Statistics Canada’s Role in a Whole of Government Approach to Data Stewardship

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Delivering insight through data for a better Canada
Overview

1. Statistics Canada’s Mandate
2. Our approach to data stewardship
3. StatCan’s Office of the Chief Data Officer
4. Renewal of the Data Strategy Roadmap for the Federal Public Service
OUR MISSION
Serving Canada with high-quality statistical information that matters

OUR VISION
Delivering insight through data for a better Canada

OUR PILLARS
- User-centric service delivery
- Leading-edge methods and data integration
- Statistical capacity building and leadership
- Sharing and collaboration
- Modern workforce and flexible workplace

Ensuring no one is left behind

OUR VALUES
- TRUSTWORTHY
- PURPOSEFUL
- CARING AND INCLUSIVE
- CURIOUS AND ALWAYS LEARNING
Statistics Canada's Approach to Data Stewardship

**Data Quality**
- Prioritize high quality, certified data that maintains trust & transparency
- Reduce the time spent cleaning, verifying & validating data
- Strict adherence to the scientific approach.

**Data Standards**
- Ensure interoperability, comparability and facilitate data linkage
- Remove the burden of developing and adapting to standards
- Adhere to changing industry standards.

**Data Management**
- Protect data security, making sure data is used & shared in a fair, safe & equitable way
- Provide transparency of data use & centralized governance of assets based on data ethics, regulations, legislation & policies.

**Data Sharing & Access**
- Align to the FAIR principles
- Reduce time spent in data discovery, eliminate common barriers to data sharing & reuse, streamline dissemination
- Steward data safely under the Statistics Act.

**Data Strategies**
- Implement data strategies to solve problems and provide data-driven answers to policy questions
- Enable the use of data as a strategic asset

**Data Science**
- Meet evolving, data needs in an increasingly digital society
- Implement a new scale of knowledge work automation
- Review machine learning and artificial intelligence processes.

**Data Analytics**
- Leverage world-leading expertise
- Increase the value of insights/outputs by combining data sources innovatively to produce higher value data assets
- Better understanding of how to use these data assets.

**Data Governance**
- Define clear authorities and responsibilities around ethical data management
- Prioritize the health of national statistical system
- Facilitate access to national and international networks, including models, tools, and expertise.

**Data Protection**
- Ensure the protection of privacy and confidentiality
- Maintain trust and social acceptance to operate
- Ensure data is protected and shared in a fair, safe and equitable way.

**Data Literacy**
- Increase skills and competencies needed to understand and use data
- Increase/optimize the use of data for decision and policy-making
In order to effectively steward data throughout this lifecycle, Statistics Canada developed the “Four Gs” model of data life-cycle management – gather, guard, grow, and give (Rancourt, 2019).

This system demonstrates a necessary commitment to sound stewardship throughout the data lifecycle, and aligns well with Statistics Canada’s conception of the 4 sub-capabilities of data stewardship, including data discovery, digitalization, interoperability, and management (Statistics Canada, 2020).
Strategic Direction: Office of the Chief Data Officer (OCDO)

**Mandate:** Established in 2020 to position Statistics Canada as trusted data steward and centre of expertise to increase data’s contribution to evidence-based policy, informed decision-making and improved service delivery. The OCDO is responsible for providing strategic direction and enabling the optimal use of data assets.

**Statistics Canada's OCDO objectives include:**

1. Supporting an enterprise-wide approach to data management within Statistics Canada and the Government;

2. Foster collaborative partnerships with other federal organizations in the context of joint initiatives and strategies;

3. Disseminate best practices in the field of data management that can benefit Statistics Canada by promoting synergies across the National Statistical System;

4. Establish and update Departmental policies and data management strategies.
Horizontality by Design:

**External Initiatives**

- **GC Data Community:** Contribute to content and community-building efforts to support better data, insights and services to citizens.

- **Senior Committee on Data & Information:** Providing interdepartmental expertise and recommendations on data and information governance.

- **Data Strategy Roadmap for the Public Service:** Providing expertise and data stewardship leadership to GC's enterprise data strategy.

- **Interdepartmental data strategies:** Partnering with govt departments to showcase how grassroots partnerships and collaboration can improve data governance and stewardship.

**Internal Initiatives**

- **StatCan Data and Information Strategy:** Leading a whole-of-agency approach to strategic use of data and information.

- **Tangible data stewardship support:** High profile initiatives related to data literacy, data science, data stewardship engagement to further drive horizontality.

- **Deepening strategic partnerships:** Continue to further drive horizontality by establishing collaborative partnerships with key enablers.

- **Data and Information Strategy Playbook:** Providing program areas with a framework to develop strategies to better manage and use data and information.
In 2018, StatCan partnered with central agencies to develop the Data Strategy Roadmap for the Federal Public Service.

Developed “to set a foundation so that the Government of Canada creates more value for Canadians from the data we hold”, supporting the drive to use data to transform how government interacts with citizens, businesses, organizations and other governments.

[Link to the Data Strategy Roadmap for the Federal Public Service]
Progress on data strategy objectives since 2018

2018
- Data Strategy Roadmap for the Federal Public Service published
- Departments name “data leads” or Chief Data Officers

Early 2019
- GoC departments produce data strategies

Late 2019
- Senior level data governance committees created

2020
- GC Data Community launched

2021
- GC-wide governance

Early 2022
- Data strategy renewal begins

2022
- CDO of Canada appointed to strengthen horizontal leadership

Key data initiatives and collaboration
- Departmental Data Leads and CDOs
- Corporate data strategies
- GoC departments produce data strategies
- Senior level data governance committees created
- GC Data Community launched
- GC-wide governance

Consultations for Roadmap renewal
- Chief Data Officer of Canada appointed to strengthen horizontal leadership

Roadmap
- Data Strategy Roadmap for the Federal Public Service published
- Departments name “data leads” or Chief Data Officers
- GoC departments produce data strategies
- Senior level data governance committees created
- GC Data Community launched
- GC-wide governance
- CDO of Canada appointed to strengthen horizontal leadership

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But there is more work to be done to keep pace with the changing data landscape

The 2018 Roadmap resulted in:
• strong leadership
• increased awareness
• foundation for governance

Now is the time to solidify and scale the foundations we’re building and leverage our data capabilities to their fullest

We are again working with our partners to renew the strategy.
We are building off and aligning with ongoing efforts

The renewed strategy will be oriented to complement, build on, and enhance existing work to address public sector needs and challenges

**Department or Domain**
- Vision, expectations and flexible recommendations for department and domain led action
  - Departmental Data Strategies
  - Pan-Canadian Health Data Strategy

**Enablers/Conveners/Bridgers**
- Vision and recommendations to mature domain/department capacity, solidify networks and support alignment between departments and the enterprise
  - Mapping the GC Data Landscape
  - GC data advisory bodies, communities and working groups

**GC Enterprise**
- Vision, recommendations and mechanisms to drive cross-government integration and consistency
  - Senior management Working Group for Data and Information Recommendations
  - Ambition for Government in the Digital Age
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**Roadmap renewal timeline**

- **Announced Chief Data Officer for the GC at the 2022 Data Conference**
- **Furthered understanding of the GC data landscape and priorities**
- ** Developed, recommended and confirmed direction for GC-wide data and information governance**
- **Reignited PCO, TBS and StatCan strategy collaboration**
- **Soft-launch of renewal in various fora**
  - **Developed scope and context**
- **Draft and consult on complete strategy**
- **Engage broad stakeholder groups**
- **Host GC-wide engagement**
- **Approve and polish final strategy**
- **Promote and implement strategy (ongoing)**
- **Publish strategy**

- **2021 Q4 21/22**
  - Furthered understanding of the GC data landscape and priorities
  - Developed, recommended and confirmed direction for GC-wide data and information governance
  - Announced Chief Data Officer for the GC at the 2022 Data Conference

- **Q1 22/23**
  - Soft-launch of renewal in various fora
  - Draft scope and context developed
  - Reigned PCO, TBS and StatCan strategy collaboration

- **Q2 22/23**
  - Engage broad stakeholder groups
  - Draft priority actions and supporting concrete vignettes

- **Q3 22/23**
  - Host GC-wide engagement event
  - Draft and consult on complete strategy

- **Q4 22/23**
  - Approve and polish final strategy
  - Promote and implement strategy (ongoing)
  - Publish strategy
Questions/discussion