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THE HUNTER PRIZE FOR PUBLIC POLICY

Building an AI Nation

Joel Blit
Danielle Goldfarb
Paul Samson
Stephen Tapp

This study was commissioned by the Centre for Civic Engagement. The CCE is a non-partisan Canadian charity dedicated to conducting original research on public policy issues related to Canadian prosperity, productivity, and national flourishing. The CCE's research informs an active program of policy seminars, events, conferences, and lectures all aimed at providing the policy making community with actionable insights that encourage informed decision making on issues that matter to Canadians.

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Section 1. Defining The Problem

Canada is in a productivity, innovation, and growth emergency. Over the past half century, this country had the weakest labour productivity growth in the G7. Among peers, Canada stands out as the only country where private sector research and development (R&D) intensity declined during the 21st century. Recently, Canada's economy began falling behind in absolute terms, with GDP per capita shrinking by three percent over the last three years.[1] The Trump trade shocks further worsen the outlook.

What's at stake? Unless we reverse these troubling trends, Canadians will face lower living standards than our peers, and future generations will have fewer economic opportunities than their parents. Such economic stagnation threatens social cohesion and puts at risk the pillars of Canadians' national identity, including our quality public healthcare and education systems.

Artificial intelligence (AI) offers the potential to significantly improve the nation's economic trajectory. AI capabilities have advanced rapidly and can now write computer programs, generate customized photorealistic images, engage in open-ended conversations, and much more. As the next big general-purpose technology, AI is already transforming every sector of the economy.

Our collective opportunity therefore lies, not in focusing narrowly on trying to create a few AI tech champions, but in embedding AI across the economy to build a true AI Nation — a country where the use of AI becomes a shared civic skill, woven into the economy and society, empowering every person and organization to thrive in the age of intelligence.

Past innovation policies have failed to deliver results. We need a new approach. Broad-based AI adoption is Canada's best bet to reverse the relative productivity decline, raise living standards, and ensure that AI's benefits are widely distributed across society. The window is open but not for long. We must act now to secure our future prosperity.

[1] Authors' calculations from Statistics Canada Table: 36-10-0706-01.

Section 2. Proposing A Solution

Ottawa's recently announced "nation-building" projects focus on energy, mining and ports. What's missing is a galvanising forward-looking project that propels us into the economy of the future.

AI has the potential to change Canada's economic trajectory. With the launch of ChatGPT in 2022, AI moved from research centres to the fingertips of ordinary people, who can now leverage powerful AI systems across diverse applications using natural language. This distinguishes AI as an inclusive and versatile technology that can boost the entire economy, much like electricity or the Internet that it builds on.

We propose that Canada seize this historic opportunity by embarking on a project to build an AI Nation. This entails integrating AI into all our economic activities (not only the technology sector), empowering every Canadian to use the technology, building a culture of openness to change, and embedding AI into our national identity.

This strategy is based on the following six pillars (**Figure 1**)[2]:

Figure 1: Six Pillars of Canada's National AI Strategy

1. Declare Canada's focus on AI applications and services	
2. Launch a national AI literacy and education campaign	
3. Lay foundations via research, smart regulation, and data/compute access	
4. Incentivize business AI adoption • Matching funds, tax credits, accelerated depreciation • Advisory services and mentoring • Use cases, playbooks, toolkits • Public sector adoption as proof of concept	**5. Support AI entrepreneurship** • Venture development programs, incubators, accelerators • Research commercialization grants • Early-stage and sovereign venture capital • Public challenge funds • Public procurement
6. Set ambitious targets and measure progress	

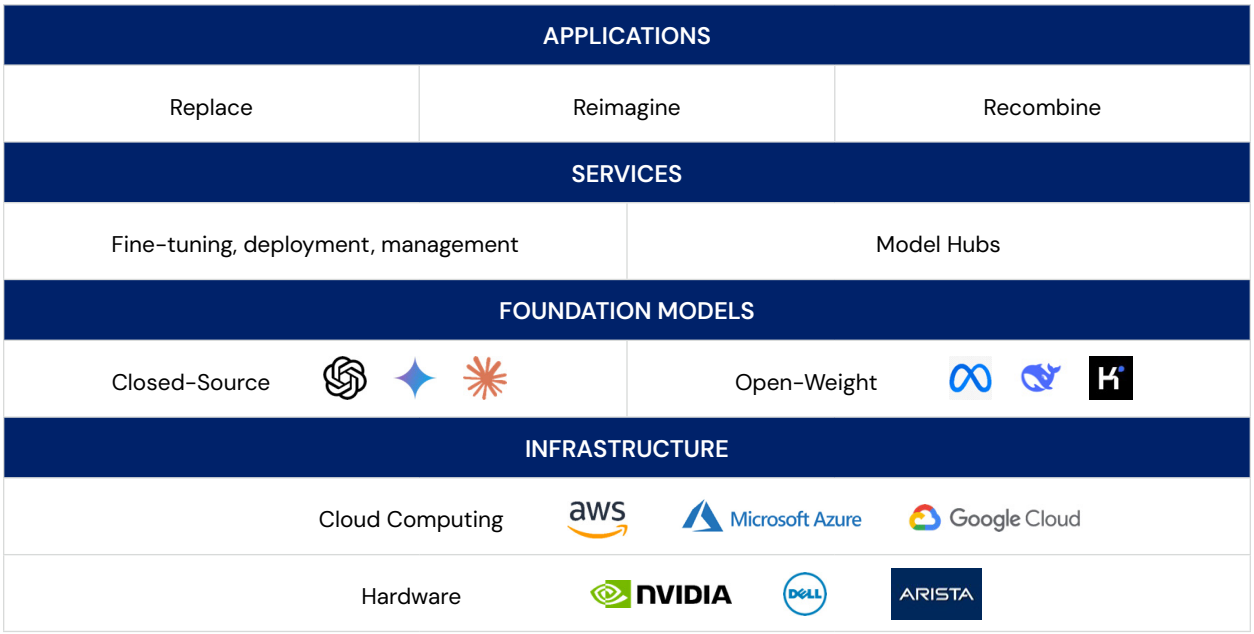
1. Declare Canada's Focus on AI Applications and Services

The global AI technology stack has four main layers: infrastructure (chips, servers, networks, cloud computing); foundation models; services (fine-tuning, deployment management, platforms); and applications (businesses, entrepreneurs and consumers using AI, **Figure 2**)[3].

[2] Figure and pillars adapted from Blit, J. 2025. "Replace, reimagine, recombine: building an AI Nation to fix Canada's productivity crisis." Forthcoming in *Canadian Public Policy*.

[3] Figure adapted from Blit, J. 2025. "The AI stack and the structure of competition." Working paper.

Figure 2: The Four Layers of the AI Technology Stack



The infrastructure and model layers are dominated by large, well-capitalized foreign firms. Attempts to rival Nvidia in chips or OpenAI in models would be prohibitively expensive and allocate resources to unwinnable races[4]. Instead, Canada should focus on leading in services and applications where businesses adopt AI and entrepreneurs reimagine industries around the technology.

History teaches that with previous general-purpose technologies, the largest gains accrue, not to those who build the underlying infrastructure, but to those who build upon it. With the Internet, companies like Cisco and Nortel initially profited by supplying networking infrastructure. However, Google, Amazon, and Meta ultimately created entirely new business models leveraging the Internet to join the ranks of the world's most valuable firms.

With the emergence of free, best-in-class open-weight models, businesses and entrepreneurs can now build their own AI system without incurring the high cost of building models from scratch. Moreover, the costs of running AI models are falling dramatically, by a factor of five to ten each year[5], making previously uneconomic use-cases viable. Much leaner, "small language models" focused on specific applications are further reducing costs, resulting in an explosion of practical AI applications across sectors from healthcare to logistics, finance to education. Canada must position itself to ride this wave of adoption and innovation.

The next Amazons and Shopifys will be startups that leverage AI, not as an add-on, but as the foundation of new business models. Crucially, these will not be AI industry companies, but entities that reimagine sectors like agriculture, mining, or healthcare around AI. By focusing on applications and services, Canada can concentrate its efforts where they will yield the greatest returns.

[4] Although Canada's renewable-energy base, regulatory credibility, and geographic stability create advantages for data centres, which link compute, storage, and energy systems, and can support the two upper layers of the technology stack (models and applications).

[5] Appenzeller, Guido. 2014. "Welcome to LLMflation – LLM inference cost is going down fast." Andreessen Horowitz. https://a16z.com/llmflation-llm-inference-cost/?utm_source=chatgpt.com

2. Launch a National AI Literacy and Education Campaign

To succeed in the coming age of intelligence, Canada must treat AI literacy as a basic civic skill, essential to participate in modern economic and democratic life.

Ottawa should launch a national AI literacy campaign to build awareness, trust, and hands-on competence across the population. These efforts would aim to replace anxiety with confidence, and hesitation with curiosity. Public lectures, community workshops, media partnerships, and national challenges can engage citizens at scale, while open learning platforms can make training accessible to everyone, from students and teachers to small-business owners and retirees. Embedding AI education in school curricula at every level will ensure that the next generation grows up fluent in this technology, rather than fearful of it.

A complementary set of workforce tools are also needed. AI education tax credits, stackable micro-credentials, and online programs can help workers at all skill levels learn to integrate AI into their professions. Executive-level courses can equip leaders with the ability to connect AI adoption to their business strategies and bottom lines.

Canada's ability to thrive in the AI era depends on unlocking the creativity of its people. In many businesses, adoption is happening from the bottom up, as workers experiment with new tools and share what they learn. By giving Canadians the skills and confidence to use AI, we can turn this informal experimentation into a national movement, speeding up adoption across sectors and embedding innovation into everyday work. And by empowering all Canadians to use AI, we help ensure that its benefits are widely shared and not just captured by a small technical elite.

3. Lay Other Foundations for Broad AI Adoption

Beyond literacy and education, Ottawa must also support research and its commercialization, provide agile regulation, and facilitate access to data and compute.

Canada has long been a leader in AI research, representing a well-earned source of comparative advantage. Governments should continue to support world-class research in universities, while doing a better job of commercialization by embedding researchers in industry, providing translational grants, and investing in the other pillars of this strategy.

Ottawa needs a clear, principles-based AI framework with regulatory sandboxes in priority sectors. Since it is extremely difficult to predict future AI uses, regulations must be nimble. As such, Ottawa should separate AI regulation from legislation on online harms. Where possible, harmonizing with U.S. rules will allow Canadian businesses easier access to our principal foreign market.

Data availability can be a barrier to AI adoption. The creation of a National AI Data Library can accelerate adoption, especially for SMEs and startups. Datasets should use common standards, be secure, protect privacy, and include metadata to facilitate training and fine-tuning AI systems. This can be paired with compute infrastructure (leveraging public-private partnerships) to guarantee affordable, reliable access for adoption and commercialization, not just research.

These foundational pillars, along with AI literacy and education, create the pre-conditions for further initiatives that directly foster business AI adoption and entrepreneurship.

4. Incentivize Business AI Adoption

To realize the full economic potential of AI, Canada must actively catalyze business adoption, particularly among SMEs. While large corporations have the capital and expertise to experiment with new technologies, most SMEs face financial and knowledge barriers. A coordinated national approach can bridge these gaps by combining financial incentives, advisory services, practical tools, and early government adoption as a proof of concept.

Ottawa can accelerate adoption by providing matching grants, targeted tax credits, or accelerated depreciation for AI-related capital investments. SMEs frequently operate with thin margins and limited cash flow, making upfront technology costs a key obstacle. Strategic funding mechanisms can help de-risk investments, encouraging firms to integrate AI into their operations.

Beyond financial incentives, advisory and mentorship services are needed to guide firms through the early stages of AI adoption. Many businesses are unaware of how AI applies to their operations.[6] By leveraging programs such as the Industrial Research Assistance Program (IRAP) or establishing new advisory networks, government can connect SMEs with domain experts to identify use cases, assess readiness, and implement solutions.

To scale these efforts, Ottawa should create sector-specific use cases, playbooks and toolkits. Catalogs with examples from Canadian firms can demystify adoption by showing tangible benefits and typical costs. Implementation playbooks can outline step-by-step pathways, while toolkits can provide ready-to-use models, templates, and data resources. Once developed, these materials can be distributed widely at minimal cost, making them a scalable driver of productivity growth.

Finally, governments should lead by example through AI adoption in the public sector. Flagship deployments (such as triaging immigration applications, customer support services for CRA and optimizing healthcare wait-times) paired with rigorous evaluation, public post-mortems, and reusable code/data can showcase practical value, build public trust and develop shareable tools. Early wins can shift the narrative from risk to opportunity.

5. Support AI Entrepreneurship and Growth

Many of Canada's future economic champions will emerge because of Canadians reimagining existing industries around AI.[7] Promoting this next generation of firms must be central to our national AI strategy. Government must create the conditions for these ventures to start, scale, and stay in Canada through targeted founder programs, commercialization funding, access to capital, challenge-based initiatives, and strategic procurement.

We need to strengthen the pipeline of AI founders through dedicated venture development programs, incubators, and accelerators. These initiatives can help individuals identify real-world problems, validate ideas, and gain the skills needed to lead AI-first businesses.

Incubators can then provide workspace, advisory support, and prototyping tools to early-stage firms, while accelerators can help them access networks, customers, and investors as they scale. Such programs can channel entrepreneurial talent to move beyond merely automating existing processes to reimagining industries.

Research commercialization grants should bridge the gap between world-class academic research and market-ready innovation. Canada has deep AI research strength but weak commercialization.

[6] Statistics Canada Table 27-10-0368-01.

[7] Blit, J. 2025. "Replace, reimagine, recombine: building an AI Nation to fix Canada's productivity crisis." Forthcoming in *Canadian Public Policy*.

Targeted grants can provide funding to researchers and startups for critical early activities such as data preparation, model development, intellectual property protection, and prototype creation — helping more discoveries cross the "valley of death" from lab to market.

To sustain growth, early-stage firms need capital to match their ambitions. Government can provide this through direct grants, co-investment with angels and venture funds, and by creating a sovereign AI venture capital fund. Such a fund would ensure that successful scale-ups have access to patient capital while retaining their talent, intellectual property, and operations in Canada.

Government can also spur innovation through mission-oriented challenge funds tied to national priorities such as healthcare, clean energy, or food security. These open competitions invite entrepreneurs to solve societal problems with AI and provide staged funding, data access, and mentorship to the most promising teams. This approach derisks innovation while aligning it with the public good.

Finally, public procurement can be one of the most powerful tools for fostering AI entrepreneurship. By acting as an early and reliable customer, government can validate Canadian solutions, reduce market uncertainty, and help startups scale. Defense offers particularly strong opportunities for dual-use AI technologies like remote monitoring for the Arctic.

Together, these measures form an integrated ecosystem for AI entrepreneurship: nurturing ideas, bridging research and market gaps, providing capital, and creating early demand.

6. Set Ambitious Targets and Measure Progress

Finally, Canada must establish clear national goals and transparent metrics to guide and measure progress. The Prime Minister should announce an overarching objective to **achieve the highest AI adoption rate in the G7 by 2030**. This target signals national ambition and accountability, while providing a unifying target for public and private actors.[8]

Canada currently lacks a robust framework to track AI adoption and its economic and social effects. We recommend maintaining a public, open-data dashboard that captures the pace, breadth, and intensity of adoption across the economy. This hub should integrate Statistics Canada business survey data with emerging digital indicators such as AI platform usage, tool adoption by workers, and citizen engagement, to provide a real-time view of progress. Monitoring uptake would allow policymakers to identify where adoption lags, understand barriers, and adjust strategies and funding in response.

[8] Supporting metrics could include the share of SMEs adopting AI, the proportion of Canadians using AI tools, the number of workers completing AI-related micro-credentials, and the percentage of federal departments deploying AI in core services.

Section 3. Implementation

Embedding AI across the economy requires political commitment, institutional capacity, and effective execution under a unified national framework.

Implementation should be led from Ottawa to ensure coherence and accountability. A new AI Adoption Delivery Unit, housed in the Privy Council Office and reporting to the Minister of AI and Digital Innovation, could oversee and coordinate execution. The unit will serve as the national control tower for the strategy, driving collaboration with partners, setting milestones, and publishing public progress reports and dashboards to ensure transparency, accountability and responsiveness.

The AI strategy would be deployed in a decentralized manner with a broad array of partners including other federal organizations, provincial and municipal governments, colleges and universities, school boards, media outlets, community groups, entrepreneurship ecosystems, and the private sector.

The strategy can be implemented in three phases, beginning with the actions that are most urgent and readily achievable (**Figure 3**).

Figure 3: Implementation Actions and Outcomes

PRIORITY ACTIONS	OUTCOMES
PHASE 1 (YEARS 0–1): Establish leadership, launch foundational programs, achieve visible early wins	
Declare buildings an AI Nation as Canada's next great project	Adoption target announced
Declare AI focus on services and applications	Focus announced
Establish AI Adoption Delivery Unit	Coordination and accountability unit established
Establish AI Data Hub	Real-time progress dashboard operational
Launch national AI literacy campaign	1 million Canadians engaged
Pilot SME AI support programs	1,000 SMEs supported
Flagship government AI projects	3–5 demonstrated projects deployed
Implement agile AI regulation and sandboxes	Flexible, harmonized regulatory framework
Roll out compute access program	Increased access to compute for startups, SMEs and researchers
PHASE 2 (YEARS 2–4): Expand successful pilots, institutionalize programs, and scale education, data, and funding infrastructure	
Expand AI literacy campaign nationally	15 million Canadians, including all students, trained in AI skills, opportunities and challenges
Roll out sector-specific toolkits and playbooks nationwide	80% of major sectors covered with open toolkits and playbooks
Launch AI venture development programs and sovereign AI venture fund	1,000+ AI-first startups supported
Create national AI data library	100s of datasets connected and offered openly
Introduce mission-oriented challenge funds	3–4 national challenges targeting key sectors
PHASE 3 (YEARS 5–7): Entrench adoption across sectors, mainstream AI in the public service, and institutionalize continuous improvement	
Scale public sector AI adoption	50% of departments using AI in at least one core function
Maintain and evolve AI Dashboard and metrics	Real time data informing ongoing strategy
Publish annual state of AI adoption report	Transparent national reporting. G7 benchmarking

Section 4: Costs and Benefits

Building an AI Nation is an ambitious rethinking of Canada's economic potential, not a conventional government program. The objective is to increase overall economic prosperity, which would, in turn, enhance government revenues. This represents a bold new objective, but a fitting one for the country that invented modern machine learning.

Estimated Costs

Federal government implementation costs could be relatively limited. Given the comprehensive expenditure review already underway, resources could be reallocated from existing programs and previous spending commitments. Key existing funding sources include Scientific Research and Experimental Development tax incentives and ramped up defense spending for dual-use technology R&D and procurement. Some of the $2 billion for compute infrastructure could be redeployed if private partners can leverage the remaining investment.

The largest new expenditures would likely be increased SME supports, entrepreneurship programs, and literacy and education initiatives.[9]

Expected Benefits

The emerging literature suggests that the potential economic benefits of faster and broader AI adoption could be significant. A recent OECD survey paper projects that for Canada economy-wide productivity gains from AI could be 0.2% annually over the next decade in a slow adoption scenario, with triple that rate (0.6%) in a rapid adoption scenario.[10] Compounding those gains implies that Canada's GDP could be as much as $200 billion (or 4.3%) larger by 2035 in the faster AI adoption scenario.[11] This would, in turn, boost overall government revenues by $87 billion to fund vital public services.

Clearly advancing AI adoption timelines, even modestly, could bring forward significant incomes and earnings. Moreover, being an early adopter and disruptor could mean lasting first-mover economic gains in the form of AI-based economic champions.

In short, building an AI Nation is likely to offer extraordinary returns on investment, and represents a bold plan to reverse decades of stagnation and secure Canada's place as a leader in the age of intelligence.

[9] Capitalizing an AI sovereign wealth fund would also incur significant upfront investment but subsequently provide returns. Public sector adoption initiatives could also be expensive but if well executed would quickly pay for themselves in cost savings.

[10] OECD (Filippucci et al. 2025) "Opportunities and Risks of Artificial Intelligence for Productivity". *International Productivity Monitor*, Spring Issue, lead article.

[11] Gains to GDP and government revenues reported in nominal terms. Modelling assumes a nominal GDP growth rate of 4.0% per year (in line with Department of Finance Survey of Private Sector Economic Forecasters) that increases to 4.4% in the fast adoption scenario. Total government revenues assumed to be 42.7% of GDP, in line with the average historical ratio over the period Q1 2024 to Q2 2025 (Statistics Canada Tables 36-10-0104-01 and 36-10-0477-01).

Section 5: Conclusion

Canada faces a productivity and economic growth crisis, with trade and geopolitical shocks worsening the outlook. At the same time, advances in AI present an extraordinary opportunity. Generative AI has made the technology accessible to every worker, entrepreneur, and organization. This new wave of democratized intelligence has the potential to reverse Canada's economic decline — if we act decisively to deploy AI across our economy and society.

Canada's next major project must be to build an AI Nation. Just as railways connected a vast land, electrification powered modern life, and universal healthcare raised the longevity and living standards of Canadians, artificial intelligence can drive the next era of prosperity and inclusion. By embedding AI into the fabric of our economy, education, and public services, we can ensure this technology serves the public interest and broadens opportunity rather than concentrating it.

With resolve, coordination, and vision, Canada can become not only a leader in the age of intelligence but a model for how a nation renews itself, through knowledge, courage, and the belief that progress belongs to everyone. Canada can become the land of hockey, maple syrup, and AI.

Joel Blit is a Professor of Economics at the University of Waterloo, a Senior Fellow at the Centre for International Governance Innovation, and a Co-Founder of the Canadian AI Adoption Initiative.

Danielle Goldfarb is a Senior Fellow at the Centre for International Governance Innovation and a Co-Founder of the Canadian AI Adoption Initiative.

Paul Samson is President of the Centre for International Governance Innovation.

Stephen Tapp is the CEO and Chief Economist at the Centre for the Study of Living Standards (CSLS) and the President of the Canadian Association for Business Economics (CABE).

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