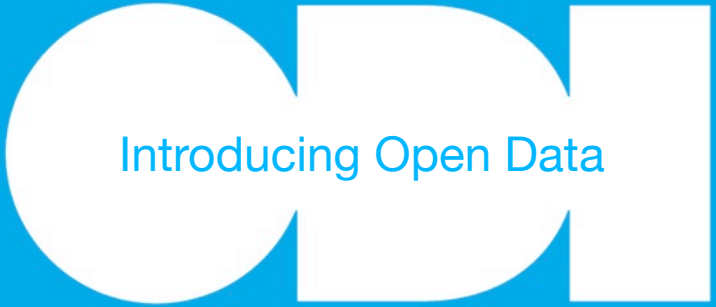


David Tarrant · davetaz@theodi.org · @davetaz

Aim

Provide a good foundation in the principles of open data, and explore examples of open data usage.

Outcomes

Define open data

Describe a number of key open data stories

Evaluate the challenges facing open data

Analyse the future of open data on a global scale

Exercise

What is Data?

Definition of Data (1)

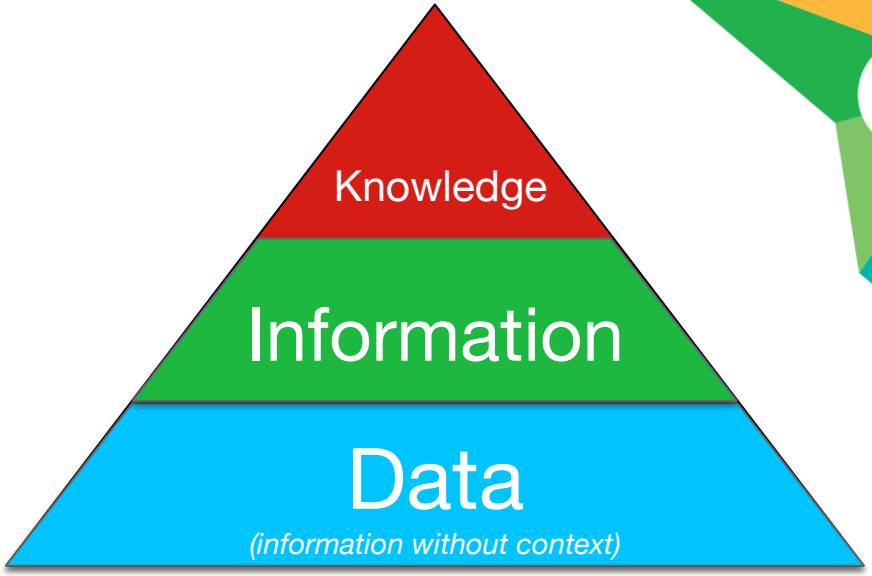
A collection of **facts**, **information** and statistics that can be analysed to develop new knowledge

Definition of Data (2)

A collection of numbers assigned as values to quantitative variables and/or characters assigned as values to qualitative variables

Definition of Data (3)

The **lowest level** of abstraction from which information and then knowledge are derived.



Exercise

What is Open Data?

Option A

Open data is data that is made **available** by **organisations**, **businesses** and **individuals** for **anyone** to **access**, **use** and **share**.

- Open Data Institute

Introduced November 2014

Option B

Open means **anyone** can **freely access**, **us**

modify and **share** for **any purpose** (subject, at most, to requirements that **preserve provenance** and **openness**).

- Summary of Open Definition (v2.0)

Introduced August 2014

Option C

DATA.GOV.UK
Opening up Government

Open data is data that is **published** in an **open format**, is **machine readable** and is **published** under a **license** that allows for **free reuse**.

- data.gov.uk
Accessed November 2014

Option D

Open data is the **idea** that certain data should be **freely available** to **everyone** to **use** and **republish** as they wish, **without restrictions** from **copyright**, **patents** or other **mechanisms of control**.

- Wikipedia

Accessed November 2014

Data is the raw material of the new industrial revolution

- Francis Maude, UK MP

Justifications

Trust and Transparency

Enabling the economy

Key Stories

Enabling transparency

Creating an income stream

Cutting costs

Improving services

Saving our planet

Exercise

Enabling transparency

Creating an income stream

Cutting costs

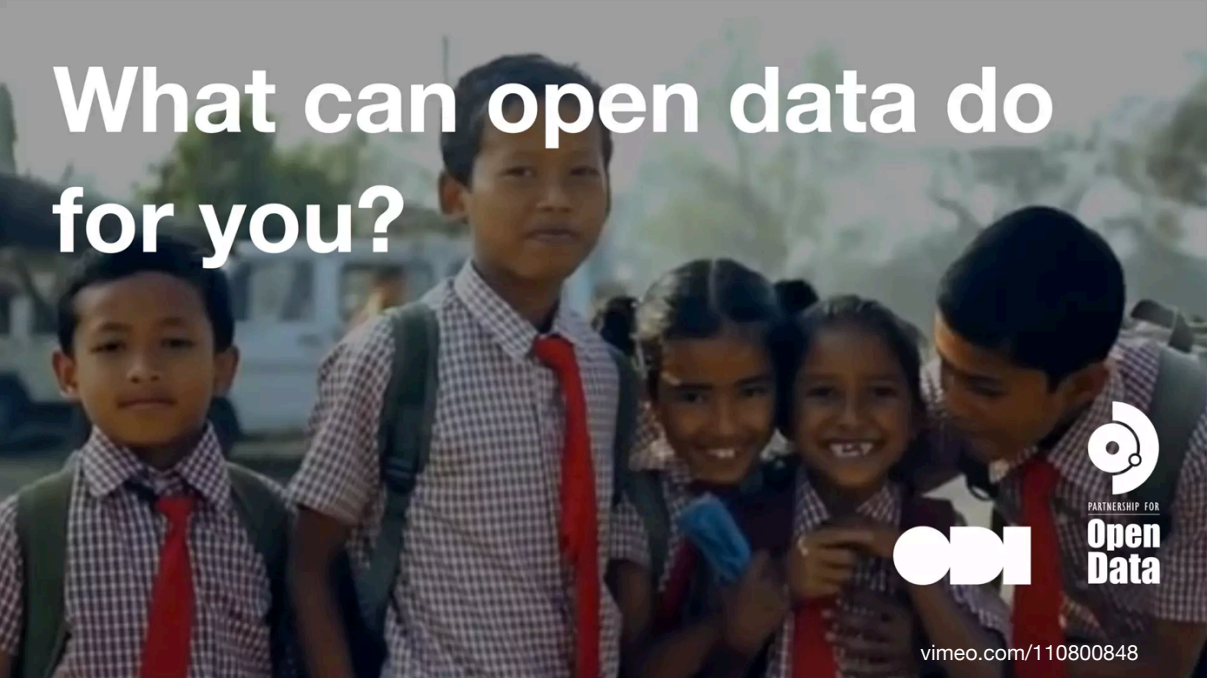
Improving services

Saving our planet

In your groups, come up with a short list of your favourite open data stories

(bonus points for one in each area)

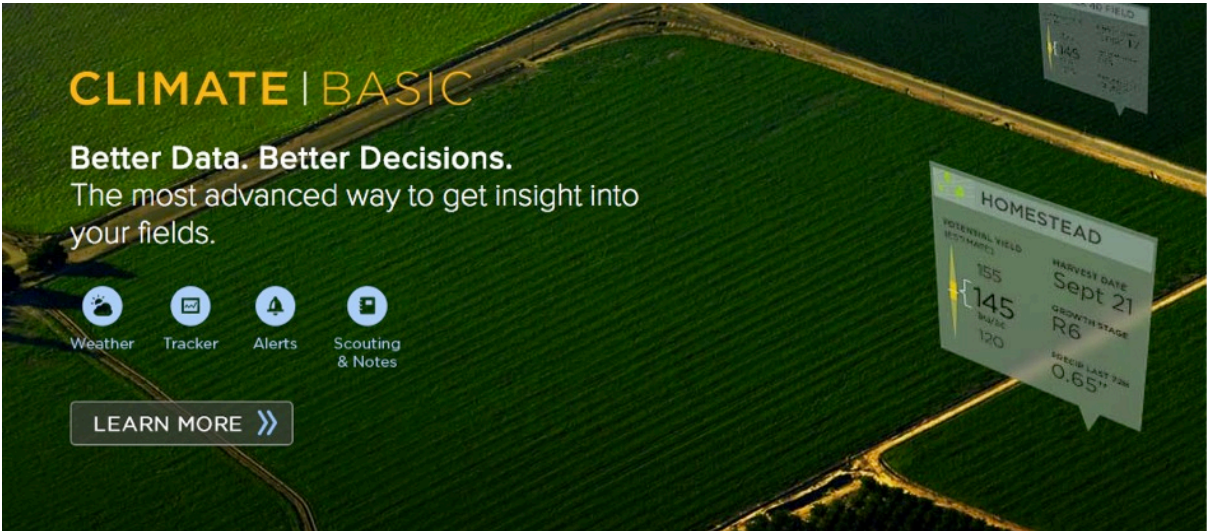
7 minutes


What can open data do for you?
PARTNERSHIP FOR
Open Data
vimeo.com/110800848

Transparency

http://www.telegraph.co.uk/news/newstopics/mps-expenses/

Income


CLIMATE | BASIC
Better Data. Better Decisions.
The most advanced way to get insight into your fields.
Weather
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Alerts
Scouting & Notes
LEARN MORE
HOMESTEAD
155
145
120
HARVEST DATE
Sept 21
GROWTH STAGE
R6
0.65"

Cutting Costs

Open Data found a £200m saving in the NHS budget

prescribing analytics

Home

Detailed statin analysis

Why prescriptions matter

FAQ

Methodology

Contact us

About this site

About Prescribing Analytics

Prescribing Analytics is a joint venture of a group of UK technologists and NHS doctors, who believe in the power of data and technology to help the NHS.

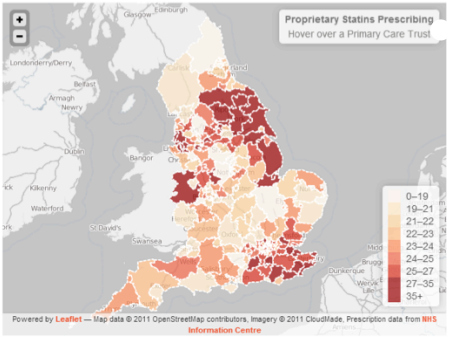
Drop us an email at **info@prescribinganalytics.com**

Home

NHS efficiency savings: the role of prescribing analytics

The NHS has been challenged to make £20 billion in "efficiency savings" by 2015 (1). £10 billion a year are spent by the NHS on essential drugs. Often, there's a choice between a cheap "generic" medication, or an expensive "branded" one. Branded drugs can cost over ten times as much, for the same therapeutic benefit. "Prescribing Advisors" in the NHS, with the support of NICE, encourage doctors to use the most cost effective treatments. We have analysed exactly how much is spent on expensive "branded" medicines, for one class of drugs, namely statins, in England.

Percentage of proprietary statin prescribing by CCG Sep 2011 - May 2012



Show PCT data

Where generic alternatives exist, NHS purchasing of branded drugs has a number of effects:

1. There is only a finite amount of money to spend on treatments. Prescribing a patient expensive branded drugs, when cheaper equivalents would have the same therapeutic effect, means that money is wasted. As a result the NHS has less money to spend on the care needed by other patients.

1x Rosuvastatin Calcium

1.2x Simvastatin

11x Atorvastatin

2nd Largest Drug Cost

(prior to June 2012)

perscribinganalytics.

Improving services

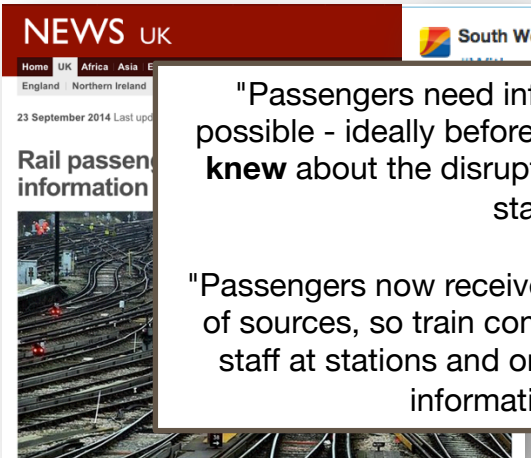
1 Tube network

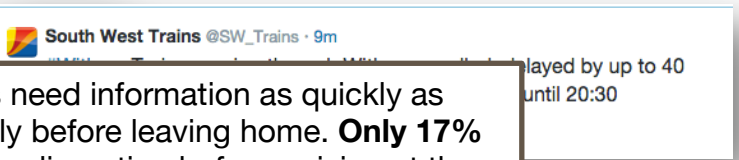
13 Bus Companies with 100s of routes

11 Train companies connecting urban areas

1 integrated payment system

Communicate and support





"Passengers need information as quickly as possible - ideally before leaving home. **Only 17% knew** about the disruption before arriving at the station.

"Passengers now receive information from a range of sources, so train companies must ensure that staff at stations and on trains are ahead of the information game."

http://www.bbc.com/news/uk-29317630

Saving our planet

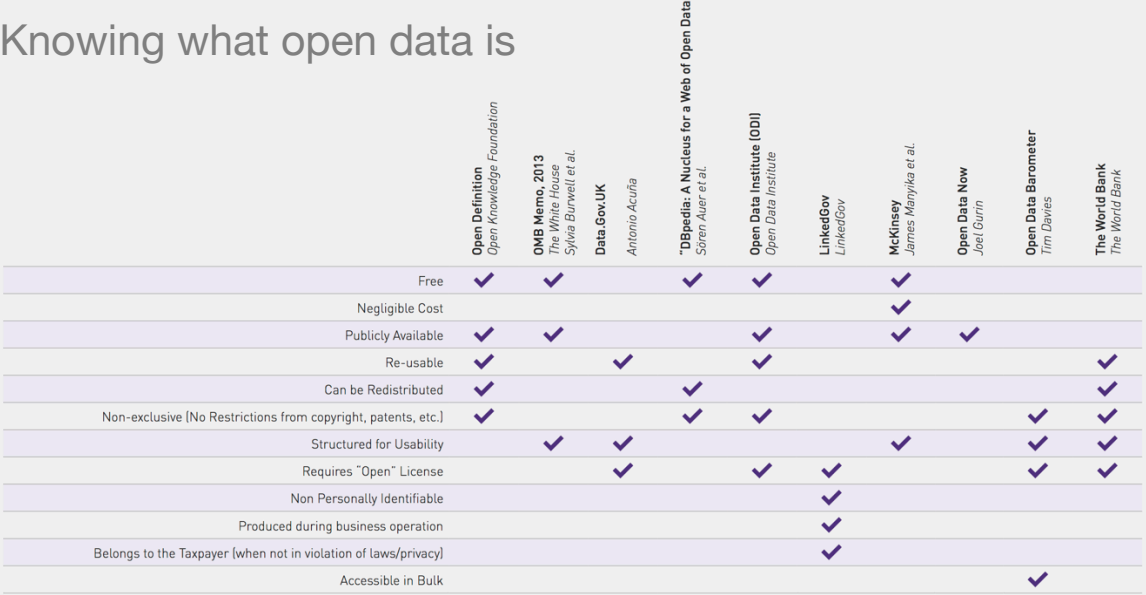
vimeo.com/9182869

OpenStreetMap

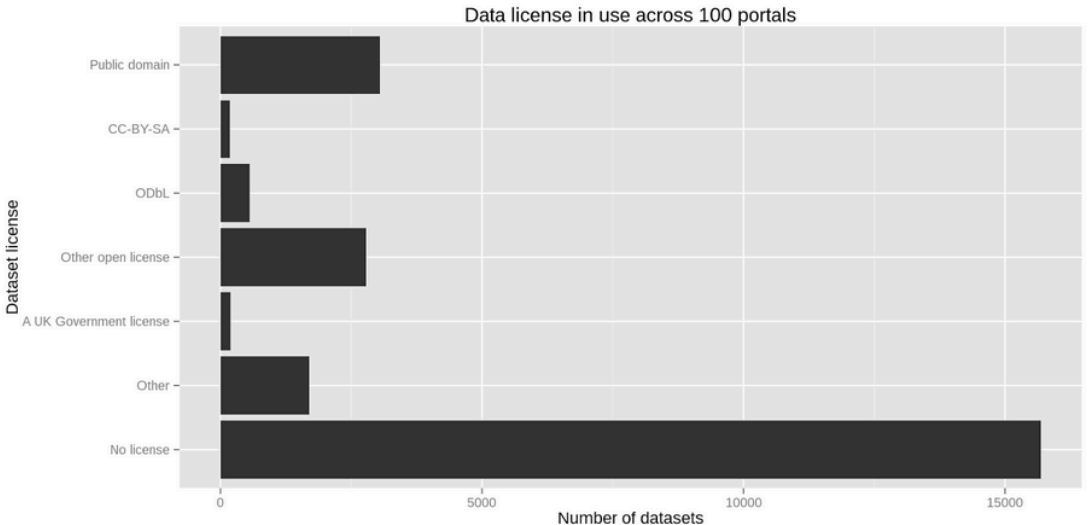
Map data www.openstreetmap.org 31 Jan 2010

The challenges…

Knowing what open data is

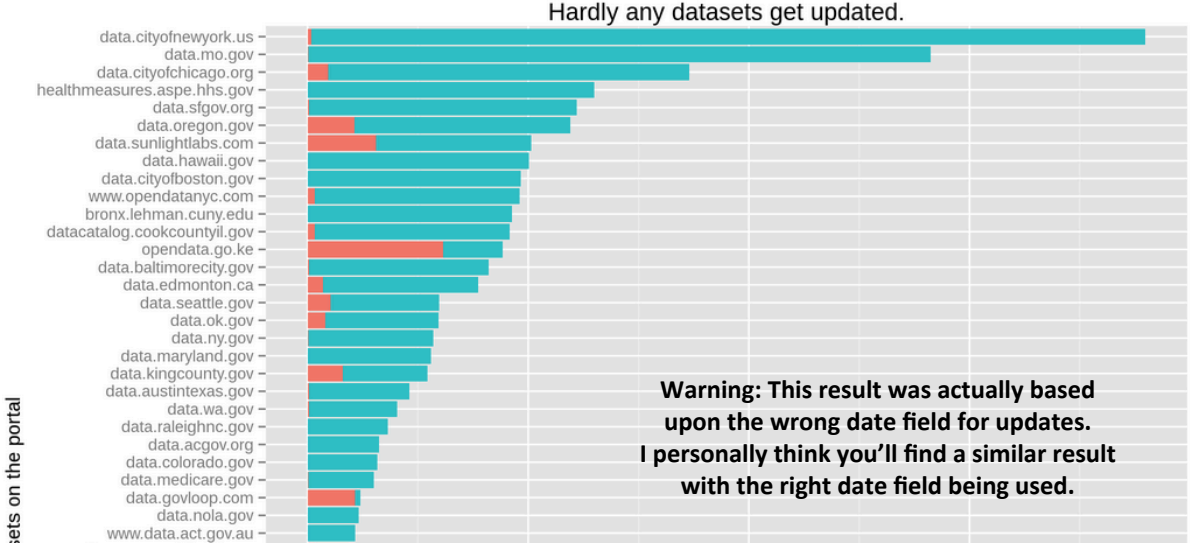


Open data is hardly ever appropriately licensed.



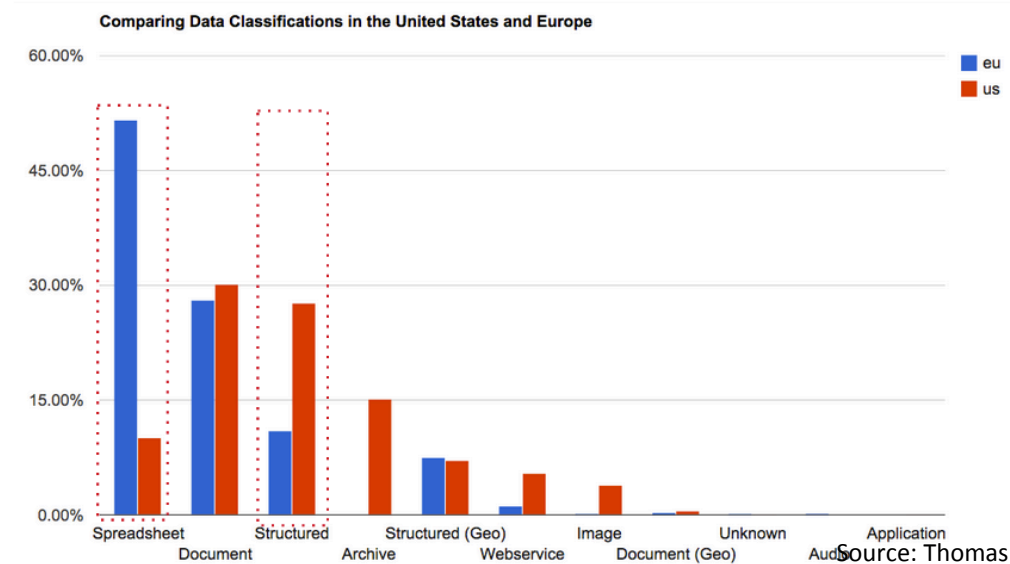
Source: Thomas Levine

http://thomaslevine.com/!/open-data-licensing/



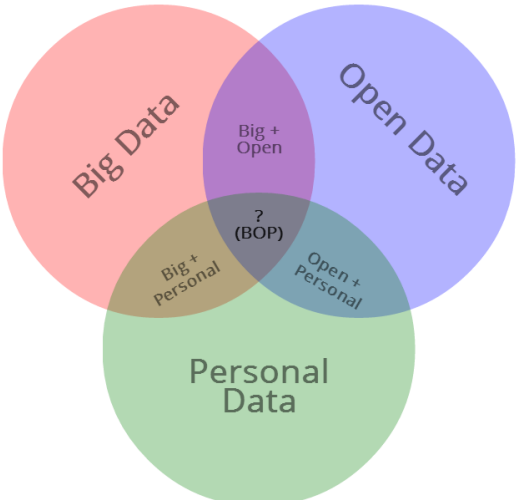
http://thomaslevine.com/!/data-updatedness/

Open data is rarely structured.



Source: Thomas Levine

Challenges and Risks



http://theodi.github.io/data-definitions/

Types of personal data

Open personal data

Data about people not a person

Available to anyone

Has been anonymised

e.g. number of people attending event, gender split, age ranges. (bigger numbers are better!)

Available personal data

Data about a person

Available to the person only!

Often known as MiData

e.g. credit scores, energy and other consumption data.

Personal data

Data about a person which is neither open nor available.

Might belong to you or be collected by a company.

Opportunities

Open Data

Brings transparency, open peer review

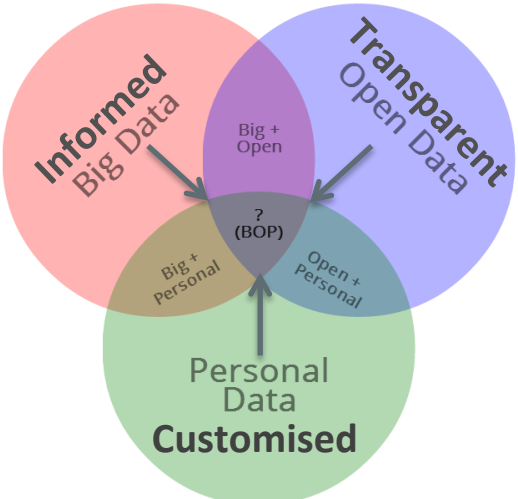
Big Data

Brings the evidence

Personal Data

Makes it relevant

Opportunity



http://theodi.github.io/data-definitions/

Why now?

Why now?

Policy Drivers

Technical Standards

Best Practice Guidelines

Open Data

Best Practice Guidelines

open data institute

Open Knowledge Foundation

W3C®

Technical Standards

G8

Policy Drivers

World Bank

Policy paper

G8 Open Data Charter and Technical Annex

Published 18 June 2013

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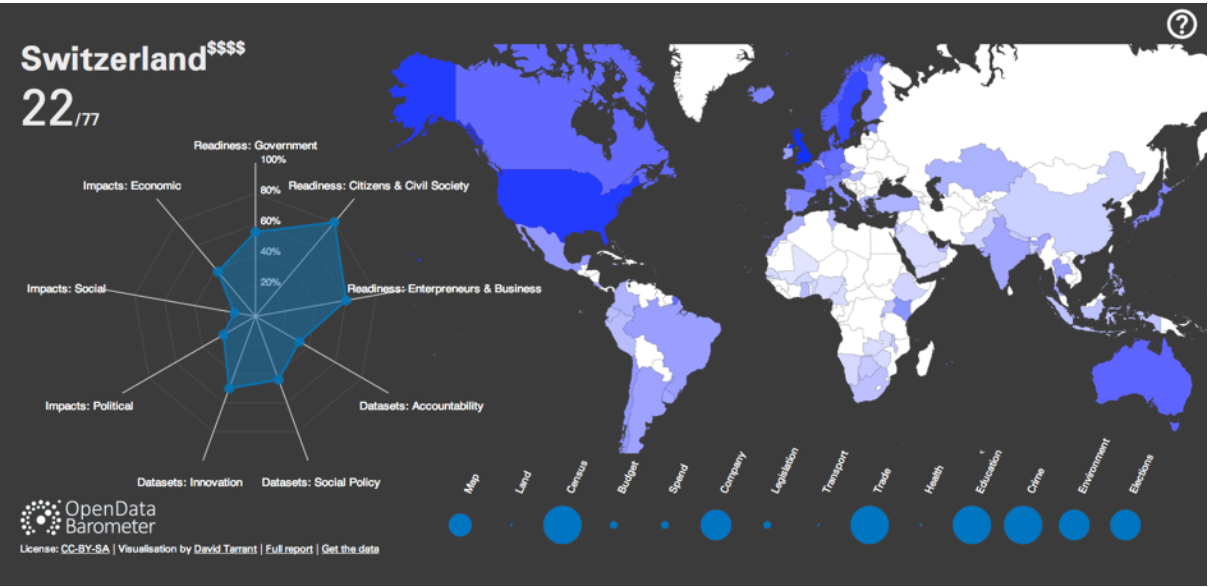

http://www.opendataresearch.org/barometer

http://vimeo.com/97404977

Data is a means, not an end.

In your country

Discuss:

1. What is the end? /
   Why are you opening data?

2. What is a potential application of open data?

Outcomes

Define open data

Describe a number of key open data stories

Evaluate the challenges facing open data

Analyse the future of open data on a global scale

The biggest evolution of the web, since the web itself

David Tarrant · davetaz@theodi.org · @davetaz