# Creating Canada's AI Advantage

## Turning Trusted Data into Value, Productivity and a Competitive Edge



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# Canada’s productivity problem makes AI an economic question

**The issue is whether capability becomes output, competitiveness and living standards.**

## Productivity is not abstract

- **Wages & living standards**
- **Competitiveness & resilience**
- **Fiscal capacity & public priorities**

**0.8%**

**avg. annual labour productivity growth, 2000–2023**

*OECD Economic Survey: Canada 2025*

**−0.5%**

**business labour productivity, Q1 2026**

*Statistics Canada, The Daily, June 3, 2026*

AI must be part of the national dialogue beyond simply technology adoption….

**+1.4%**

**unit labour costs, Q1 2026**

*Statistics Canada, The Daily, June 3, 2026*

**AI creates value only when it improves data, decisions, workflows and diffusion.**

**KEY MESSAGE: AI matters economically only if it changes how organizations create value**

# The paradox: capability is abundant; value capture is scarce

**AI can make information work faster. It does not automatically make organizations better.**

**Equation 1 — the risk**

AI capability + weak foundations = faster underperformance

**Equation 2 — the opportunity**

AI capability + trusted data + redesigned work = productivity

**Leadership moves the organization from the first equation to the second.**

KEY MESSAGE: AI is a multiplier — of good systems or bad ones.

# From paradox to foundation

**The next move is simple: responsible AI begins before AI.**

### THE PARADOX

**AI is accelerating**

but productivity gains are not automatic

Technology creates possibility.

### THE FOUNDATION

**responsible data**
**+ stewardship**
**+ governance**

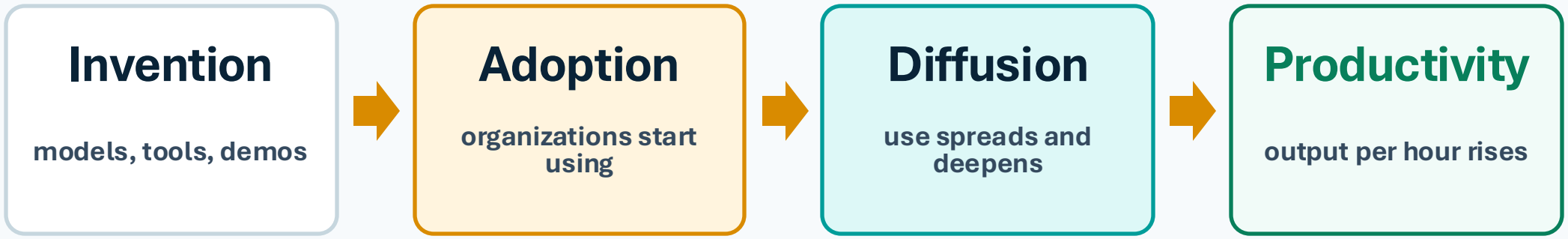
then AI can support better decisions, faster learning, more innovation and measurable value.

**The AI advantage will belong to organizations that manage data as an asset and steward it as a source of trust, insight and productivity.**

KEY MESSAGE: Responsible stewardship converts technological possibility into legitimate value.

# Adoption is the bridge between invention and productivity

**The economic payoff comes when AI changes how work, decisions and investment actually happen.**




**Where the conversation often stops**

announcements • pilots • tools • licences

**Where the value is created**

workflows • decisions • operating models • scaling

**The productivity question is not "who has AI?" It is "where has AI changed the system?"**

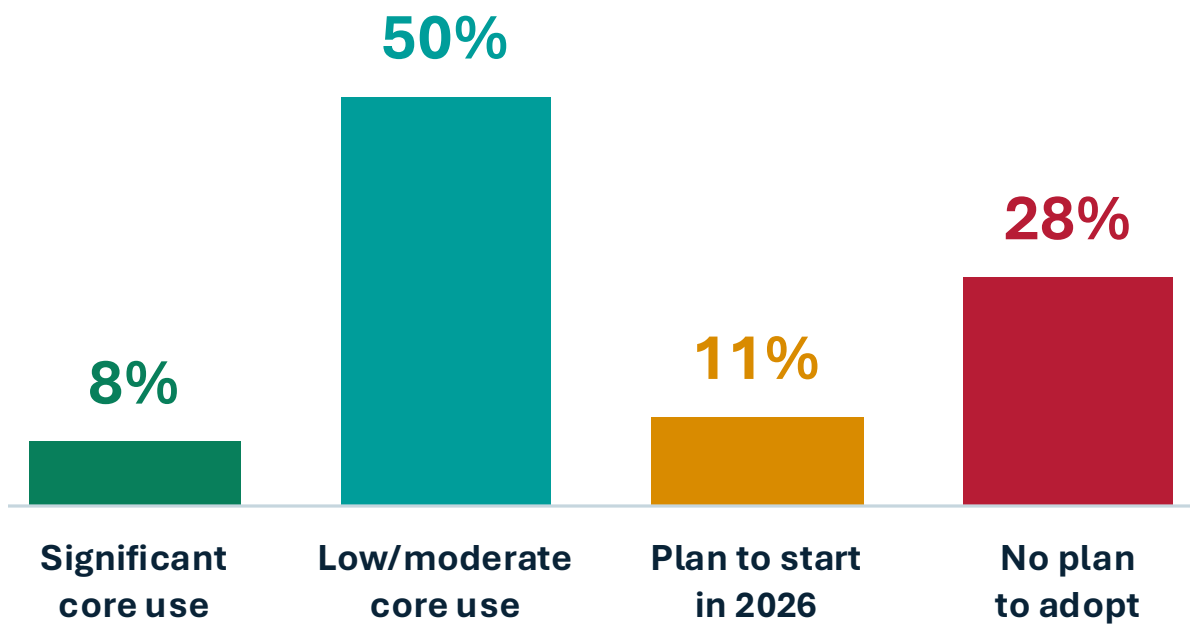
KEY MESSAGE: Invention creates possibility; adoption and diffusion create economic value.

*Synthesis: GPT adoption literature; OECD Canada 2025*

# Canada is adopting AI — but depth is still uneven

## The gap is no longer awareness. It is integration into core operations and decision systems.

### AI use in Canadian business operations




### Interpretation

- Experimentation is rising.
- Embedding is still early.
- Non-adoption remains material.

**Depth of use will matter more than presence of tools.**

**The most important adoption metric is not licence count — it is whether AI has entered the operating model.**

KEY MESSAGE: AI use is spreading, but productivity depends on deeper integration.

*Bank of Canada, Aug. 13, 2026*

# Diffusion is the productivity opportunity

## Canada does not only need more AI firms — it needs more AI-enabled firms.

**$350B**
potential GDP gain over time if SMEs reached mature digital and AI capability
*BDC, June 2026*

**38%**
possible SME productivity increase at top-tier digital maturity
*BDC, June 2026*

**24%**
higher productivity among SMEs using generative AI
*BDC, June 2026*

### Diffusion turns scattered advantage into economy-wide performance.

Large firms, SMEs, governments, universities and intermediaries all matter.

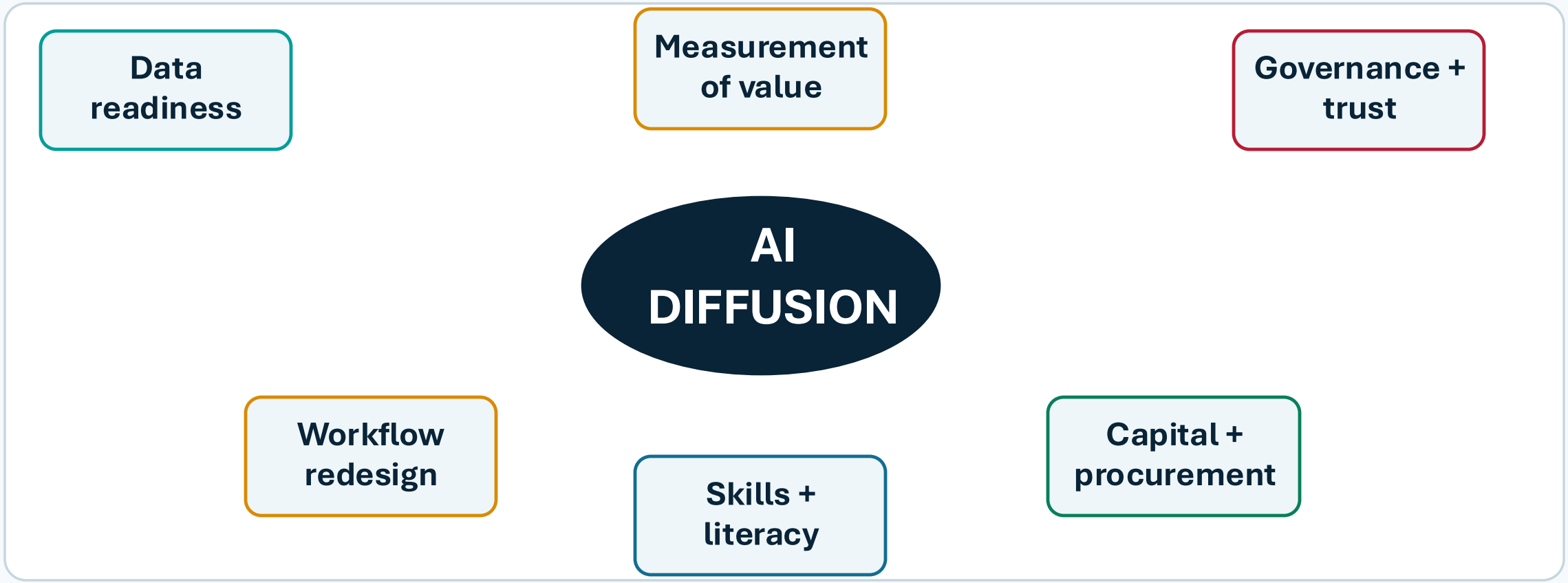



**KEY MESSAGE: The biggest payoff comes from spreading capability across organizations.**

*BDC, June 3, 2026; OECD Canada 2025*

# Diffusion requires complementary assets

## AI does not diffuse by magic. It scales when leaders build the conditions around it.



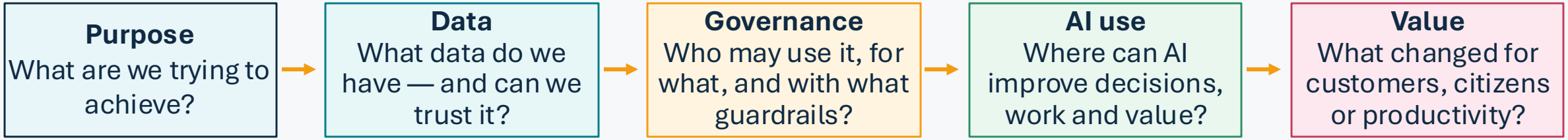

**The managerial task is to move from tool rollout to operating-model change.**

KEY MESSAGE: Diffusion depends on assets and leadership around the technology.

*Synthesis: OECD Canada 2025; Bank of Canada 2026*

# Responsible AI starts before the model

**Start with the value you want to create — then test whether the data foundation can support it.**




**AI strategy should not begin with a tool. It should begin with an outcome and a disciplined view of the data needed to achieve it.**

**Leadership question**

***"Are we clear enough about the decision, service, process or market outcome we want AI to improve?"***

**KEY MESSAGE: Responsible AI begins with purpose, not procurement.**

# Before AI, know the data

**Organizations need a “data passport” before they ask AI to analyze, predict or automate.**

**“DATA PASSPORT”**

**Inventory**
What data do we have?

**Metadata**
Definitions, structure, standards

**Paradata**
How the data were collected or generated

**Quality**
Accuracy, completeness, timeliness

**Provenance**
Origin, lineage and transformations

**Fitness for use**
Is it good enough for this decision?

**Poor metadata and weak lineage do not disappear when AI is added. They become harder to see — and easier to scale.**

**KEY MESSAGE: AI-ready data requires inventory, meaning, context, lineage and fitness-for-use judgment.**

# Permission is not the same as legitimacy

**Responsible use requires legal authority, consent where needed, privacy protection and social acceptance.**




**The question is not only "Can we use this data?"**

**It is also "Should we — and can we simply and clearly explain why?"**

***Trust can be lost when technical permission runs ahead of public understanding, transparency or acceptance.***

**KEY MESSAGE: Legitimacy is built from authority, consent, privacy, ethics and social acceptance working together.**

# Stewardship turns data into responsible value

**Clear governance makes responsible use repeatable, scalable and auditable.**

**Use case**
desired outcome
+ value hypothesis

**Stewardship**
owners, custodians
+ decision rights

**Controls**
access, security
+ privacy design

**Ethics**
review, bias tests
+ transparency

**Monitoring**
performance, risk
+ accountability

**Responsible data stewardship** + **Responsible AI** + **Redesigned work** → **Productivity value**

**Governance should not be the machinery that stops organizations from moving. Done well, it lets them move faster with clarity and confidence.**

KEY MESSAGE: Stewardship makes responsible AI a repeatable operating capability, not a one-off control review.

# A practical responsible-data test

Before scaling AI, leaders should be able to answer these questions in plain language.

1. What outcome are we trying to improve?
2. What data are we using — do we understand them-and what do they actually measure?
3. What do metadata, paradata and lineage tell us about reliability?
4. Who has permission to use, link or share the data? Is the permission implicit or explicit?
5. What privacy, ethical and social-acceptance risks must be managed?
6. Who is accountable if the AI output is wrong or harmful?
7. How will we measure value, risk and trust after deployment?

**If leaders cannot answer these questions, AI creates speed before it creates value.**

KEY MESSAGE: Responsible AI should be explainable to executives, practitioners, regulators and the public.

# A richer Canadian data ecosystem

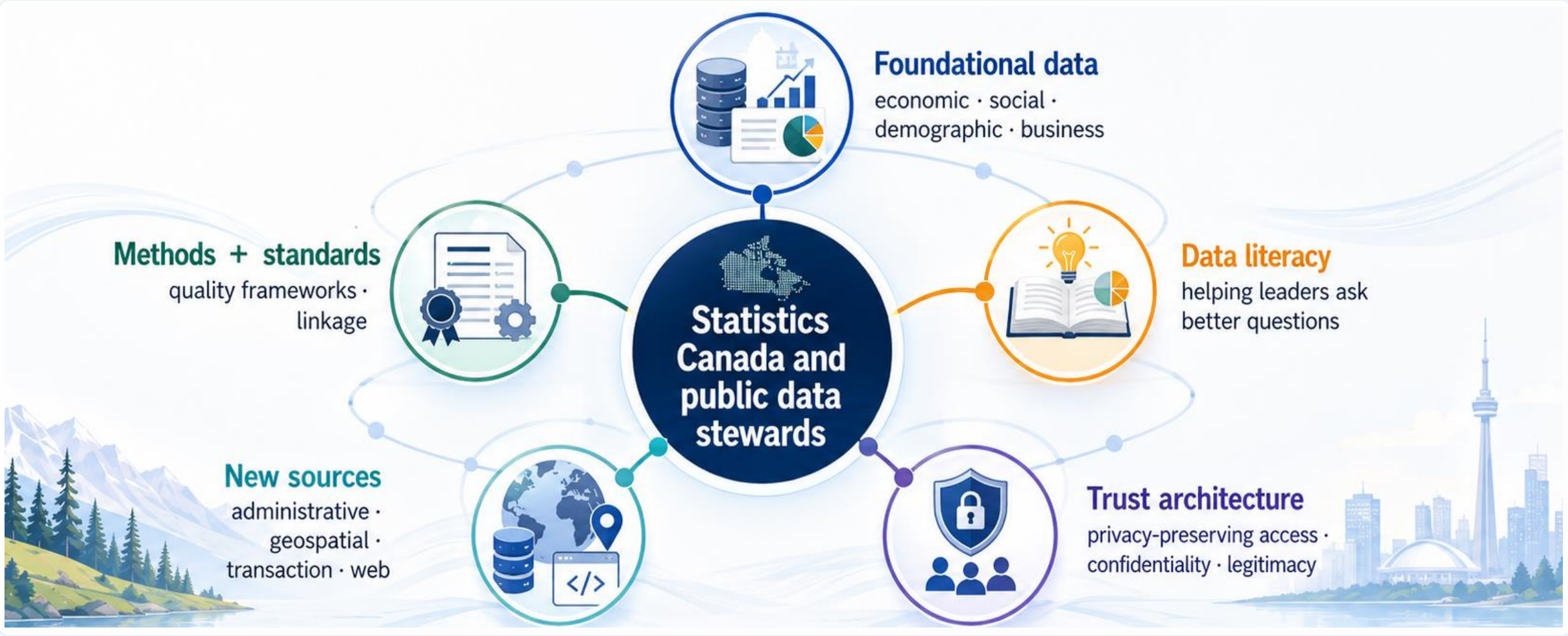
**Canada needs an ecosystem — not a single platform — with more players reinforcing one another.**




**Greater utility comes when trusted public data, private-sector enrichment, research, finance and users reinforce one another.**

# National data stewards are productivity infrastructure

**Institutions like Statistics Canada and ISED should help convert information into trusted economic capability.**




**Public data is not simply an output of governments. Properly stewarded, it becomes an input into economic activity.**

# A healthy data ecosystem should create a productivity flywheel

**Better data infrastructure lowers the cost of insight and makes adoption easier across more organizations.**




**Productivity compounds when each step strengthens the next.**

# The design principle: greater utility without sacrificing trust

**Canada's AI advantage depends on making responsible data use easier, safer and more valuable.**




**Responsible data use should be easier to do well than to do badly.**

# The economic case starts with Canada’s operating model

**A service-heavy economy and an ageing workforce make output per worker increasingly important.**

**~75%**

**of real GDP is produced by services-producing industries (April 2026)**

**~80%**

**of employment is in the services-producing sector (May 2025)**

**19.5%**

**of Canadians were age 65+ in 2025 — and the share continues to rise**

**276,800**

**average number of retirements in the 12 months to Aug. 2025**

## Why this changes the business case...

### Services are labour-intensive

In health, finance, professional services, government, education and NFPs, human time is a major input. AI can increase output without proportional headcount growth.

### Labour will be harder to replace

Ageing and retirements create structural pressure on scarce skills. The economic question becomes how to augment people, preserve expertise and redesign work.

### Productivity becomes capacity

For a service organization, productivity is not “doing more with fewer people” alone — it is more clients served, faster decisions, better quality and reduced administrative burden.

**AI matters economically because it can change the amount of service, insight and value produced per hour of scarce human effort.**

Sources: Statistics Canada, GDP by industry Table 36-10-0434-01; Labour Force Survey, May 2025; Population Projections 2025–2075; Retirement and post-retirement employment, 2026.

# Where the economics can be strongest

**In a labour-constrained service economy, AI creates value by expanding capacity, improving decisions and reducing friction.**

### SMEs

Revenue / employee
Sales & marketing productivity
Back-office hours
Decision speed

### NFPs

Program reach / FTE
Fundraising efficiency
Casework capacity
Reporting burden

### Government

Cost / transaction
Processing & wait time
Compliance / error rates
Policy & service insight

### Health + social

Clinical/admin time
Triage & scheduling
Case management
Demand forecasting

### Finance + professional

Cases / professional
Risk detection
Research cycle time
Client responsiveness

**Common value pools**

capacity freed | revenue or reach increased | service quality improved | risk / error avoided | employee experience improved

**For many service organizations, the highest return is not fewer people — it is more valuable work from the people they already have.**

Context: Statistics Canada shows service industries dominate Canadian GDP/employment; IMF estimates about 60% of advanced-economy jobs are exposed to AI.

# A senior leader’s business case for data + AI

**Treat AI as an operating investment: define the value pool, fund the enablers and measure what changes.**

### 1 · OUTCOME

**What are we improving?**

Revenue · reach · capacity · speed · quality · risk

### 2 · BASELINE

**What does today cost?**

Time · FTE effort · volume · error · wait time · lost opportunity

### 3 · DATA FOUNDATION

**Can the data support it?**

Quality · metadata · permissions · privacy · stewardship

### 4 · WORKFLOW REDESIGN

**What actually changes?**

Tasks · decisions · hand-offs · human / AI roles · escalation

### 5 · RESPONSIBLE CONTROLS

**Can it scale with confidence?**

Security · validation · regulation · ethics · accountability

### 6 · ADOPTION + VALUE

**How will we know?**

Training · uptake · KPI tracking · benefits realization · scale

**Business-case discipline**

$$\frac{\text{Value created} - \text{operating cost} - \text{risk / transition cost}}{\text{data + technology + redesign + training investment}}$$

**Measure at the workflow level first. Scale only what produces durable value.**

Framework synthesizes Statistics Canada evidence on complementary capabilities, responsible data stewardship principles, and OECD evidence on AI adoption/diffusion.

# The leadership agenda: turn capability into value

**Senior leaders need a disciplined value, data, workflow and governance agenda — not a technology procurement exercise.**

1. **Start with value** — Outcome, baseline and decision that must improve
2. **Treat data as capital** — Quality, metadata, permissions, interoperability and stewardship
3. **Redesign work** — Tasks, hand-offs, decision rights and human–AI roles
4. **Govern to scale** — Privacy, security, validation, ethics and accountability
5. **Measure and diffuse** — Value, adoption, risk and trust — then scale what works

## The executive test

**Can we show that this changes performance at the workflow level?**

Better business cases specify the value pool, the enabling data investment, the operating change and the measurement discipline before scaling.

**Governance should not be the machinery that stops progress; done well, it lets organizations move faster with confidence.**

# Canada’s opportunity: compete on trusted adoption

**Canada does not need to win only by building the biggest models; it can win by deploying AI responsibly across the economy.**




**The productivity prize is not one AI champion — it is thousands of Canadian organizations becoming more capable.**

# The imperative is to turn trusted data, responsible AI and leadership into measurable value.

**Technology creates possibility.**

**Data creates insight.**

**Leadership determines whether either creates value.**




**Trusted data** → **Responsible AI** → **Redesigned work** → **Measured value**

The question is whether Canadian organizations will transform quickly enough — and responsibly enough — to capture the value.