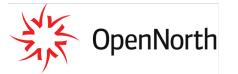


# State of Open Data in Canada

Jean-Noé Landry

Executive Director | <u>Open North</u> Fellow | <u>Center for Law, Technology, and Society</u>

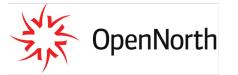
Novembre 8, 2018





#### Outline

- Shifting Open North Roles
  Government Open Data Leadership
  The State of the Open Data Community
- Emerging Risks Broadening and Operationalizing Openness lacksquare





# Shifts at OpenNorth Serve as **Indicators of Maturity**

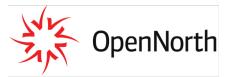
#### THEN

- 1. Provided policy/license advice

- Built open data websites
   Organized hackathons
   Researched open data standards
- 5. Developed municipal open data plans/roadmaps
- 6. Tool building, creating supply/demand

#### NOW

- 1. Engaged in the ODC review
- 2. Context driven approaches to data user engagement
- 3. Broker shared, multi-stakeholder governance
- 4. Pilot multi-jurisdictional interoperability
- 5. Scaling Open Smart Cities
- 6. Applied research, interrogating tools/systems





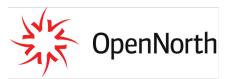
# **Canadian Open Data Successes**

Internationally:

- Leadership in supporting the International Open Data Charter
- Canadian expertise in many different open data networks
  - GODAN, Open Contracting, IATI
- Co-Chair of the Open Government Partnership (OGP)
- Ranked no. 1 in the latest edition of the Open Data Barometer

In Canada:

- Federal Open by Default pilots
- Inter-jurisdictional coordination to enhance searchability
- Openness element in Smart Cities Challenge
- Associations demonstrating leadership (MISA Ontario)

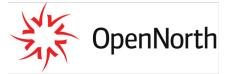


# **Open Data Barometer: Canada No.1**

"Canada has advanced steadily, retaining its position as a top performer for the past five years and rising to the top in this edition. The government's continued progress reflects a strong performance in virtually all areas — from policies to implementation. Its consistent political backing has been one the keys to its success. As Canada starts to show substantial evidence of the impact of this focus on open data across the government, social, and economic sectors, we can see this approach starting to pay off."

G	iovernments and groups	Total Score (out of 100)	Total Score Change (since 1st Ed.)	Readiness (out of 100)	Implementation (out of 100)	Impact (out of 100)	G20 member	Charter adopter
(*)	Canada	76	18 🔺	86	87	55	Yes	Yes
	UK	76	-4 🔻	83	89	57	Yes	Yes
	Australia	75	17 🔺	79	84	62	Yes	Yes
$\mathbf{O}$	France	72	17 🔺	84	77	55	Yes	Yes
()	South Korea	72	25 🔺	82	67	67	Yes	Yes
	Mexico	69	33 🔺	79	67	62	Yes	Yes
ullet	Japan	68	24 🔺	78	68	58	Yes	No
**	New Zealand	68	5 🔺	79	72	52	No	Yes
	USA	64	-11 🔻	79	76	37	Yes	No

NordOuvert



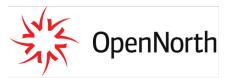


#### **Challenges for Government OD Leadership**

Open Data Barometer takeaways from the last 5 years:

- 1. Better policies, but modest results
- 2. Data openness requires resources not just political will
- 3. Promises on infrastructure and community building remain undelivered
- 4. Weak legislation impedes the growth of open data
- 5. There is (still) inadequate evidence of impact

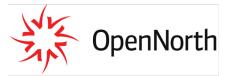
Are we leading by example in these areas? What is our collective and individual responsibility?





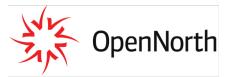
#### **Open By Default vs Publish With Purpose**

- Put "open by default" into action: Develop clear plans, guidelines and procedures to disclose data proactively. This includes listening to people's demands, facilitating data sharing, and investing in the financial and human resources needed for better open data governance.
- **Publish data with purpose:** Work closely with civic groups and multi-stakeholder advisory groups to identify pressing challenges that open data can help solve. Publish the relevant datasets and analyse the impact achieved.



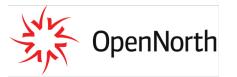


#### **Open Data Movement at a Crossroads: Government and Community Trends**



# State of Open Data Community

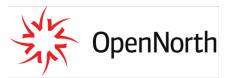
- **Objective**: Critically review the current state of the open data movement, assessing its progress and effectiveness in addressing challenges related to social and economic development and democratization around the world
- Process: Broad mix of experienced open data researchers, users, innovators, and activists (over 60) in order to harness genuine insight into the progress of open data.
- Scope: Open Data Communities, Overarching Issues, Global Regions, Stakeholder Groups
- Funded: IDRC through the Data For Development Research Network





# **Progress and Maturity**

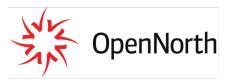
- Open data is now **orthodoxy**.
  - The open data agenda has made government data more visible
- Directly and indirectly shaped contemporary debates around data
- Led thousands of people to engage with, build on, and ask critical questions about the data government collects and manages.
- Has surfaced long-standing issues with the quality and representativeness of data inside governments: and revealed the challenges of data-driven policy making.





# **Fundamental Questioning**

- What is the open data community?
  - Communities framing has been challenging. Sectors represent a more complex set of communities and sub-communities.
- How is the level of **impact** tied to relationship with data?
  - Central to the community or more peripheral to overall sector objectives
- Are we learning the right lessons from successful communities?
  - Clearly part of the central discourse in a cluster of communities around anti-corruption, international aid, government finance transparency, and beneficial ownership.

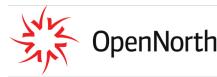






#### **Cross-Cutting Issues**

- Questioning data creation with a more critical approach to data collection and management
  - Gender Equity and Indigenous Data Sovereignty
- Open data has tended to focus on release and use of data, rather than creation and management.
  - A focus on the open definition can restrict the space for talking about other meaning of openness, including greater recognition of when 'closed' approaches should also be used to protect particular community interests.
- Need to identify what 'open data end-to-end' would look like.
  - Eg. Exploring the kinds of openness that should apply to data collection (engaging in design of data collection, and being accountable throughout the process).
- There is an investment gap and a dearth of institutional capacity for scaling open data infrastructure.
  - Need to understand costs and ROI, and support strategic work to build up data infrastructures in particular sectors.





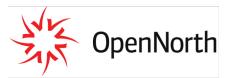
#### **Emerging Challenges**

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- The data space is getting broader, with many more themes in need of attention, new actors, and issues crossing the boundary between 'open data' and wider 'data policy'.
- The open community may be at risk of losing energy, and the need to strengthen networks and links between open data and other open agendas
- Need to focus on how to strengthen open advocacy within the wider data landscape.
  - Eg. digital justice, personal data sovereignty
- There are sometimes established technical protocols that embed an open data approach, and arguably open data has been essential to the development of some of these sectors. However, substantial commercial players with vested interests can also limit the discourse around openness.



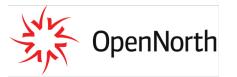
# Operationalizing Openness: Situating and Measuring Openness in Smart Cities





#### **Role of Cities in the Open Data Movement**

- Shorter feedback loops between government and citizens provides opportunities to engage citizens directly in problem framing before publication
- Cities move faster, are more agile to experiment at different scales
- Greater sources of data: higher concentrations of people means more data about them
  - $\circ$  Raises risks and opportunities
- Opportunity to strengthen peer-to-peer networks but need to align on shared drivers of change and incentives

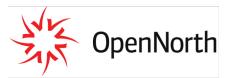




## **Open Smart City Definition**

Need to start with a definition, shared normative understanding:

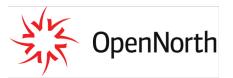
An **Open Smart City** is where residents, civil society, academics, and the private sector collaborate with public officials to mobilize data and technologies when warranted in an ethical, accountable and transparent way to govern the city as a fair, viable and liveable commons and balance economic development, social progress and environmental responsibility.



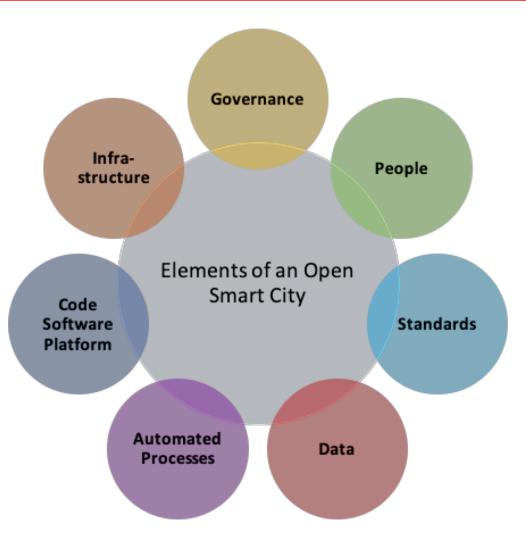


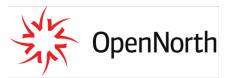
#### **Open Smart Cities Definition**

- <u>Governance</u> in an Open Smart City is <u>ethical</u>, <u>accountable</u>, and <u>transparent</u>. These principles apply to the governance of social and technical platforms which includes data, algorithms, skills, infrastructure, and knowledge.
- An Open Smart City is <u>participatory</u>, <u>collaborative</u> and <u>responsive</u>. It is a city where government, civil society, private sector, the media, academia and residents meaningfully participate in the governance of the city and have shared rights and responsibilities. This entails a culture of <u>trust</u> and <u>critical thinking</u> and <u>fair</u>, just, <u>inclusive and informed</u> approaches.
- An Open Smart City uses data and technologies that are <u>fit for purpose</u>, can be <u>repaired and queried</u>, their source code are open, adhere to <u>open standards</u>, are interoperable, durable, <u>secure</u>, and where possible <u>locally procured and scalable</u>. Data and technology are used and acquired in such a way as to <u>reduce harm</u> <u>and bias</u>, <u>increase sustainability</u> and enhance flexibility. An Open Smart City may defer when warranted to automated decision-making and therefore designs these systems to be legible, responsive, adaptive and accountable.
- In an Open Smart City, <u>data management</u> is the norm and <u>custody and control over data</u> generated by smart technologies is held and exercised in the public interest. Data governance includes sovereignty, <u>residency</u>, <u>open by default</u>, <u>security</u>, <u>individual and social privacy</u>, and <u>grants people authority over their personal data</u>.
- In an <u>Open Smart City</u>, it is recognized that data and technology are not the solution to many of the systemic issues cities face, nor are there always quick fixes. These problems require innovative, sometimes long term, social, organizational, economic, and political processes and solutions.



# Domains, Components, and Elements of an Open Smart City







#### **Open Smart City Principles**

- 1. Balanced
- 2. Ethical, Fair & Just
- 3. Accountable & Transparent
- 4. Trust
- 5. Safe & Secure
- 6. Participatory, Collaborative & Responsive
- 7. Inclusive & Accessible

- 8. Critical Deliberative Culture
- 9. Public interest
- 10. Sustainable
- 11. Procured Locally
- 12. Open
- 13. Lifecycle Data Management
- 14. Social action is as important as technology

