

OPEN DATA: CHALLENGES AND OPPORTUNITIES FOR NATIONAL STATISTICAL OFFICES



Timothy Herzog
Data Scientist
March 3, 2017

OPEN DATA & NSOs

NSO Objectives (NSDS)

- Produce high-quality statistics
- Authoritative published statistical record
- Greater use and usability of statistics

Open Data Objectives

- Improved public services
- Greater transparency and accountability
- Innovation in use of data

However: NSOs do not always feature prominently in Open Government Data Initiatives

NSO Study Group

INE Uruguay

INEGI Mexico

Istat Italy

Jakarta BPS

NBS Tanzania

NISR Rwanda

NSO Mongolia

ONS, United Kingdom

Paris 21

ROSSTAT

Stat Canada

U.S. Census Bureau

World Bank

OPEN DATA & NSOs: Strategic Significance

- NSOs produce many products considered essential under Open Data
- Open Data strongly supports NSOs' primary mission(s)
- Provide technical leadership, inter-agency cooperation, in line with goals of National Statistical System
- Contribute to broader government priorities

OPEN DATA: CHALLENGES & OPPORTUNITIES FOR NATIONAL STATISTICAL OFFICES

Opportunities

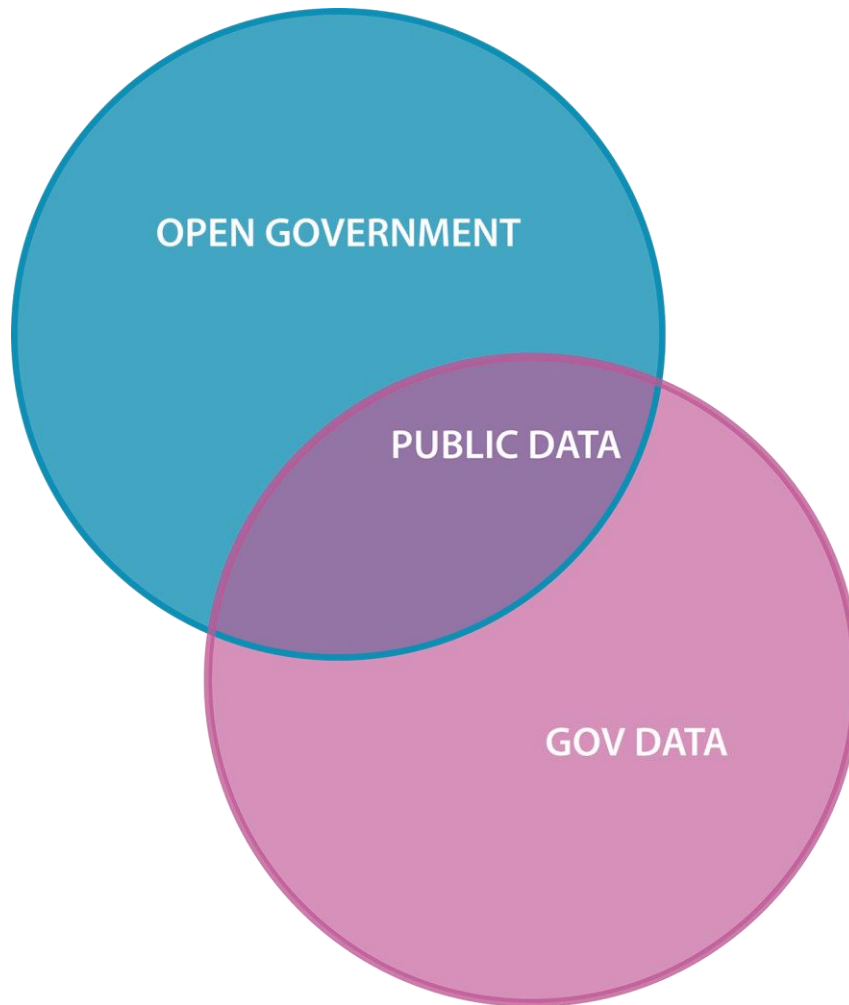
- Open Data increases use/-reuse of data; maximize investments in statistics and data production
- Open Data can reduce costs
- Increase in NSO profile, enhanced reputation
- Improved data quality

<http://bit.ly/opendata-nsos>

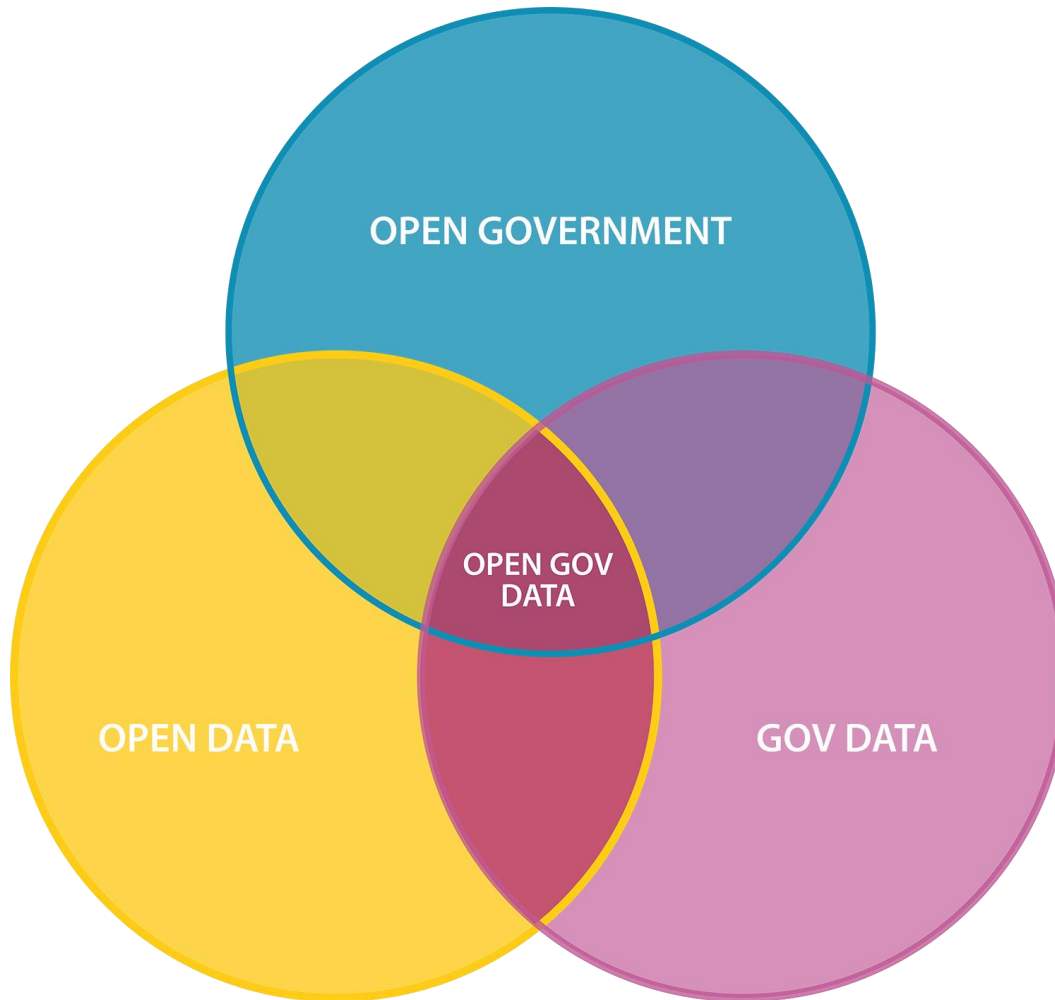
Challenges

- **Understanding data privacy considerations; safeguarding confidentiality**
- **Legal issues: aligning policies, consistent, clear licensing**
- **Capacity & resource constraints in implementation**
- **Engaging the broader open data ecosystem**

KEY TAKEAWAY: PUBLIC VS. OPEN DATA



KEY TAKEAWAY: PUBLIC VS. OPEN DATA



Open Data Means:

- **Open License**
- **No Access Restrictions**
- **Open Data Formats**

ROLES FOR NSOs IN OPEN DATA

- Provide technical expertise
- Establish and oversee standards
- Provide training (in- and outside government)
- Engage international community
- Rarely are NSO's the "lead" implementation agency

TECHNICAL ASSESSMENT OF OPEN DATA PLATFORMS FOR NSOs

Software platform	Descriptive Metadata	Machine-readable	Anonymous access	Data licences	Data attribution	Search	Open API	Static URI	Harvesting	Federating	Public Documentation	Standards-based	Structural Metadata	OLAP Hypercubes	Data Endpoints	Visualisation	UX & S/W Extensibilit
CKAN	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
DevInfo	●	●	●	●	●	●	●	●			●		●	●	●	●	●
DKAN	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
Junar	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
NADA	●		●	●	●		●				●	●	●				●
Nesstar	●	●	●	●	●	●		●			●			●		●	●
OpenDataSoft	●	●	●	●	●	●	●	●	●		●	●			●	●	●
PC-Axis and PX-Web	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Prognoz	●	●	●	●	●	●		●						●		●	●
Semantic MediaWiki	●	●	●	●	●	●	●	●			●	●			●		●
Socrata	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
Swirrl	●	●	●	●	●		●	●	●	●	●	●			●		●

<http://bit.ly/opendata-nso-platforms>

INTEGRATING DDI WITH OPEN DATA CATALOGS

The screenshot shows a CKAN dataset page. The header includes the CKAN logo, navigation links for Datasets, Organizations, Groups, and About, and a search bar. The breadcrumb trail is 'Home / Datasets / Comprehensive Food Security ...'. The dataset title is 'Comprehensive Food Security and Vulnerability Analysis and Nutrition Survey 2009'. It has 0 followers. Social media links for Google+, Twitter, and Facebook are provided. The dataset is categorized as 'Dataset'. Below the title, there are tabs for 'Dataset', 'Groups', 'Activity Stream', and 'Related'. The main content area shows the dataset title, a 'Data and Resources' section with an XML icon and an 'Explore' button, and an 'Identification' section with a table of metadata.

Identification	
Source	Comprehensive Food Security and Vulnerability Analysis and Nutrition Survey 2009
Abbreviation	CFSVA&NS 2009
Study Type	Other Household Survey [hh/oth]
Series Information	The 2009 Comprehensive Food Security and Vulnerability Analysis & Nutrition Survey (CFSVA & NS) together with its partners. This baseline survey is a joint initiative and has

<http://extensions.ckan.org/>

NEXT STEPS

- Share findings more broadly with NSOs – continue discussion
- Standards, Metadata & Ontologies
- Improved Tools and APIs
- Synergies with Open Data Watch

TO READ THE REPORTS

- <http://opendatatoolkit.worldbank.org>
- <http://bit.ly/opendata-nsos>
- <http://bit.ly/opendata-nso-platforms>

Thank You!

Tim Herzog – <http://twitter.com/tgherzog>