

# Canadian Data Science Workshop



100

STATISTICS CANADA

ONE HUNDRED YEARS AND COUNTING

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Statistics  
Canada

Statistique  
Canada

Canada

# Data science at StatsCan

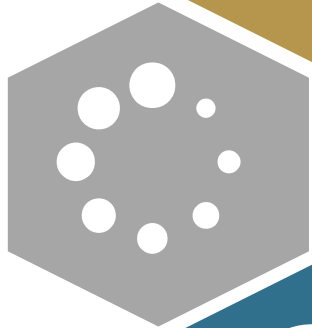
- Interdisciplinary field of scientific methods,... and systems to extract knowledge or insights from data in various forms, either structured or unstructured (Wikipedia)
- StatsCan has been “data sciencing” since it turned on its first computer!
- At the core of the production of official statistics
  - Optimize survey and data processes
  - Analyze data
  - Provide access while protecting privacy
- AI is a means of doing more, doing better and doing faster



# Statistics Canada is undertaking a significant transformation and leading efforts to be more responsive to the data needs of policy leaders by:



Moving beyond a survey-first approach with **new methods** and **integrating data** from a variety of existing sources



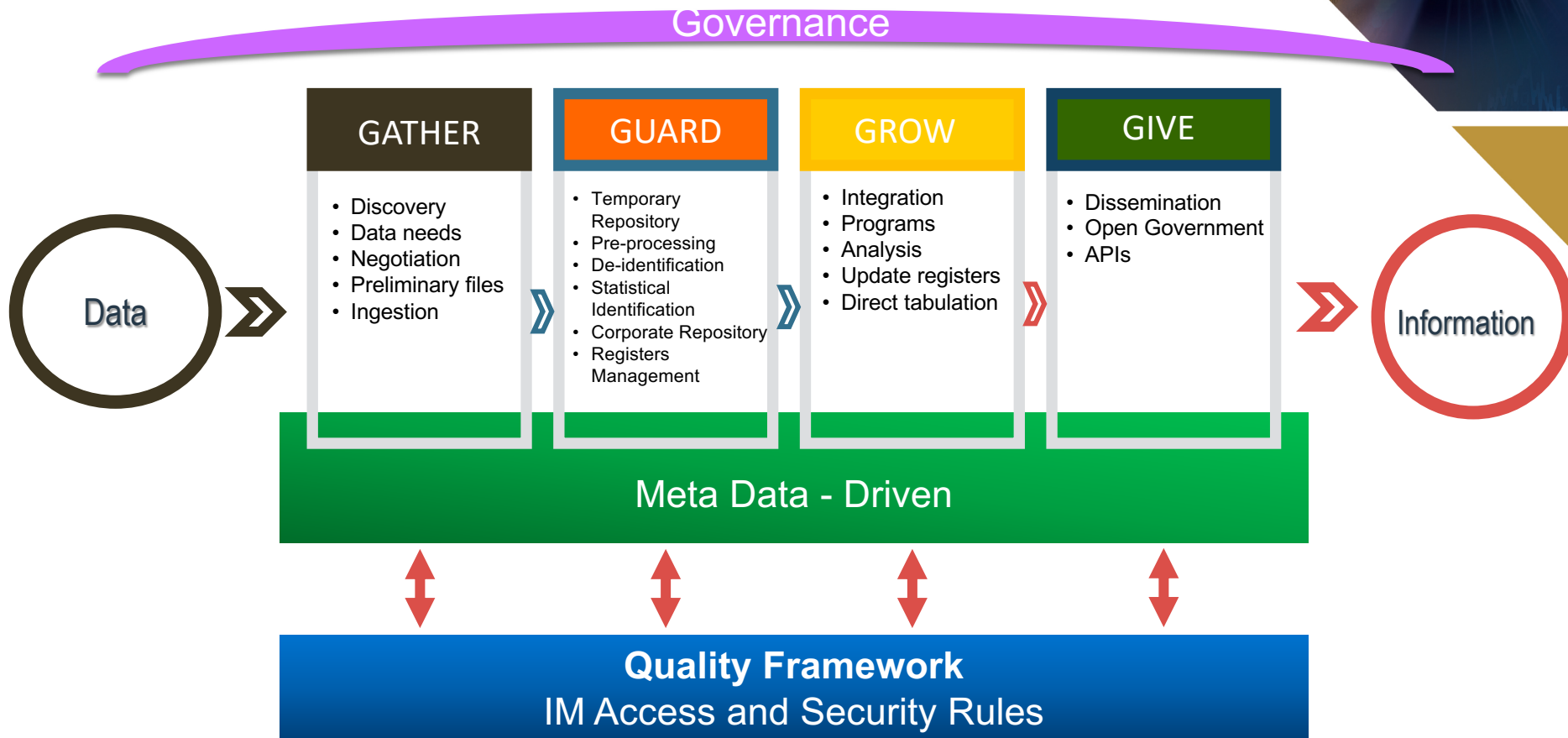
Making data **easier to access** and use by adopting **new tools** to analyze and visualize data



Enabling Canadians to use data to make **evidence-based decisions**

User Centric Service Delivery	Statistical Capacity Building & Leadership	Sharing & Collaboration	Leading Edge Methods & Data Integration	Flexible and Modern Workforce
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# Challenges and opportunities and every phase of our data life-cycle



# Availability of real data

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## BIG DATA

### Social Media

Use of social media info to capture info travellers' origin, destination, and characteristics.

### Payment & Credit Cards

Use of payment and credit cards information to enhance admin and survey data.

### Assisted & promoted data collection

Data collection supported by interviewers or promoted by traveller & tourism stakeholders.



### Application Add-ons

Build on already existing applications to collect info on travellers.

### Mobile & cellular info

Mobile & cellular information on travellers' mobility & hotspots.

### Self-response data collection

Self-response electronic questionnaire.

### Administrative data

Administrative data supporting various regulatory activities.

Confidentiality, privacy, statistical rigour, quality

# We can't do this all alone!

- Collaboration is one of the pillars of StatsCan's transformation
- Network of research data centres (analytical research)
- One the challenges is making our real data more accessible for methods and process research
- It is more easy to bring researchers in StatCan, than getting data out to researchers
  - Post-doc assignments
  - Graduate student terms

# THANK YOU!

For more information,  
please visit  
[www.statcan.gc.ca](http://www.statcan.gc.ca)



#StatCan100



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A graphic in the top right corner featuring a blue and white globe with data points, overlaid with the number '100' in a large, bold, blue font. The background is dark blue with faint white numbers and lines, suggesting a data visualization or statistical theme.