights and cybersecurity integrated into systems and processes from the outset.

5.2. Management of the agreement and implementation framework

At the centre of the proposed governance structure is the Federal-Provincial-Territorial Data Interoperability Board (**FPT-DIB).** It will be co-chaired by the Chief Information Officer of the Treasury Board of Canada and a provincial CIO designated by the Council of the Federation. The FPT-DIB will bring together senior officials from key federal and provincial departments.
Technical experts from agencies such as Statistics Canada and the Office of Digital Transformation will contribute, while the Privy Council Office and the Treasury Board Secretariat will provide secretariat support.

The FPT-DIB will be tasked with defining an evolving national strategy for data interoperability and AI adoption in the public sector. It will identify priority areas for intergovernmental projects, including productivity, infrastructure, trade, training, healthcare, and environmental management. It will also oversee the implementation of standards and compliance.

The Council will play a key role in aligning Canada with international standards and agreements on digital governance. It will update the national strategy every two years, approve cross-sectoral jurisdictional projects and funding allocations, and monitor performance and compliance. It will also serve as a point of contact with international digital governance bodies.

The Council will meet twice a year. **Sectoral working groups,** meeting more frequently, will address emerging issues. The FPT-DIB will also be responsible for promoting AI and data innovation projects, coordinating AI adoption strategies across jurisdictions, and monitoring cybersecurity and privacy issues in intergovernmental data flows.

To support its work, sectoral working groups will focus on priority areas such as digital trust, cybersecurity, internal trade, professional mobility, digital infrastructure, health data, taxation, economic data, and natural resources and environmental management. These groups will bring together technical experts, policy and legal advisers, and representatives from academia and the private sector to ensure specialized expertise and cross-sectoral collaboration.

Finally, a **National Data Interoperability Observatory** will be established as an independent entity. Its mission will be to assess, monitor, and publicly report on progress made. Its activities will include audits, comparative analyses and impact assessments on service quality, economic efficiency, and privacy protection. An annual report on the state of interoperability in the public sector will be published to inform stakeholders and guide future policies.

5.3. Norms and standards

A successful governance architecture must be based on clearly defined technical standards and norms. These include the mandatory use of **open data standards**, ensuring that data is stored and shared in non-proprietary formats that promote long-term compatibility and accessibility. The system will rely on **secure APIs** to facilitate the exchange of authenticated and protected data between jurisdictions.

The infrastructure will adopt **federated cloud architectures**, allowing data to remain under the control of local jurisdictions while being accessible via a standardized and secure network. A **common identity framework** will enable secure authentication between jurisdictions for users and systems, ensuring trust and security in all interactions. These standards must also align with international frameworks, including those developed by the OECD, G7 and EU, to enable transparent cooperation beyond Canada’s borders.

5.4. Dispute resolution and compliance mechanisms

Effective governance requires built-in mechanisms to resolve disputes and ensure compliance. **Mediation committees** within the FPT-DIB will be responsible for resolving operational disputes before they escalate.

Regular third-party audits will assess compliance with agreed standards and practices, ensuring transparency and accountability.

To promote adherence, enforcement levers will be put in place, including conditional access to federal funding linked to compliance with interoperability standards and project timelines. These mechanisms are essential to maintain momentum and ensure consistent implementation across jurisdictions.

As highlighted by the Commission in its strategy on the Act for an Interoperable Europe (2023), successful governance of interoperability rests on three pillars: continued political commitment, operational transparency, and the integration of shared standards into a common framework[23]. The proposed governance model for Canada follows this logic. It aims to integrate these principles into a sustainable system that can evolve with needs.

[23] Regulation on an Interoperable Europe: Council and Parliament reach agreement on more efficient digital public services across the EU: https://www.consilium.europa.eu/fr/press/press-releases/2023/11/13/interoperable-europe-act-council-and-parliament-strike-a-deal-for-more-efficient-digital-public-services-across-the-eu

PART 6

Implementation timeline: advancing public sector data interoperability in Canada

Realizing the vision of an interoperable Canadian public sector requires a phased, strategic, and disciplined implementation approach, consistent with relevant government priorities, as outlined in the Speech from the Throne. The proposed timeline outlines the **concrete steps** that federal, provincial, and territorial governments should take following the passage of Bill C-5:

6.1. Phase 1: Immediate actions (first 100 days after the tabling of the budget)

Objective: Launch fundamental efforts to build momentum and coordination.
)

Key action	Description
Leadership of the mandate	The Prime Minister instructs the Clerk of the Privy Council to launch the FPT consultations.
Launch FPT consultations	Engage digital and data leaders at the federal, provincial, territorial, and municipal levels.
Data mapping	Conduct a joint audit of existing data systems and identify interoperability gaps.
Draft the agreement	Distribute the draft FPT agreement on data interoperability to gather initial feedback.
Canada-EU workshop	Organize a Canada-EU workshop on digital interoperability, building on existing partnerships (Office of the Prime Minister of Canada, 2025e). (**Joint statement: sustainable partnership, ambitious program**)[24]

[24] Deepening cooperation within the EU-Canada Digital Partnership and organizing the first EU-Canada Digital Partnership Council later this year to advance this process. Joint statement: A lasting partnership, an ambitious agenda Canada-EU on 23 June 2025, Brussels, Belgium

6.2. Phase 2: Medium-term actions (6 to 12 months)

Objective: Establish basic agreements, pilot initiatives, and governance mechanisms.

Key action	Description
Finalize the FPT agreement	Obtain signatories and announce a public commitment to interoperability.
Pilot sectoral data centres	Launch pilot projects in priority areas: health, infrastructure, and trade.
Create the FPT Data Interoperability and AI Council	Formalize governance and convene the inaugural meeting of the council.
Publish interoperability guidelines	Publish technical and semantic standards based on the results of pilot projects.
Monitor progress **and** report **on it**	Implement transparent measures and public information mechanisms.

6.3. Phase 3: Longer-term actions (12–24 months)

Objective: Expand and refine systems and integrate the adoption of AI.

Key action	Description
Develop sectoral platforms	Extend pilot projects to interoperable national data centres in new sectors: environment, education, and public safety.
Refine governance mechanisms	Adjust the terms of the agreement based on practical experience and input from the board of directors.
Integrate AI strategies	Integrate AI adoption programs across all jurisdictions through coordinated efforts led by the board of directors.

PART 7

Expected impacts—Economic, administrative, and strategic benefits

7.1. Success factors

The success of Canada's trust-based digital interoperability strategy depends on several key conditions, which must be actively prioritized at all levels of government.

The first is alignment with national innovation and competitiveness goals. Interoperability must contribute directly to the country's economic priorities. Next, it is essential to dedicate financial and human resources, within existing operating budgets, to ensure continuity of efforts. These investments support the technical infrastructure, governance and project teams needed for implementation.

Strong leadership is also essential. The appointment of visible and credible champions within the public sector will foster political momentum and alignment between administrations. These leaders will play a central role in keeping interoperability at the heart of public policy.

The federal senior civil service reshuffle planned for summer 2025 comes at a time of increased pressure on public services. These services must respond to increasingly complex citizen needs in an environment marked by budget constraints and high expectations. In this context, leaders must not only define ambitious visions but also mobilize their teams to deliver them.

This is no easy task. A McKinsey & Company survey[25] of more than 800 senior public officials around the world identifies the main threats to the government's mission: budget constraints, competition for talent, and technological change (Spaner et al., 2025). In such a context, character becomes a determining factor in public leadership.

The design and implementation of interoperability frameworks must be citizen centric. Improving services and protecting individual rights must take precedence over administrative efficiency gains alone. Success will be measured by the ability of data systems to improve the lives of Canadians in tangible ways, while respecting their privacy and autonomy.

Finally, transparent communication is essential. Citizens must understand how interoperability and AI improve public services and how their data is protected. Open and ongoing communication will build trust and foster social acceptance.

---

[25] **Jon Spaner, Julia Klier, and Roland Dillon with Elizabeth Murray. Character is key: Leadership excellence in the public sector** 18 June 2025 | Article McKinsey & Company (in English only—for more information, **see support exhibit 12 in the backgrounder.**

When these conditions are met—resources, leadership, citizen focus and transparency—a structured and progressive implementation plan can transform the vision of digital interoperability into an operational reality in less than two years.

The implementation of the proposed FPT data interoperability and AI framework agreement, combined with the creation of the FPT board for AI adoption and data interoperability, will generate tangible benefits for Canada's economy, governance, and digital sovereignty. A federated and interoperable public data infrastructure will transform not only government operations, but also competitiveness, innovation, and long-term resilience.

This impact will be amplified by the synergy between the FPT board and the new Office of Digital Transformation, positioning Canada as a global leader in the responsible and sovereign adoption of AI.

7.2. Economic benefits-The link between data sharing, AI, and national prosperity

Modern AI systems rely on access to high-quality, representative, and well-governed data. However, in Canada, public data is often fragmented, siloed or technically incompatible. This situation hinders innovation and limits the potential of AI. This is not only a technical challenge, but a strategic issue for competitiveness and digital sovereignty.

A responsible, secure, standards-based FPT data-sharing model would stimulate collaboration and innovation. Access to anonymized and aggregated data sets could support AI applications of public interest, such as labour market forecasting, climate adaptation, and infrastructure planning.

Interoperability also strengthens domestic trade and market integration. Real-time-sharing of data on permits, certifications or goods in transit would reduce barriers and harmonize regulatory frameworks. A common platform for demographic and transportation data would improve planning, while federated recognition of credentials would facilitate labour mobility. According to some estimates, removing interprovincial trade barriers could add more than $200 billion to GDP, or about $5,100 per Canadian (see section 7.7.).

Finally, better access to comprehensive and reliable public data would accelerate innovation in key sectors such as health, agriculture, logistics and climate technology. Public sector data would thus become a catalytic resource for Canada's next phase of economic growth.

7.3. Administrative efficiency gains—how AI improves public service productivity

Artificial intelligence offers a unique opportunity to improve public services. It can automate repetitive tasks, leverage advanced data analytics, and deliver faster, more personalized services. By reducing administrative burdens and optimizing resource allocation, AI frees up time for public servants to focus on higher-value tasks.

An interoperable data infrastructure would significantly reduce the duplication of collection, processing, and storage efforts across jurisdictions. AI could also simplify processes, both at the front line and in administrative support. According to international estimates, efficiency gains of 10 to 30% are possible with interoperable systems (**see section 7.7 and the financial fact sheet in the background document)**.

For Canada, where public administration accounts for more than 40% of GDP, this could generate recurring savings of several billion dollars. Interoperability would also improve the experience of citizens and businesses. Accessible one-stop services would become simpler and more responsive. Reducing administrative complexity would enhance service quality, transparency, and trust in public institutions.

Several recent publications confirm these findings. The 2024 Annual Report of the Canadian Advisory Council on Statistics, "Navigating Social and Technological Change in the National Statistical System," highlights the role of AI in improving productivity and the importance of high-quality, interoperable data (Canadian Statistics Advisory Council, 2024). The 2025–2027 Artificial Intelligence Strategy for the Federal Public Service presents concrete examples of AI use in government departments, illustrating its impact on operational efficiency (Government of Canada, 2025c).

The Auditor General of Canada has not yet published a specific report on AI-related productivity. However, several recent documents address-related issues. The Office of the Auditor General's 2024–2025 Departmental Plan emphasizes the use of digital technologies and data analytics to improve audit effectiveness (Office of the Auditor General of Canada, 2023). Although AI is not explicitly mentioned, the focus on technological modernization is clear.

The 2020–2021 audit report on financial impacts and results discusses the potential of data analytics to improve government operations, while highlighting challenges related to data integration and quality (Office of the Auditor General of Canada, 2021).

The 2023 Report No. 7, Modernizing Information Technology Systems, discusses IT modernization efforts, which are essential for the adoption of AI solutions (Bourne, 2023).

In addition, a public sector productivity task force, established by the federal government in early 2025, is currently examining how technology, including AI, can improve service delivery and efficiency. Its findings are expected to guide the next steps in integration.

Together, these publications provide a comprehensive overview of how productivity is measured in the Canadian public sector and the transformative potential of AI in government operations. They provide a valuable foundation for guiding the future integration of AI in public administration.

7.4. Strategic benefits for national resilience

Interoperability directly contributes to strengthening Canada's digital sovereignty. By reducing dependence on foreign infrastructure and platforms, it improves control over sensitive data, limits the risks of external surveillance, and strengthens cybersecurity. As highlighted by the Centre for International Governance Innovation, digital sovereignty is an essential condition for national security, democratic integrity, and economic self-determination (Rohozinski, 2025).

Common security protocols, encrypted data flows and coordinated responses to cyber threats, supported by transparent governance, will strengthen public trust and the legitimacy of institutions. Interoperability also improves Canada's ability to manage emergencies. In the event of a pandemic, a natural disaster or economic shock, real-time data sharing between governments enables faster and more consistent coordination. Federated health data systems would facilitate monitoring and resource deployment, while shared environmental data would support climate adaptation. Crisis preparedness relies on the interoperability that this framework aims to establish.

Climate and environmental objectives would also benefit from federated systems that respect provincial jurisdictions while promoting collective action. Sharing data on emissions, water resources and climate risks would enable more integrated and science-based policies.

7.5. Impact on society

The societal effects of a federated data ecosystem go far beyond administrative or economic gains. Interoperability can improve social equity by facilitating access to services and reducing bureaucratic barriers, particularly for marginalized communities.

It also stimulates academic and citizen innovation through open platforms that support research and social entrepreneurship. Better access to reliable, real-time data promotes informed public debate, strengthens democratic engagement, and improves citizens' digital literacy.

7.6. International leadership and alignment

Canada has a unique opportunity to demonstrate that federated AI and data systems can foster collaboration without compromising the autonomy of jurisdictions. A coordinated FPT approach strengthens the country's position in favour of responsible and sovereign AI adoption, consistent with digital government objectives and the modernization of public services.

By aligning with European Union interoperability standards, G7 and OECD AI governance frameworks, Canada can deepen its transatlantic economic partnerships, strengthen its credibility in digital governance, and establish a global benchmark for ethical and federated AI systems.

7.7. Financial considerations

It is currently difficult to establish a precise budget for the implementation of the FPT data interoperability initiative due to a lack of access to internal resources and spending forecasts from the different jurisdictions. However, relevant financial elements are presented, including potential savings and return on investment for the public sector in a financial annex[26]. It assesses the costs associated with fragmented data governance and the expected benefits of a federated and scalable framework. These preliminary data, drawn from Canadian and international sources, provide a useful strategic perspective for public consideration and decision-makers.

The financial case for interoperability is strong. Fragmentation is inefficient and costly. A federated model delivers measurable gains in efficiency, service quality, and economic growth. These benefits can be achieved through co-investment, shared governance and strategic use of existing capabilities and infrastructure.

Canada cannot afford to maintain 14 separate versions of its digital infrastructure. It is time to work together to build the foundations of an inclusive and functional digital federation.

[26] **Financial considerations and ROI** For more information, **see the support exhibit 13 in the separate backgrounder**.

Seize the opportunity to modernize federal-provincial-territorial governance and secure Canada's future

Where are we today?

Beyond internal systemic tensions, Canada faces major external threats. US policies are disrupting North American and global value chains. The United States is increasingly perceived as a strategic risk (Munich Security Report 2025). Its economic coercion directly challenges Canadian sovereignty (Munich Security Conference, 2025).

Canada is at a turning point. Global economy fragmentation, AI, digital transformation, geopolitical tensions, and the climate crisis are no longer abstract: they are immediate. Our digital vulnerabilities directly threaten our sovereignty, our democratic institutions, our economy, and our collective well-being. The future of the country will depend on our ability to respond quickly and strategically.

The Prime Minister's call to "think big and act bigger" shows that the urgency is there. His "Strong Canada" agenda aims to reform public administration, improve spending efficiency and launch national projects with intergovernmental reach. In this context, data interoperability is becoming a fundamental cross-cutting lever that must be addressed before any structural initiatives can be undertaken.

Governments must make a choice: continue with fragmentation, at the risk of accelerated decline, or adopt a bold and coordinated FPT strategy focused on public data interoperability. This direction is crucial to making Canada a resilient, sovereign, and innovative player in the digital age.

Despite regional diversity, taxpayers' expectations are clear: efficient, complementary services without redundancy. It is therefore essential to distinguish between political federalism and functional federalism. While political dynamics vary, the need for continuous, citizen-centred services remains constant.

The report recommends two urgent measures: concluding an FPT agreement on data interoperability and creating a permanent FPT board on AI and interoperability. These initiatives are not mere technical adjustments: they are strategic and fundamental to any nation-building project. They respond to the Prime Minister's call to identify projects with lasting benefits.

These recommendations aim to strengthen the domestic market, enable reliable AI and data-driven innovation, and assert Canada's digital sovereignty. They will help restore public trust and build a more transparent, responsive, and citizen-centred public sector.

But, as this report highlights, the success of interoperability does not depend solely on technology. It also depends on trust, shared governance, leadership, and the development of skills and organizational cultures. Without investment in these human dimensions, even the best tools will fail.

AI will generate more data in the next three years than in the entire history of humankind. Public governance must evolve rapidly to integrate data management and AI as pillars of its operations. The Canadian public sector must become a driver of this transformation, not just an observer.

Towards a new intergovernmental model?

Canadian federalism has historically been based on partnerships. After 1945, governments collaborated to create major social programs in a spirit of cooperative federalism. In the 1960s, provinces, notably Quebec, demanded greater autonomy, marking the emergence of executive federalism, centred on negotiations between prime ministers.

But the 1980s and 1990s revealed the limits of this model. The failure of constitutional reforms increased mistrust, and the decline of formal forums weakened intergovernmental dialogue. Some provinces, particularly those rich in resources, expressed frustration with federal intervention, particularly on the environment and equalization.

These tensions persist. Alberta is considering a referendum on separation in 2026, and the Parti Québécois is reviving the idea of independence by 2030. According to recent polls, most Canadians consider federal-provincial collaboration to be dysfunctional.

- Environics Institute Findings: Their research shows that over half of Canadians believe the federal and provincial governments are not working well together. This perception has worsened over time, particularly in regions like Atlantic Canada and the Prairie provinces.
- Regional Discontent: In provinces such as Alberta and Quebec, dissatisfaction with federal-provincial relations is especially pronounced. For example, 59% of Albertans and 49% of Quebecers say the two levels of government are not effectively collaborating.
- Broader sentiment of dysfunction: According to Abacus Data, Canadians are increasingly skeptical about government competence amid economic and healthcare challenges. This skepticism extends to intergovernmental coordination, with many viewing it as fragmented and ineffective, especially in the face of pressing national issues like affordability, healthcare access, and job security. The erosion of intergovernmental mechanisms is fuelling fragmented governance, to the detriment of national unity and public trust.

A way forward

This path requires bold leadership and a shared national strategy focused on interoperability. Just as the Second World War ushered in a new era of cooperation, today's crises demand an equivalent response.

But the current threat is unprecedented: it combines the credible risk of global conflict, the questioning of our alliance with the United States, AI-driven transformation, and the climate emergency. These challenges together render current models obsolete and call for rapid transformation.

Two models can guide this evolution: solidarity-based federalism, which strengthens capacities in an equitable manner, and transformative federalism, which focuses on modernization and agile, citizen-centred governance. A hybrid approach, solidarity-based in its intentions and transformative in its execution, seems the most promising.

In this context, a shared commitment to data interoperability becomes a key lever. It enables more functional cooperation between governments, improves services, respects jurisdictions and, if implemented in an ethical and transparent manner, helps restore public trust.

As Canadians expect faster, more integrated services, and as the country's competitiveness depends on AI and digital infrastructure, FPT interoperability appears to be a high-return, low-risk investment. It links digital trust, economic growth, intergovernmental cooperation, and public sector performance.

The consultation process provided for in the Building Canada Act (C-5) offers an opportunity to designate this initiative as a project of national interest. This would send a strong signal in favour of modern federalism, focused on results and productivity, while fully respecting the responsibilities of all parties.

This approach is consistent with international best practices. It sets out the conditions for a successful digital transition: transformation of intergovernmental processes, technological modernization, and coordination of AI adoption.

Shared digital infrastructure, common standards and secure data exchange are not luxuries. They are the foundations of a modern public sector. They support collaboration in critical areas such as labour mobility, emergency response, climate adaptation, healthcare, and the internal market. In these areas, siloed approaches are not only inefficient, but they are also risky.

Interoperability is not just about technology. It is about trust: in data, algorithms, institutions, technologies and between jurisdictions and citizens. Building this trust requires leadership, policy alignment, institutional capacity, and a culture of cooperation.

An integrated FPT digital ecosystem will make Canada more competitive, resilient, innovative, and sovereign. It will restore trust in governments through transparency, scientific integrity, and evidence-based policies.

The time for hesitation is over. As the Munich Security Report 2025 reminds us, those who are slow to adapt become vulnerable. Data interoperability is not an administrative reform: it is a strategic imperative (Munich Security Conference, 2025).

In a context where facts, data and analysis are increasingly questioned, the lack of common language to address shared challenges fuels what a team of researchers calls "Truth Decay" (Kavanagh & Rich, 2018). This profound trend complicates the search for solutions, weakens public debate, paralyzes political action, and fuels mistrust of institutions.

Canada’s prosperity in the 21st century will not come from incremental reforms, but from transformative investments in how we mobilize knowledge, data, and collective intelligence. This is a historic moment. Inaction would be an existential risk we cannot afford anymore.
Let us act—together, boldly and without delay.

SOURCES AND REFERENCES

Angus Reid Institute. (2025a, January 21). *Canadian Unity: Ford & Smith's contrasting messages on Trump's threatened tariffs reflect regional divisions* -. https://angusreid.org/canadian-unity-ford-smith-trump/

Angus Reid Institute. (2025b, April 10). *With distrust sown in institutions and political opposition, is there a path back in this time of division?* https://angusreid.org/canada-us-trust-institutions-trump-carney-poilievre-republican-democrat-conservative-liberal/

Angus Reid Institute. (2025c, May 14). *New cabinet meet familiar challenges in Alberta, Sask. Canadians divided on response to Smith's demands*. https://angusreid.org/carney-cabinet-danielle-smith-alberta/

Atkinson, A. (2005). *The Atkinson Review: Final Report: Measurement of Government Output and Productivity for the National Accounts*. https://www.semanticscholar.org/paper/The-Atkinson-Review%3A-Final-Report%3A-Measurement-of-Atkinson/aa515465288bbe305ccf2c79b18450344626e78e

Bean, C. (2016). *Independent review of UK economic statistics: Final report*. https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report

Bego, K. (2025, August 11). *Silicon Valley's national security pivot will only accelerate under the new Trump administration*. Chatham House, The Royal Institute of International Affairs. https://www.chathamhouse.org/2024/11/silicon-valleys-national-security-pivot-will-only-accelerate-under-new-trump-administration

Blit, J., Goldfarb, D., Samson, P., & Tapp, S. (2025, June 26). *Maple Syrup, Hockey, and AI: Economy-Wide AI Adoption as a Nation-Building Project*. Canadian AI Adoption Initiative. https://www.aiadoption.ca/recommendations/

Blit, J., Samson, P., Goldfarb, D., & Tapp, S. (2025). *About the Canadian AI Adoption Initiative (CAIAI)*. Canadian AI Adoption Initiative. https://www.aiadoption.ca/about/

Bommasani, R., Singer, S. R., Appel, R. E., Cen, S., Cooper, A. F., Cryst, E., Gailmard, L. A., Klaus, I., Lee, M. M., Raji, I. D., Reuel, A., Spence, D., Wan, A., Wang, A., Zhang, D., Ho, D. E., Liang, P., Song, D., Gonzalez, J. E. & Zittrain, J. (2025). *The California Report on Frontier AI Policy*. The Joint California Policy Working Group on AI Frontier Models.

https://carnegieendowment.org/research/2025/06/the-california-report-on-frontier-ai-policy?lang=en

Bourne, M. (2023). *Exploring Opportunities for Acceleration From the of...* https://www.infotech.com/research/exploring-opportunities-for-acceleration-from-the-office-of-the-auditor-general-of-canada-s-2023-report-7-modernizing-information-technology-systems

Broadbent, S. (2025, May 1). Canada's tech opportunity in a fractured global economy. *Policy Options*. https://policyoptions.irpp.org/magazines/may-2025/grow-canadian-tech/

Canadian Statistics Advisory Council. (2024, November 7). *Canadian Statistics Advisory Council 2024 Annual Report—Navigating Social and Technological Change in the National Statistical System*. Statistics Canada. https://www.statcan.gc.ca/en/about/relevant/CSAC/report/annual2024

Council of Canadian Academies. (2023). *Connecting the Dots* (Expert Panel on Health Data Sharing). CCA. https://cca-reports.ca/wp-content/uploads/2023/10/Connecting-the-Dots_ENdigital_FINAL.pdf

Council of the European Union. (2020). *Council conclusions on shaping Europe's digital future* (No. 2020/C 202 I/01; Official Journal of the European Union). European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020XG0616(01)

Council of the European Union. (2023, October 6). *Interoperable Europe act: Member states agree common position to deliver more efficient digital public services across the EU*. European Union. https://www.consilium.europa.eu/en/press/press-releases/2023/10/06/interoperable-europe-act-member-states-agree-common-position-to-deliver-more-efficient-digital-public-services-across-the-eu/

Council of the European Union. (2024). *The future of EU digital policy – Council conclusions*. European Council. https://data.consilium.europa.eu/doc/document/ST-9957-2024-INIT/en/pdf

Curry, E., Scerri, S. & Tuikka, T. (Eds.). (2022). *Data Spaces: Design, Deployment and Future Directions*. Springer International Publishing. https://doi.org/10.1007/978-3-030-98636-0

Department for science, Innovation & Technology. (2025, January 13). *AI Opportunities Action Plan*. GOV.UK. https://www.gov.uk/government/publications/ai-opportunities-action-plan/ai-opportunities-action-plan

European Commission. (n.d.). *The European Interoperability Framework in detail*. Interoperable Europe Portal. Retrieved July 17, 2025, from https://interoperable-europe.ec.europa.eu/collection/iopeu-monitoring/european-interoperability-framework-detail

European Commission. (2024). *Interoperable Europe Act*. Interoperable Europe Portal. https://interoperable-europe.ec.europa.eu/interoperable-europe/interoperable-europe-act

European Commission. (2025). *European data strategy*. European Commission. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en

European Commission: Directorate General for Digital Services. (n.d.). *The European Interoperability Framework in detail*. Interoperable Europe Portal. Retrieved July 17, 2025, from https://interoperable-europe.ec.europa.eu/collection/iopeu-monitoring/european-interoperability-framework-detail

European Commission: Directorate General for Digital Services. (2017). *New European interoperability framework—Promoting seamless services and data flows for European public administrations*. Publications Office of the European Union. https://data.europa.eu/doi/10.2799/78681

European Union & Government of Canada. (2025, June 23). *Joint Statement: Enduring Partnership, Ambitious Agenda*. Prime Minister of Canada. https://www.pm.gc.ca/en/news/statements/2025/06/23/joint-statement-enduring-partnership

Executive Order 14110 of October 30, 2023, Federal Register / Vol. 88, No. 210 § Presidential Documents (2023). https://www.govinfo.gov/content/pkg/FR-2023-11-01/pdf/2023-24283.pdf

Fuss, J., Munro, G. & Whalen, A. (2024). The Size of Government in Canada in 2022. *Fraser Research Bulletin*, 12.

Goldfarb, D. (2025, May 29). *How Canada Needs to Respond to the US Data Crisis*. Centre for International Governance Innovation. https://www.cigionline.org/articles/how-canada-needs-to-respond-to-the-us-data-crisis/

Government of Canada. (2013, April 3). *Labour productivity measurement at Statistics Canada*. Government of Canada. https://www.publications.gc.ca/site/eng/9.936789/publication.html?utm_source=chatgpt.com

Government of Canada. (2022, August 18). *Bill C-27 summary: Digital Charter Implementation Act, 2022*. ISED-ISDE; Innovation, Science and Economic Development Canada. https://ised-isde.canada.ca/site/innovation-better-canada/en/canadas-digital-charter/bill-summary-digital-charter-implementation-act-2020

Government of Canada. (2023, December 12). *Canada – European Union Digital Partnership*. ISED-ISDE; Innovation, Science and Economic Development Canada. https://ised-isde.canada.ca/site/ised/en/canada-european-union-digital-partnership

Government of Canada. (2025a). *Strategic Partnership Agreement*. Government of Canada. https://www.international.gc.ca/world-monde/international_relations-relations_internationales/spa-aps.aspx?lang=eng

Government of Canada. (2025b, March 18). *Joint Cooperation Committee Report on the State of the EU-Canada Relationship (March 2023 to February 2025)*. Global Affairs Canada. https://www.international.gc.ca/transparency-transparence/canada-eu-ue/2023-2025.aspx?lang=eng

Government of Canada. (2025c, June 24). *AI Strategy for the Federal Public Service 2025-2027*. Government of Canada. https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/gc-ai-strategy-overview.html

Government of Canada. (2025d, June 24). *Directive on Automated Decision-Making*. Government of Canada. https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32592&section=html

Haddad, J., Sharma, A., & Salam, A. (2025). *AI: A Roadmap for Governments*. Oliver Wyman & World Governments Summit. https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2025/jan/ai-roadmap-for-governments-english.pdf

Kavanagh, J. & Rich, M. D. (2018). *Truth Decay: An Initial Exploration of the Diminishing Role of Facts and Analysis in American Public Life*. RAND. https://www.rand.org/pubs/research_reports/RR2314.html

Liberal Party of Canada. (2025). *Canada Strong—Mark Carney's plan to stand up to Donald Trump and build a stronger Canada*. Liberal Party of Canada. https://liberal.ca/cstrong/

Malik, H., Béland, D., & Robson, J. (2025, April 2). Does size really matter? Rethinking public service reform. *Policy Options*. https://policyoptions.irpp.org/magazines/april-2025/public-service-reform/

May, K. (2025a, February 13). Is the public service ready for a big Trump policy shift? *Policy Options*. https://policyoptions.irpp.org/magazines/february-2025/trump-canada-public-service/

May, K. (2025b, June 18). *Enter Michael Sabia, the next clerk of the Privy Council*. The Functionary - Policy Options. http://44615331.hs-sites.com/enter-michael-sabia

Mitchell, J. R. (2025). Organizing Government for the 21st Century. *Canadian Public Administration*, *68*(1), 8–17. https://doi.org/10.1111/capa.70012

Munich Security Conference. (2025). *Multipolarization: Munich Security Report 2025*. Stiftung Münchner Sicherheitskonferenz GmbH. https://securityconference.org/en/publications/munich-security-report-2025/

OECD. (2019). *Enhancing Access to and Sharing of Data—Reconciling Risks and Benefits for Data Re-use across Societies*. OECD. https://doi.org/10.1787/276aaca8-en

OECD & United Nations Educational, Scientific and Cultural Organization. (2024). *G7 Toolkit for Artificial Intelligence in the Public Sector* [OECD Publishing]. https://doi.org/10.1787/421c1244-en

Office for National Statistics. (2025). *National Statistician's independent review of the Measurement of Public Services Productivity*. UK Statistics Authority. https://uksa.statisticsauthority.gov.uk/publication/national-statisticians-independent-review-of-the-measurement-of-public-services-productivity/

Office of the Auditor General of Canada. (2021, October 19). *Commentary on the 2020–2021 Financial Audits*. Office of the Auditor General of Canada. https://www.oag-bvg.gc.ca/internet/english/oag-bvg_e_43883.html

Office of the Auditor General of Canada. (2023, December 19). *2024–25 Departmental Plan* [Prime Minister of Canada]. Office of the Auditor General of Canada. https://www.oag-bvg.gc.ca/internet/English/acc_rpt_e_44405.html

Office of the Prime Minister of Canada. (2025a, May 21). *Mandate Letter*. Prime Minister of Canada. https://www.pm.gc.ca/en/mandate-letters/2025/05/21/mandate-letter

Office of the Prime Minister of Canada. (2025b, June 11). *Prime Minister Carney announces a change in the leadership of the public service*. Prime Minister of Canada. https://www.pm.gc.ca/en/news/news-releases/2025/06/11/prime-minister-carney-change-leadership-public-service

Office of the Prime Minister of Canada. (2025c, June 17). *G7 Leaders' Statement on AI for Prosperity*. Prime Minister of Canada. https://www.pm.gc.ca/en/news/statements/2025/06/17/g7-leaders-statement-ai-prosperity

Office of the Prime Minister of Canada. (2025d, June 17). *Prime Minister Carney concludes 2025 G7 Leaders' Summit*. Prime Minister of Canada. https://www.pm.gc.ca/en/news/news-releases/2025/06/17/prime-minister-carney-concludes-2025-g7-summit

Office of the Prime Minister of Canada. (2025e, June 23). *Joint statement: Enduring Partnership, Ambitious Agenda*. Prime Minister of Canada. https://www.pm.gc.ca/en/news/statements/2025/06/23/joint-statement-enduring-partnership

Parliament of Canada. (2025). *Bill C-5—An Act to enact the Free Trade and Labour Mobility in Canada Act and the Building Canada Act* (No. C–5). https://www.parl.ca/documentviewer/en/45-1/bill/C-5/first-reading

Prime Minister Mark Carney's victory speech. (2025, April 29). [Broadcast]. In *Global News*. Global Television Network. https://globalnews.ca/news/11154593/canada-election-mark-carney-victory-speech/

Privy Council Office. (2018, December 6). *Report to the Clerk of the Privy Council: A Data Strategy Roadmap for the Federal Public Service*. Government of Canada. https://www.canada.ca/en/privy-council/corporate/clerk/publications/data-strategy.html

Privy Council Office. (2025, May 27). *Building Canada Strong: A bold, ambitious plan for our future - Speech from the Throne to open the first session of the 45th Parliament of Canada*. Government of Canada. https://www.canada.ca/en/privy-council/campaigns/speech-throne/2025/building-canada-strong.html

Regulation (EU) 2024/903 of the European Parliament and of the Council, Pub. L. No. 2024/903 (2024). https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202400903

Rohozinski, R. (2025, March 21). *The Brutalist Web—America's digital dominance is becoming a geopolitical weapon*. Centre for International Governance Innovation. https://www.cigionline.org/articles/the-brutalist-web/

Sargent, T., & Denniston, L. (2023). *Valuing Data: Where Are We, and Where Do We Go Next?* (No. CIGI Papers No. 280). Centre for International Governance Innovation. https://www.cigionline.org/static/documents/no.280.pdf

Shrivastava, R. (2025, April 10). *Forbes 2025 AI 50 List—Top Artificial Intelligence Companies Ranked*. Forbes. https://www.forbes.com/lists/ai50/

Spaner, J., Klier, J., & Dillon, R. (2025, June 18). *Character is key: Leadership excellence in the public sector*. McKinsey & Company. https://www.mckinsey.com/industries/public-sector/our-insights/character-is-key-leadership-excellence-in-the-public-sector?stcr=49D543736E7C4B6FB79F29E0EDE998D6&cid=other-eml-alt-mip-mck&hlkid=a3b5b68b01234edcb442081352e2a8d3&hctky=3003455&hdpid=eb972aaa-b2bd-474b-af35-4c957f7764f4

Stewart, J. K., & O'Reilly, H. (2025, April 3). Canada's policy reset needs to go much further than trade to address Trump shock effects. *Policy Options*. https://policyoptions.irpp.org/magazines/april-2025/trump-shock-reset/

Taylor, P. (2025, May 9). *Data centers in the U.S. - statistics & facts*. Statista. https://www.statista.com/topics/10667/data-centers-in-the-us/

Tokson, M. (2025, May 1). *The Authoritarian Risks of AI Surveillance | Lawfare*. Lawfare. https://www.lawfaremedia.org/article/the-authoritarian-risks-of-ai-surveillance

Treasury Board of Canada Secretariat (TBS). (2024a). *Canada Open Government Working Group: High Value Datasets Criteria*. Government of Canada. https://open.canada.ca/data/en/dataset/e26db340-df16-4796-8b0b-55dacacfbcd5

Treasury Board of Canada Secretariat (TBS). (2024b, March 13). *2023–2026 Data Strategy for the Federal Public Service*. Government of Canada. https://www.canada.ca/en/treasury-board-secretariat/corporate/reports/2023-2026-data-strategy.html

U.S. Government Accountability Office. (2023, September 6). *Artificial Intelligence's Use and Rapid Growth Highlight Its Possibilities and Perils*. U.S. GAO. https://www.gao.gov/blog/artificial-intelligences-use-and-rapid-growth-highlight-its-possibilities-and-perils

Watters, D. B. (2025, February 20). *The Knowledge Factory*. ICI Canada. https://www.icicanada.org/post/the-knowledge-factory

Wesley, J. (2020). *Jeter des ponts: Pour une réforme des relations intergouvernementales canadiennes* (No. Essai No 7). Institut de recherche en politiques publiques. https://centre.irpp.org/wp-content/uploads/sites/3/2020/12/Jeter-des-ponts-pour-une-r%C3%A9forme-des-relations-intergouvernementales-canadiennes.pdf

Wittes, B. (2025, March 24). *The Situation: The Five Pillars of Trumpian Repression*. Lawfare; Lawfare. https://www.lawfaremedia.org/article/the-situation--the-five-pillars-of-trumpian-repression

Yap, C. W. (2025, March 11). *The Age of Data*. Hinrich Foundation. https://www.hinrichfoundation.com/research/wp/digital/age-of-data/

Zhang, L. (2025). *An IT Policy Playbook for Canada*. Information Technology & Innovation Foundation. https://itif.org/publications/2025/04/16/an-it-policy-playbook-for-canada/

Calvino, F., et al. (2024). *A sectoral taxonomy of AI intensity*. *OECD Artificial Intelligence Papers* (No. 30). OECD Publishing. https://doi.org/10.1787/1f6377b5-en

Dudoit, A. (2023). European common data spaces: a structuring initiative that is both necessary and adaptable to Canada (2023RB-06, Burgundy Reports, CIRANO). https://doi.org/10.54932/SKHP9567

Dudoit, A. (2023). The urgency of the first link: Canada's supply chain at breaking point, a national security issue. (2023RB-04, Burgundy Reports, CIRANO.) https://doi.org/10.54932/CXWF7311

Dudoit, A., Panot, M. & Warin, T. (2021). Towards a multi-stakeholder Intermodal Trade-Transportation Data-Sharing and Knowledge Exchange Network (2021RP-28, Projects Reports, CIRANO). https://doi.org/10.54932/MVNE7282

Dudoit, A. (2020). *COVID-19 – Reinventing our governance and operating models. The Turning Point for Canada and Québec?* (2020RB-04, Burgundy Reports, CIRANO.) https://cirano.qc.ca/en/summaries/2020RB-04

Eslava, D., Manca, F., & Paunov, C. (2025). AI skills and capabilities in Canada. OECD Artificial Intelligence Papers (No. 35). OECD Publishing. https://doi.org/10.1787/87f76682-en

European Union. (2020). *Council conclusions on shaping Europe's digital future* (2020/C 202 I/01 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020XG0616(01)

Fraser Institute. (2025, May). *The deterioration of Canada's finances internationally*. Retrieved from https://www.fraserinstitute.org/sites/default/files/2025-05/deterioration-of-canadas-finances-internationally.pdf

Fraser Institute. (2013). *Measuring government in the twenty-first century: An international overview of the size and efficiency of public spending*. Retrieved from https://www.fraserinstitute.org/sites/default/files/measuring-government-in-the-21st-century.pdf

G7 Leaders. (2025, June 17). *Kananaskis Common Vision for the Future of Quantum Technologies* *https://g7.canada.ca/en/news-and-media/news/kananaskis-common-vision-for-the-future-of-quantum-technologies/*

G7 Research Group. (2025, June 17). *G7 Leaders' Statement on AI for Prosperity.* *https://g7.utoronto.ca/summit/2025kananaskis/250617-ai.html*

OECD. (2019). *Enhancing access to and sharing of data: Reconciling risks and benefits for data re-use across societies*. Retrieved from https://www.oecd.org/en/publications/enhancing-access-to-and-sharing-of-data_276aaca8-en.html

OECD. (2024, December 19). Global Trends in Government Innovation 2024 Fostering Human-Centred Public Services. https://www.oecd.org/en/publications/global-trends-in-government-innovation-2024_c1bc19c3-en.html

OECD. (2025). Government at a Glance 2025 https://www.oecd.org/en/publications/government-at-a-glance-2025_0efd0bcd-en.html

Oliver Wyman & World Governments Summit. (2025, January 29). *AI: A roadmap for governments—Shaping AI's future with government-led innovation* (Haddad, Sharma & Salam). https://www.oliverwyman.com/our-expertise/insights/2025/jan/government-roadmap-how-to-navigate-ai-revolution.html