A Field Guide to Open Data

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2021-01-31

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Welcome!

Thank you for joining me on a journey to explore the use of Open Data in the civic world.

The book is organized into 3 parts -

- Part 1 provides an overview of what Open Data is, how Open Data is used and who uses Open Data.
- Part 2 questions the usefulness of Open Data to its producers, how use is measured and what are the challenges faced by producers and consumers of Open Data.
- Part 3 imagines how information provided by Open Data may be shared, discovered and improved.

I have had the great honor to work with many amazing organizations, agencies and governments to implement technology solutions that enabled the unleashing of data and analytics to power decision making and transparency.¹

¹Brown (2020)

An Open Data Primer

2.1 What is Open Data?

"Open data is information or content made freely available to use and redistribute, subject only to the requirement to attribute it to the source.

- Gartner"¹
- 2.1.1 Types
- 2.1.1.1 Tabular
- 2.1.1.2 Spatial
- 2.1.1.3 Dashboards
- 2.1.1.4 Stories
- 2.1.1.5 Visualizations
- **2.1.1.6** Surveys
- 2.1.1.7 Reports

2.2 How is it used?

2.2.1 Organizational Goals

- Public information
- Transparency
- Fine tune staffing and location

 $^{^{1}}$ Gartner (2020)

- Equity and performance measurement
- Insights and data mining
- 2.2.2 News
- 2.2.3 Civic

2.3 Who uses it?

- Producer organizations
- Community users (civic)
- Academic

2.3.1 Personas

There are many people and roles across organizations that require data. Here are some personas based on individuals I have met and worked with to get the data they need to perform their jobs. Please note that the names are made up and intended to reflect any specific gender.

- 2.3.1.1 the Analyst
- 2.3.1.2 the Performance Manager
- 2.3.1.3 the Executive

Use of Open Data

- 3.1 Examples of Usefulness
- 3.1.1 Outcomes
- 3.2 Measuring Use
- 3.2.1 Utilization
- 3.2.2 Analytics
- 3.2.3 Feedback
 - 1. Who are the real users of this data?
 - 2. How can we tell who they are?
 - 3. Are there personas we haven't imagined?
 - 4. How can we measure actual engagement of these users?
 - 5. Are they using it the way we thought they were? Ex. Hack to "fix" data in between steps.

3.3 Challenges of Open Data

- 3.3.1 Searching for data
 - Paging through results
 - Onus of filtering

3.3.2 Peeking at data

Nobody wants to download 1 million records of taxi rides, but they do want to know why tips increased after a software update. 1

 $^{^1 {\}rm Wellington}~(2020)$

Imagining Open Data

4.1 Sharing

Adding datasets to a platform may benefit power users of data and make it easy consumable by tools and programming languages. However data alone will not advance the knowledge of the community it is intended to serve without also including narrative and insights from the collections of datasets shared to a platform.

4.1.1 Stories & Narrative

- Live tiles
- Data driven documentation

- 4.1.2 Dashboards
- 4.1.3 Goals
- 4.1.4 Reports
- 4.1.5 Access by Tools
- 4.1.6 Open source library
- 4.1.7 API accessible
- 4.2 Discovery
- 4.2.1 Metadata
- 4.2.2 Harvestable
- 4.3 Standard schemas
- 4.4 Improving the Ecosystem
- 4.4.1 Ownership and stewardship
- 4.4.2 Automation
- 4.4.2.1 Data refreshes
- 4.4.2.2 Quality monitoring

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