



**Sink or Swim:  
The New Realities of Open Collaboration  
and how Canada wins in the Digital Age**

Tom Jenkins  
Chair, OpenText Corporation  
Member of Open Government Committee Canada

March 31, 2016  
Ottawa

# Key Observations:

- Digital Disruption is removing barriers.
- The Internet is flattening the world and enabling global trade agreements.
- Innovation is a global game – we must collaborate together to be globally competitive.
- Content is the core of collaboration. It is the digital “water in the water cooler”. Open Government must lead in this regard for Canada.
- Intentional actions are required. Spontaneous Innovation does not happen. Canada once led and must now catch up.

# Management Lesson

A crow was sitting on a tree, doing nothing all day. A small rabbit saw the crow, and asked him, "Can I also sit like you and do nothing all day long?"

The crow answered: "Sure, why not. So, the rabbit sat on the ground below the crow, and rested. All of a sudden, a fox appeared, jumped on the rabbit and ate it.

## Management Lesson:

*To be sitting and doing nothing,  
you must be sitting very, very high up.*



# Built the Original “Google” in the mid 90s



# YAHOO!



*based on  
university research*



Jerry Yang CEO of Yahoo and Tom Jenkins CEO of Open Text launch in 1995.

# Built Archives Which Became the “Deep Web” Inside Corporations



# The Deep Web

## The Public Web

Only 4% of Web content (~8 billion pages) is available via search engines like Google



10  
Zettabytes

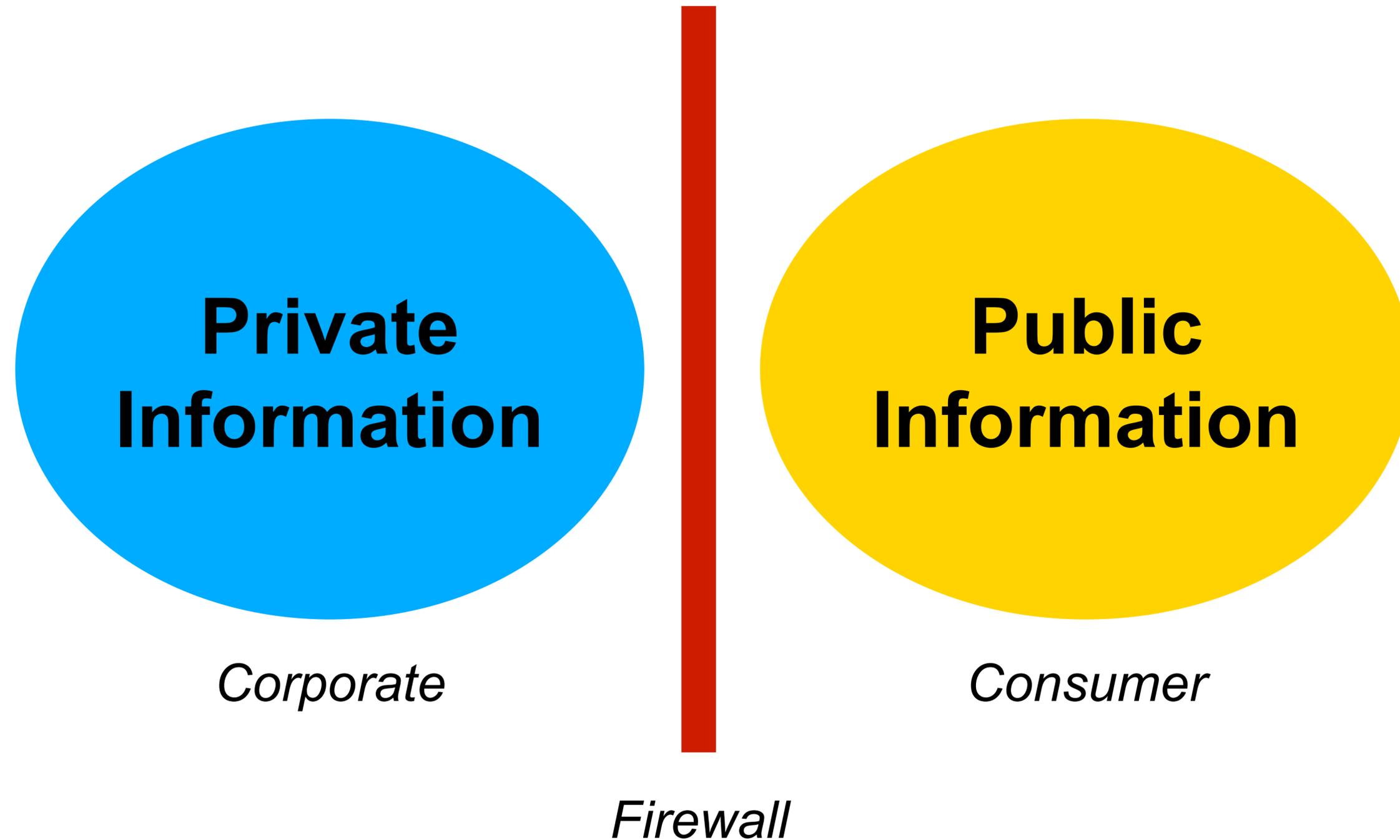
The image features a large iceberg floating in a blue ocean. The tip of the iceberg, which is above the water line, is white and jagged, representing the 'Public Web'. The vast, submerged part of the iceberg, which is below the water line, is a darker blue and represents the 'Deep Web'. The text '10 Zettabytes' is written in white on the submerged part of the iceberg.

## The Deep Web

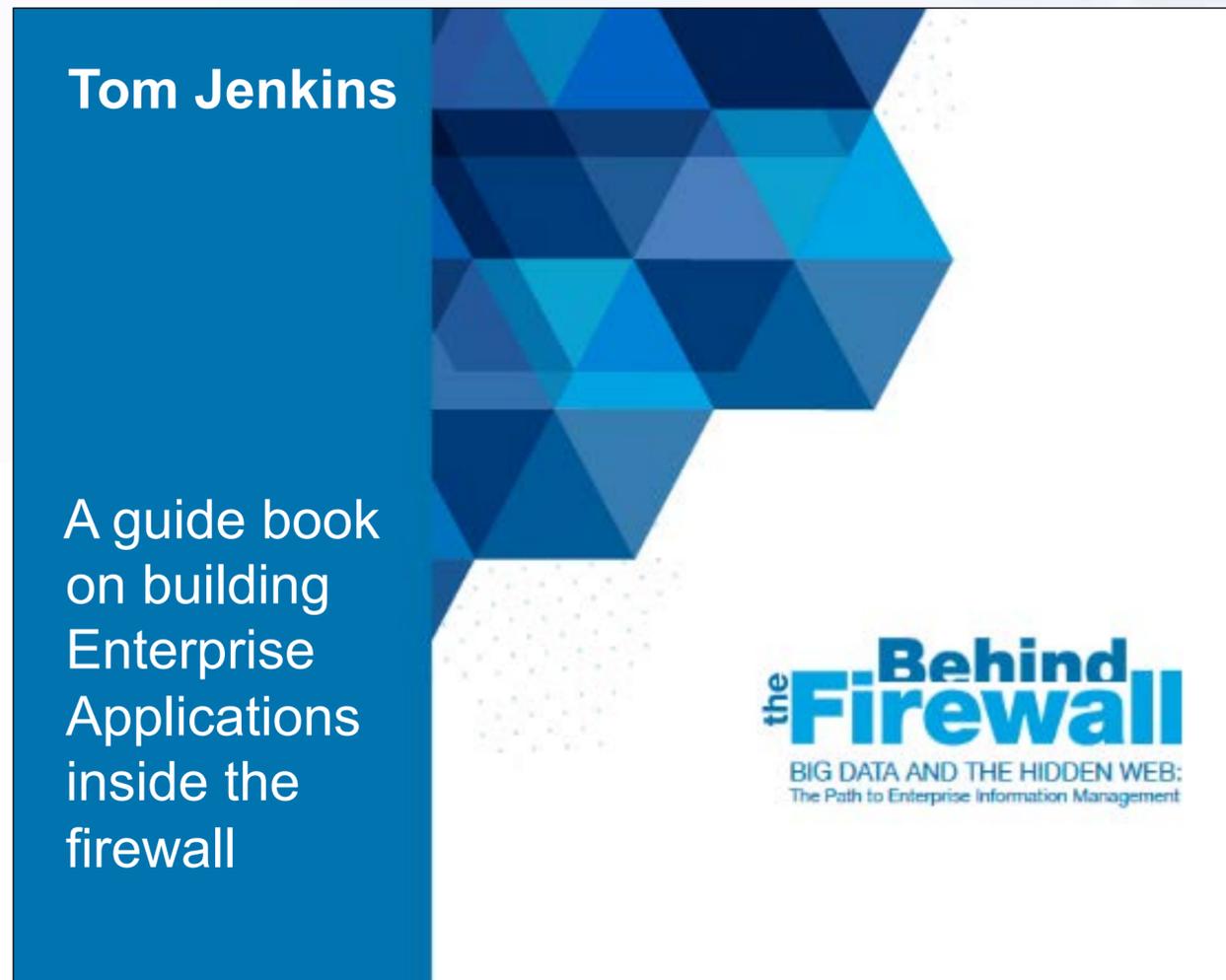
Approximately 96% of the digital universe is on Deep Web sites protected by passwords

10 Zettabyte = 10000000000000000000000000000

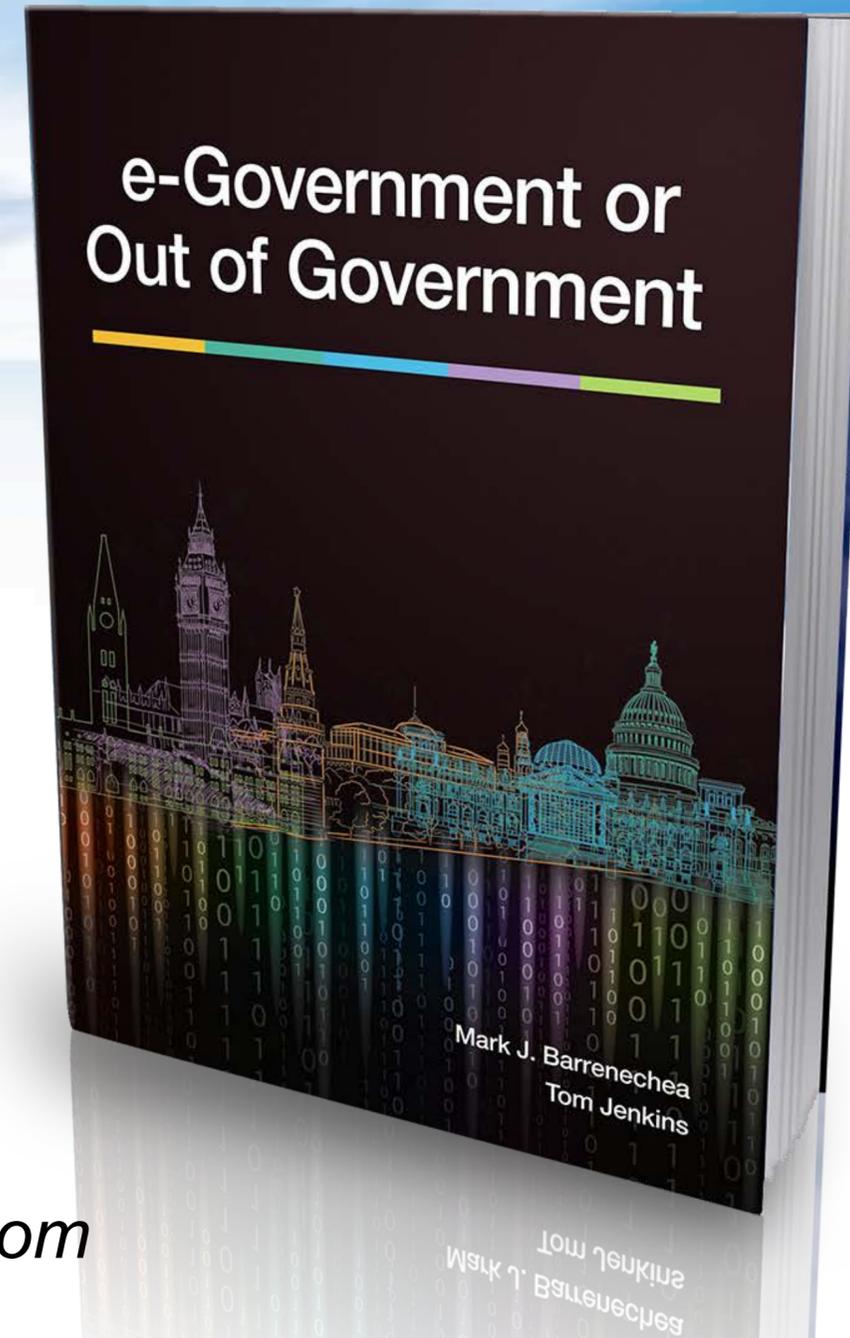
# Digital Information: The line is moving!



# Wrote a book on the Deep Web and eGovernment



A guide book  
on building  
Enterprise  
Applications  
inside the  
firewall

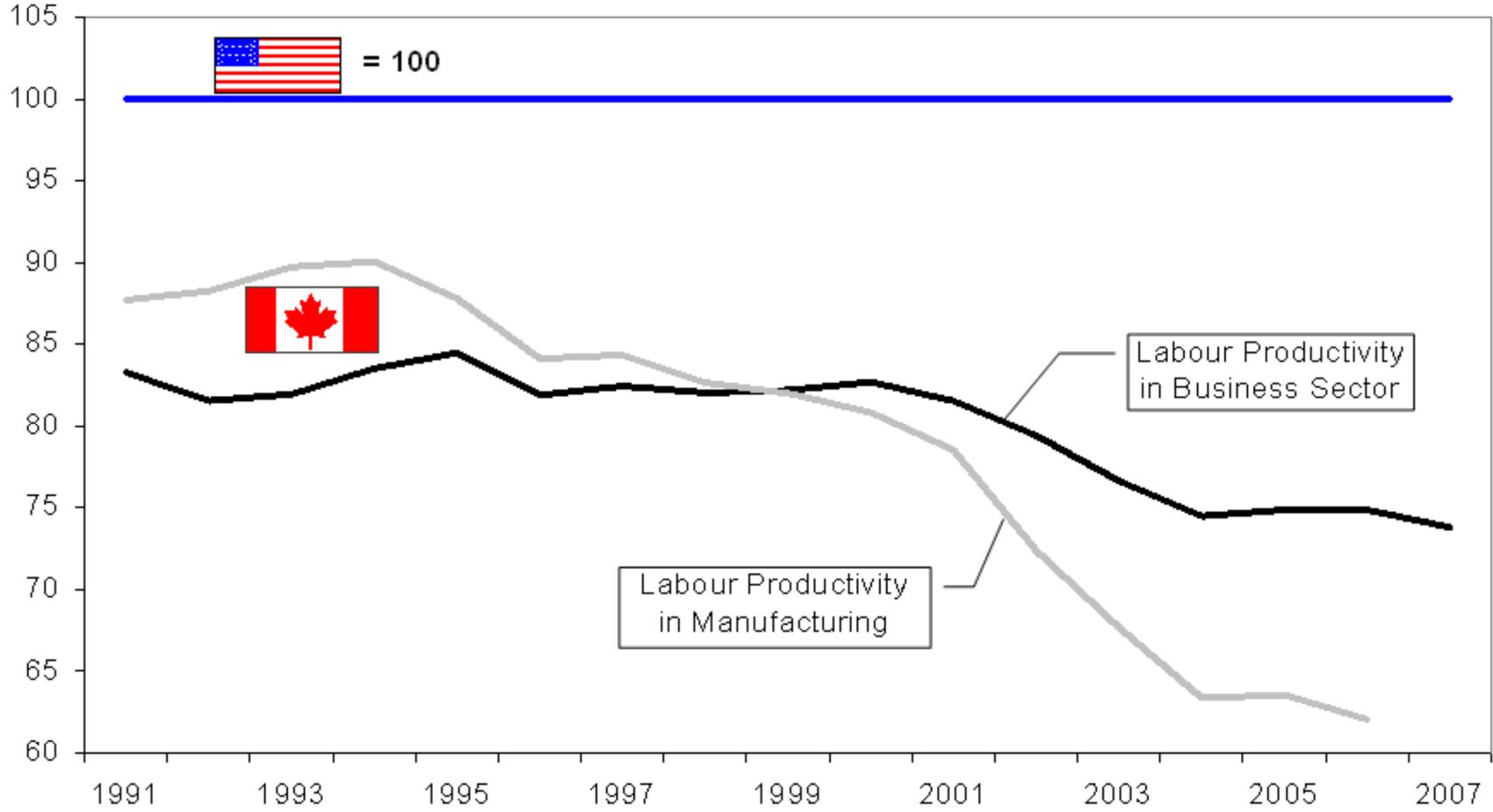


*Available on Amazon, Apple and [www.opentext.com](http://www.opentext.com)*

# Canada's Great Economic Challenge: Poor Relative Productivity Performance



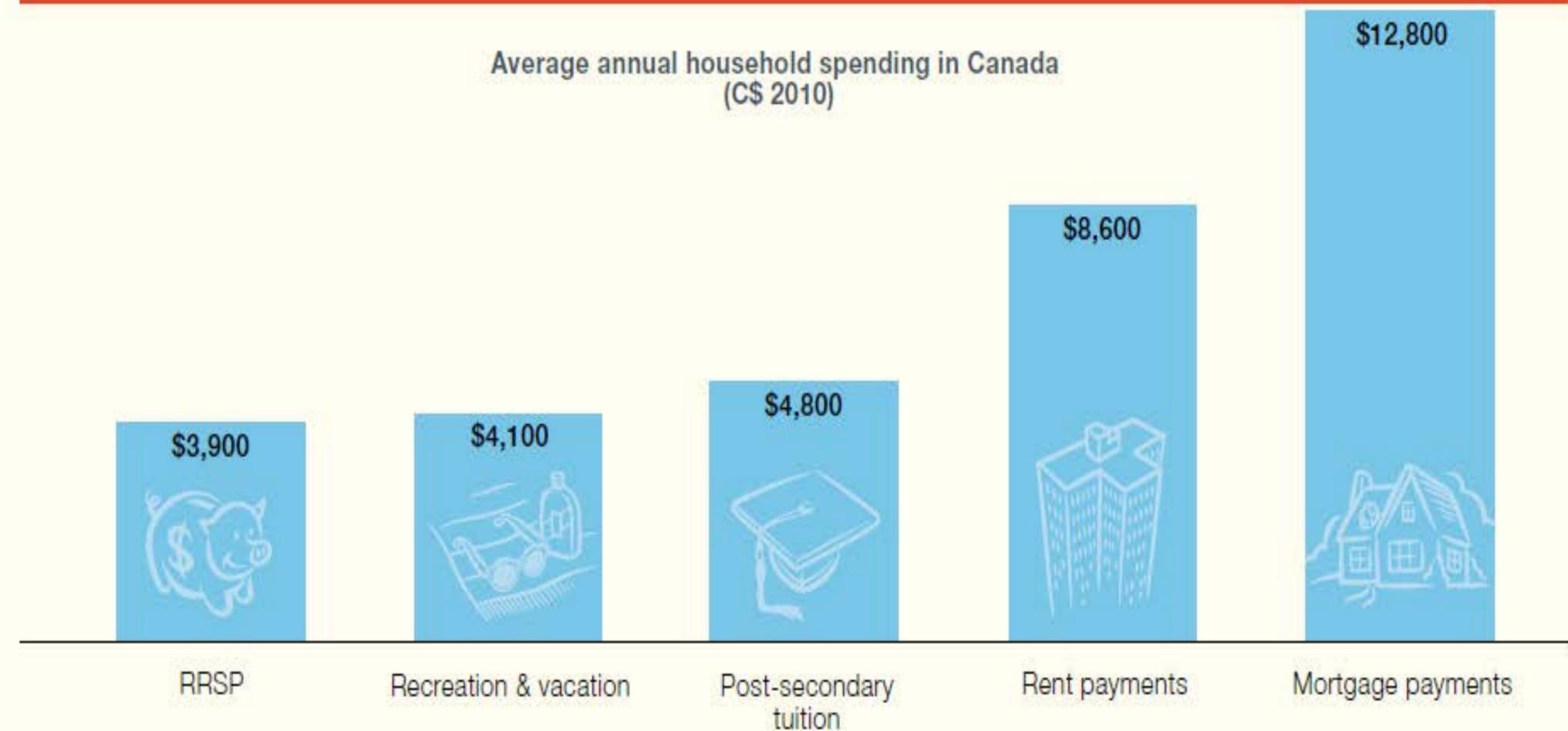
Our Findings: Relative Labour Productivity Gap in Canada  
1991–2007



# Impact on Standard of Living

Exhibit 5 Canadian families would have higher living standards if the prosperity gap were closed

Benefits of closing the prosperity gap for the average household  
**\$12,900** increase in personal disposable income



Note: Among Canadians with some spending in these categories; 2009 results restated to 2010 dollars.  
Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada, *Spending Patterns in Canada 2009*.

# The Digital Revolution will challenge us further

## Extreme Automation

### DISRUPTIVE TECHNOLOGIES

Robots, 3D Printing,  
Artificial Intelligence (AI),  
Machine to Machine

“47% of jobs could be  
swallowed by  
machines by the  
middle of this century”

(Oxford University)

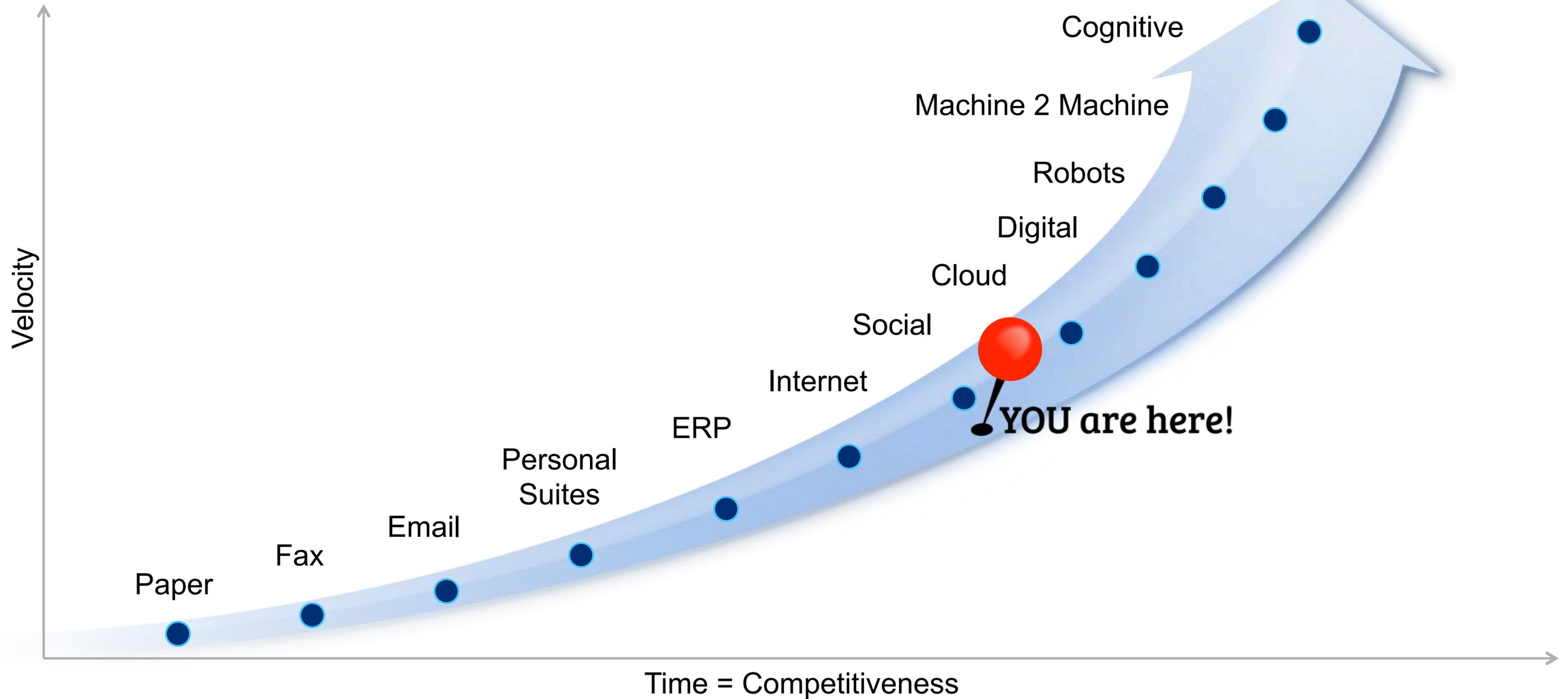
## Extreme Connectivity

### DISRUPTIVE TECHNOLOGIES

5G Networks, Global Internet,  
4 Billion Connected Users

# The Pace of Change is Accelerating

One Trillion Devices



# Climbing the Curve is Insanely Hard

Disintermediation

Subscription  
Economy

Disruptive  
Business Models

Intellectual  
Property

New  
Work Force  
(Millennials)

Customer  
Journey  
Expectations

Information as  
Currency

Single Platform  
of  
Information Truth

*Opening up our information is critical to national competitiveness*

# Open Data Initiatives Drive Productivity for the Country



An Official Web Site of the United States Government

Change Text Size SHARE

**DATA.GOV**  
EMPOWERING PEOPLE

Search Data.gov SEARCH

HOME ABOUT DATA APPS COMMUNITIES METRICS OPEN GOVERNMENT

## AIRCRAFT WILDLIFE STRIKE DATA

Federal Aviation Administration

### Latest Datasets

- EPA Water Services - Total Waters...
- EPA Water Services - Total Waters...
- EPA Water Services - Upstream/...
- EPA Water Services - Name Service
- EPA Water Services - Navigation...
- EPA Water Services - Navigation Service
- EPA Water Services - Point Indexing...
- EPA Water Services - RAD Event...
- EPA Water Services - Results Queue...
- EPA Water Services - Spatial Assignment...

### DATA AND APPS

- 376,529 raw and geospatial datasets
- 1,264 government apps
- 236 citizen-developed apps
- 103 mobile apps
- 172 agencies and subagencies
- Suggest a dataset or app!
- 2011 Next Generation Data.gov is interactive, explorable, and socially.

### COMMUNITIES

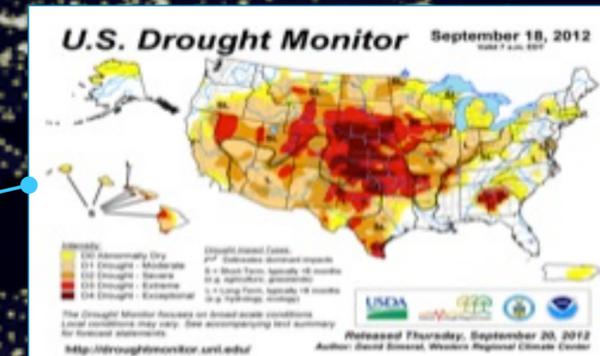
Come explore, discuss, meet others in the same field, and develop the data and apps in the community that you care about. Join in the discussions by going to communities, some of which are listed below, that interest you.

EDUCATION ENERGY

### OPEN GOVERNMENT

First open source code released for the [Open Government Platform](#) delivered by the governments of India and the U.S. [Find out more](#) and then [download the code](#).

The 2012 International Open Government Data Conference will be held July 10-12 at the World Bank in Washington DC. We hope to see you [there](#).



# Innovation is Driven by Content



FAA Data



Census Data



Satellite Images

# Canada has a strong history in this topic

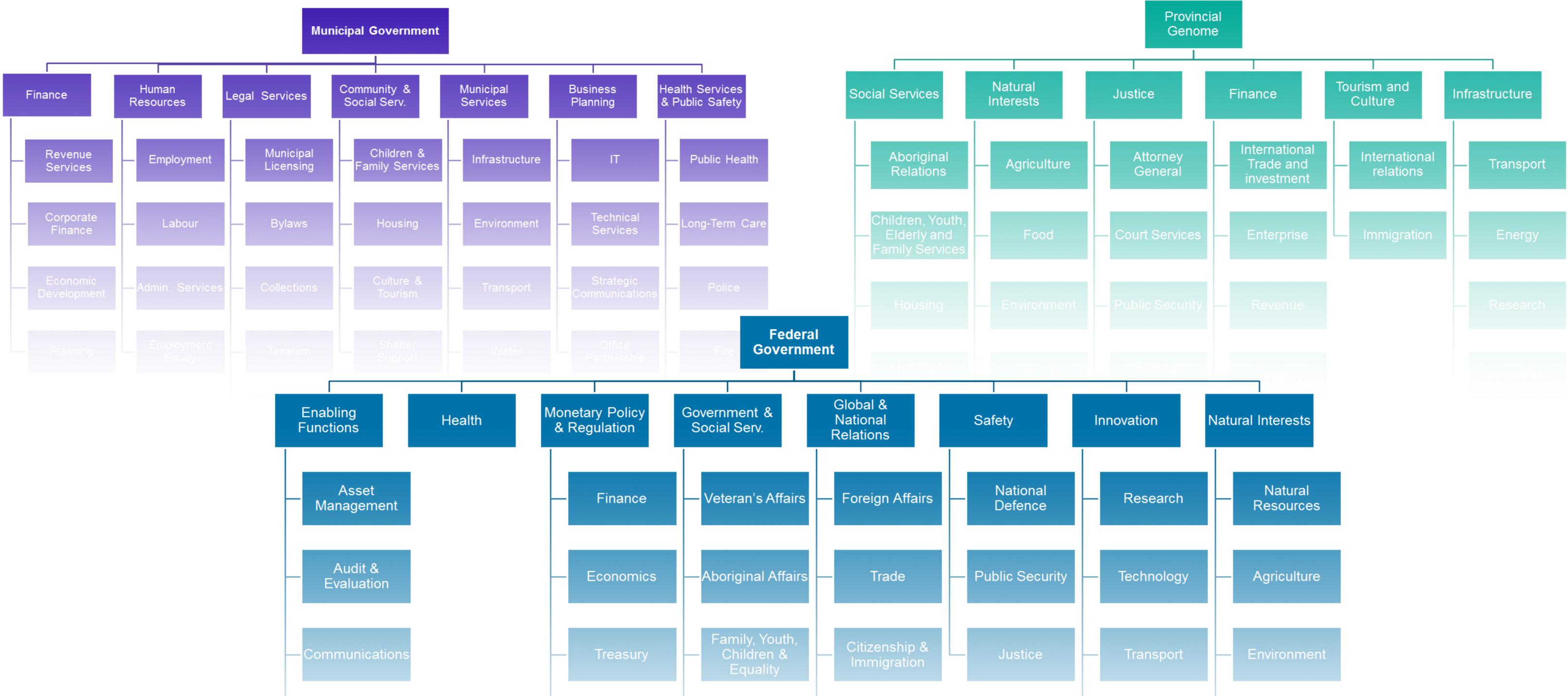
- G20 in 2010
- Open Government effort of Government of Canada Treasury Board
- Open Government effort of Ontario Government
- Many other provinces and municipalities
- More than 20 years of creating and exposing archives through Access to Information Requests (ATIP)
- But we need to go faster!

# eGovt is the Dominant Digital Entity in Canada

- Canadian Public Sector has 1 million users
- Canadian Society has 20 million users



# Government Organization



# Case Studies

Outside of Portal Space Contact Us Help

THE CITY OF CALGARY

Home City Business City Hall City Living City Transportation City Visitors My Pages

City Hall > Business Units > Assessment

### Assessment Property Search

Assessment's Property Search is provided for property owners to conduct a more in-depth self-review of their assessment and confirm that it reflects value in comparison to similar properties in the neighbourhood.

You can compare your assessment with your neighbour's based on property attributes, such as location, size and style of home, lot size and the existence of a garage. If the properties are indeed similar, the assessment should be similar. If after comparing your assessment to similar properties, you believe it is inaccurate, contact our Customer Service Centre at 403-268-2888.

Assessment

- Assessment
- 2009 Notices & Information Update
- Assessment Search
- Property Assessment
- Business Assessment
- Publications & Forms
- About Assessment
- Contact Assessment

Assessment

Due to weather conditions, the City will be closed on Wednesday, September 30, 2009. We apologize for any inconvenience.

News Submit a Tip About Us Contact Us Search:  Enter Search Terms

PEEL REGIONAL POLICE **Peel Regional Police**  
A Safer Community

PEEL CRIME STOPPERS  
Learn about the program

Message from Chief Metcalf  [Read](#)

Communities Crime Prevention Specialized Units Crime Files Employment Police Records Media Relations Courts & Offences Community Calendar

## 2008 Divisional Crime Data

[Click Here](#)

### RECENT NEWS

September 30, 2009  
» PEEL POLICE - COMMUNITY SAFETY ALERT CANCELLED - HIGH RISK

September 28, 2009  
» Peel Police - Missing Brampton Man Located

September 28, 2009  
» Peel Police - Missing Brampton Man

[Media Archive](#) [Publications](#) [Subscribe](#)

### HOW CAN WE HELP YOU?

[Locations](#) [Strategic Plan 2008-2010](#) [Criminal Records check/Police Rpt?](#) [Considering a Career at Peel Police?](#)

### COMMUNITY EVENTS

October 3, 2009  
Cram-A-Cruiser - 11 Division

## USER STORY

### > School Board of Broward County



The School Board of Broward County in Florida is the fifth largest school district in the United States, with an organization that includes almost 30,000 teachers and administrators spread over 250 locations. Broward's challenge was to find an advanced cost-effective solution that would replace a collection of different e-mail systems that were slow, inefficient and difficult to manage.

A key additional requirement was the need for a solution that would provide flexibility and choice regarding the range of supported devices. Broward has a large installed base of Apple computers, and due to financial priorities not all system releases since that is costly and time consuming.

Broward ended up deploying a feature-rich, new solution that handled the needs of the entire district and provided tremendous cost savings over traditional e-mail systems.



Figure 13.11: Broward County School District Intranet

## USER STORY

### > St. John's Hospital



St. John's Hospital is a regional healthcare center serving central and southern Illinois. Over 600 physicians representing approximately 30 specialties and sub-specialties are on the medical staff. The healthcare industry is notorious for developing department-based solutions, so St. John's challenge was to create a consistent environment that would support its close working relationship with another local healthcare institution, Memorial Medical Center.

In order to provide the physicians of both St. John's and Memorial with immediate access to the information and applications they need, St. John's implemented a physician's portal solution. SaintsNet, as it is called, delivers targeted, personalized content and applications to users based on their needs and preferences. Through a secure, single sign-on mechanism, the physician population has access to announcements, health sciences information and various other applications.

Prior to implementing the portal, approximately 600 doctors with privileges at both hospitals were required to learn different systems at each hospital and memorize several different sign-on sequences. A single point of access to all of the systems means that physicians can review critical information online from their homes, clinics and other locations. Since doctors can review images and confer online, an on-call radiologist, for example, who may be 15 to 20 miles from the hospital, can look at images online and make a decision immediately regarding a patient's status.



Figure 11.7: St. John's Intranet

www.opentext.com/ocmbook/userstory/st\_johns

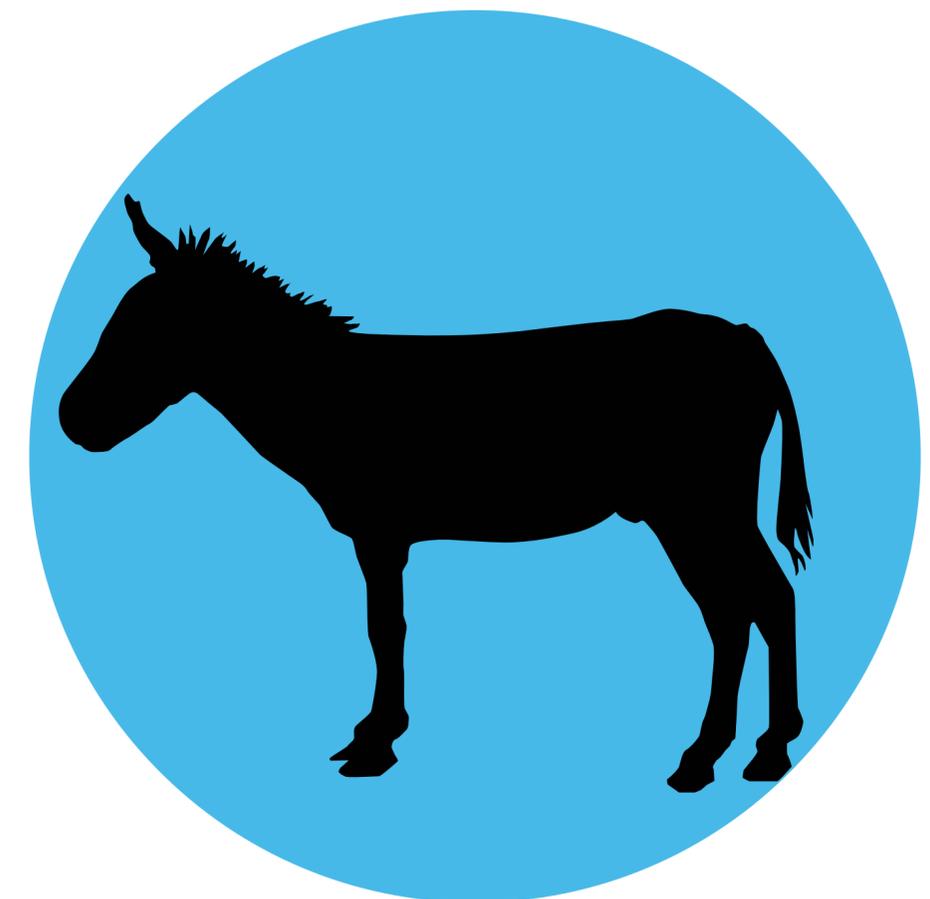
# Need for Focus

The boy rode on the donkey and the old man walked. As they went along, they passed some people who remarked, "it was a shame the old man was walking and the boy was riding". The man and boy thought maybe the critics were right so they changed positions. Later, they passed some people that remarked, "What a shame, he makes that little boy walk." They decided they both would walk! Soon they passed some more people who thought they were stupid to walk when they had a decent donkey to ride. So they both rode the donkey!

Now they passed some people that shamed them by saying "how awful to put such a load on a poor donkey". The boy and man said they were probably right so they decided to carry the donkey. As they crossed a bridge, they lost their grip on the animal and he fell into the river and drowned.

***Management Lesson:***

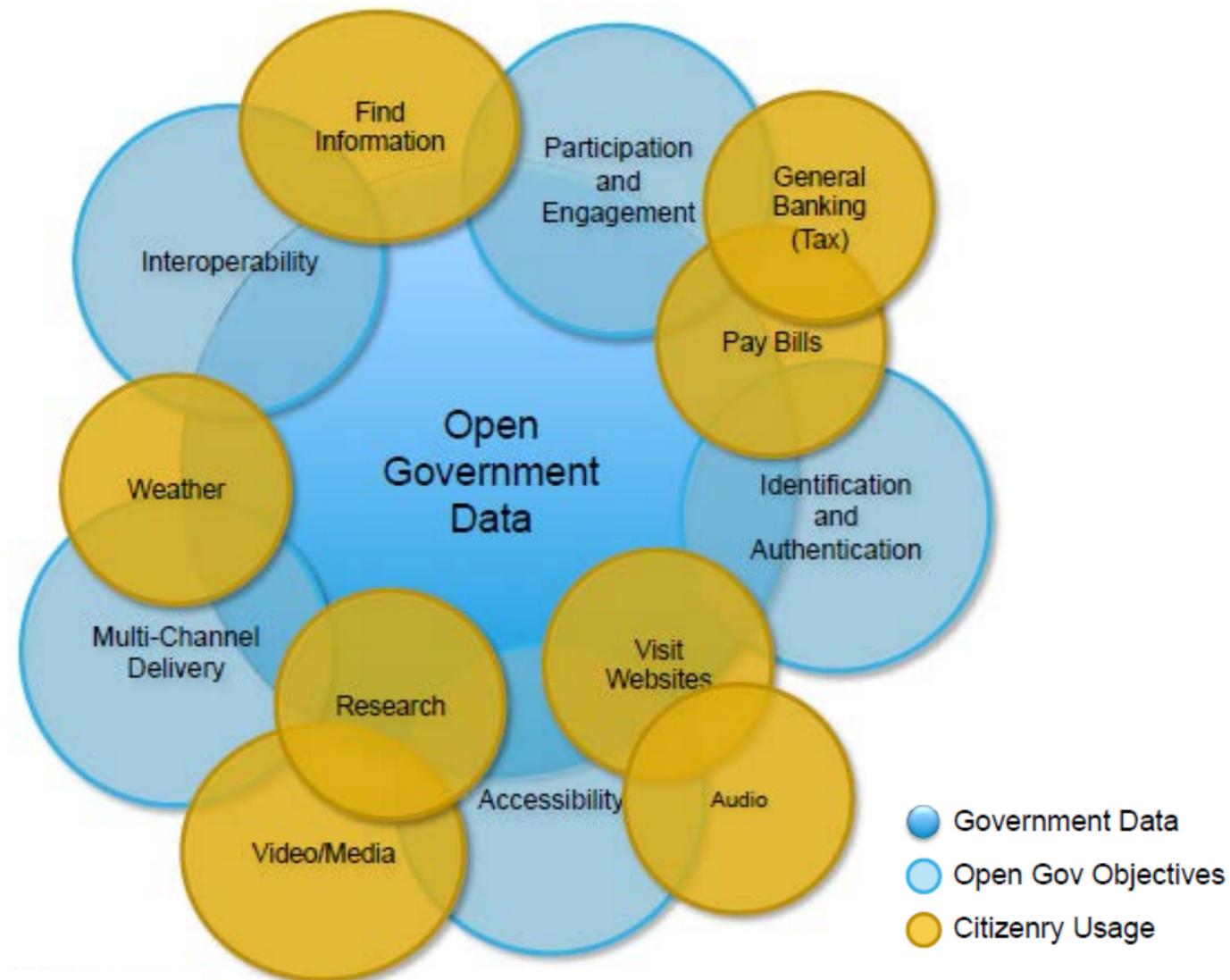
***If you try to please everyone, you will eventually lose your ass.***



# History of Open Data: 2 Decades of Investment

Over the past two decades, governments have launched policy initiatives to promote the reuse of Public Sector Information—from developing open license models to establishing regulatory frameworks and making “open data” available on government websites.

Governments have the opportunity to use this information to improve transparency, efficiency, and service delivery to citizens.



## Open Government Partnership (OGP)

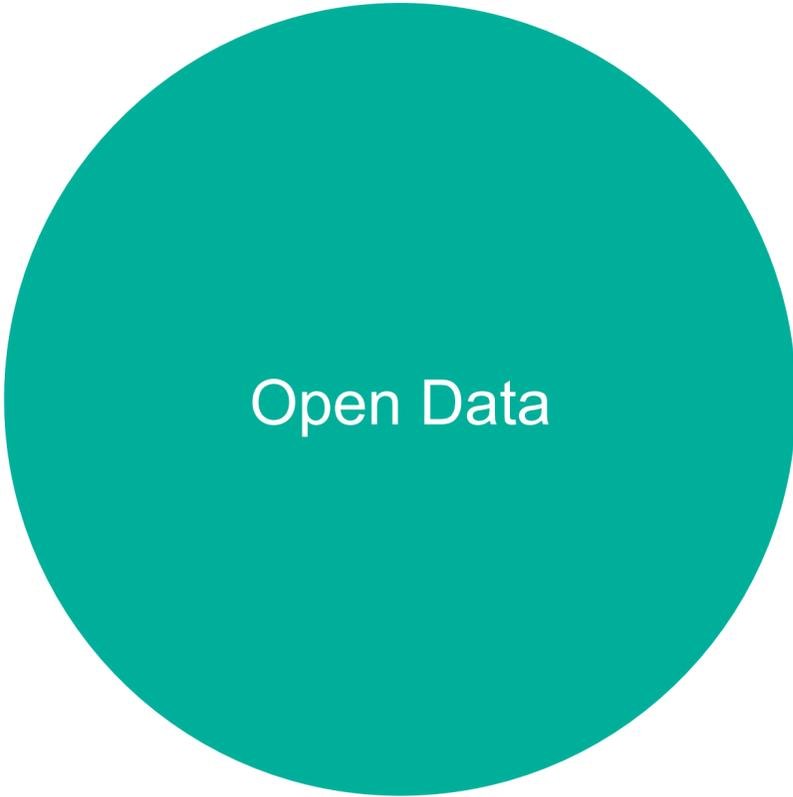
Launched in September 2011, when the eight founding governments (Brazil, Indonesia, Mexico, Norway, Philippines, South Africa, United Kingdom, and the United States) endorsed an Open Government Declaration.

The declaration outlines a voluntary, multilateral mandate to “promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance.”

To date, almost 1,000 commitments have been made by OGP countries to make their governments more open and accountable.

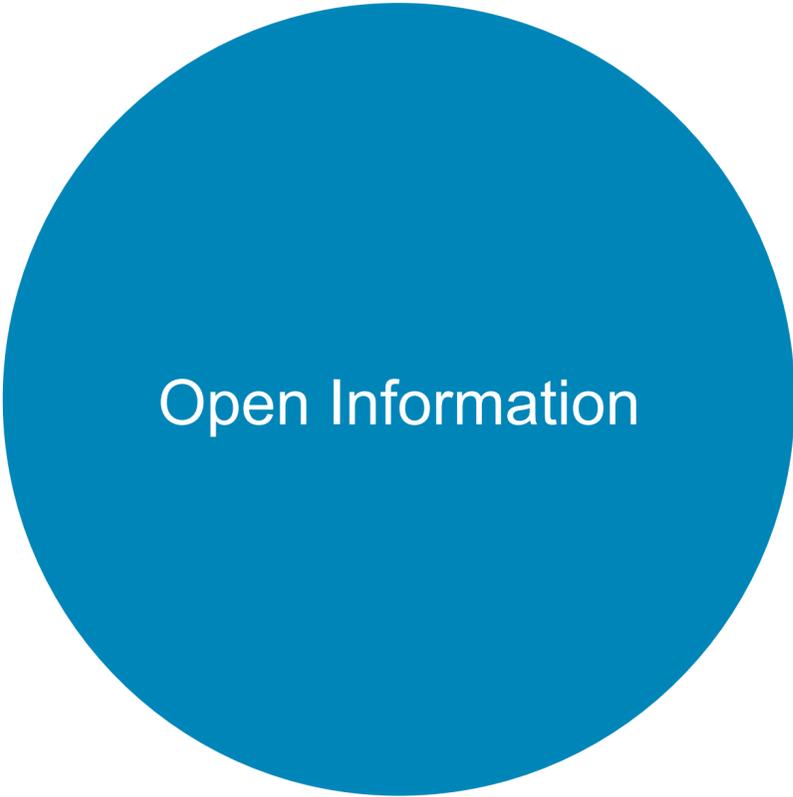
Open Government Partnership, <http://www.opengovpartnership.org/> (accessed February, 2014).  
Mark J. Barrenechea and Tom Jenkins, “e-Government or Out of Government,” OpenText, 2014.

# Open Government (open.canada.ca/en)



Open Data

Released Government  
of Canada data sets



Open Information

Government of Canada  
digital records

**OpenText Showcase with Canada Science  
and Technology Museums Corporation**

<http://documents.techno-science.ca/en/index.htm>



Open Dialogue

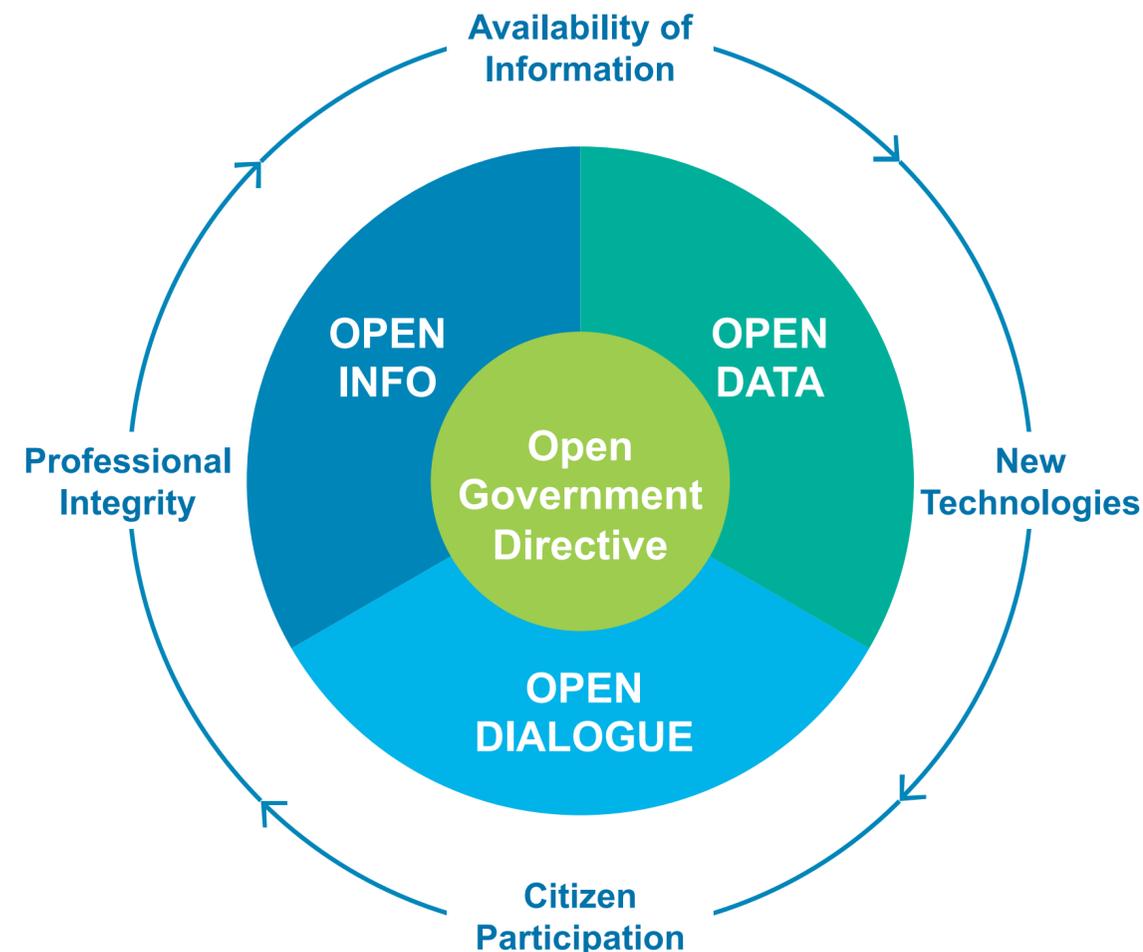
Ongoing conversation with  
Open Government experts

# Why We Are Here

## Importance of 'Open' for Federal and Provincial Levels of Gov't

“In an information economy, data is the raw material for new products and services. Governments around the world have articulated their commitment to facilitating a more open approach to governing.”

### Canada's Approach to Open Government

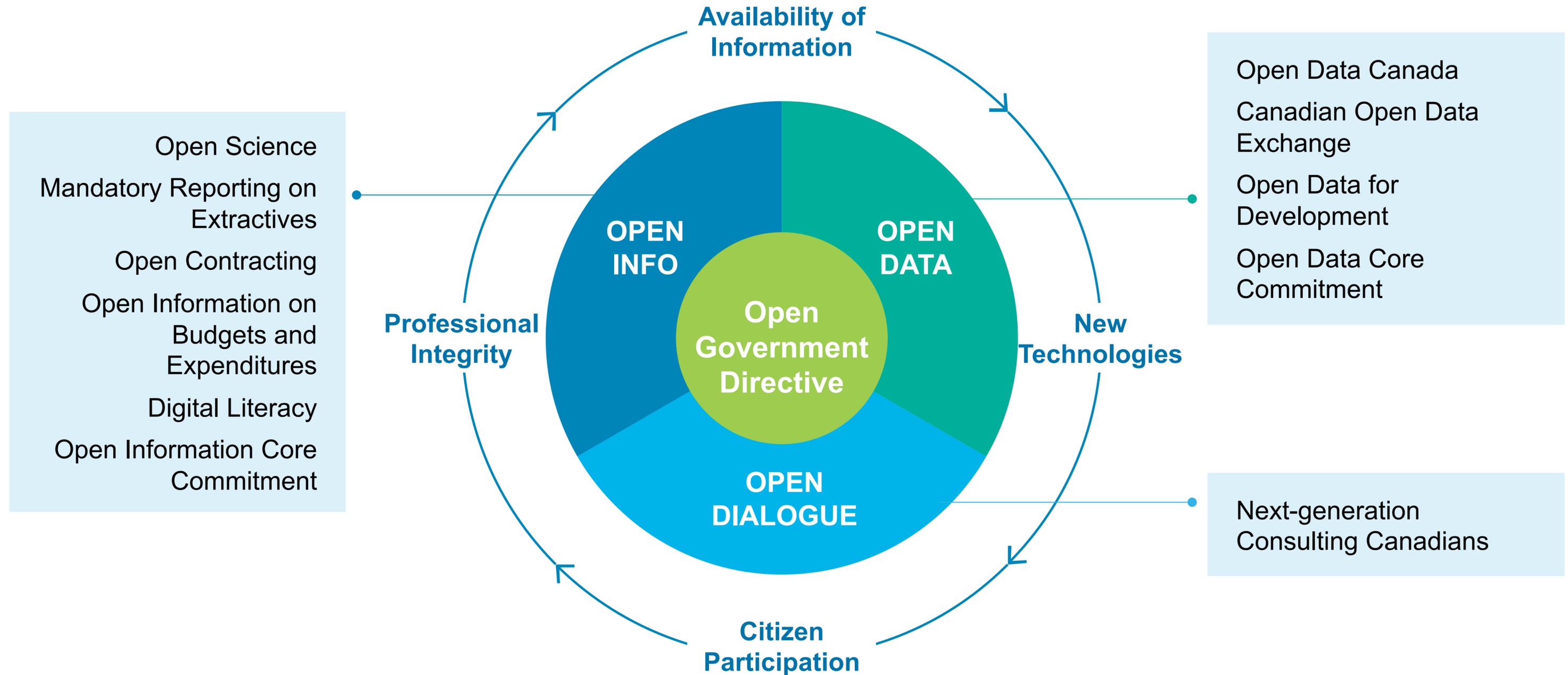


### Goals for Open Government

- Foster greater openness and accountability
- Provide Canadians with more opportunities to learn about and participate in government
- Drive innovation and economic opportunities for all Canadians
- Create a more cost effective, efficient, and responsive government.
  - GC1 – Improving Public Services;
  - GC2 – Increasing Public Integrity;
  - GC3 – Effectively Managing Public Resources;
  - GC4 – Creating Safer Communities; and
  - GC5 – Increasing Corporate Accountability.

# The Chasm is Crossable

## Extracting Value from Current Investment - Building Foundations



# The Chasm is Crossable

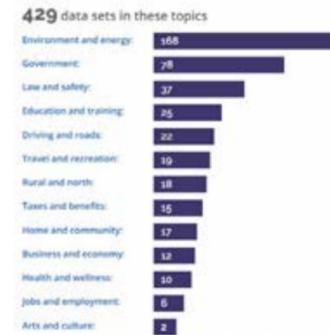
## Extracting Value from Current Investment - Where are the Gaps?

Ontario  français MENU

### Sharing government data

We are sharing government data sets online with you to help encourage innovation and solve problems through new ideas and applications.

[Open data catalogue](#)



### ▼ Open Provinces

A layer showing open provinces across Canada.

| Select                   | Name                                  | Website   |
|--------------------------|---------------------------------------|---|
| <input type="checkbox"/> | Government of Ontario                 | <a href="#">Ontario open data website</a>           |
| <input type="checkbox"/> | Government of Québec                  | <a href="#">Données ouvertes (French only)</a>      |
| <input type="checkbox"/> | Government of Newfoundland & Labrador | <a href="#">Open Data Newfoundland and Labrador</a> |
| <input type="checkbox"/> | Government of Alberta                 | <a href="#">Alberta Open Data Portal</a>            |
| <input type="checkbox"/> | Government of British Columbia        | <a href="#">DataBC</a>                              |

### ▼ Open Initiatives

Showing 1 to 10 of 12 entries Show 10 entries

Filter items

| Select                   | Name                                       | City          | Province | Website   |
|--------------------------|--|---------------|----------|---|
| <input type="checkbox"/> | Nunavut Geoscience                         | Iqaluit       | NU       | <a href="#">Canada-Nunavut Geoscience Office</a>                |
| <input type="checkbox"/> | Northwest Territories Geoscience           | Yellowknife   | NT       | <a href="#">Northwest Territories Geoscience Office</a>         |
| <input type="checkbox"/> | Polar Data Catalogue                       | Waterloo      | ON       | <a href="#">University of Waterloo</a>                          |
| <input type="checkbox"/> | GeoNOVA                                    | Nova Scotia   | NS       | <a href="#">GeoNOVA Portal</a>                                  |
| <input type="checkbox"/> | Manitoba Land Initiative                   | Winnipeg      | MB       | <a href="#">Manitoba Land Initiative</a>                        |
| <input type="checkbox"/> | Geomatics Yukon                            | Whitehorse    | YT       | <a href="#">Geomatics Yukon</a>                                 |
| <input type="checkbox"/> | GeoNB                                      | Fredericton   | NB       | <a href="#">GeoNB Portal</a>                                    |
| <input type="checkbox"/> | Northwest Territories Centre for Geomatics | Yellowknife   | NT       | <a href="#">Centre for Geomatics</a>                            |
| <input type="checkbox"/> | Geographic Information for PEI             | Charlottetown | PE       | <a href="#">GIS Data Layers: Geographic Information for PEI</a> |
| <input type="checkbox"/> | St. Lawrence Global Observatory            | Rimouski      | QC       | <a href="#">St. Lawrence Global Observatory</a>                 |

### ▼ Open Municipalities

Showing 11 to 20 of 52 entries Show 10 entries

Filter items

| Select                   | Name                  | Municipality  | Province | Website   |
|--------------------------|-----------------------|---------------|----------|---|
| <input type="checkbox"/> | City of Mississauga   | Mississauga   | ON       | <a href="#">Mississauga Data</a>                |
| <input type="checkbox"/> | City of Niagara Falls | Niagara Falls | ON       | <a href="#">Open Data</a>                       |
| <input type="checkbox"/> | City of Ottawa        | Ottawa        | ON       | <a href="#">Open Data Ottawa</a>                |
| <input type="checkbox"/> | Region of Peel        | Mississauga   | ON       | <a href="#">Open Data Catalogue</a>             |
| <input type="checkbox"/> | City of Toronto       | Toronto       | ON       | <a href="#">Open Data - Accessing City Hall</a> |
| <input type="checkbox"/> | City of Waterloo      | Waterloo      | ON       | <a href="#">Open Data Waterloo</a>              |
| <input type="checkbox"/> | City of Welland       | Welland       | ON       | <a href="#">Open Data Welland</a>               |
| <input type="checkbox"/> | City of Windsor       | Windsor       | ON       | <a href="#">Open Data Catalogue</a>             |
| <input type="checkbox"/> | York Region           | Toronto       | ON       | <a href="#">Open Data</a>                       |
| <input type="checkbox"/> | City of Guelph        | Guelph        | ON       | <a href="#">Open Data Guelph</a>                |

<http://open.canada.ca/en/maps/open-data-canada>

# Policy & Standards

## Leveraging International Standards

### Open Government Standards

<http://www.opengovstandards.org/>

The Open Government Standards were initiated in 2012 to coincide with the presentation of OGP national Action Plans. The initiative aims to define open government based on open government policy measures. In other words: what constitutes an open government and how can new technologies advance transparency?

“The longer we allow “Open Government” to mean any and everything to anyone, the risk increases that the term melts into a hollow nothingness of rhetoric.”

**NATHANIEL HELLER**

EXECUTIVE DIRECTOR OF GLOBAL INTEGRITY

The screenshot shows the Open Government Standards website. At the top left is the logo with the text "open government standards". To the right are language options "EN | ES" and social media icons for Twitter and a Blog. A navigation bar includes links for STANDARDS, JOIN, SUPPORT US, OG INITIATIVES, HISTORY, ABOUT US, OGS NETWORK, and DONORS. The main content area features a quote from Helen Darbishire: "The Open Government Standards project is designed in the spirit of openness: The best standards will come from civil society and government working together to define what we really mean by transparency, participation and accountability." Below the quote is her name and title: HELEN DARBISHIRE, ACCESS INFO EUROPE EXECUTIVE DIRECTOR. To the right of the text is a portrait of Helen Darbishire.

## THE STANDARDS

The Open Government Standards are being drafted through a consultative process amongst civil society organisations across the world that are working to promote open government. The Standards define the measures that different governments must adopt in order to advance and become Open Governments.



**TRANSPARENCY**



**PARTICIPATION**

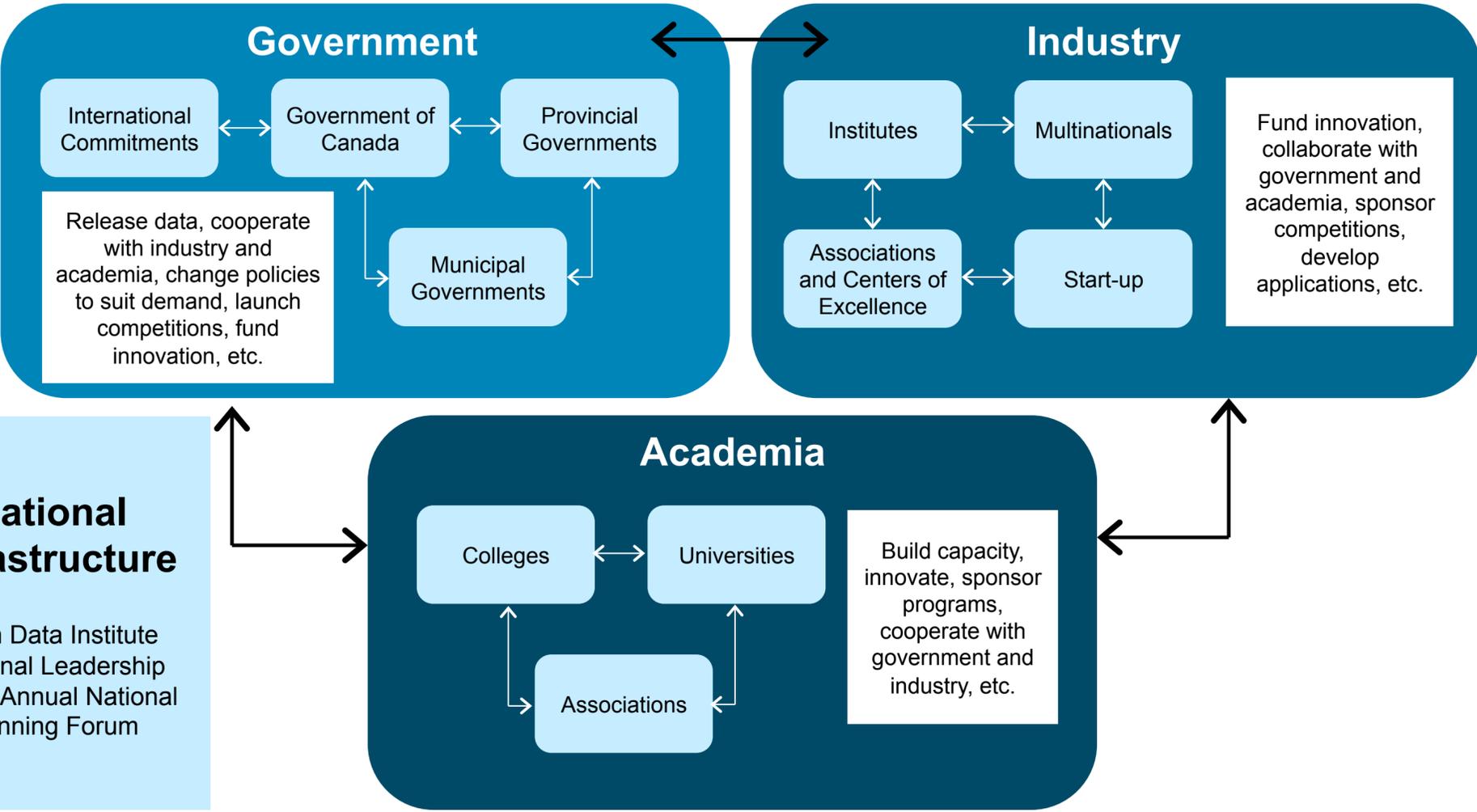


**ACCOUNTABILITY**

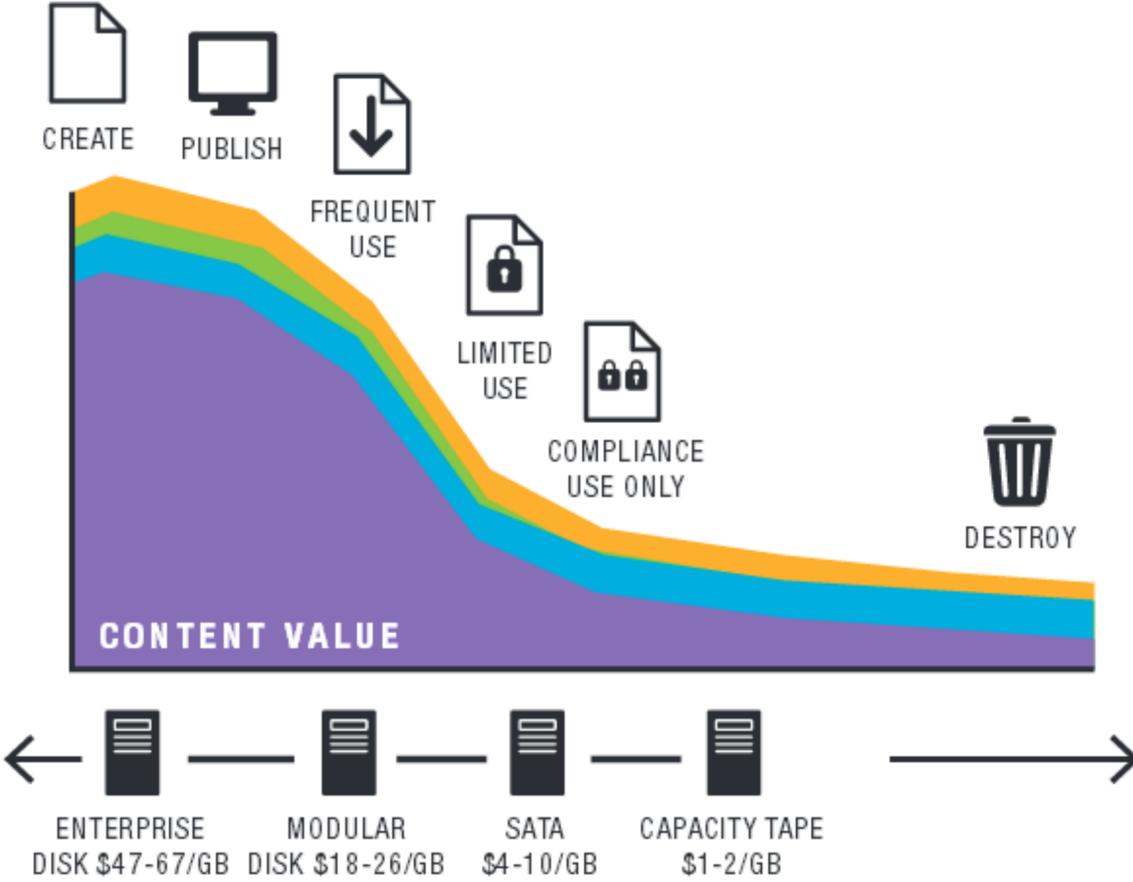
The Government of Canada will issue mandatory policy requiring federal government departments and agencies to maximize the release of data and information of business value subject to applicable restrictions related to privacy, confidentiality, and security. Eligible data and information will be released in standardized, open formats, free of charge, and without restrictions on reuse.

# Policy & Standards

## Data Sovereignty



### The Importance of Archiving to Open Data



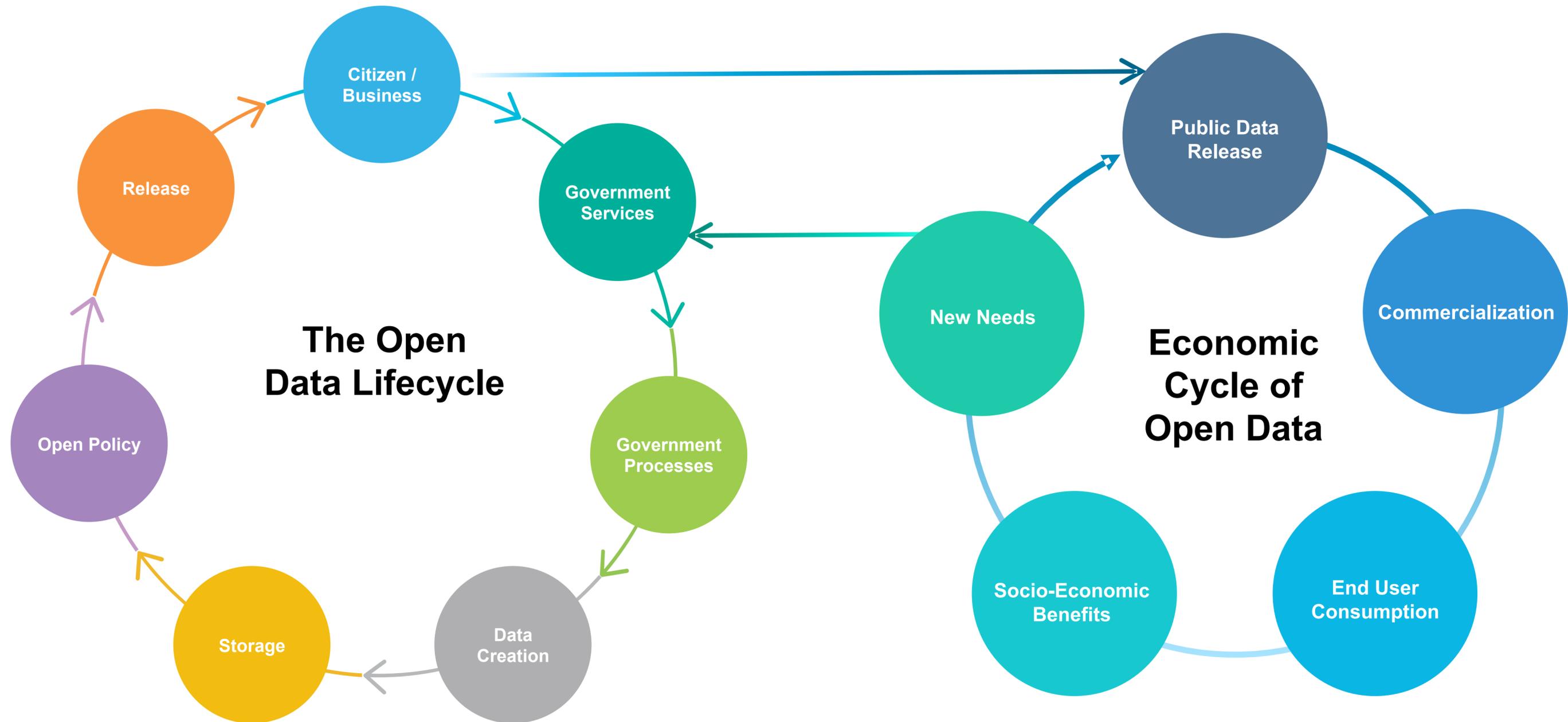
When should Canadian Data, only be Canadian Data?

# Some Examples in the Breakouts

- Heritage Canada: Science & Technology Museum Open By Default
- Open Data Exchange: Startups building Apps for Open Government

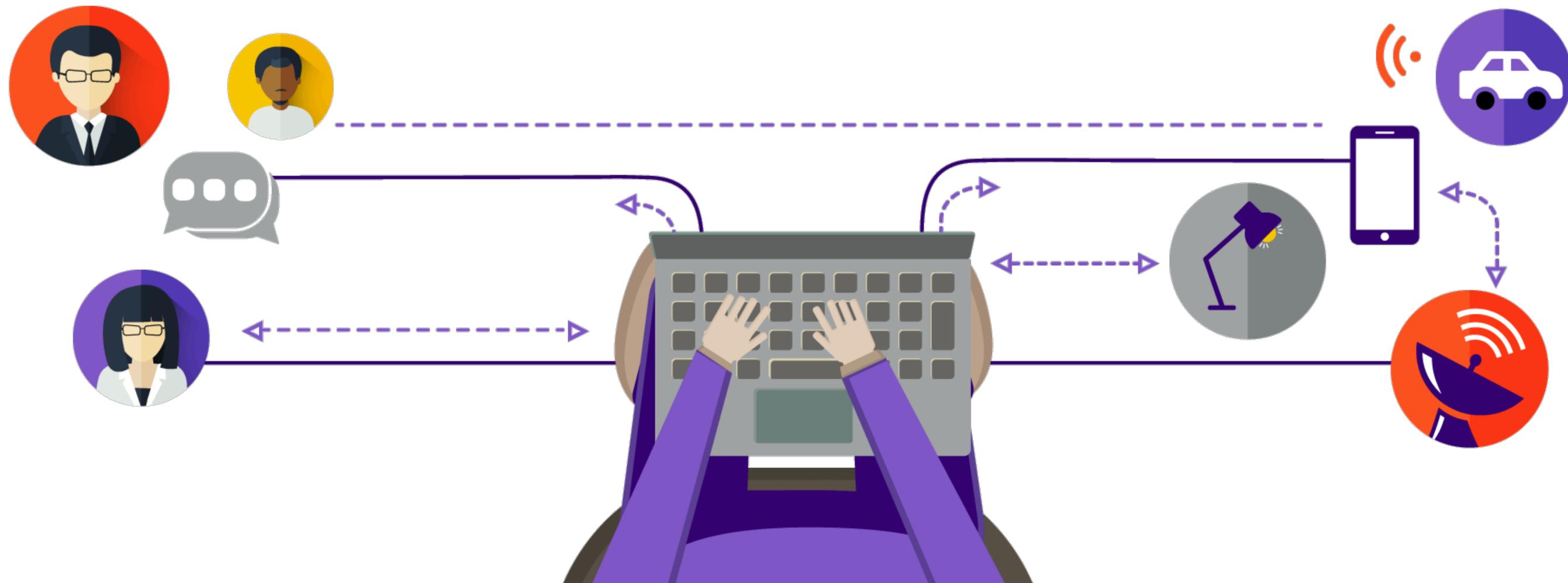
# The Opportunity

## Pace of Change - Architecture Matters

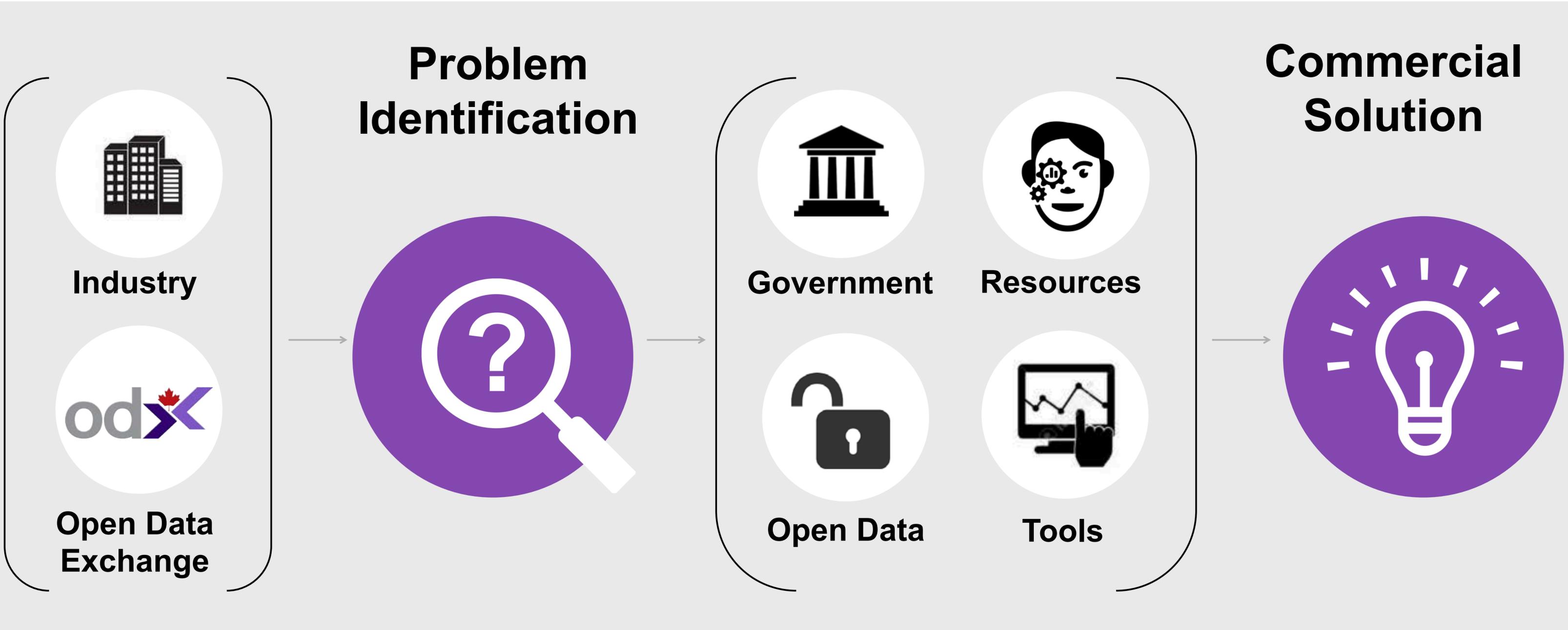


# Smart Open Data @ Heritage Canada

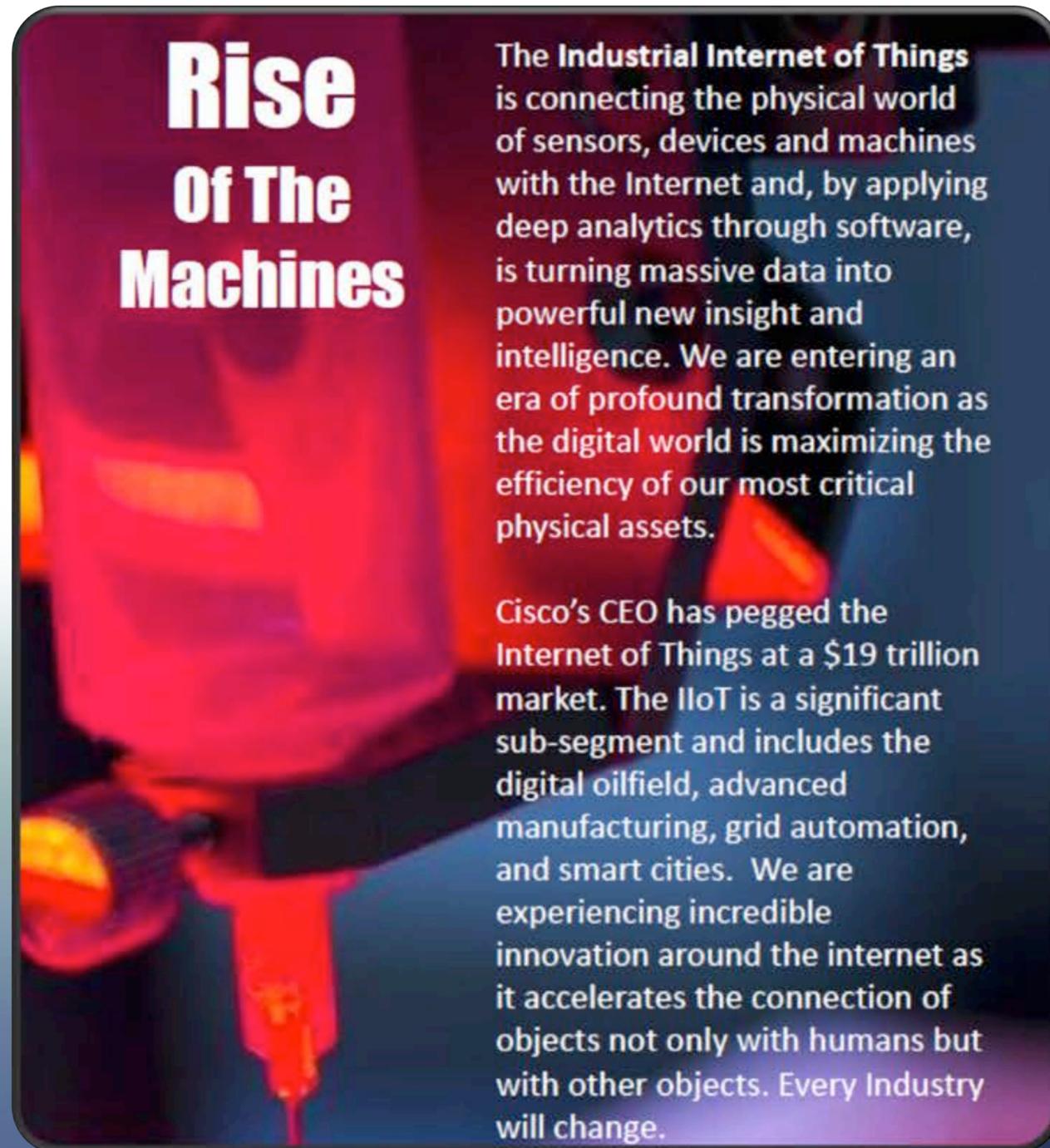
Different dialogue. Better feedback. Continuous improvement.



# How ODX Can Help



# Impact of The Devices (Machines)



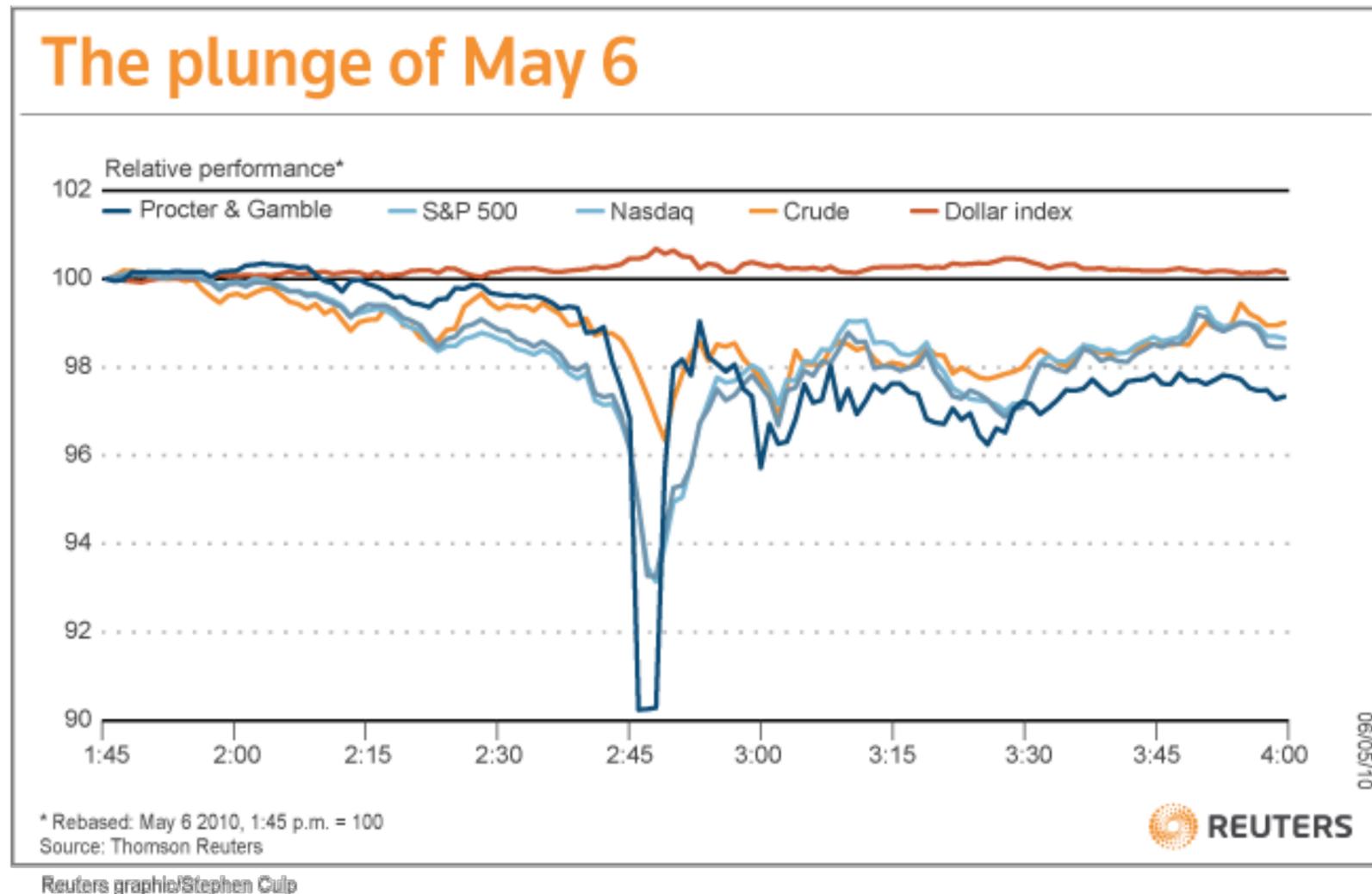
**Rise  
Of The  
Machines**

The **Industrial Internet of Things** is connecting the physical world of sensors, devices and machines with the Internet and, by applying deep analytics through software, is turning massive data into powerful new insight and intelligence. We are entering an era of profound transformation as the digital world is maximizing the efficiency of our most critical physical assets.

Cisco's CEO has pegged the Internet of Things at a \$19 trillion market. The IIoT is a significant sub-segment and includes the digital oilfield, advanced manufacturing, grid automation, and smart cities. We are experiencing incredible innovation around the internet as it accelerates the connection of objects not only with humans but with other objects. Every Industry will change.

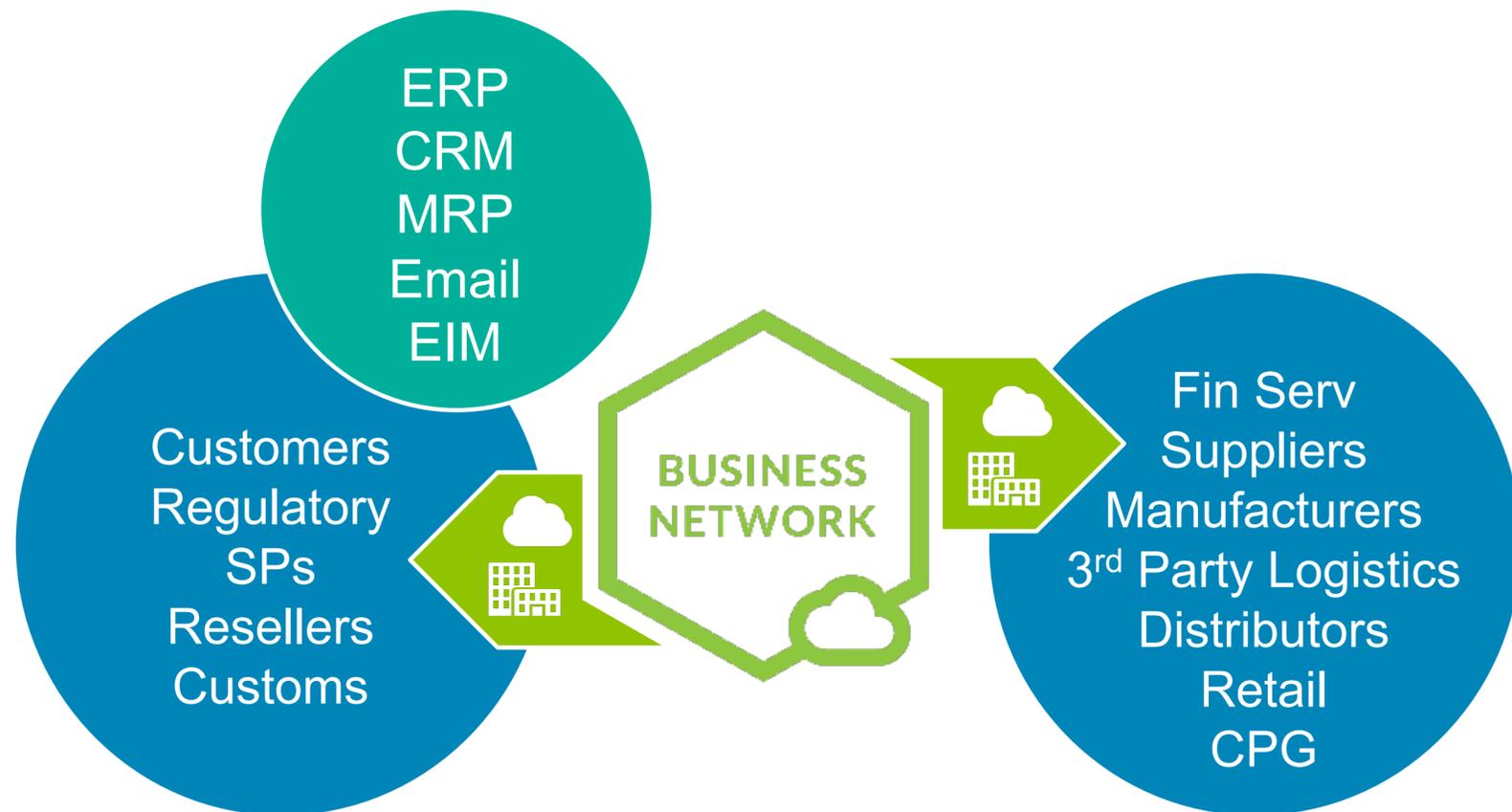
Billions of people generating petabytes hourly will be superceded by hundreds of billions of devices generating zettabytes in seconds  
Huge scale change

# FlashCrash – Fiction becomes Reality



The **May 6, 2010 Flash Crash**<sup>[1]</sup> also known as **The Crash of 2:45**, the **2010 Flash Crash**, or simply the **Flash Crash**, was a United States [stock market crash](#) on Thursday May 6, 2010 in which the [Dow Jones Industrial Average](#) plunged about 1000 points (about 9%) only to recover those losses within minutes.<sup>[2]</sup> It was the second largest [point swing](#), 1,010.14 points, and the biggest one-day point decline, 998.5 points, on an intraday basis in Dow Jones Industrial Average history

# Internal Network ... Extreme Connectivity



## Release 16

- Procure-to-Pay Automation
- Active Applications
  - Orders and Intelligence
  - Catalogue and Community
  - Invoices and Compliance
- Secure Messaging (MFT and Secure Mail)
- Fax to EDI
- Logistics Track and Trace
- On-Demand Messaging
- Trading Partner Self-Enablement
- Analytics Integration (Managed Services and Active Applications)
- EMEA Trading Grid

# BPM: Creating Digital Information Processes



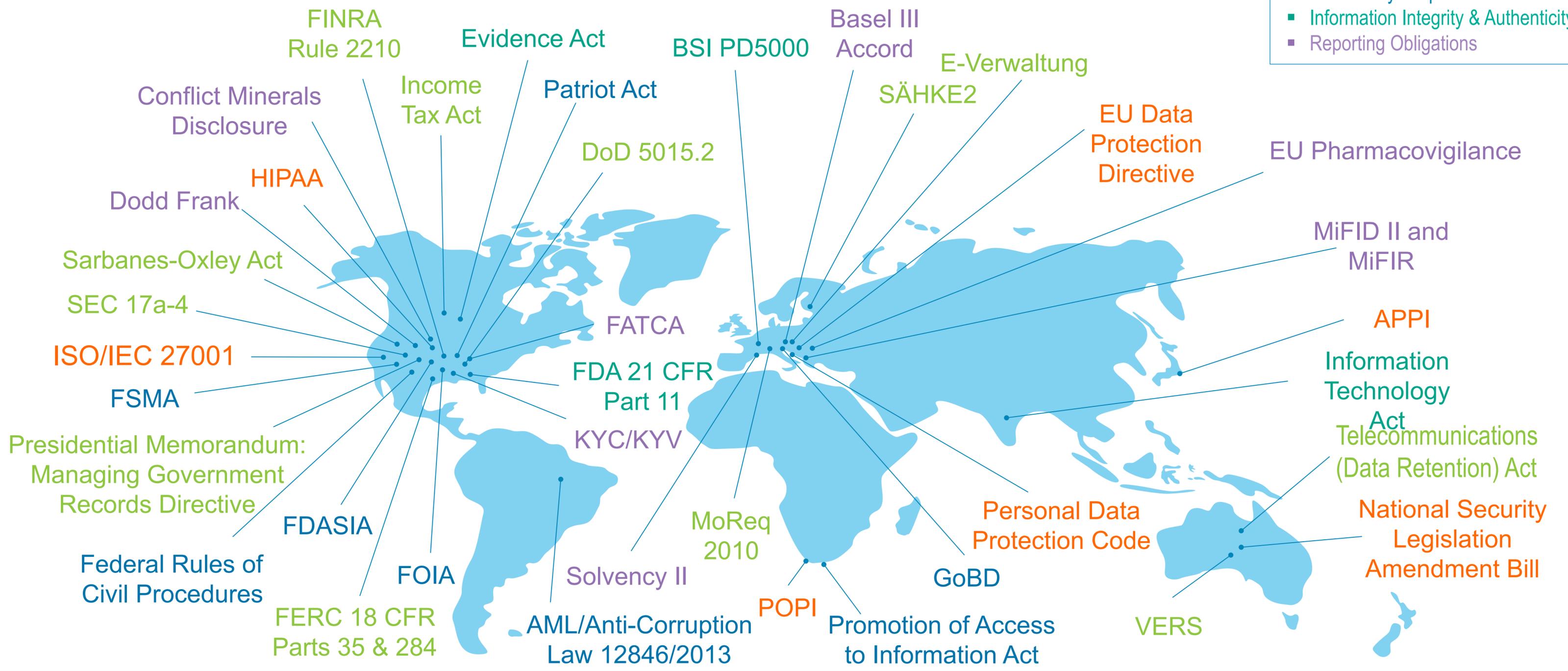
## Release 16

- Lightweight Application Development with Entity Modeling
- Contract Management
- Case Management
- Orchestration Engine
- Integrated Capture and Rights Management
- Analytics Integration
- Deep integration into Content Suite

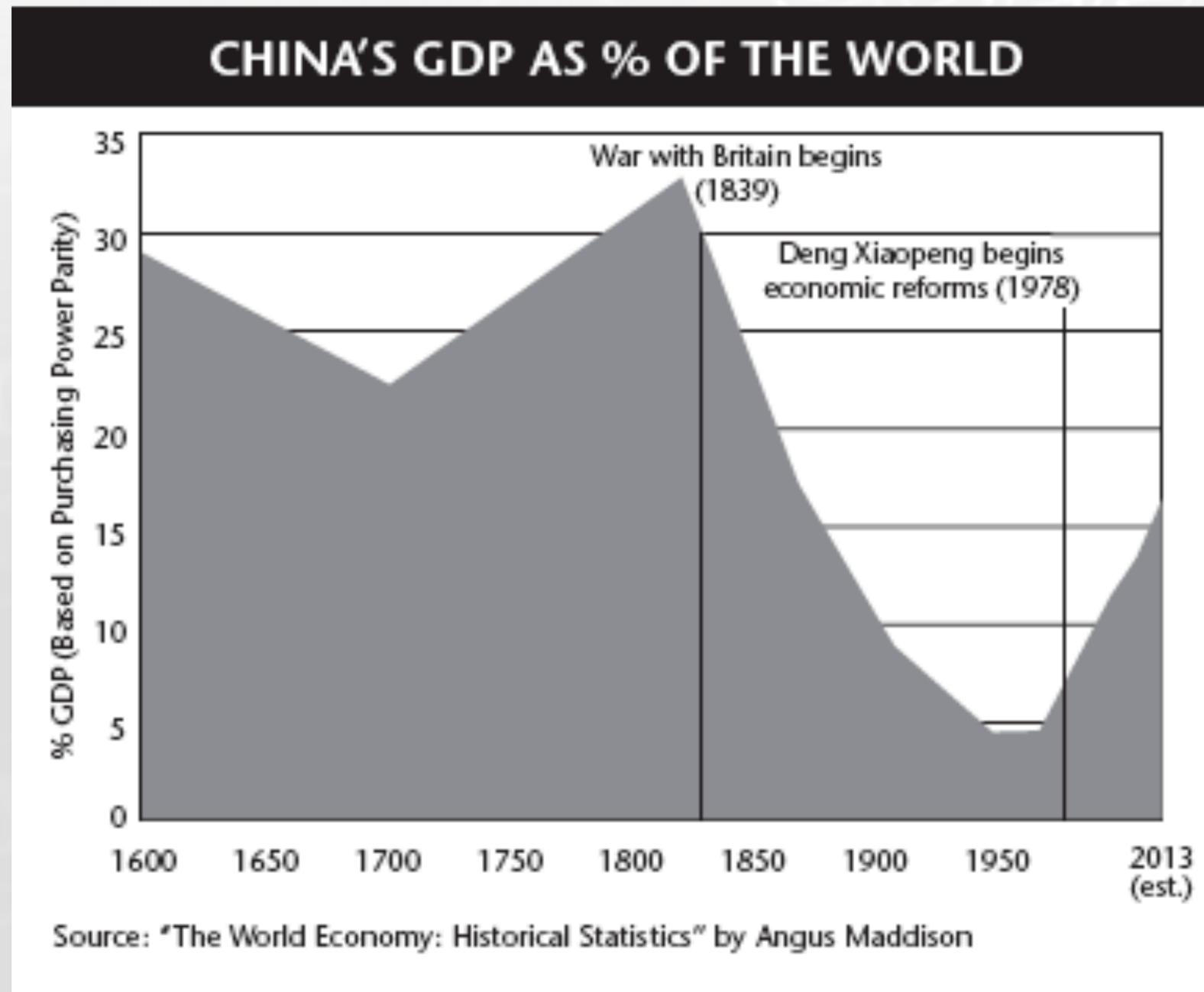
# Information Governance

More than 100,000 rules and regulations and growing

- Data Protection & Privacy Rules
- Regulated Records Retention
- eDiscovery Requirements
- Information Integrity & Authenticity
- Reporting Obligations



# No One Can Put Their Head in the Sand!



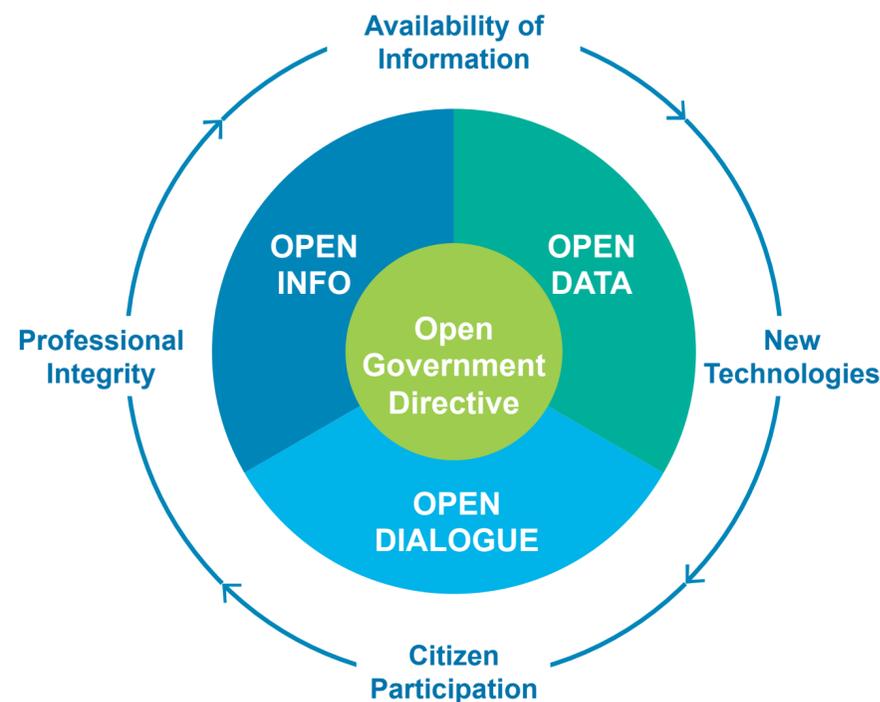
- China missed the Industrial Revolution
- It would not be wise to miss the Information Revolution – *any part of it!*

# Take-Away

- Open Government is a strategic enabler for Canada
- The foundation for economic value creation exists
- Open Dialogue will drive new policy, new data sources, and enable partnerships



1. Innovation
2. Transparency
3. Efficiency
4. Citizen Services
5. Law and Liberty
6. National Security & Data Sovereignty



# Q&A



# OPENTEXT™

**THANK YOU**

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[facebook.com/opentext](https://facebook.com/opentext)



[linkedin.com/company/opentext](https://linkedin.com/company/opentext)