Digital Sovereignty & Data Dependency: Canada & U.S.

Balancing autonomy and openness in the digital economy

"This would build compute capacity and data centres that we need to underpin Canada's competitiveness, to protect our security, and to boost our independence and sovereignty, This will give Canada independent control over advanced computing power while reinforcing our leadership in AI and quantum."
Prime Minister Mark Carney

on new Major Projects Office helping to build a "Canadian sovereign cloud"

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Executive Summary: The Sovereignty Challenge

Canada operates an open digital economy, fostering innovation but simultaneously creating a reliance on foreign infrastructure and data control. How to bridge this gap between openness and autonomy?

Heavy Dependence

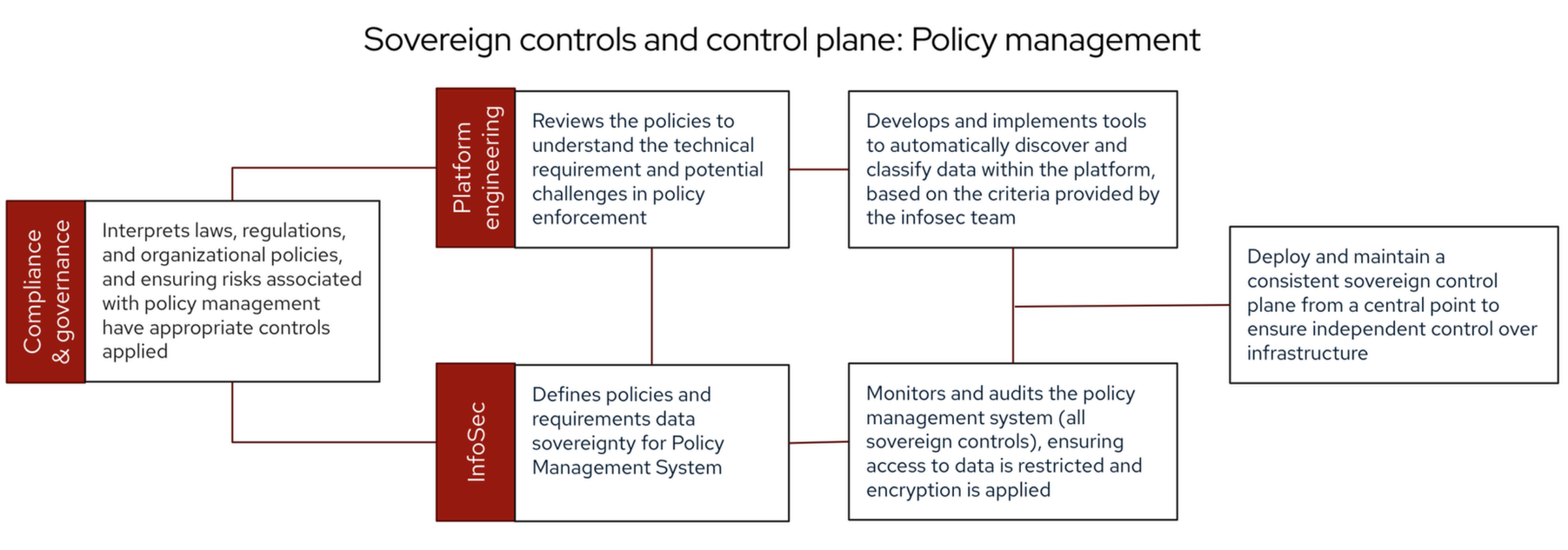
Outsourced control due to reliance on U.S. hyperscalers for cloud and AI infrastructure.

Lessons from Europe

Avoid the pitfalls of Europe's state-led model, which has resulted in lag and slow execution.

Balanced Sovereignty

A customized model for Canada combining aggressive innovation with strategic autonomy in critical domains.



Source: Red Hat Elements of cloud sovereignty 2025, synthesis of SAP (2025); Draghi (2024); Deloitte (2024).

Defining Digital Sovreignty

Digital sovereignty is the national capacity to govern and manage digital ecosystems, ensuring control over key dimensions:

Data

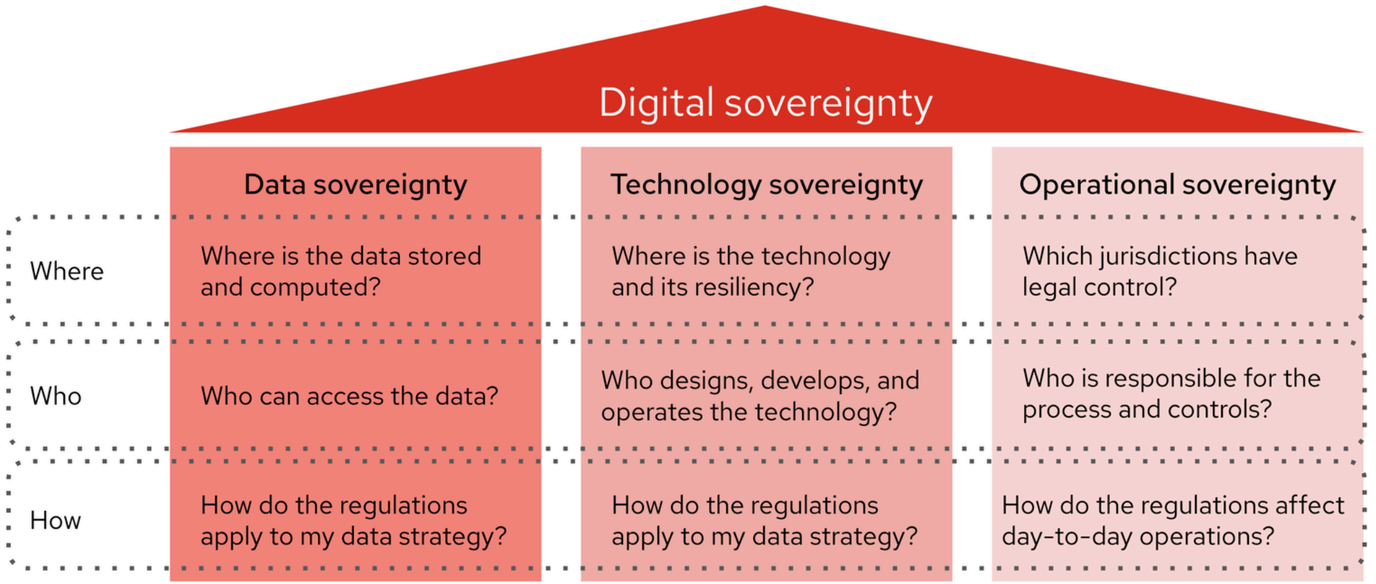
Outsourced control due to reliance on U.S. hyperscalers for cloud and AI infrastructure.

Technology

Access to and ownership of critical digital infrastructure (e.g., cloud platforms, AI chips).

Core Concept

Digital sovereignty is a means to strengthen competitiveness—not an end in itself.



Operational

The ability to enforce policies and regulations on all market actors within the digital domain.

Source: Red Hat Elements of cloud sovereignty 2025

Global Models of Digital Governance

Different global powers prioritize varying approaches, leading to unique strengths and distinct vulnerabilities in the digital realm.

Model	Primary Approach	Strategy	Strength	Primary Risk/ Limitation
U.S.	Entrepreneurial Capitalism	Innovation driven by startups and new entrants	High innovation velocity; major technological breakthroughs	Market concentration as successful firms become dominant (“winner-take-all” Big Tech)
China	State-Guided Capitalism	Government directs and funds strategic industries	Rapid catch-up growth and strategic coordination	Resource misallocation, overcapacity, rising debt, involution
EU	Big Firm Capitalism	Government directs and funds strategic industries	Stable R&D investment and industrial policy alignment	Slower adaptation; bureaucracy and reduced agility
Canada	Hybrid Dependency (Big Firm and State Guided)	Government directs and funds strategic industries	Trust-based ecosystem, strong research institutions	Foreign dependency in critical infrastructure (cloud, AI, semiconductors)

Source: Baumol, Litan & Schramm, 2012 – “Four Types of Capitalism”

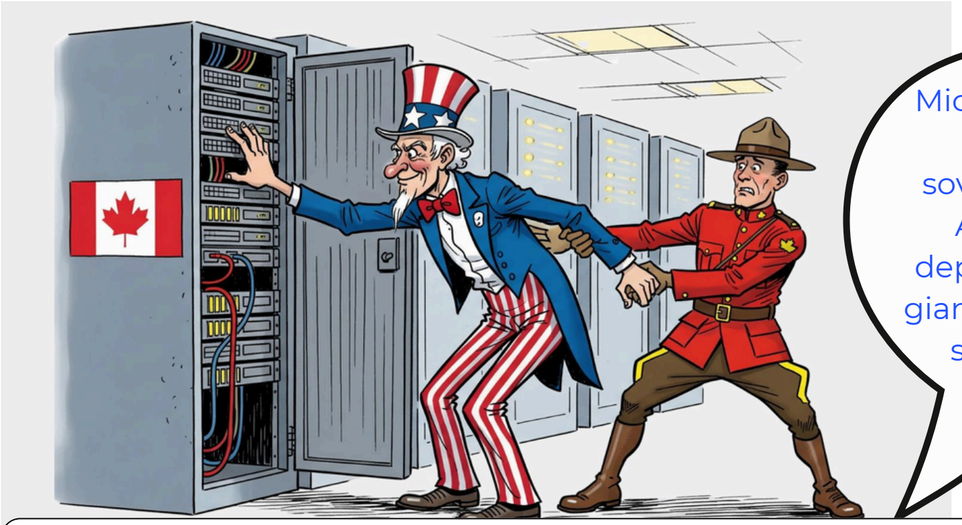
Canada’s Digital Dependency Metrics

Despite a robust digital economy, Canada's heavy reliance on foreign providers poses a direct challenge to long-term sovereignty and resilience.

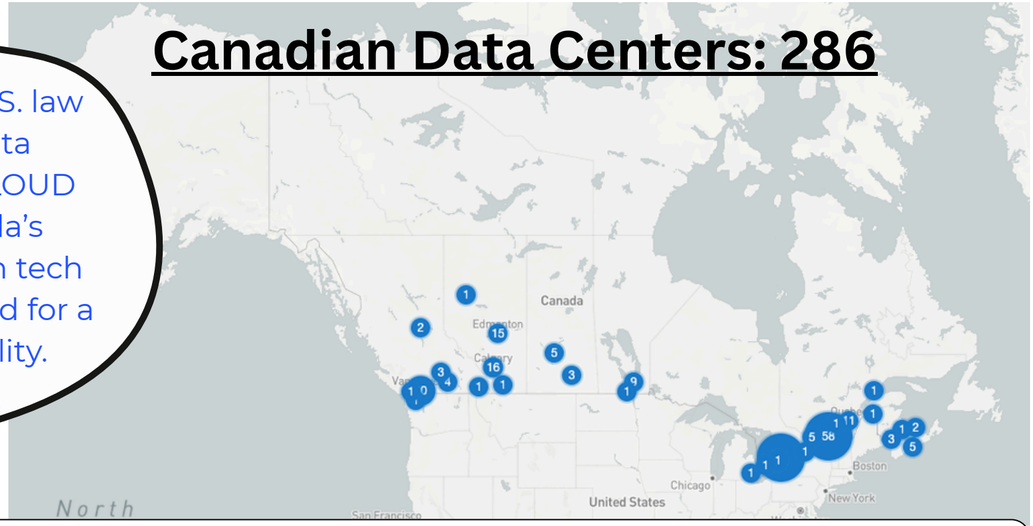
93% of office-software market controlled by U.S. firms; 60% of cloud by U.S. providers; $300M in Microsoft federal contracts (2021–22)

95% of international data crosses foreign-controlled cables; major media & data platforms foreign-owned

2.5 M Canadians lack local news; 19% have only basic literacy skills



Microsoft’s admits that U.S. law overrides Canadian data sovereignty under the CLOUD Act underscores Canada’s dependence on American tech giants and the urgent need for a sovereign cloud capability. Digital Journal 2025



American companies own 84 of Canada's 283 data centres, making the U.S. the largest foreign player in the sector, according to an IJF analysis.
Canadians control 179 of the total data centres. French companies represent the third-largest share, while others are owned by firms from the United Kingdom, Australia, Austria, the Netherlands and Singapore, along with an unknown company.

Source: Centre for International Governance Innovation: How to Confront Canada’s Digital Dependence, Investigative Journalism Foundation

Strategic Policy Options for Balanced Sovereignty

Canada needs targeted policy intervention to create sovereign choice without isolating its market from global innovation.

Launch a National AI Sovereign Compute & Cloud Controls Program

OECD flags that national compute capacity and diffusion are foundational to AI competitiveness; Canada lags.

Close the SME Diffusion Gap with Procurement-Led Adoption (ISC+) & Tax Support

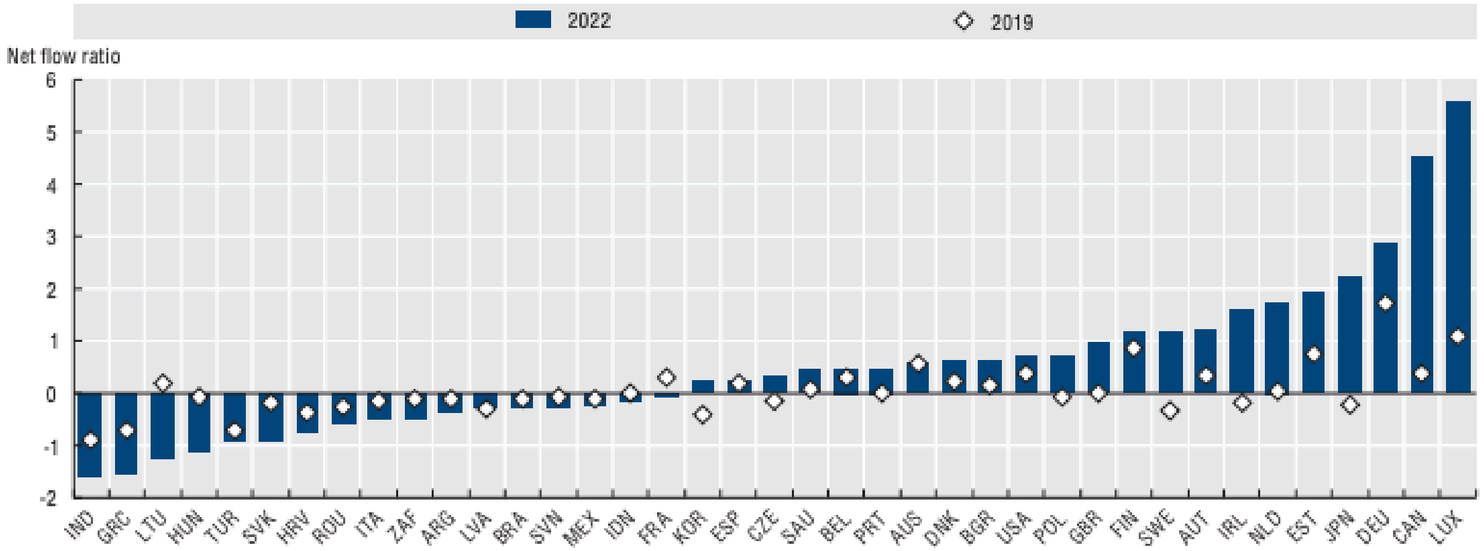
OECD shows big adoption gaps between large and small firms; targeted procurement pulls SMEs.

Pass a Digital Sovereignty Legal Pack: C-27 + GC Cloud Rules + Research Infra Roadmap

Closes the gap between rules, contracts, and hardware

Figure 2.7. Advanced economies are competing for AI talent

Between-country AI skills migration in 2019 and 2022



Notes: This chart displays the net migration flows per 10 000 LinkedIn members with AI skills in 2019 and 2022 for a selection of countries with 100 000 LinkedIn members or more declaring to have AI skills both in 2019 and 2022. Migration flows are normalised according to LinkedIn country membership.

Source: OECD.AI (2022[129]) using data from LinkedIn, also available at: *www.oecd.ai/en/data?selectedArea=ai-jobs-and-skills.*

StatLink https://stat.link/8c61e2

Source: OECD 2024

The New Global Industrial Policy

Governments globally are returning to industrial policy, targeting strategic technology sectors to ensure supply chain resilience and national advantage.

The Policy Dilemma

- The resurgence of state intervention aims to secure critical technologies (AI, green tech, chips).
- The risk remains: "Politically chosen winners become economically inefficient losers."
- Canada must balance strategic support with strict market discipline to avoid creating costly, non-competitive domestic firms.

Canada’s Current Digital Ecosystem Status

Canada possesses pockets of excellence (talent) but lacks coherent industrial capacity in core sovereign domains (infrastructure and enforcement).

Data Governance

Bill C-27 (AI and privacy law) is enacted, but effective enforcement mechanisms and organizational capacity are yet to be fully established.

Talent & Research

Leading global AI research clusters (Vector, Mila) are highly successful, but commercial scaling of domestic firms remains limited.

Infrastructure

Critical dependence on foreign compute power and cloud services limits government and SME choice and resilience.

Source: Red Hat Elements of cloud sovereignty 2025, synthesis of SAP (2025); Draghi (2024); Deloitte (2024).

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