

The insatiable thirst for data and how NSOs are responding *A Canadian perspective*

Economic Statistics Centre of Excellence
Conference on Economic Measurement 2026

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Statistics
Canada

Statistique
Canada

Canada

**Bigger, better,
faster, cheaper**

The Future of National Statistics Offices

A Call to Action

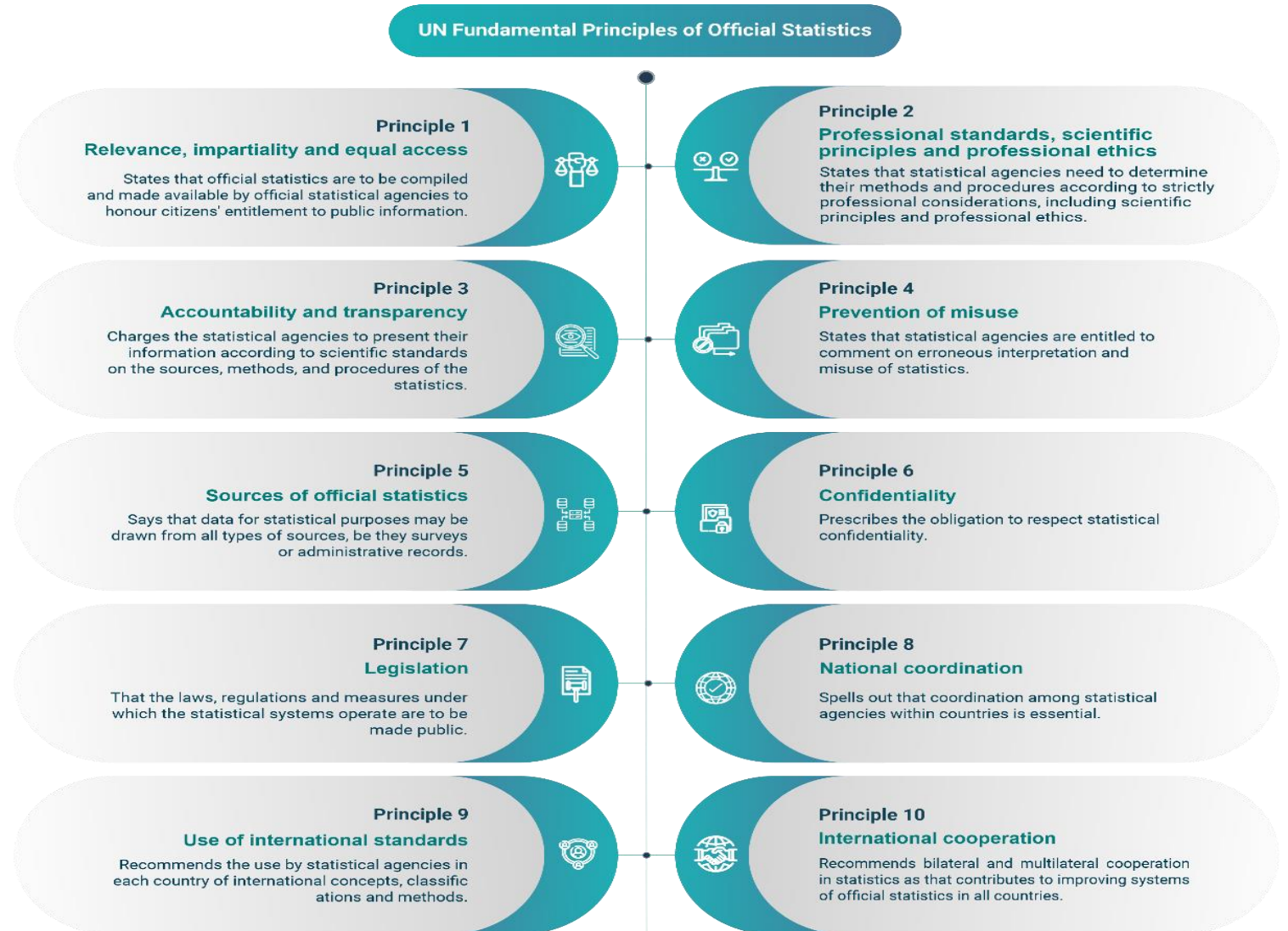
Executive editor: Osama Rahman

May 2025

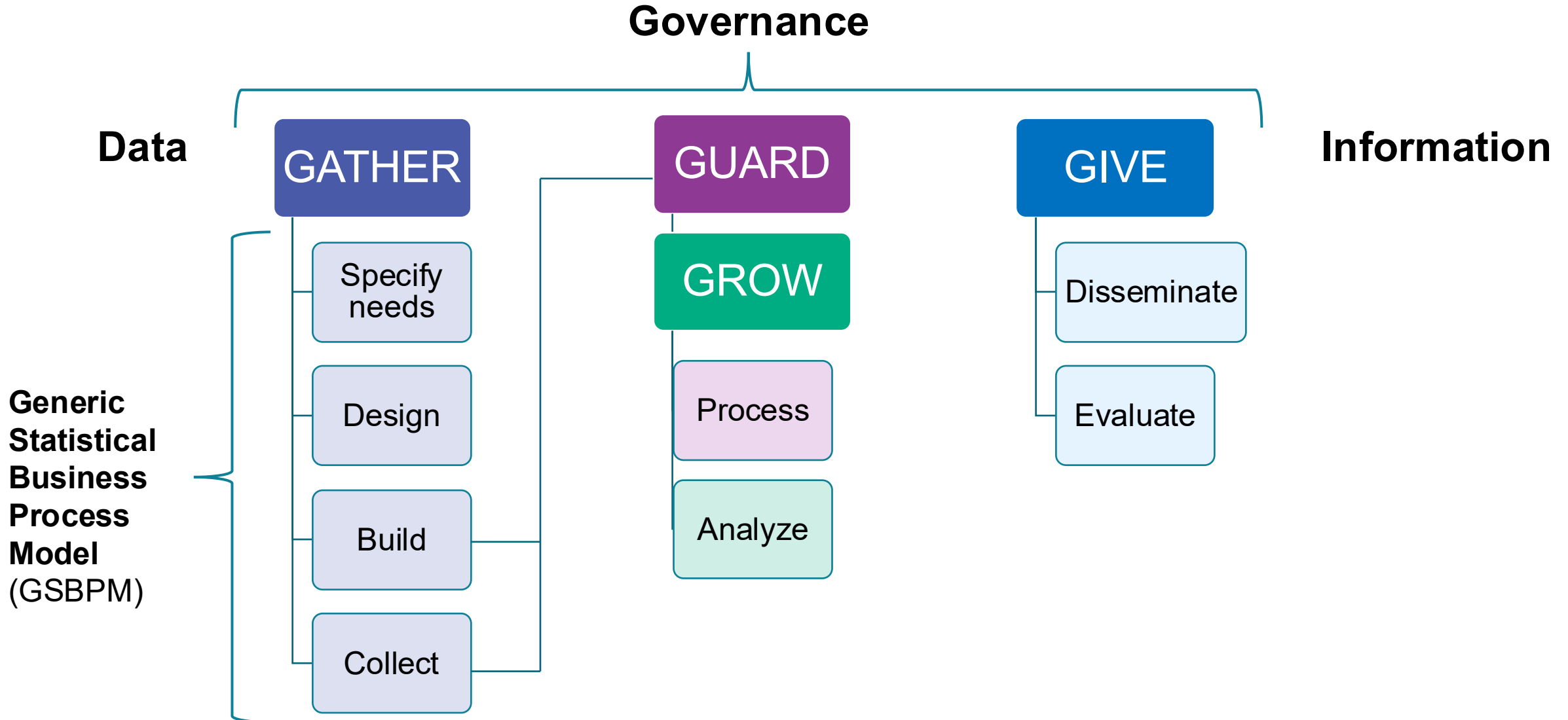


Fundamental principles of official statistics

- Adopted by the UN Statistical Commission in 1994 and endorsed by the UN General Assembly in 2014
- Endorsed by Statistics Canada to support and fulfill its mandate
- Official statistics face both challenges and new opportunities amid rapid technological change and expanding data sources



Gather, Guard, Grow, Give vs. GSBPM



GATHER



Gather

Guard

Grow

Give

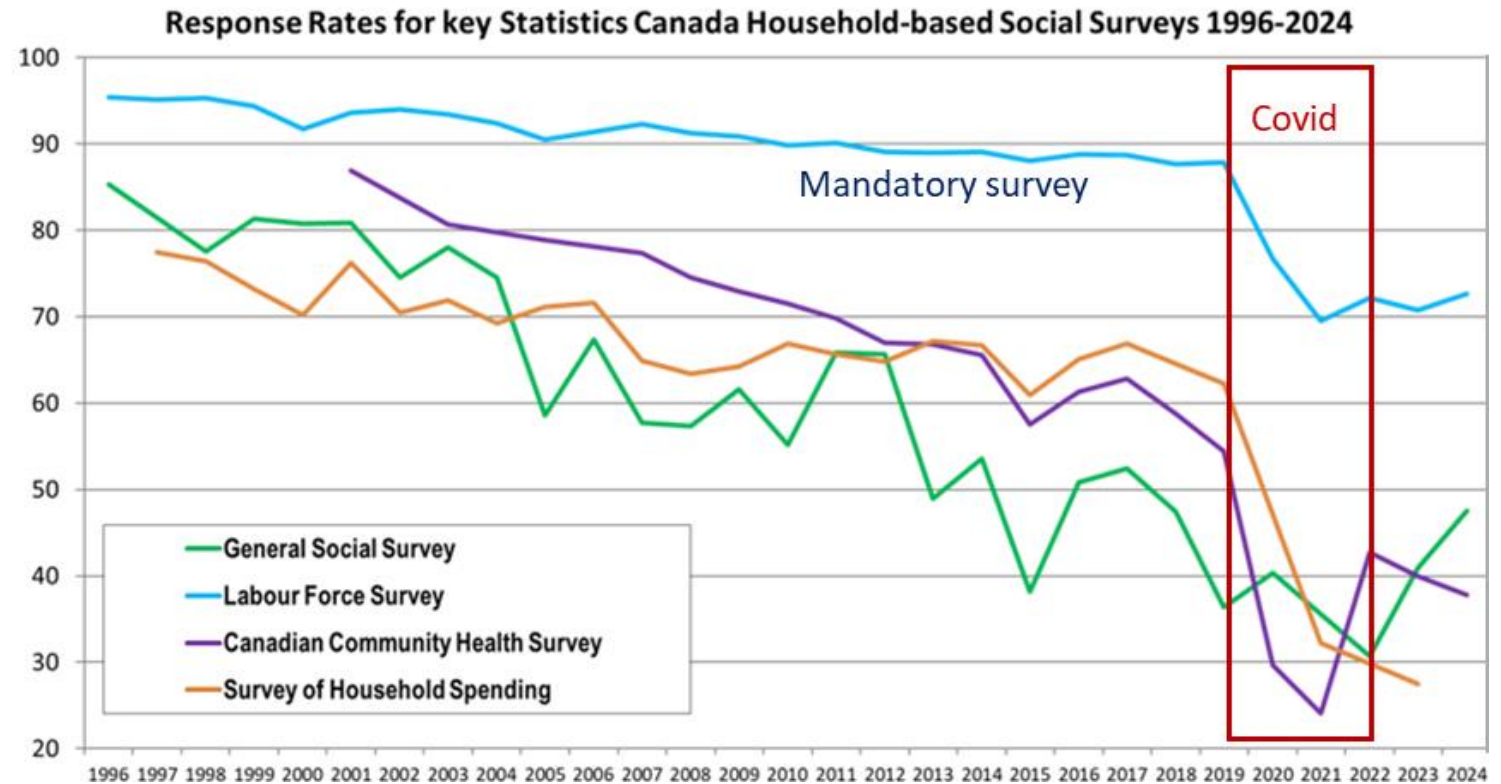
GATHER

Challenge #1

Declining survey response rates

Challenges:

- Budget constraints
- Contacting respondents
- Declining trust in institutions
- Response burden



Broad range of data gathering approaches

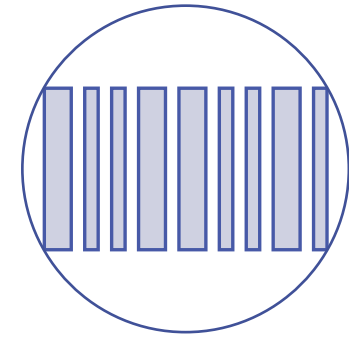


Survey approaches



Bespoke collection

- Large enterprises



Alternate data

- Taxation
- Scanner
- Satellite imagery



Sustainable collection through modern survey methods

Key initiatives to maintain quality and minimize bias

Cost efficiency

Person-level sampling supported by a person-level frame

Smaller sample sizes without reduced granularity

Sub-sampling for nonresponse follow-up

Sample divided into:

1. high-response, greater representation through greater nonresponse follow-up
2. low effort and costs sample allowing granularity

Combined to leverage the best of both worlds through use of models

Bias reduction

Responsive collection

Focusing collection efforts on units that increase representation

Enhanced calibration

Low/no-cost method leveraging external data to correct for nonresponse bias

Strategic use of alternative data through:

- sampling
- collection
- weighting

Labour Force Survey – response rate beyond 80%

Strategic Aim

- Understand and address nonresponse
- Improve response rate **from 75% to 80% +**

Approach

- Include behavioural science into collection approaches
- Monthly live tests

How

- Optimization of operations/adaptive collection
- Qualitative research on past LFS respondents
- Public opinion research
- Experimenting with communications and collections interventions in the live LFS

➤ Results and next steps

- Nearly **18 months** of experimentation – more than one experiment every month
- **Successful** initiatives transitioned into **production**
- **Operations**: better understanding and some modest improvements
- **Communications**: short messaging helps early EQ uptake
- **Next steps**: continue experiments while moving towards a **more coordinated approach** to support the development of **adaptive collection** strategies

Enterprise portfolio management

Canada's version of *Large Case Units*

Gathering data from the 0.1% driving 40% of Canada's economy

Concierge-like model

1 relationship

1 profile

1 coherent dataset

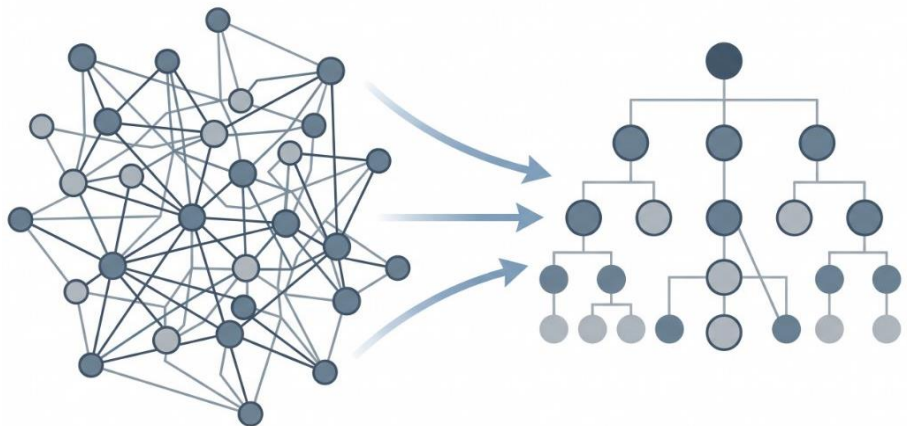
230 enterprise groups

- Accounting for **42%** of jobs & **nearly 50%** of exports

Turning large enterprises into long-term data partners to build a robust business register

Shifting to a Large Case Units approach

- Prioritize multinational enterprises
 - International supply chains, factory less manufacturing, outsourcing
- SNA integration to enhance abilities to measure multinational economic structures timely and consistently



Leveraging data from the taxation system

Benefits

- Robust and up-to-date frame for surveying
- Replaces financial information in surveys

Administrative data first approach

- Corporate income tax
- Personal income tax
- Value-added taxes
- Others

Direct compilation

National accounts and business surveys

- Household distribution accounts
- Annual industry output, intermediate consumption, and value-added
- Monthly revenues by industry



AG – Zero initiative

Collect once, use multiple times (*since 2019...*)



Administrative data

Survey program

25% of content replaced

2021 Census of Agriculture

15% of content replaced



Modeling

Replaced **2** major crop surveys

Reduced footprint of other surveys



New programs

Agriculture labour statistics

Temporary foreign workers

Transforming price and consumption measurement

Scanner data in official statistics

Source for key economic indicators

- Accuracy, timeliness, coverage, and granularity

Path to achievement

- Secure partnerships and data access
- Build infrastructure and methods
- Integrate and expand



Replaced **90%** of collected food prices



- More frequent, timely and granular basket weights
- Average price tables

SUMMARY



Gather

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GUARD



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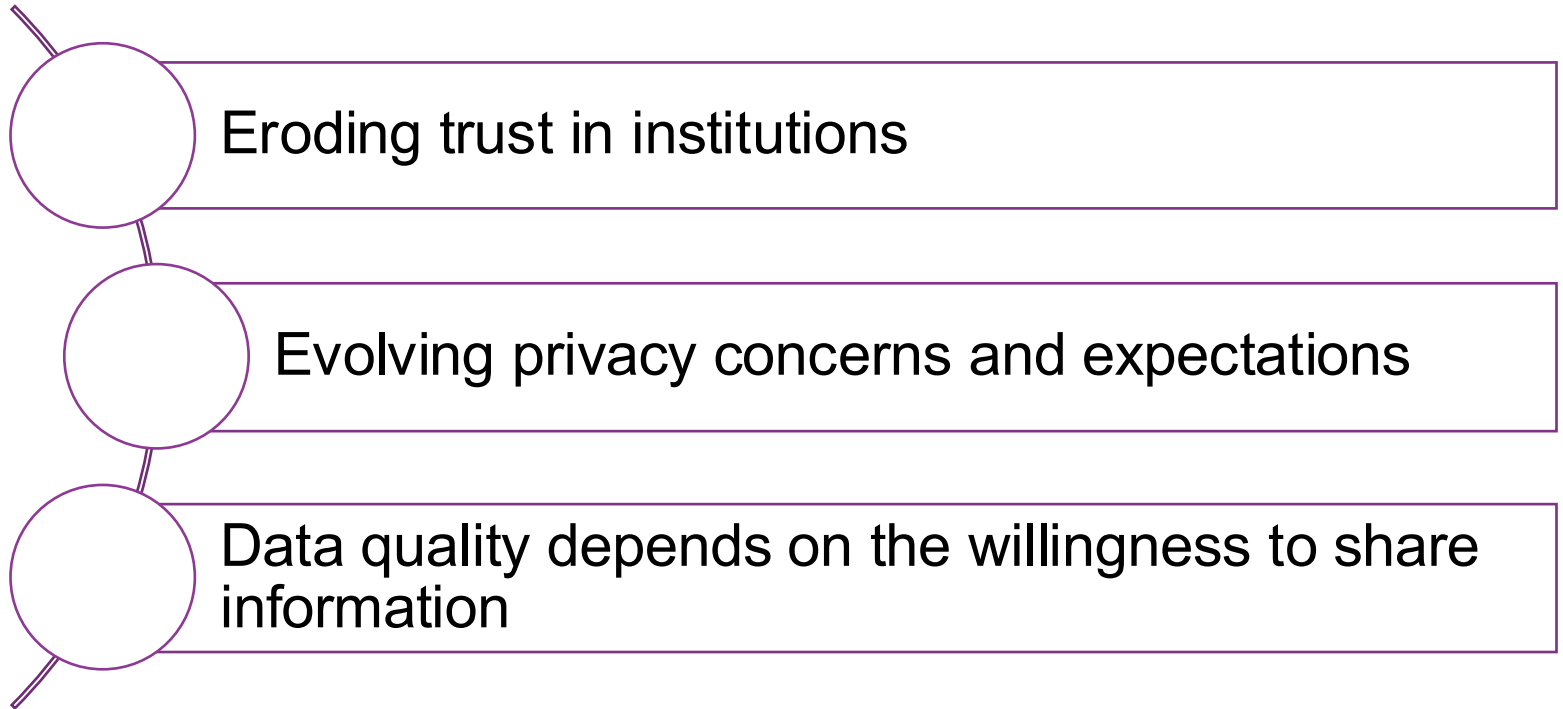
GUARD

Continue to build and maintain the trust of Canadians, businesses and institutions through robust:

- quality
- privacy protection
- communications
- measurement

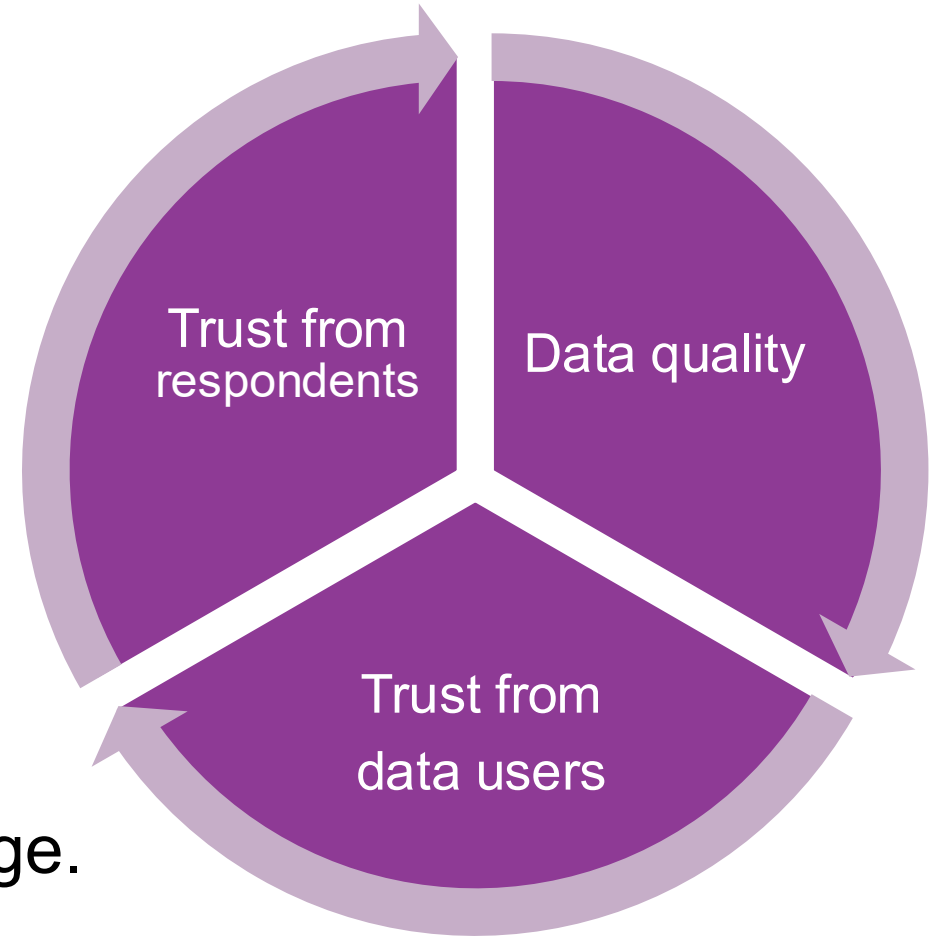
Challenge #2

Growing concerns over data privacy



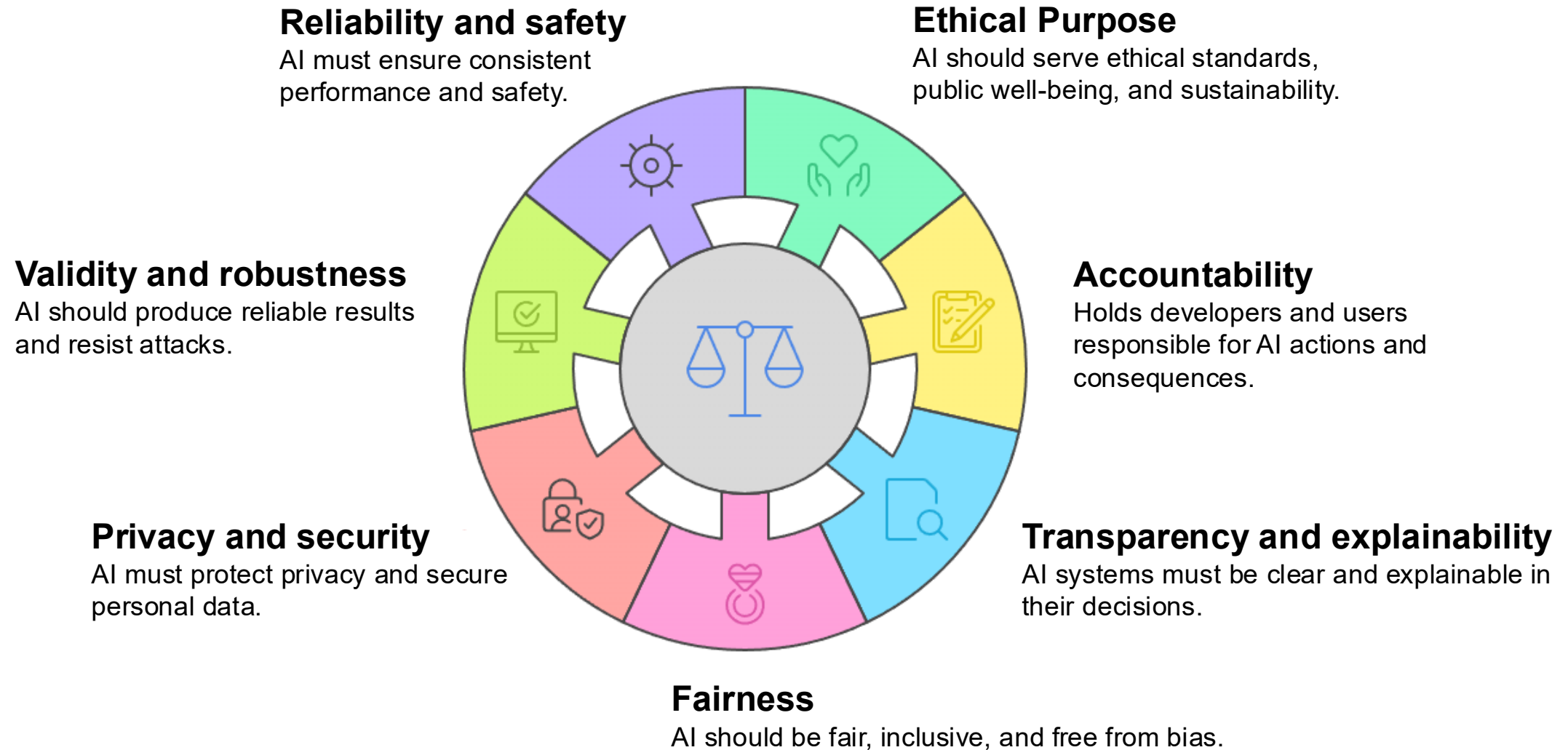
Trust is the currency of official statistics

- Responsible data handling, security, and respect for privacy.
- Proactive and embedded across institutional culture.
- Strong policy frameworks and governance structures.
- Technical and organizational controls.
- Designing for privacy is necessary, but governing for trust is the larger challenge.



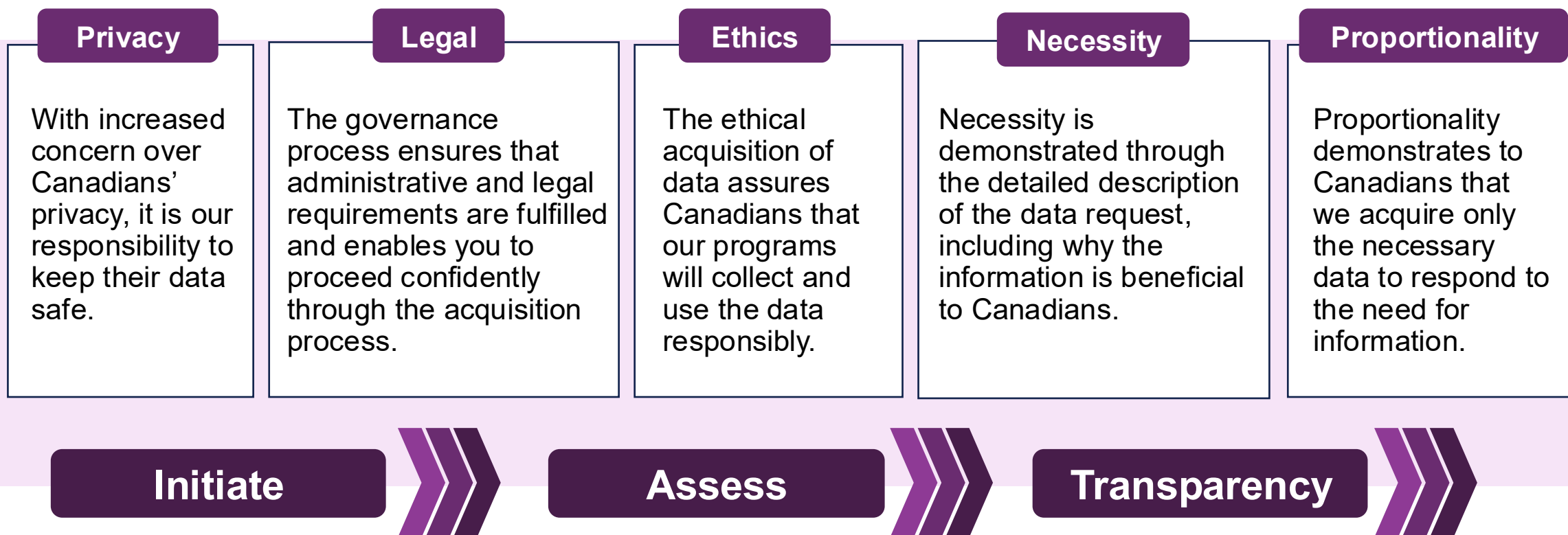
The ethics around collection and data use

Core guiding principles for responsible artificial intelligence and machine learning



Building trust through transparency and governance

Framework that ensures ethical approaches that protect privacy and build trust.



Making governance visible

Building trust through transparency and collaboration

Trust Centre

- Transparency
- Ongoing conversation
- Build trust together

Monthly visits nearly doubled
in the last 6 months

Strong user engagement

Statistics Canada's Trust Centre



For more than 100 years, your data has been telling an important story and driving the action that is helping to shape our country, and your privacy has always been our top concern. That's why we anonymize, encrypt, and de-identify all your data—we are committed to protecting your privacy and safeguarding the confidentiality of the data entrusted to us.

[Learn more on how we protect your data](#) and how it's helping shape Canada.

Let us know how we can do better, email us today: statcan.trust-confidence.statcan@statcan.gc.ca



SUMMARY



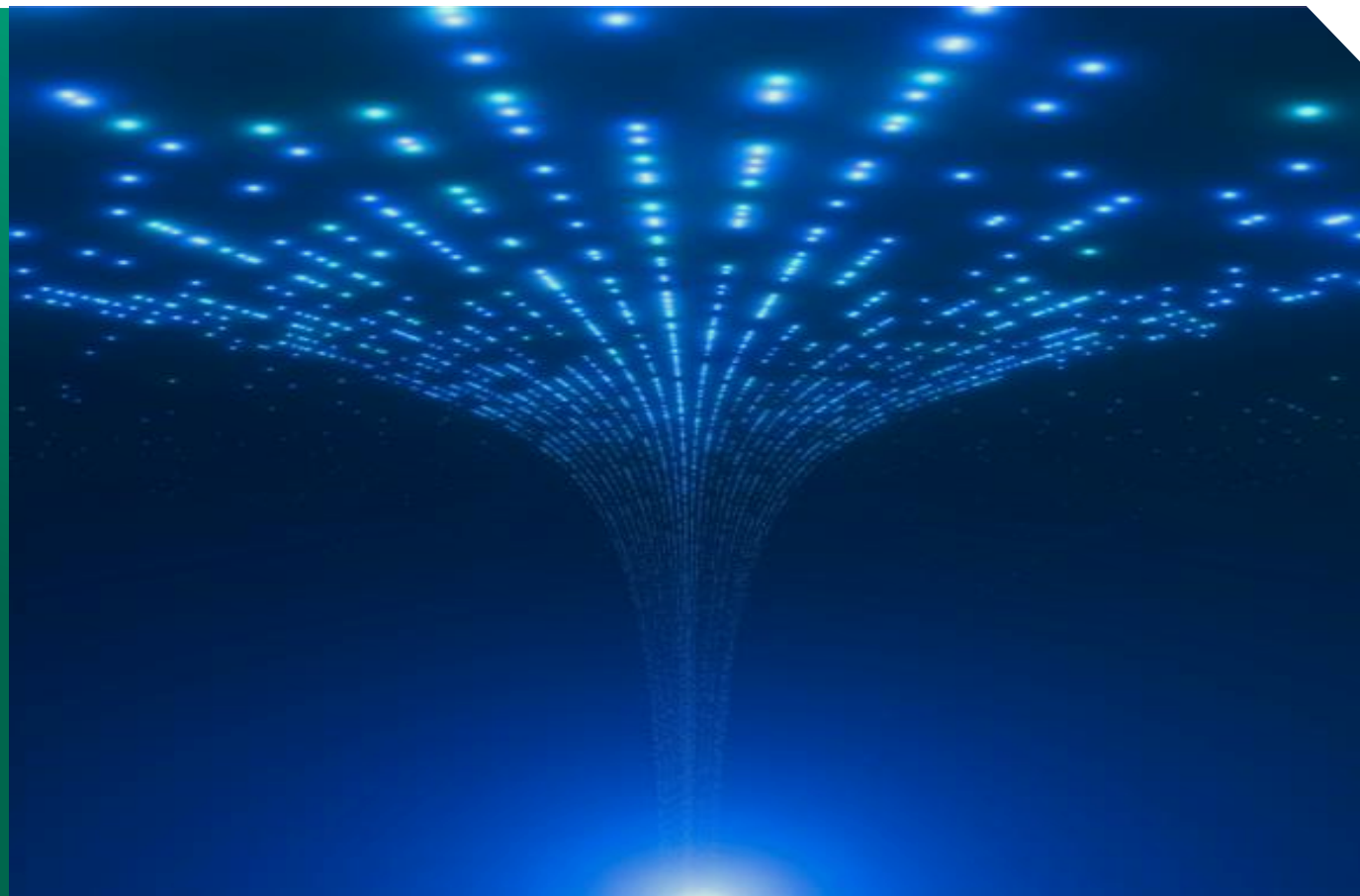
Gather

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GROW



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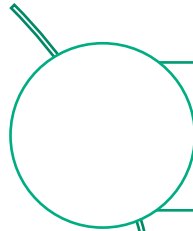
Give

GROW

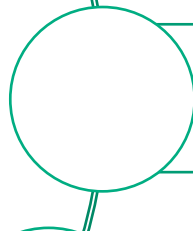
Produce high-quality, insightful and accessible data to support good decision making and help Canadians better understand their country.

Challenge #3

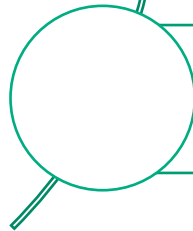
Staying relevant and meeting the needs of users



Staying relevant in an increasingly complex data ecosystem with emerging actors



Growing demands for more comprehensive, granular, and timely information



Anticipating emerging needs to be present when and where it matters most

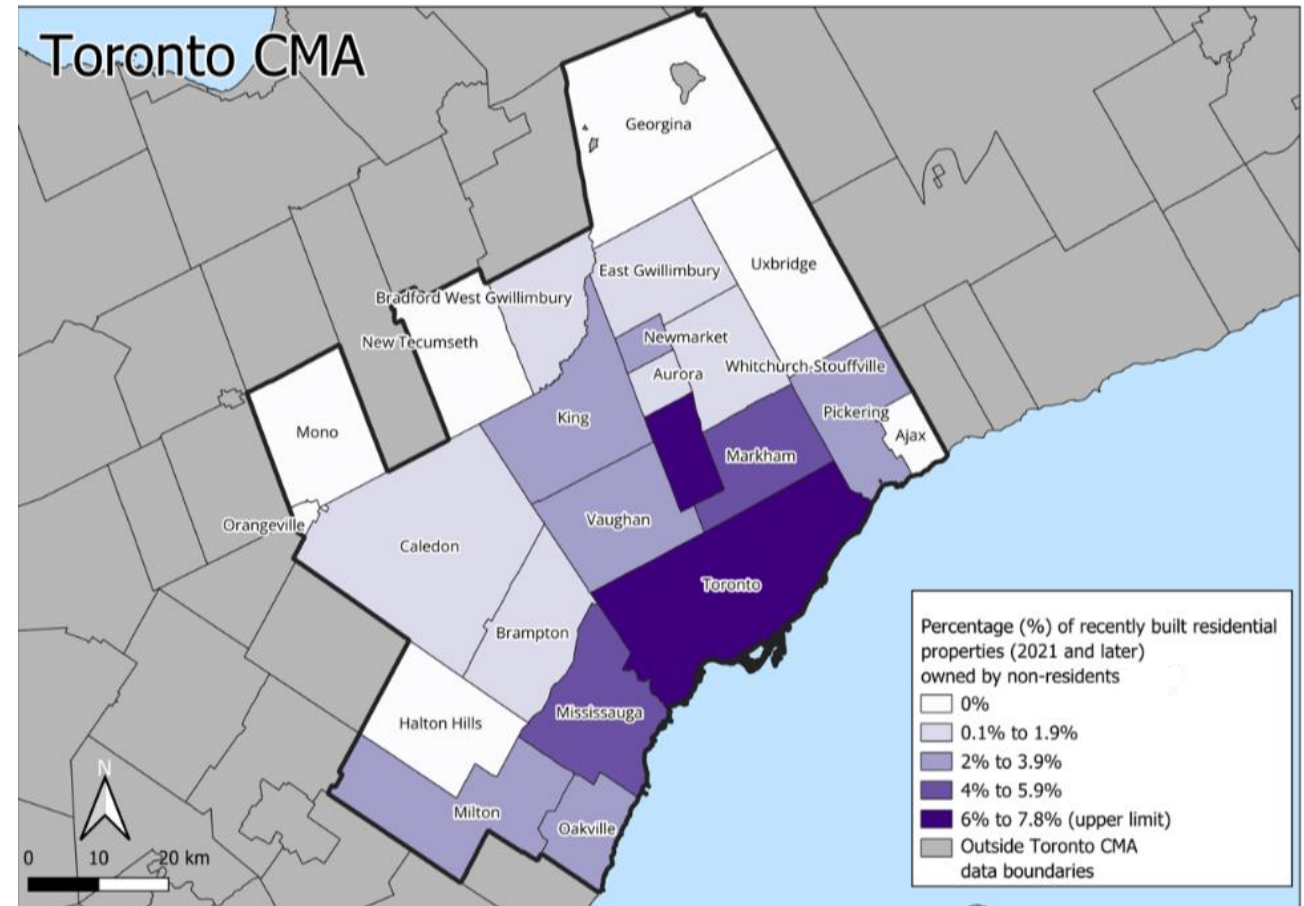


Timely Housing Insights

Canadian Housing Statistics Program

- Administrative census of residential properties and their owner characteristics.
- Data integration of municipal assessment rolls, land registry, tax, immigration and census data.
- Enables measurement of rare events and housing demand drivers:
 - Non-resident ownership
 - Investors in real estate
 - First-time homebuyer profiles
 - Homeownership by immigrants and non-permanent residents

Percentage of recently built residential properties (2021 and later) owned by non-residents

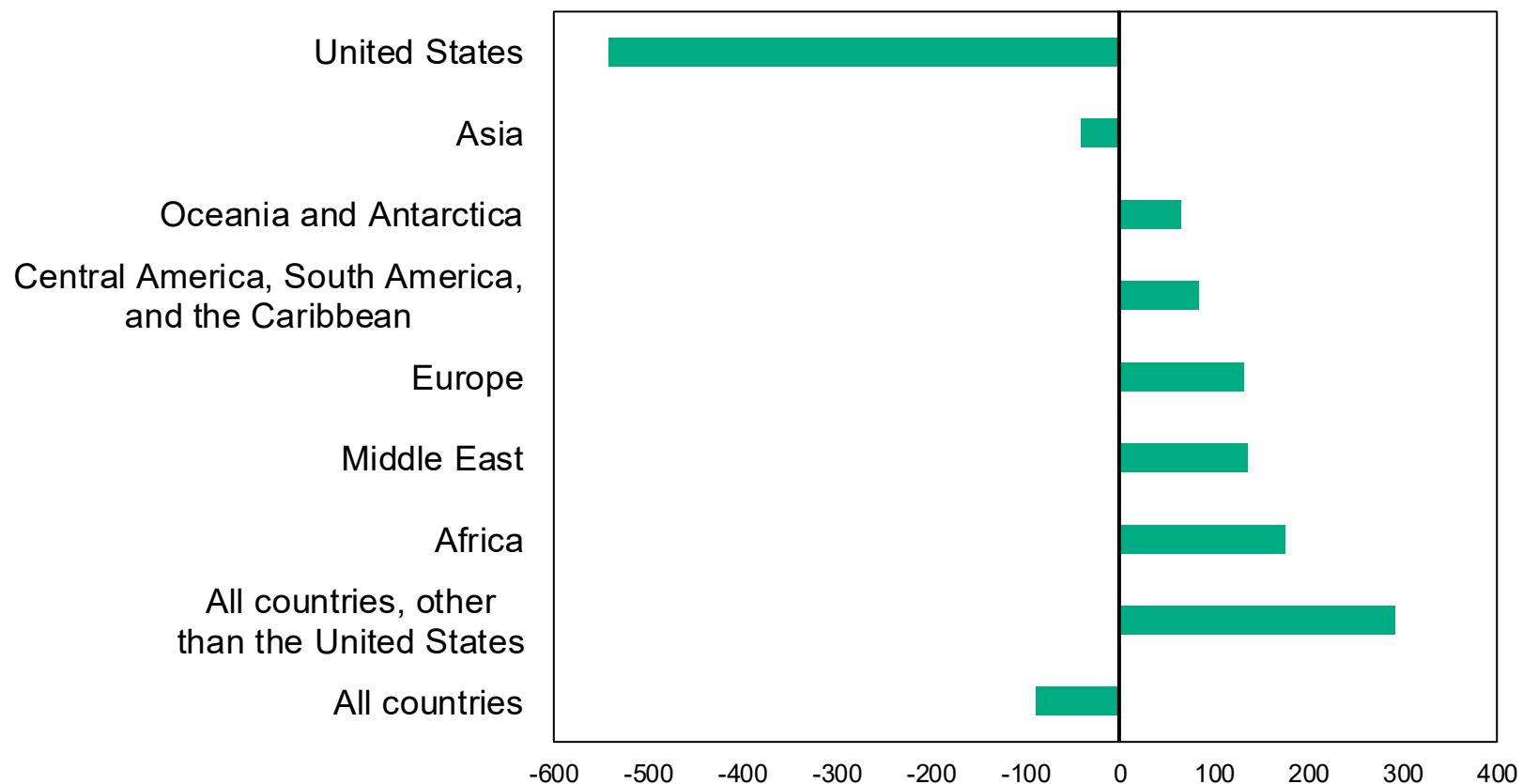


Source: Statistics Canada Table 46-10-0094-01

Trade in goods by importer and exporter characteristics

- Insights on the characteristics of Canadian firms involved in international trade
- Evolution of the traders' population over time

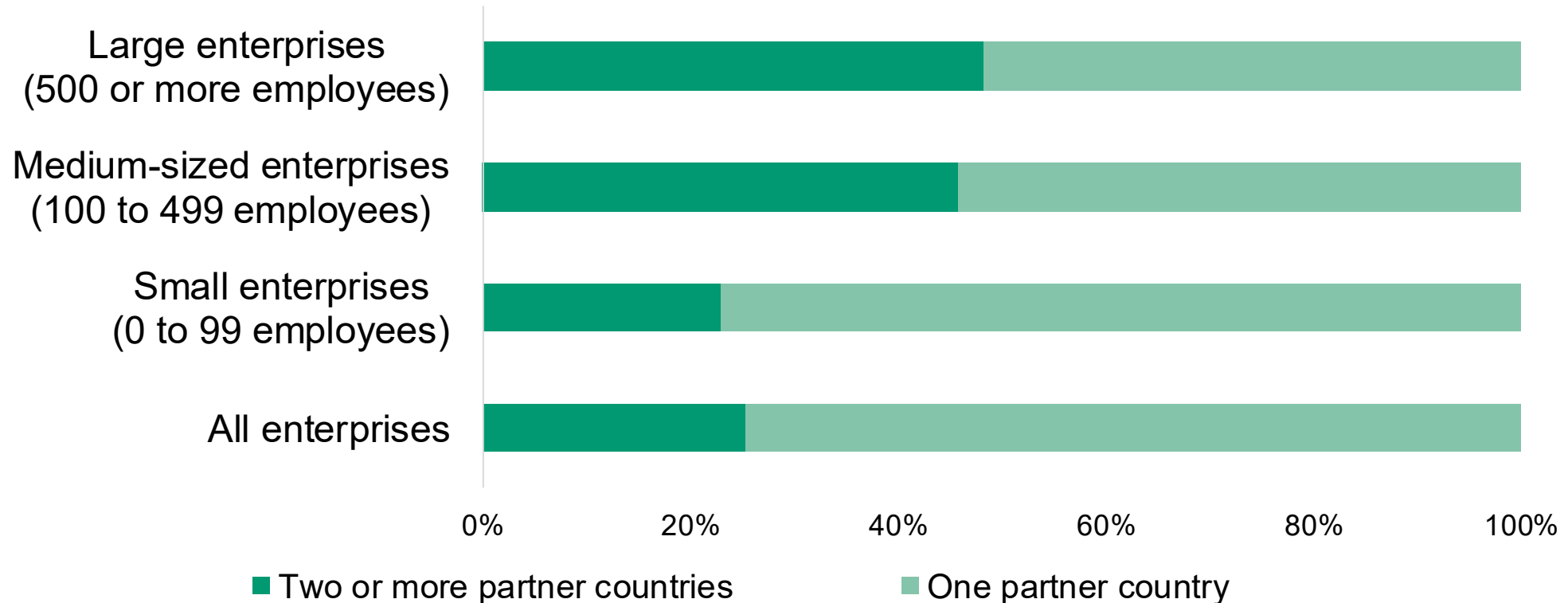
Year-over-year change in the number of Canadian exporting enterprises, by selected destination, 2024 to 2025



Source: Statistics Canada Tables 12-10-0095-01 and 12-10-0096-01

Profile of Canadian firms involved in international trade

Share of Canadian exporting enterprises, by employment size and number of partner countries, 2025



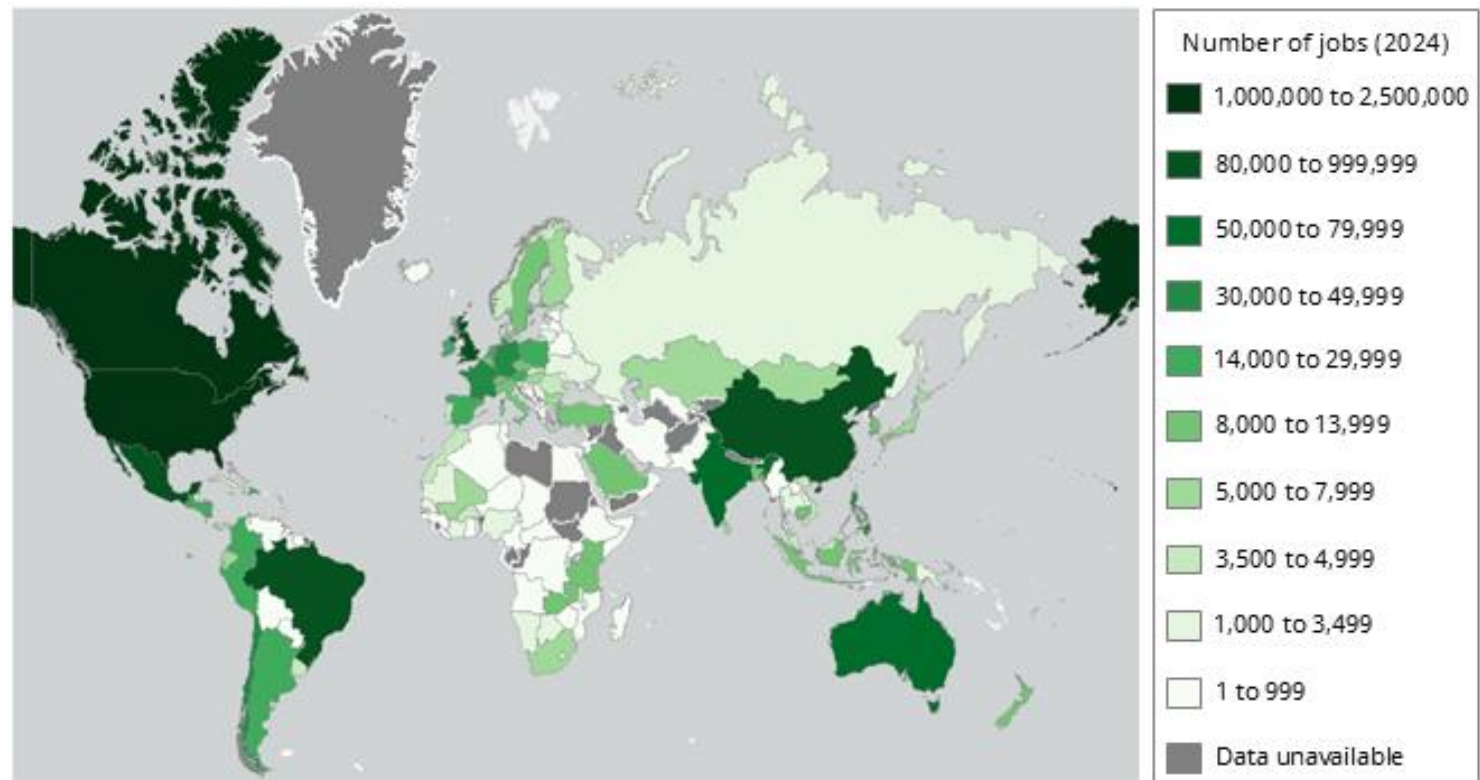
Source: Statistics Canada Table 12-10-0091-01

Activities of multinational enterprises in Canada and abroad

Characteristics, performance, and impact of multinational enterprises

Measures the extent of the globalization phenomenon within and outside of Canada

Number of jobs at Canadian multinational enterprises in Canada and abroad, by country, 2024



Note(s): Some Canadian enterprises with activities abroad are ultimately foreign controlled.

Source(s): Tables 36-10-0356-01 and 36-10-0470-01.

Measuring Canada, 1 kilometre at a time

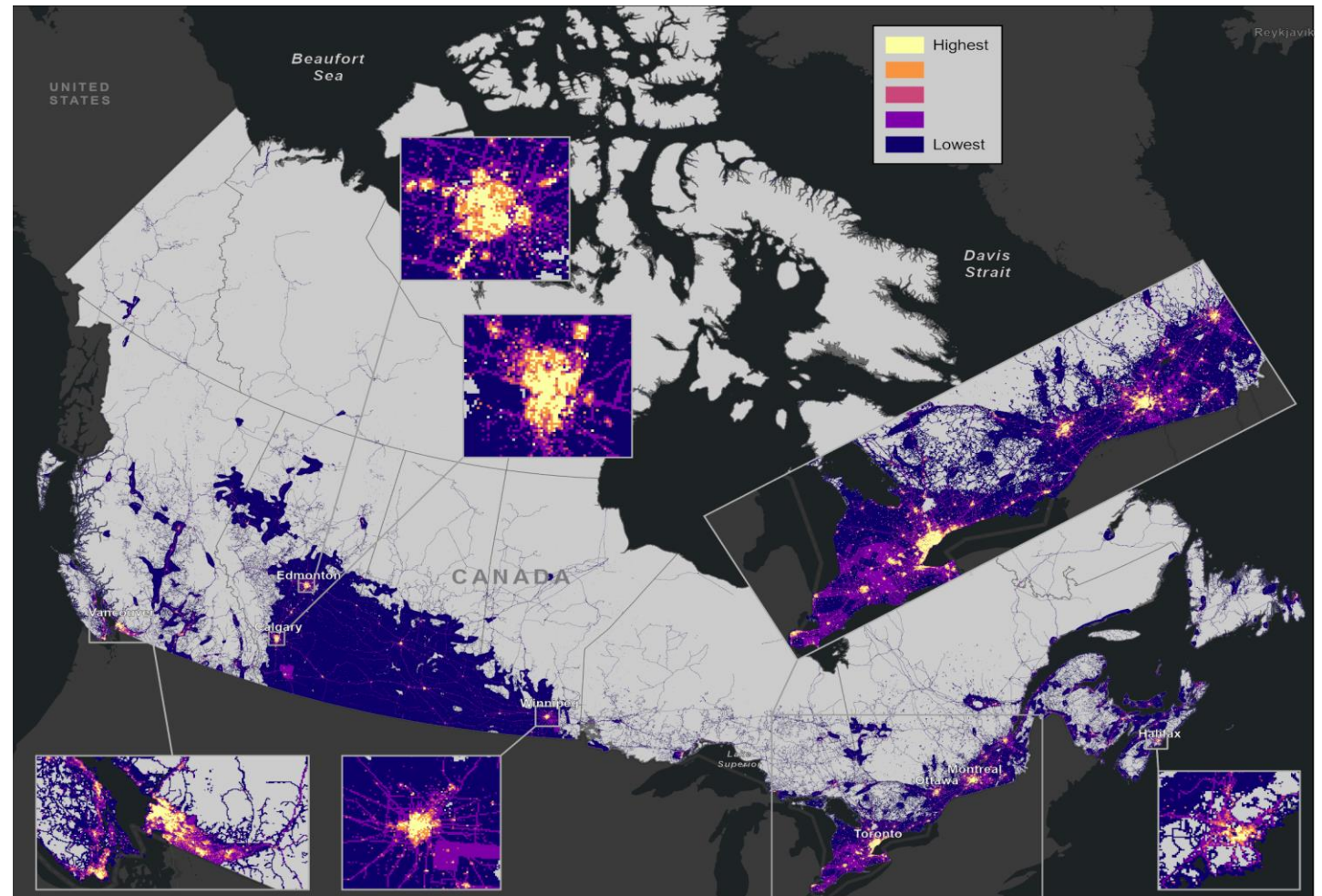
Local data for insights on:

- Urban vs. rural economies
- Impacts of floods and wildfires

1 km grid squares form the basis to aggregate into larger areas of interest such as neighbourhoods

Independent grids permit data integration with varying data sources

Gross domestic product, by 1 kilometre grid squares, Canada



Measuring the evolving technological landscape and AI

Foresight

- Emerging technologies
- Developer standards
- Understand impacts

Adoption

- Use and users

Impact

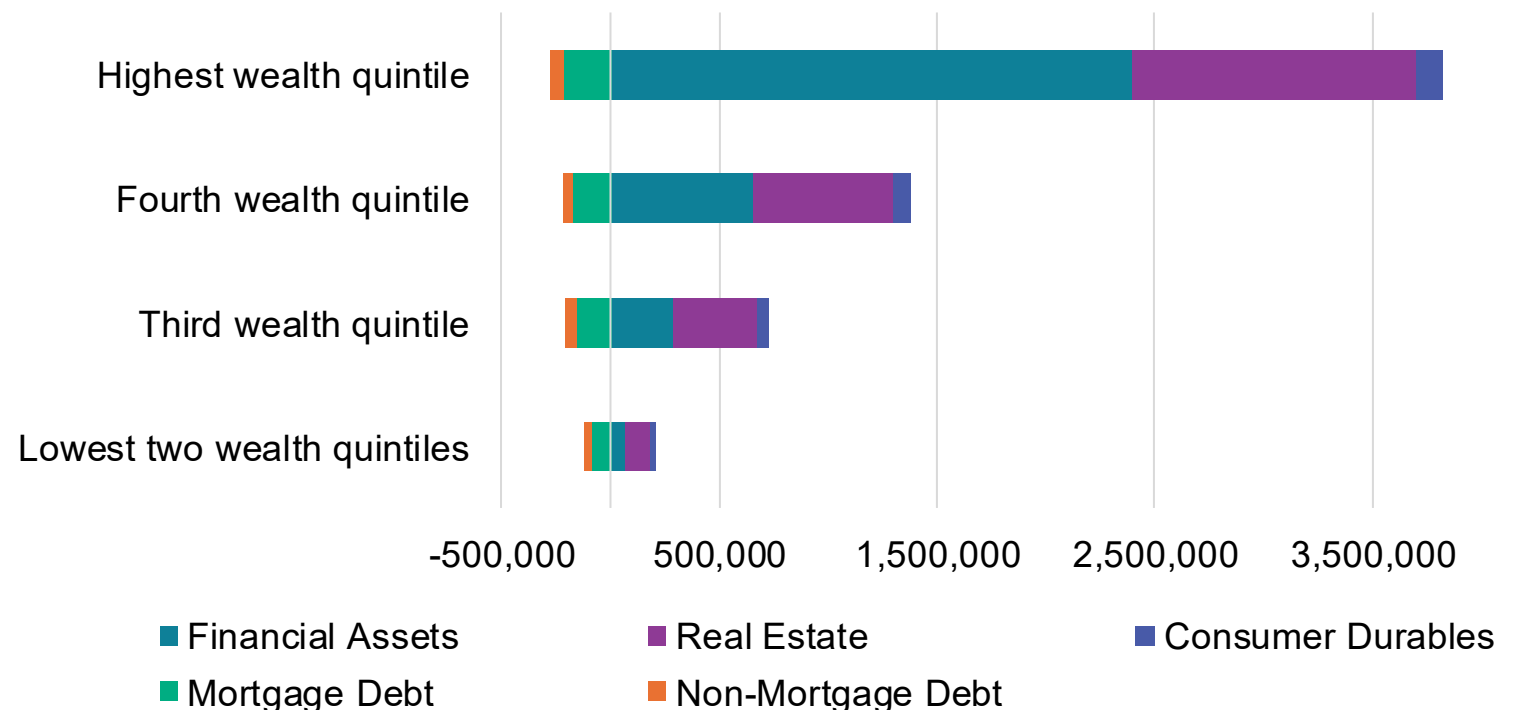
- Business dynamics and performance
- Labour markets
- Social inclusion
- Collateral and spin-off effects

Distribution of household economic account

Intersectional data for evidence-based policy

- Highlighting disparities through granular data
- Top 20% of the wealth distribution accounted for the nearly 66% of all wealth in Canada
- Bottom 40% more dependent on real estate while top 20% more dependent on financial assets

Distribution of net worth by wealth component, Q4 2025, average dollars per household, Canada



Source: Statistics Canada, Distributions of Household Economic Accounts for Wealth, Table 36-10-0660-01

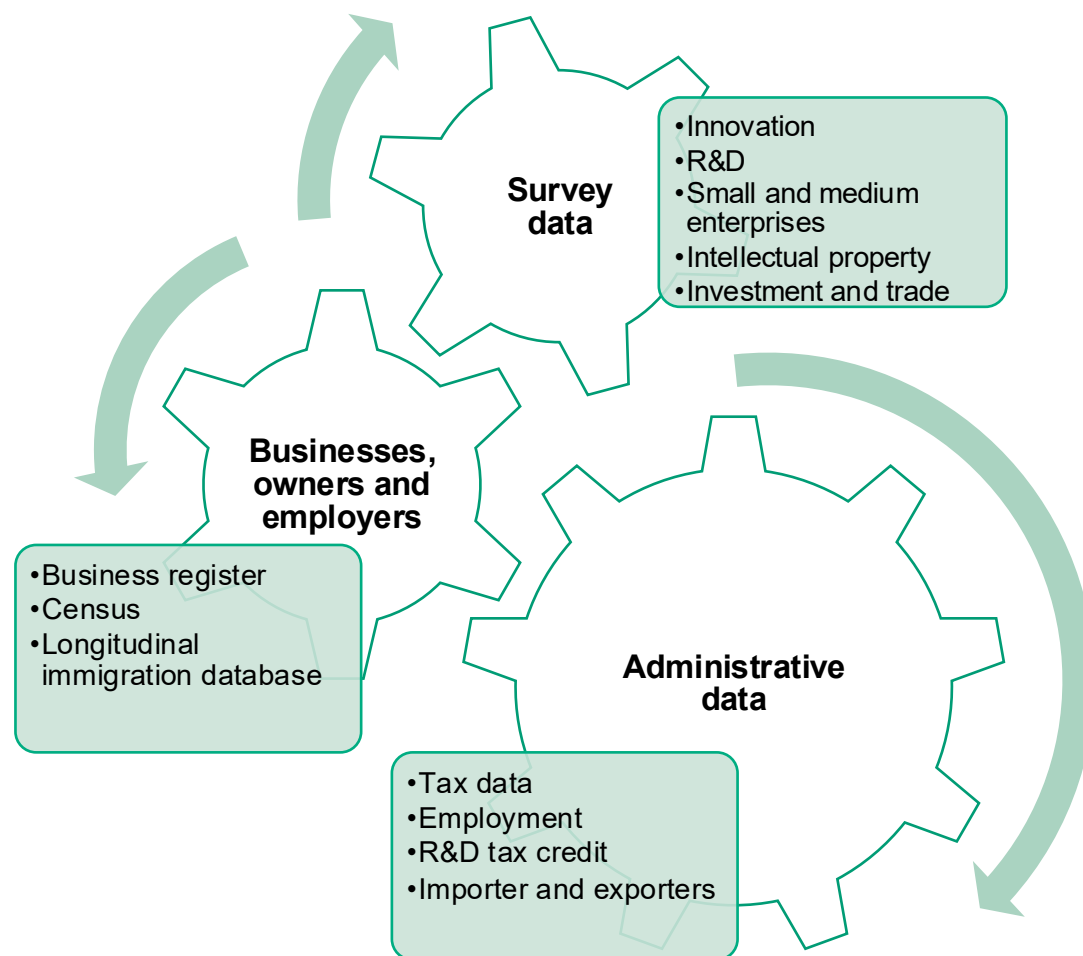
Better data for smarter growth

Business innovation and growth support (BIGS)

- Socio-economic insights that strengthen industrial and strategic policy decision-making.
 - Impact of innovation programming.
 - No additional response burden.
- A result of increasing demands for transparency and outcome-based reporting.
- Business, social, and demographic data and centralized information on innovation support measures.

Business linkable file environment

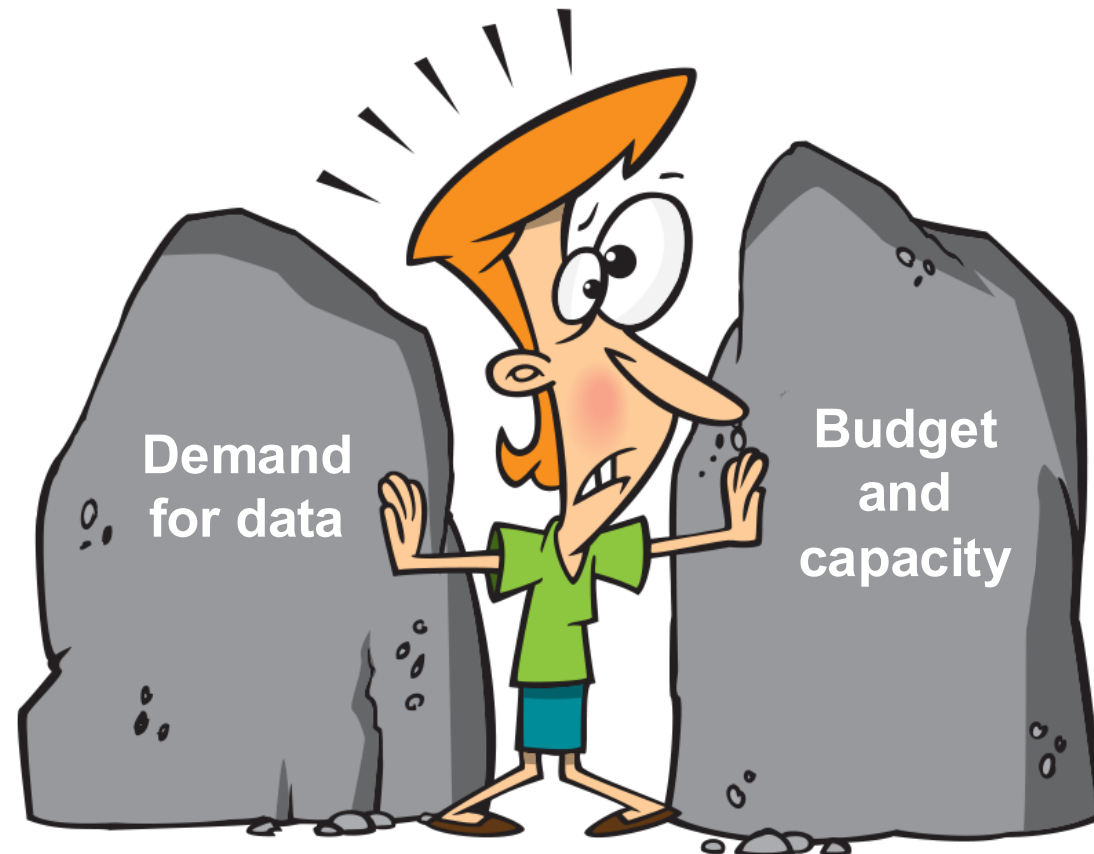
An environment for business microdata linkages



GROW

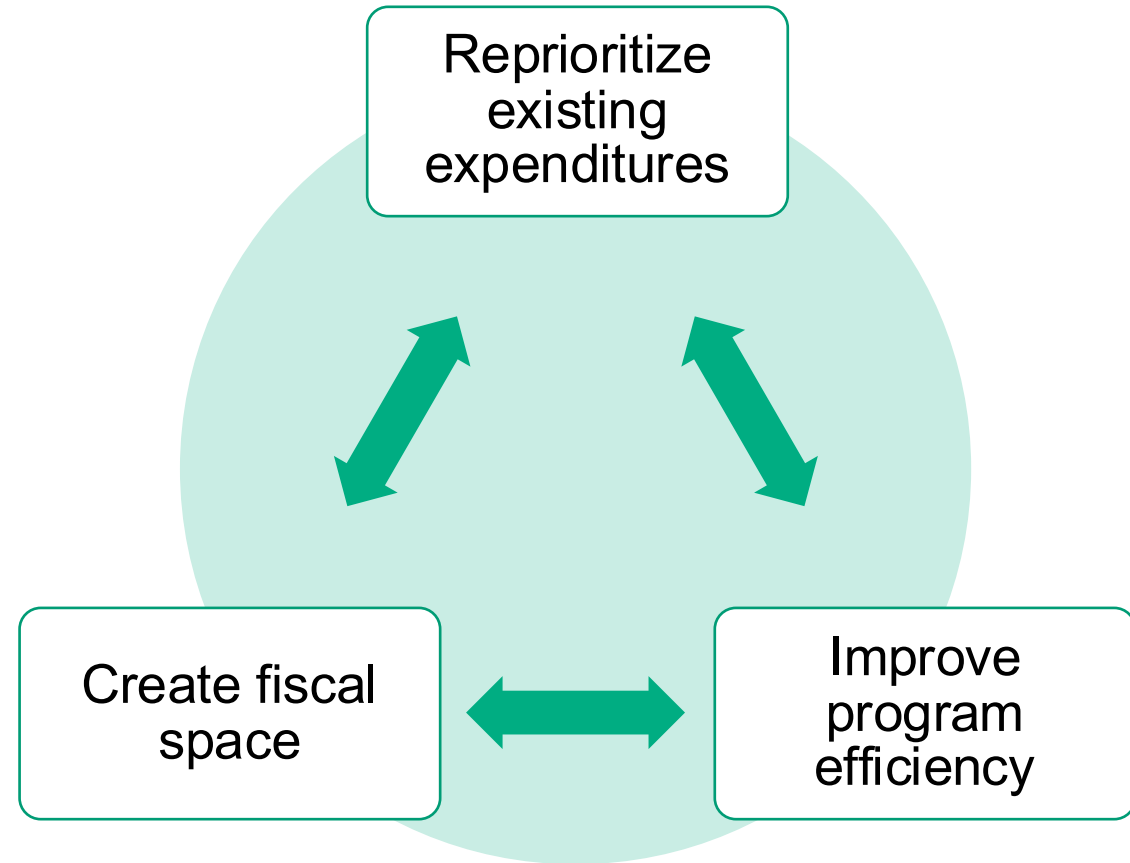
- Demands continually increase
- Budget and capacity are finite
- Growth has limits
- Priorities and trade-offs

Challenge #4 Growing sustainably



Prioritization framework

- Inform resources and funding allocation
- Identify high-growth and high-cost areas
- Support decisions on funds allocation



SUMMARY



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GIVE



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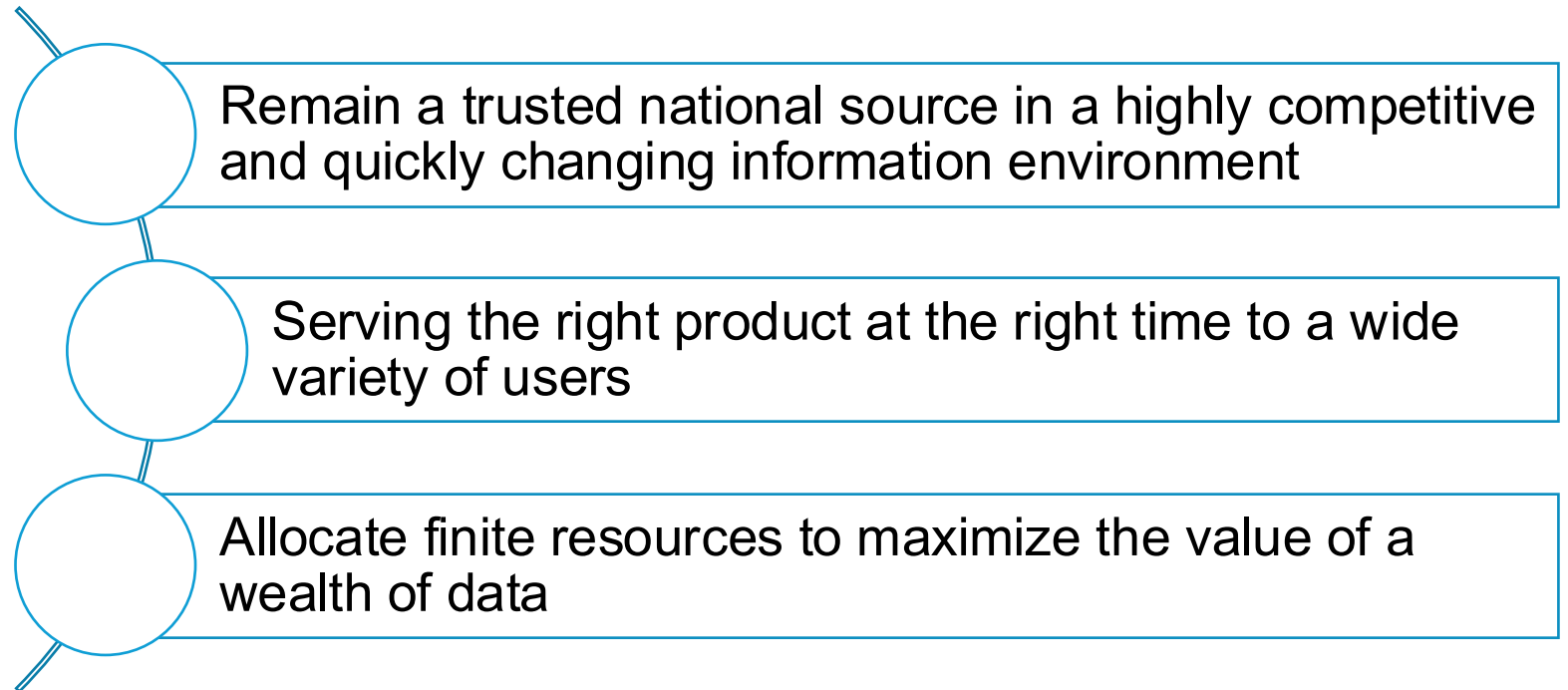
GIVE

Communication strategies must evolve to continue to serve users where they are.

User personas are evolving as information is increasingly accessed through AI.

Challenge #5

Communicating effectively to a range of users

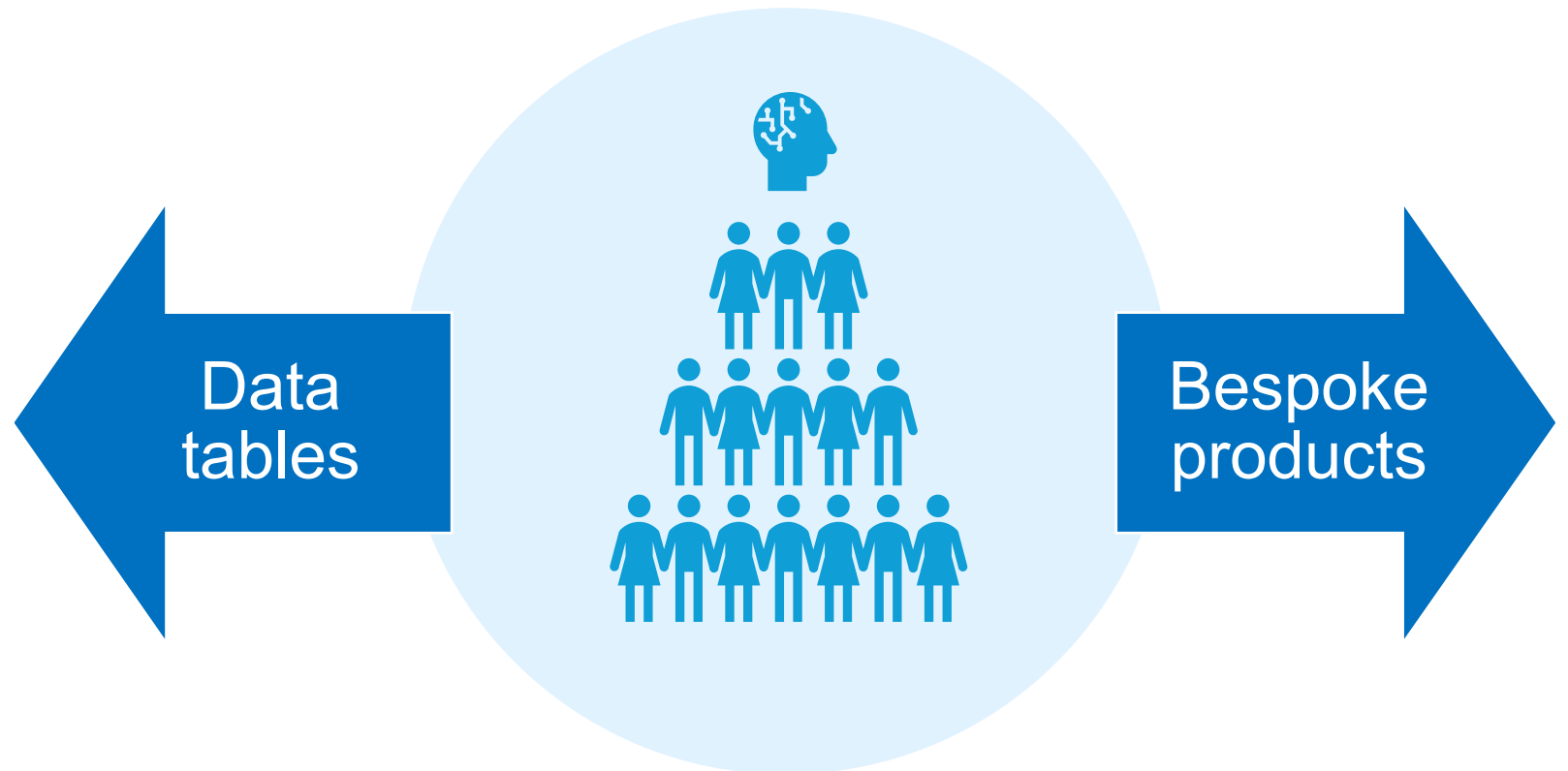


Engagement and communication

From simple to bespoke products

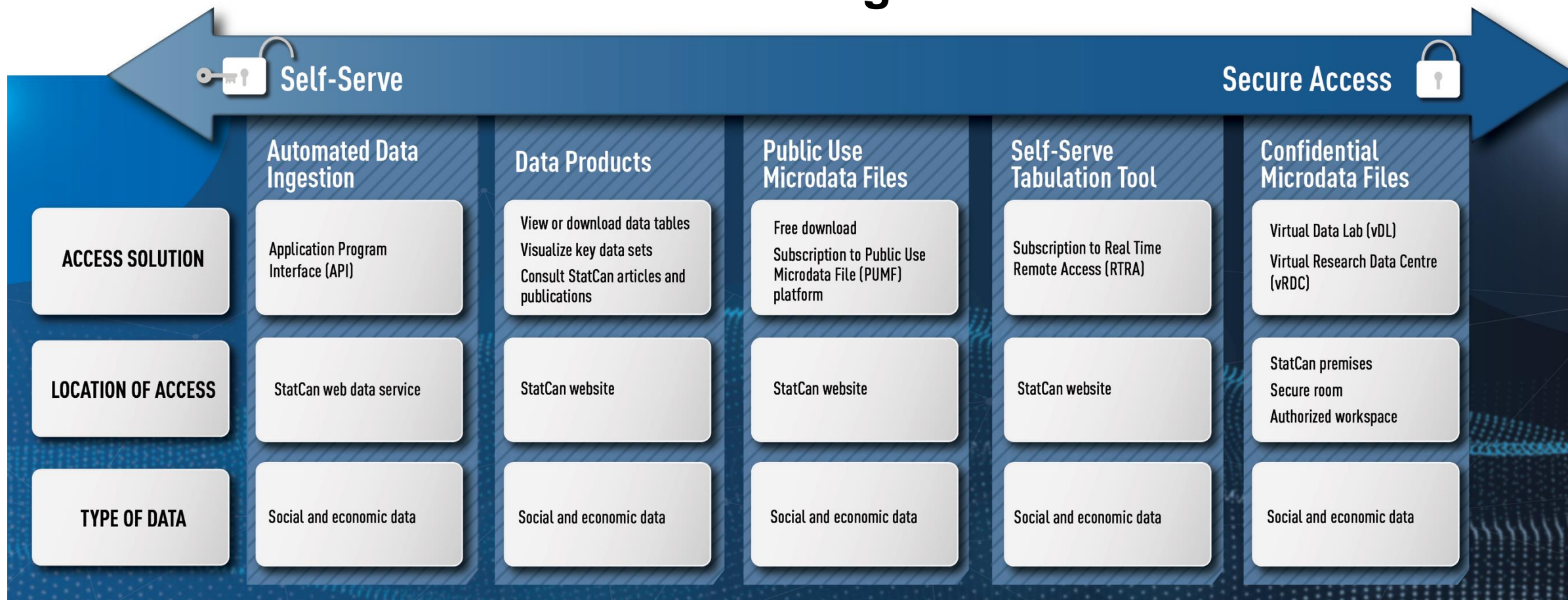
Must communicate to all users to meet rising expectations

- Access to data drives impact
- Shift to enablement to maximize value



Enabling greater access

From self-serve to guided access



Data-driven social media strategies

Generating higher user engagement and visibility

Customized content

- User demographics
- Engagement patterns
- Performance metrics and trends

Alignment

- Days of note
- News cycle
- Pop culture or events

500 posts per month



EVENT: Highly anticipated Taylor Swift concerts in Canada

1) Pre-event overview of possible economic impact



210K views



12K post interactions

2) Post event impact shared



50K views

Creative communications at work

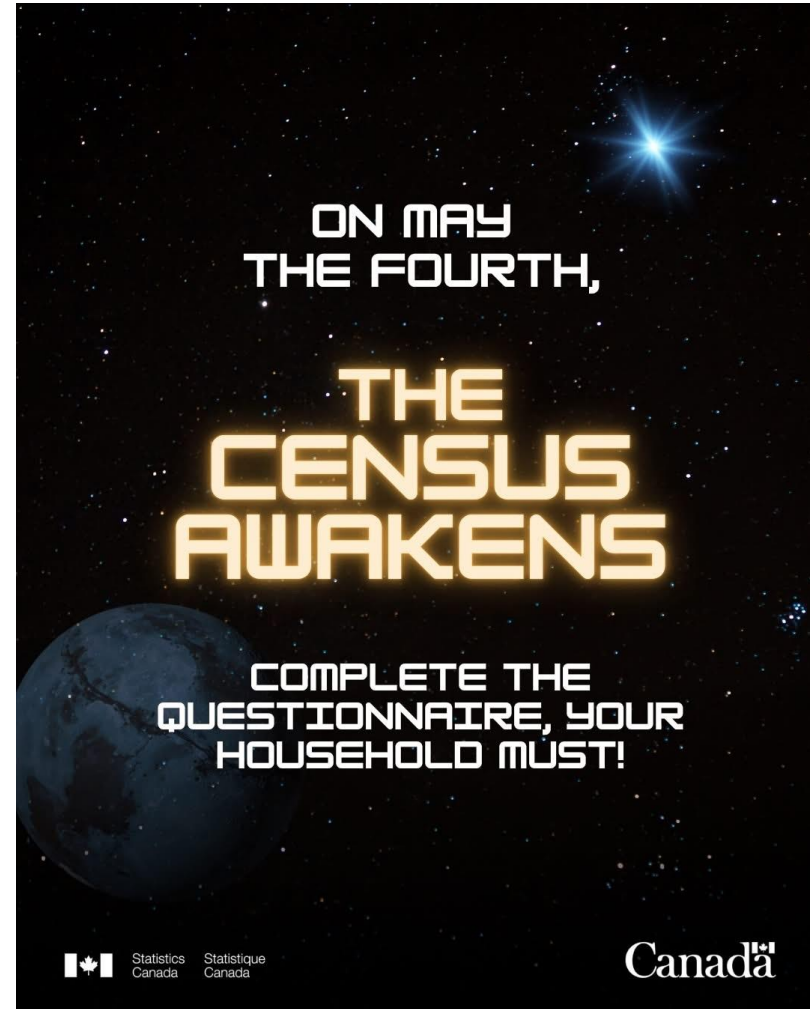
2026 Census of population



EVENT: Launch of the 2026 Census

Alignment

- Day of note and pop culture
- May the fourth / Star Wars Day



If you build it, *will* they come?



Traffic paradox: monthly bot traffic **up ~55%** (Jun 2024-Jan 2026),
while human traffic **down ~30%**

Strategic pivot: AI readiness of data platforms
the biggest dissemination shift since digitization of publications

Strong foundations are needed: SDMX and .STAT

SUMMARY



Gather

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Delivering now and into the future



StatCan 2030 Vision

Deliver smarter, more connected, and trusted insights for Canadians when it matters the most

WHAT WILL BE DIFFERENT



Faster, more efficient statistical production

Streamlined, automated, and standardized processes that deliver high-quality outputs faster and at lower costs



Data that is easier to access, use, and reuse

Accessible, AI-ready data and machine-readable information that make data easier to discover, integrate and reuse



A skilled, adaptable workforce using modern tools

A future-ready workforce working in self-serve environments, empowered to innovate and collaborate using modern tools

HOW WE ARE DELIVERING THIS

Strategy

- Build a future-ready statistical workforce
- Safeguard quality and modernize statistical programs
- Simplify and transform how statistics are produced

Enablers

- Automation
- Artificial Intelligence
- Cloud Infrastructure
- Modern Methods
- Strong Governance
- Principles

Delivery

Working together across the organization and with partners to turn our strategy into results

WHAT CANADIANS WILL EXPERIENCE



Less response burden

Fewer and shorter surveys that are easier to respond to



Easier access to data

Data that is easier to find, understand and use



More timely information

Information available sooner



More connected insights

A fuller picture of Canada through integrated and connected data



Greater trust in data and privacy

Confidence that data is high-quality, protected and used responsibly

Official Statistics

Proposed pillars

- Trustworthiness
- Authority
- Public good

Why

Canadian Statistics Advisory Council recommendation (2025)

- Develop a framework to define and accredit official statistics

To improve trust, counter mis/disinformation, and support decision-making

What

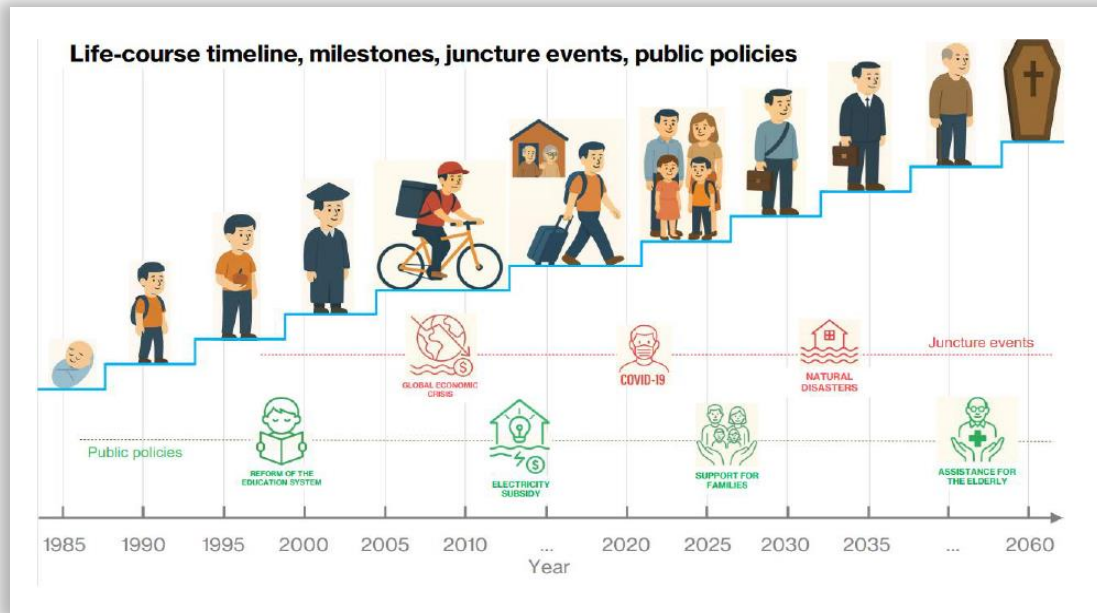
White paper to support the implementation of a definition

- Informed by international and Canadian practices
- Overview of the context, findings from consultations, proposed definition pillars, and next steps

Next steps

- Engage advisory groups; adopt at Statistics Canada; socialize across the National Statistical System

International momentum towards population spines that integrate service impacts and social outcomes



System of Population and Social Statistics

A formal, systematic and comprehensive statistical description of population and society, designed to guide the measurement of population and social phenomena.

The SPSS, once fully developed, will provide:

Comprehensive system-wide view

scope, boundaries, components and how they relate as a system.

← **Ontological layer**

Overarching conceptual framework

plain-language narrative and scientific foundations explaining what is measured and why.

← **Conceptual layer**

Common measurement language

concepts, definitions, classifications, standards and technical guidance for compilation and dissemination.

← **Measurement layer**

Integrated data infrastructure

pathways to link data from censuses, surveys, administrative records and emerging sources.

← **Data layer**

Thank you



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Eh Sayers podcast

StatsCAN Plus

The Daily

My StatCan

Website

Surveys and statistical programs

Data service centres



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