

Open Government Data Initiatives – Opportunities and Challenges



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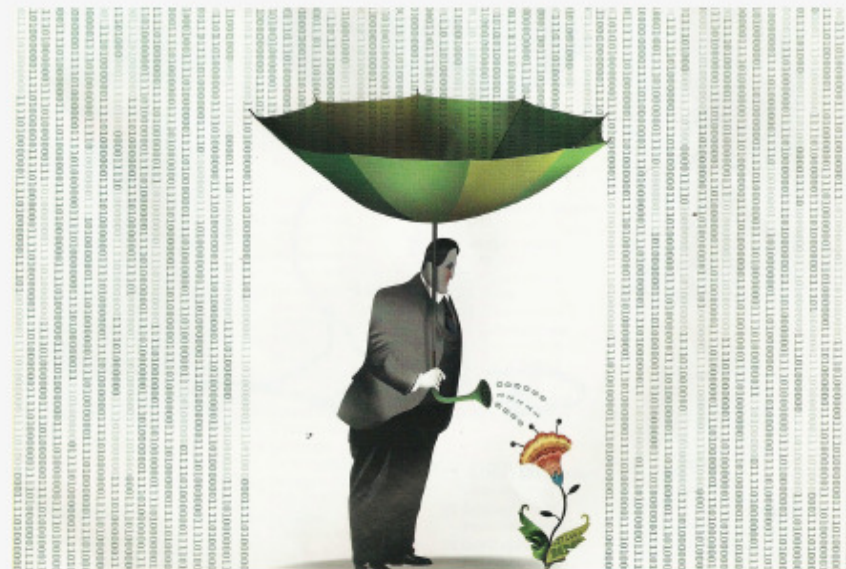
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Open Data



Open data is data that can be freely used, reused and redistributed by anyone

Information is becoming available,



Source: The Economist, Feb. 27, 2010



Better Services

**Collaboration
Innovation**

**Citizen
Engagement**

OGD

Motivations

**Better Decision
making**

Transparency

Accountability

OGD : Ecosystem

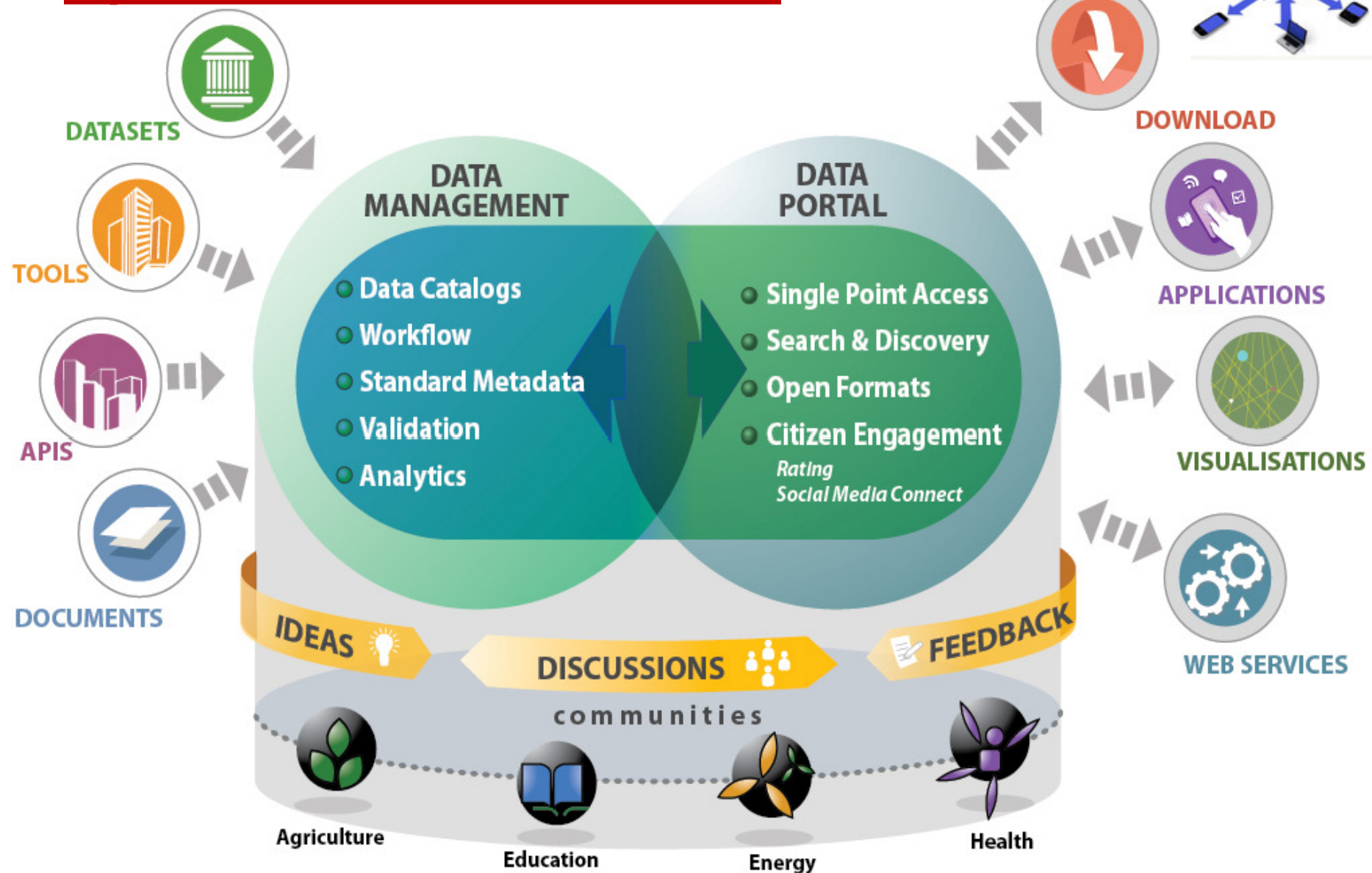


Community Engagement

Academia Engagement

Industry Engagement

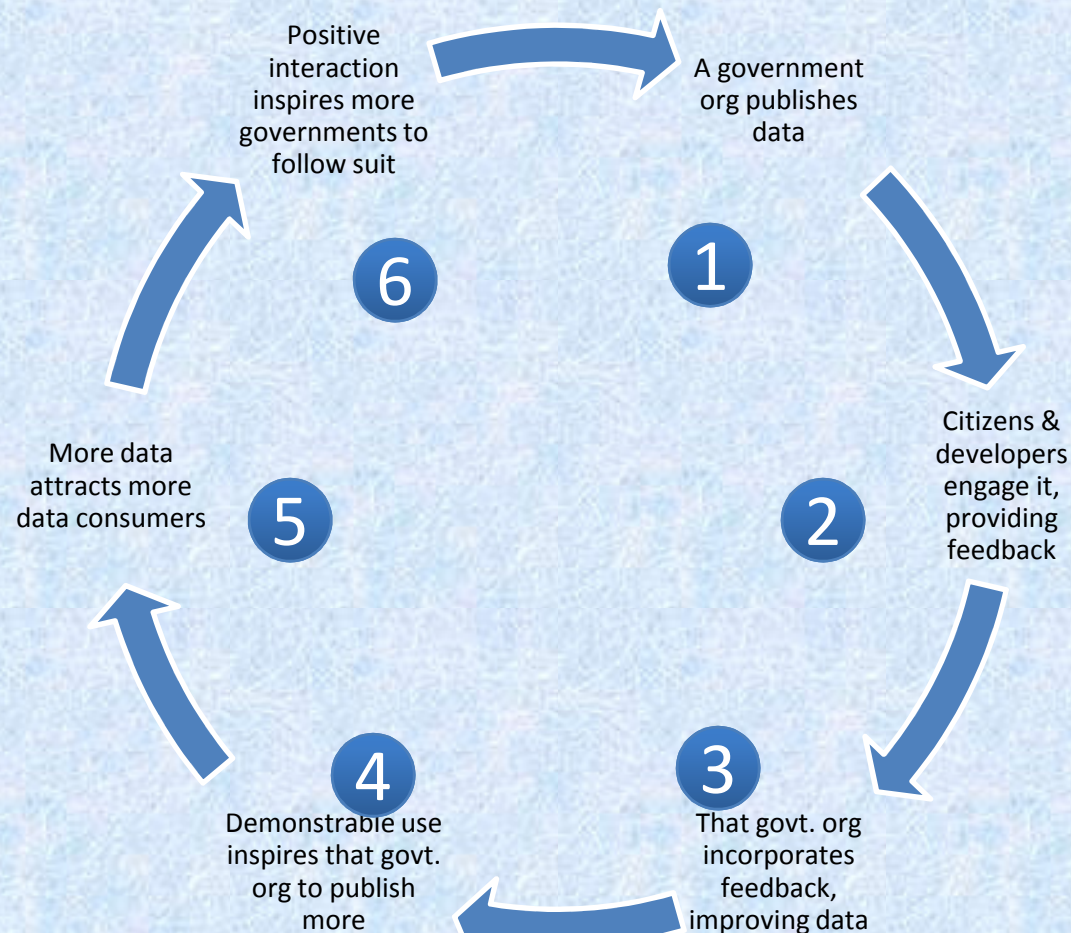
Open Government Platform



Who Benefits from Open Data?



Open Data is an ecosystem



Where government and citizens get into intelligent interactions based on equal knowledge

National Data Sharing & Accessibility Policy (NDSAP)



- **NDSAP** was formulated through an extensive process of consultation. It was gazette notified on 17th March 2012

- *NDSAP mandates all Ministries/Departments/organizations to release maximum possible datasets in the public domain*

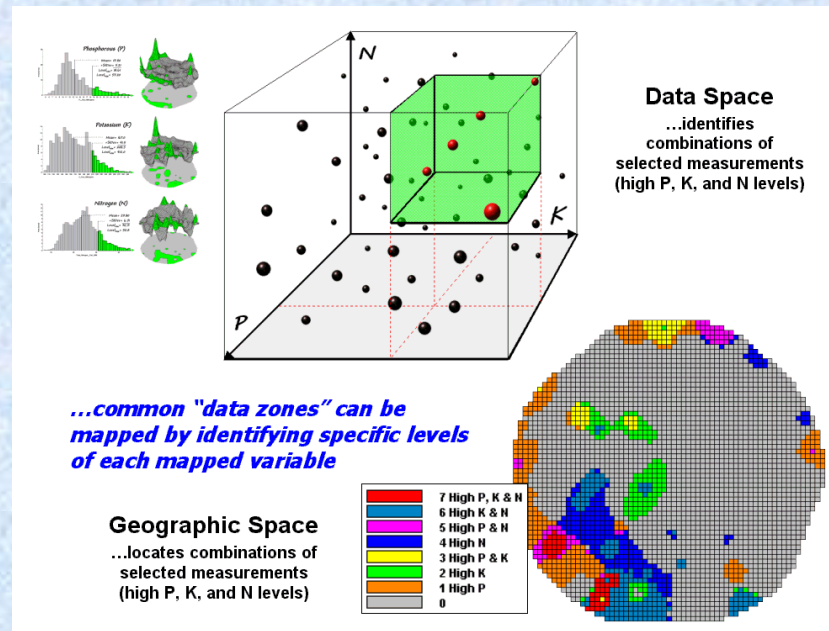
- **NDSAP is applicable to**
 - All sharable non-sensitive data
 - Government Ministries, Departments,
& Associated Offices

Full Text at <http://data.gov.in>



Data Classification

- Different types of data sets generated both in **geospatial and non-spatial** form by different Ministries / Departments are to be classified as shareable data and non-shareable data.



Data Classification

Types of Access



- **Open Access Data:** *Access to data generated from public funding should be easy, timely, user-friendly and web-based without any process of registration/authorization.*
- **Registered Access:** *Data sets which are accessible only through a prescribed process of registration / authorization by respective departments / organizations will be available to the recognized institutions / organizations / public users, through defined procedures.*
- **Restricted Access:** *Data declared as restricted, by Government of India policies, will be accessible only through and under authorization.*

Security, Legal, Pricing Aspects



- *Negative List will be prepared by each Organization/Department/ Ministry/ taking into account the security, privacy, IPR etc.*

Examples include:

- **Data relating to national sensitivity**
- **Trade secrets and intellectual property rights**
- **Protection of rare, threatened or endangered species**
- *Access to data under this policy will not be in violation of any Acts and rules of the Government of India in force*
- *Departments will decide their own pricing policy*



NDSAP Implementation in Ministries/Departments



- In order to implement NDSAP, the Ministries/Departments of Government of India have to undertake the following activities:

- a. Nominate Data Controller
- b. Setup NDSAP Cell
- c. Identify Datasets
- d. Prepare Negative List
- e. Publish Datasets on Data Portal India



www.data.gov.in



सत्यमेव जयते



DATASETS

APPS

METRICS

COMMUNITIES

CONTESTS

WW DATA SITES



Daily Market Prices of Commodities

DATASETS

4068 Datasets

52 Departments participating

APPS

7 Apps

5 Departments participating

1 Community Contributed App



#OpenDataApps CHALLENGE

Inviting entrepreneurs, developers from industry and community to participate in the challenge

ANNOUNCEMENTS

- ▶ Glimpses of Conference on #OpenDataApp Challenge for Innovation in Governance
- ▶ In Pursuit of an 'Idea', an event to encourage collaboration on Open Government Data
- ▶ 81 Data Controllers Nominated

Mc

RECENT SUGGESTIONS

Can we get data for foreign tourist arrivals gender wise. The idea is to know how many women come to India and from which countries.

SUGGEST OR ENDORSE DATASETS

USEFUL LINKS

- ▶ Open Data Policy of India
- ▶ Open Data Implementation Guidelines



CITIZEN PARTICIPATION

Join communities to connect with others in the same field & brainstorm innovative ideas



Issues and Challenges with Research Data

- **Keeping your Research Alive**
- **Preserving Research Data**

OECD DECLARATION ON ACCESS TO RESEARCH DATA FROM PUBLIC FUNDING

adopted on 30 January 2004 in Paris



The governments of Australia, Austria, Belgium, Canada, China, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Russian Federation, the Slovak Republic, the Republic of South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States recognize that:

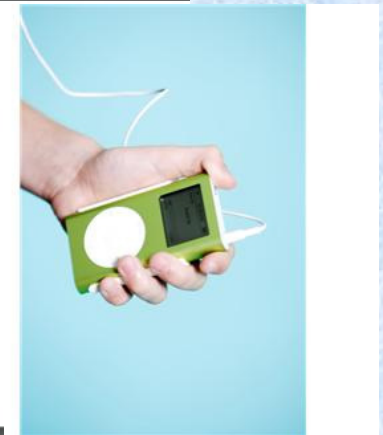
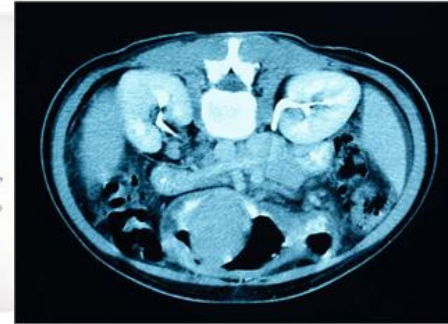
- Optimum international exchange of data, information and knowledge contributes decisively to the advancement of scientific research and innovation**
- Open access to, and unrestricted use of, data promotes scientific progress and facilitates the training of researchers**
- Open access will maximise the value derived from public investments in data collection efforts**
- Substantial benefits that science, the economy and society at large could be gained from the opportunities that expanded use of digital data resources**
- The risk that undue restrictions on access to and use of research data from public funding could diminish the quality and efficiency of scientific research and innovation**



- What type of research data and Why manage research data?
- How to manage research data
 - Types of research data
 - Ethics & IP
 - Access, Sharing & Re-use
 - Storage & preservation
- The Lifecycle of Research Data

Research Data

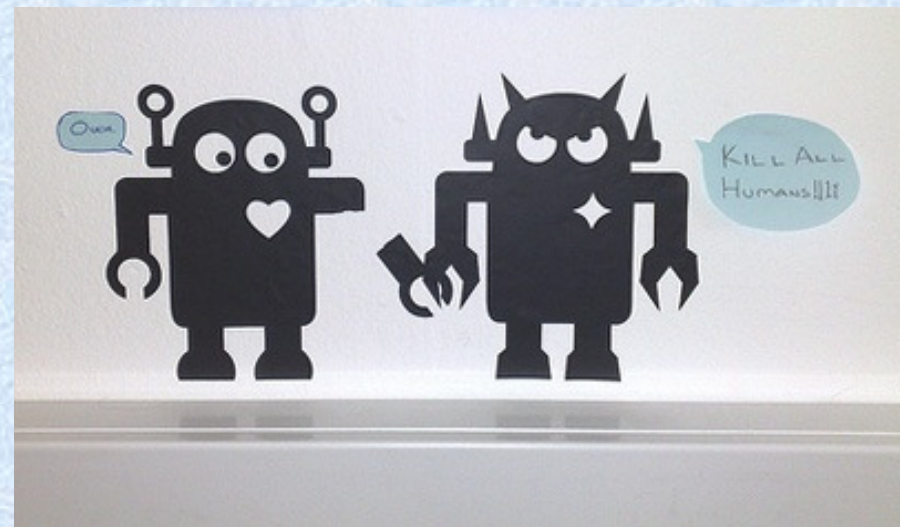
Recorded, factual material commonly retained by and accepted in the [research] community **as necessary to validate research findings;** although the majority of such data is created in digital format, all research data is included irrespective of the format in which it is created.



Stimulating re-use of open data



- Data sharing builds communities
 - Stronger networks
 - More collaboration
 - Better research
 - Increase research efficiency
 - Save time and resources
 - Enhance data security



Managing Research Data



Ethics

Ethical review – research with people –balancing data protection with data sharing

- ✓ Informed consent – current *and* future use
- ✓ Confidentiality – is anonymisation appropriate?
- ✓ Access control – who, what, when?

IPR

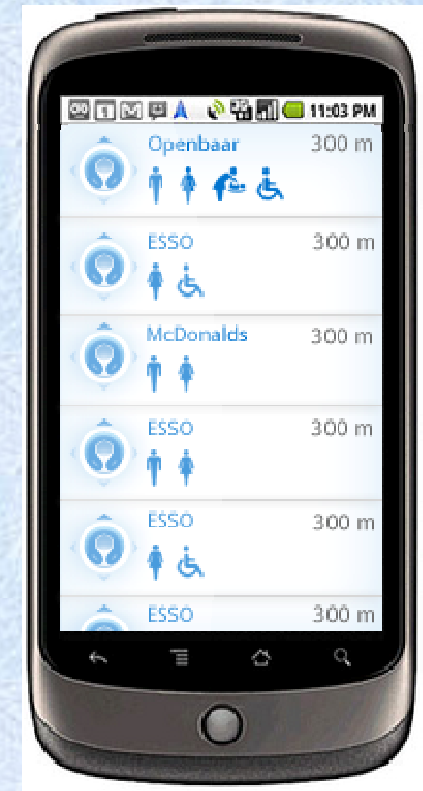
Copyright – clarify before research starts

Licensing options – CC, ODC, End User Licence



Developing Applications for use / re-use

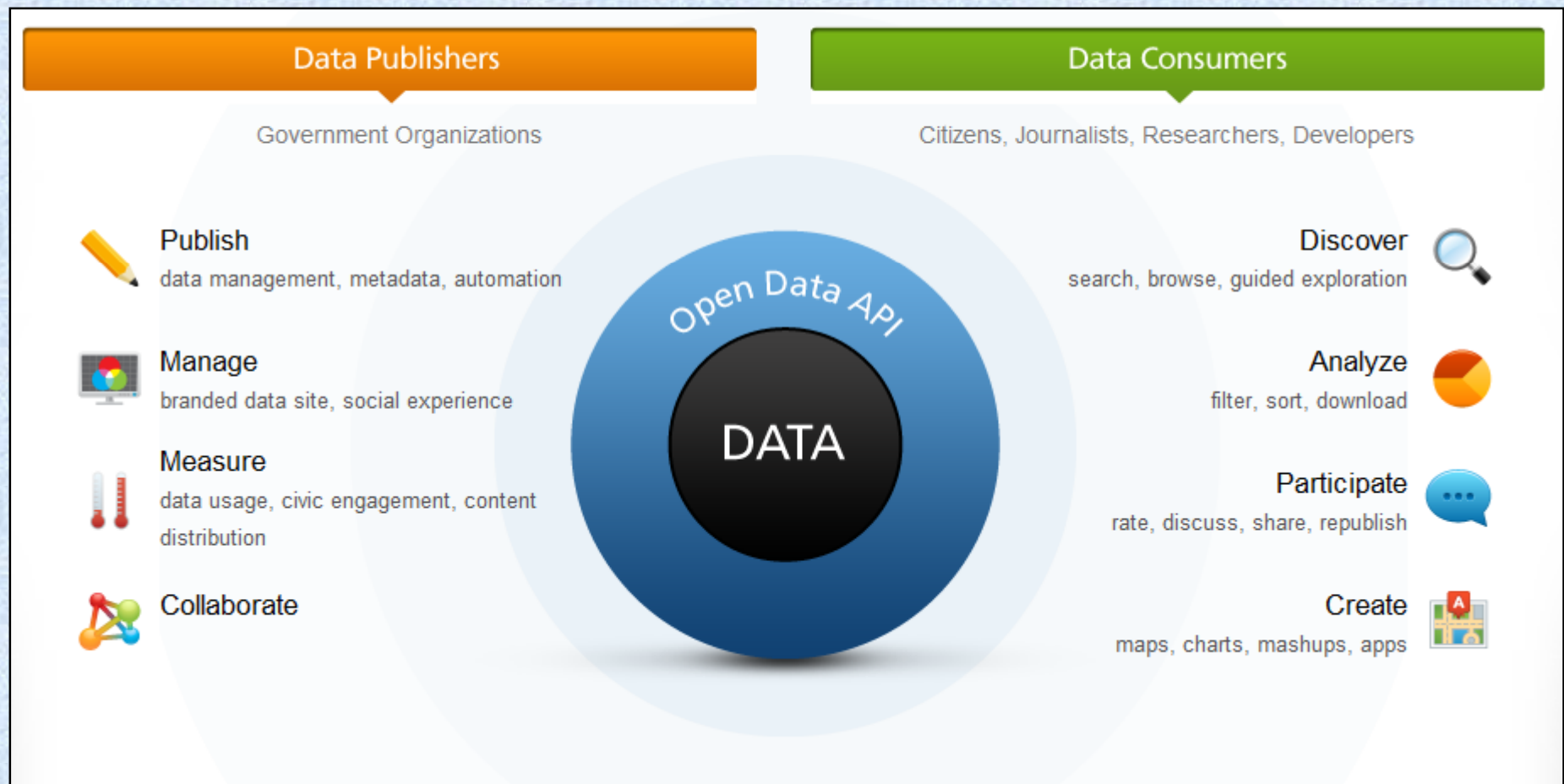
- Water distribution system
- Transport sector [GPS]
- Agromet services
- Agricultural Price data





The Open Data Publisher/Subscriber *Equation*

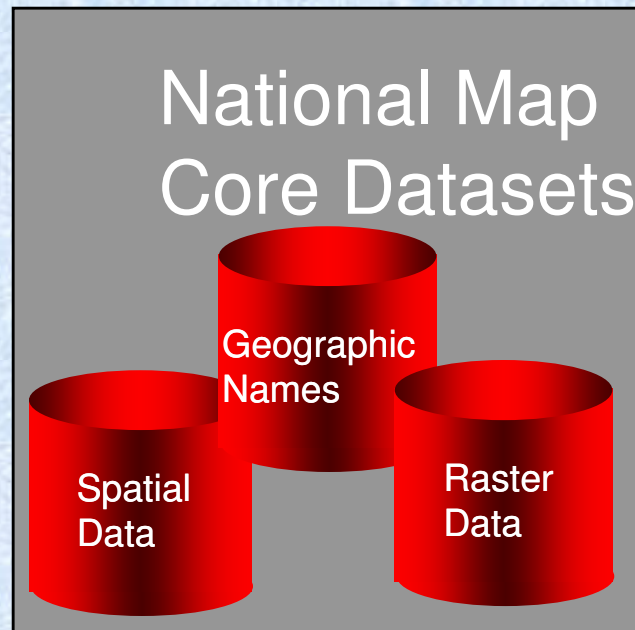
Transforming governments from data collectors → data producers → data publishers



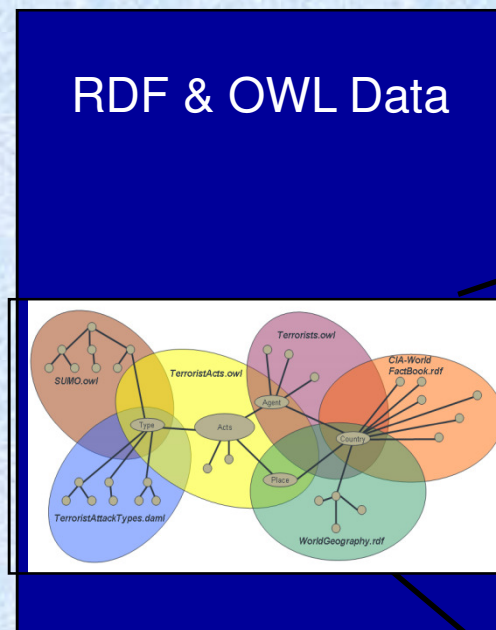
Ontology-driven Map Apps



Application
Ontologies



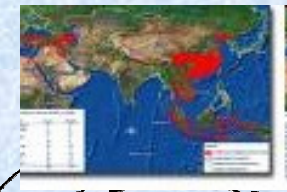
- Simple Features
- GeoRaster
- Topology
- Networks
- Gazetteers
- ...



- Data Integration
- National Map schemas
- Geographic names
- Temporal
- Naïve Geography
- ...



Situational
Awareness



Theater



Targeting

Society



Societal
issues

App
develop
ers

open
data

Societal issues

+

Open data

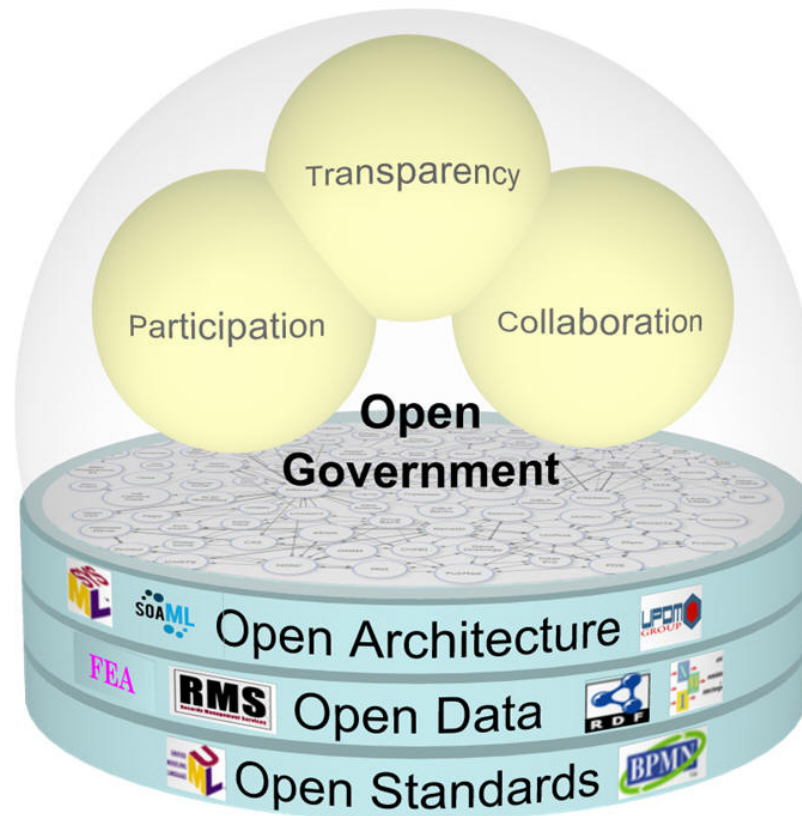
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App developers

=

Real solutions

In Summary....



THANK YOU