



Open Data in a Day

Dr David Tarrant | @davetaz | The Open Data Institute

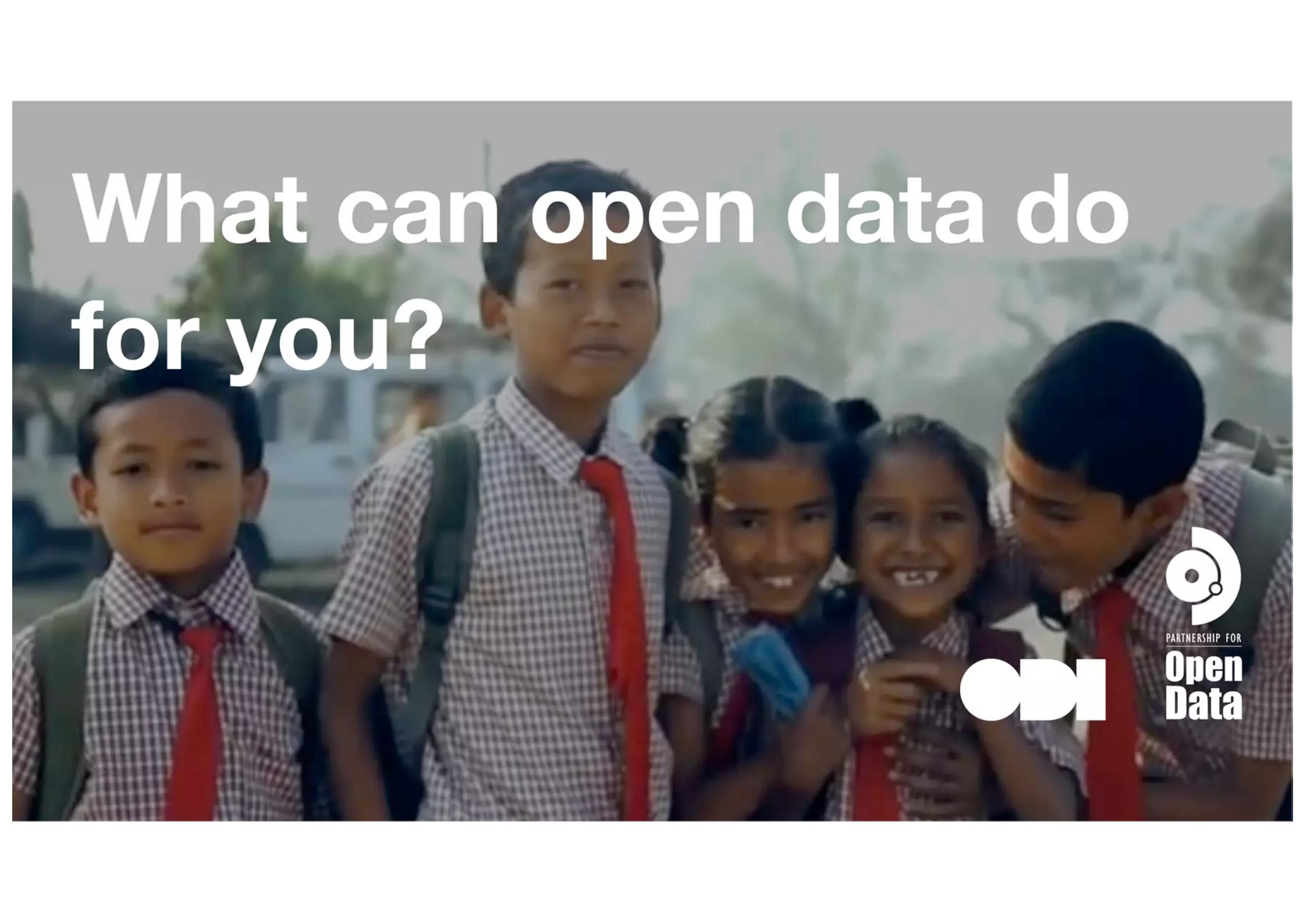
<http://training.theodi.org/Malaysia/2017>



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The Open Data Institute

We connect, equip and inspire
people around the world
to innovate with data





What can open data do for you?



Introductions

Your name

What do you do?

What was your first experience of open data?



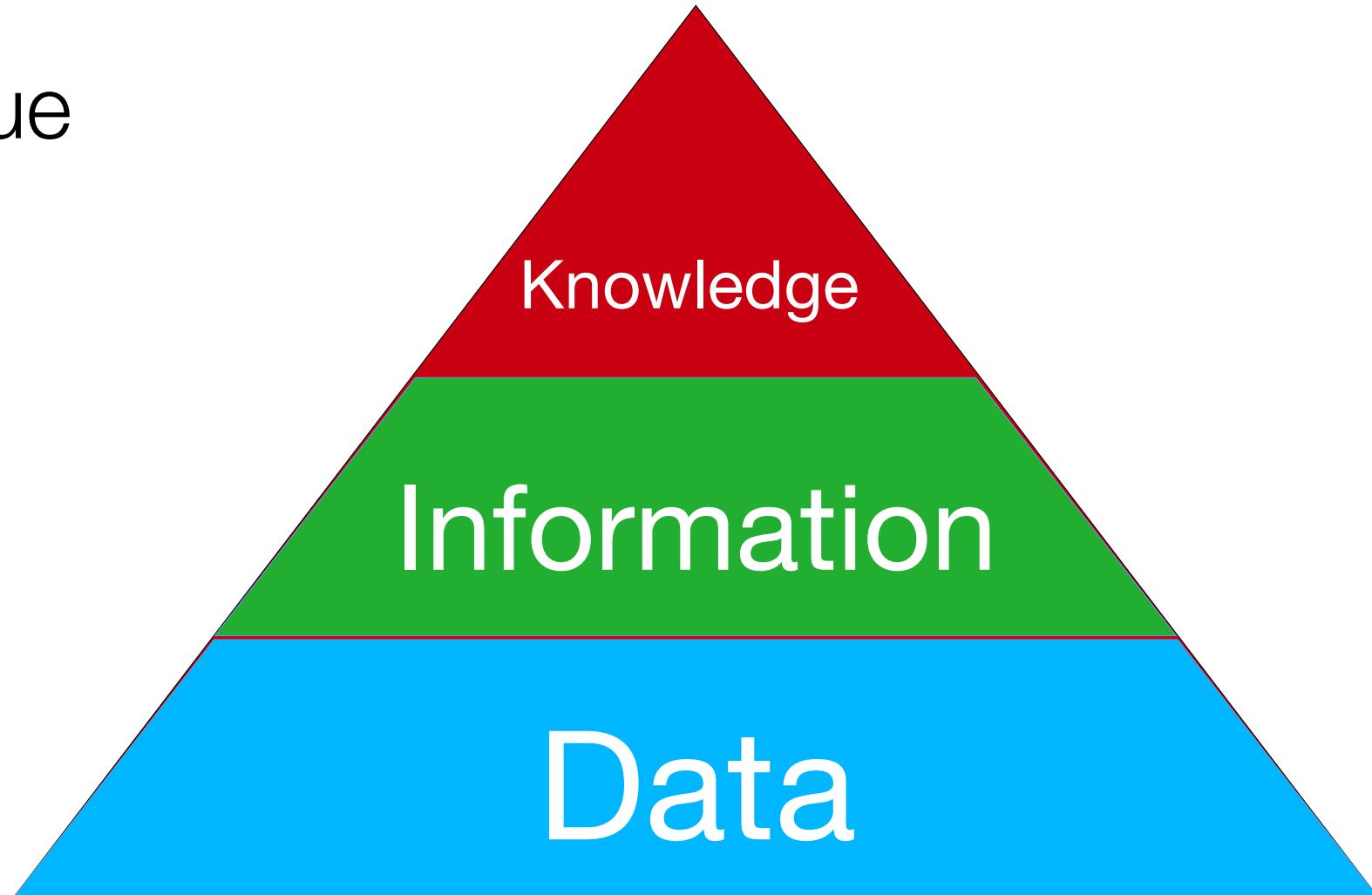
Exercise

What is Data?



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Value



Difference between data and information

Download the March 2017 dataset from bit.ly/fco_data

Download a different version from bit.ly/fco2017

Which is data and which is information and why?



Difference between data and information (2)

Take a look at a number of datasets on data.gov.my and compare and contrast which are data and which are information?

What did you find?



Data is the new raw material of the digital age



A photograph of an oilfield at sunset or sunrise, showing numerous pumpjacks in various stages of their stroke. The sky is a warm orange and yellow. In the bottom right corner, there is a small white logo consisting of a stylized 'C' and 'D' intertwined.

CDI

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people around the world
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Exercise

What is Open Data?



Open Definition (v1)

A piece of data or content is open if **anyone** is **free to use**, **reuse**, and **redistribute** it - subject only, at most, to the requirement to attribute and/or share-alike.

- Open Knowledge

Retired August 2014



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Open Data Institute (v1)

Open data is information that
is **available** for **anyone** to **use**,
for **any purpose**, at **no cost**.

- Open Data Institute
Retired November 2014



Open Data Institute (v2)

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



Open Data Institute (v3)

Data that **anyone** can **access**,
use and **share**.

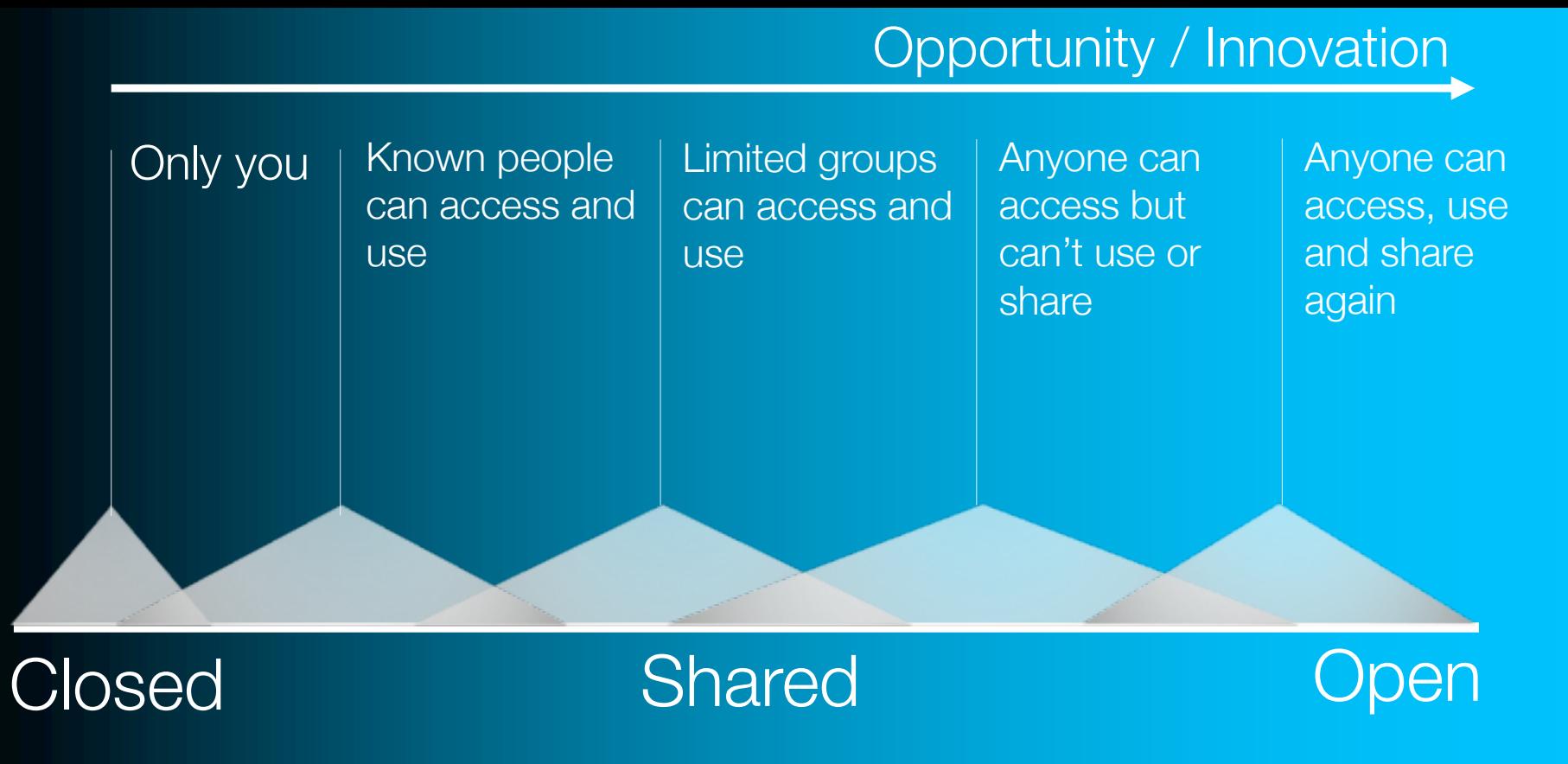
- Open Data Institute
Introduced November 2014



data.gov.uk

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***.





Licensing open data



Increase confidence in using and understanding open data licences



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List the characteristics of an open licence

Identify instances of an open licence



Law and licensing

Please note:

I am not a lawyer and this should not be treated as legal advice.





Attribution

Others can copy, distribute, display, perform and remix your work if they credit your name as requested by you



Share Alike

Others can distribute your work only under a license identical to the one you have chosen for your work



No Derivative Works

Others can only copy, distribute, display or perform verbatim copies of your work



Non-Commercial

Others can copy, distribute, display, perform or remix your work but for non-commercial purposes only.



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Exercise

Build your own open data licence



Some drafting tips

“Under this licence **you can:**”
[what is permitted?]

“**You must**, where you do any of the above:”
[do you have any restrictions?]

“**You must not**”
[explicit restrictions?]



Why licence?

A licence provides clarity

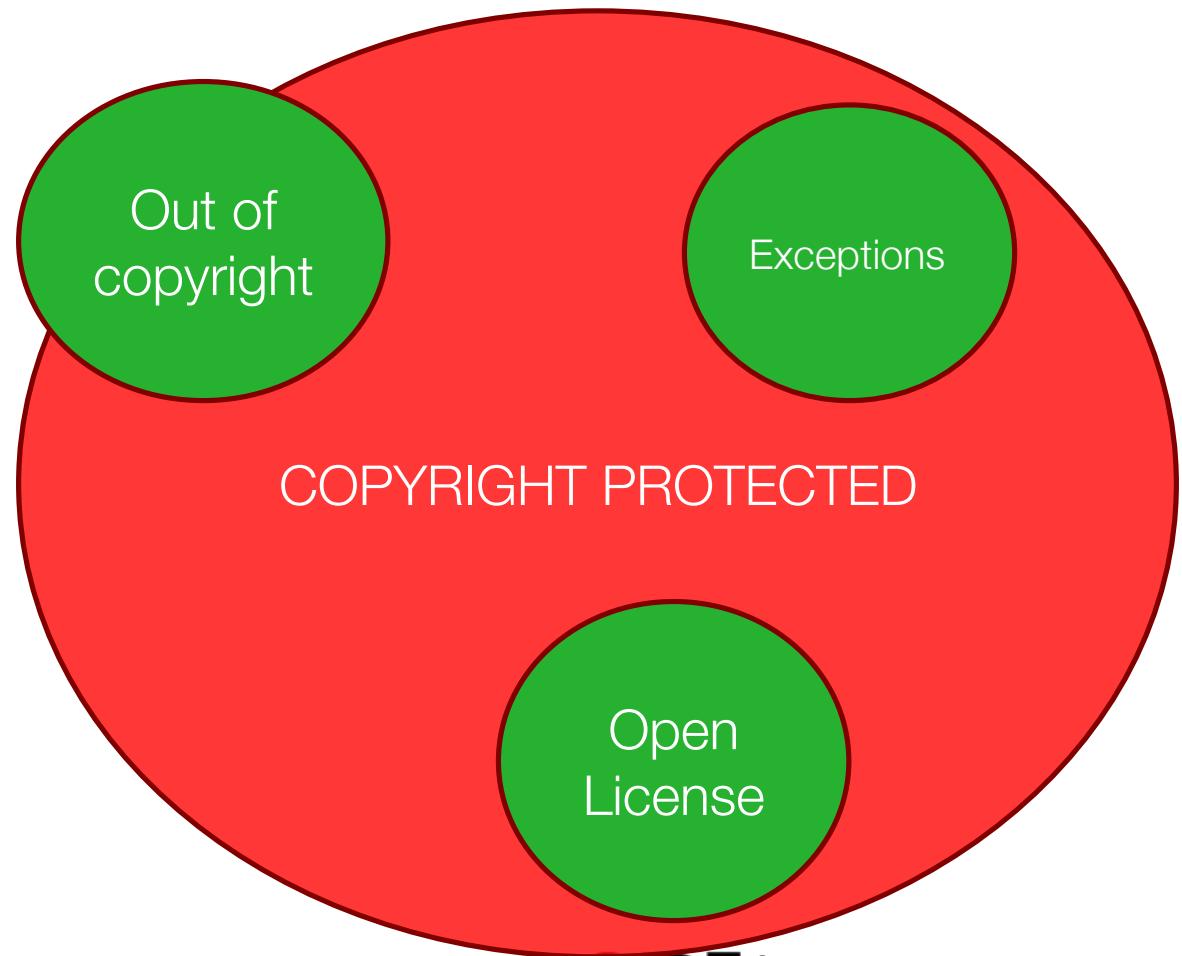
It sets out exactly what users and re-users are permitted to do with your dataset



The content world

You can use it if [green]:

- It's out of copyright [public domain]
- It's openly licensed
- Your use is covered by a copyright exception



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Copyright

Applies automatically to –

- literary works
- artistic works
- dramatic works
- musical works
- layouts of works
- sound and film works
- broadcasts



Copyright

Applies automatically to –

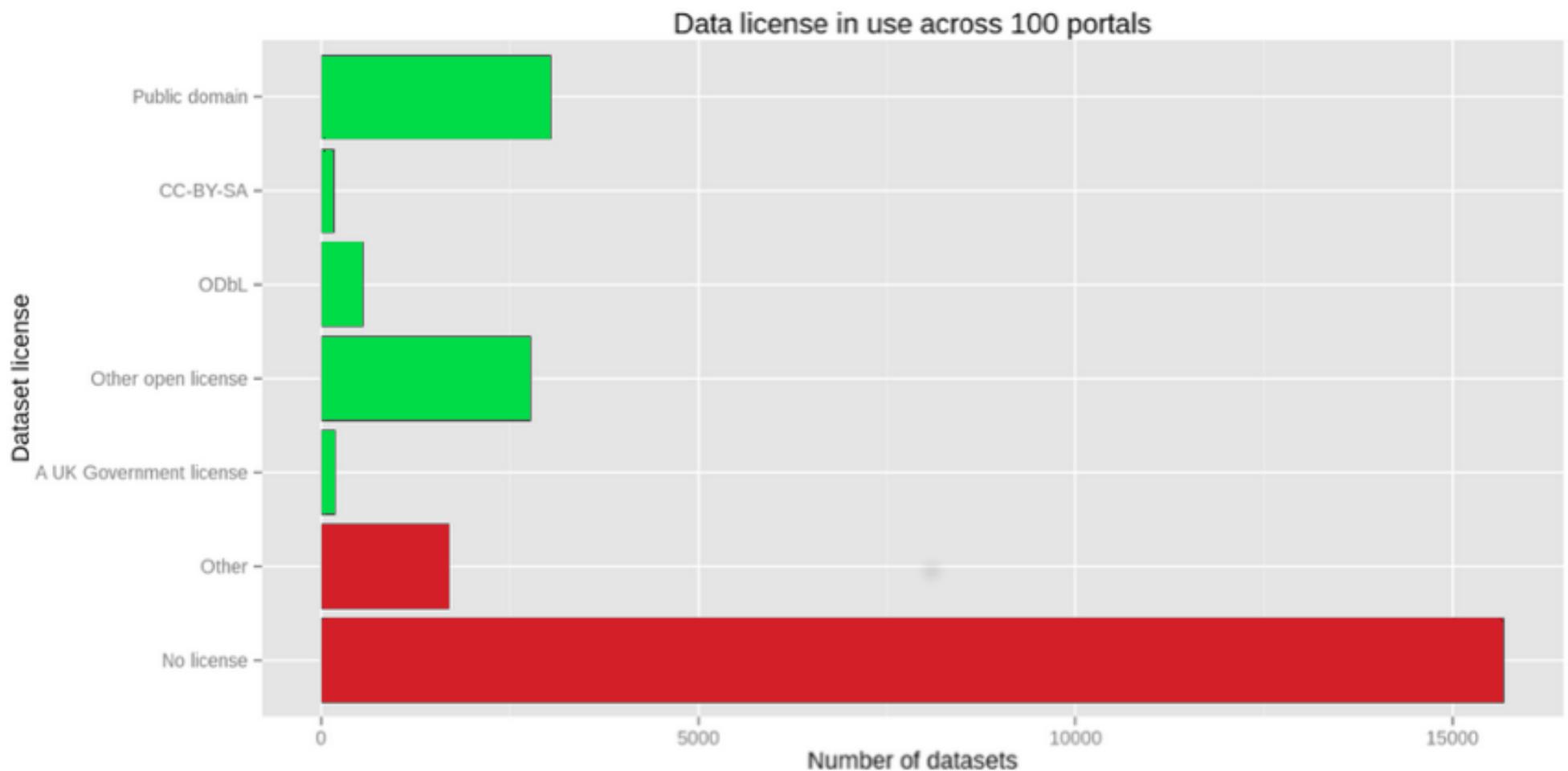
Anything where there is an intellectual, creative
and original process in creating a thing.

It does not apply when the thing created would be
the same whoever created it.

“it’s obvious”



Open data is hardly ever appropriately licensed.

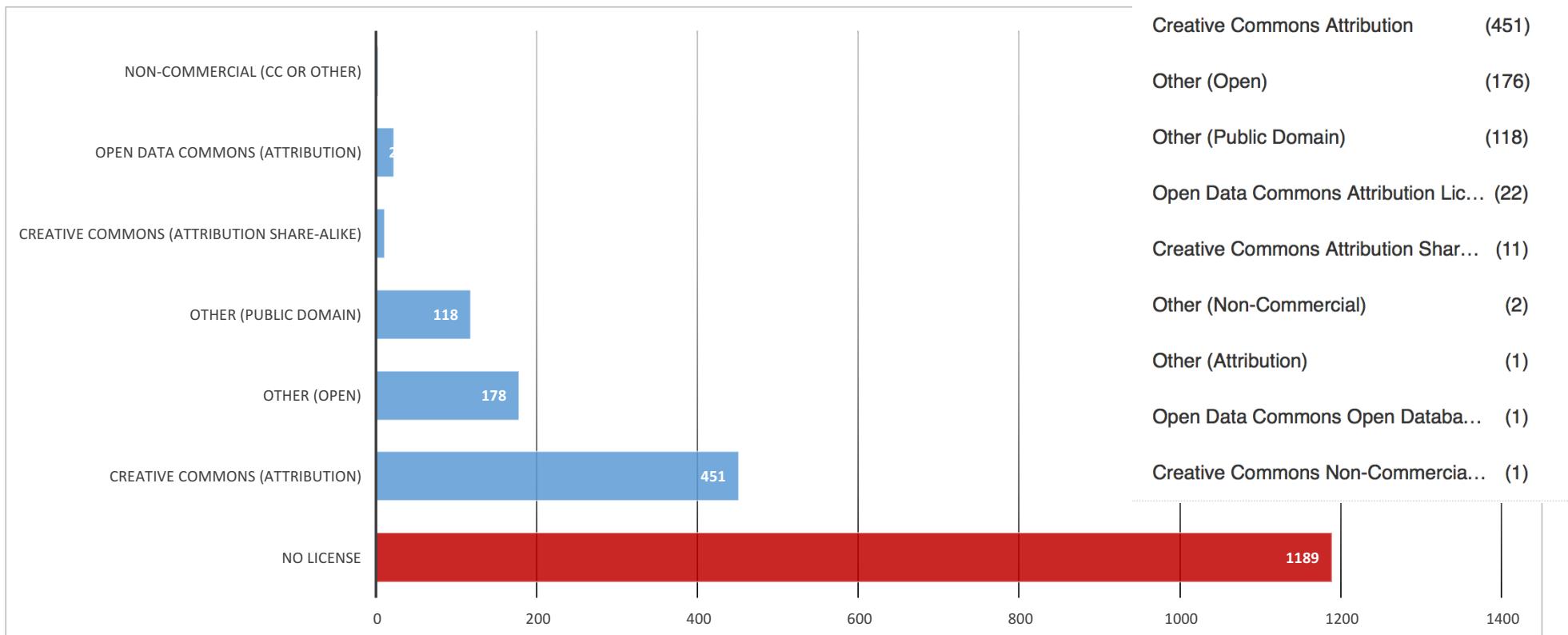


Source: Thomas Levine

<http://thomaslevine.com/l/open-data-licensing/>

data.gov.my

▼ Licenses



The UK Open Government Licence

Version 3.0 released in October 2014

[http://www.nationalarchives.gov.uk/doc/open-government-
licence/version/3/](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/)



What does it permit?



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data.gov.my terms of use

Version 1.0 updated 30 September 2015

<http://www.data.gov.my/page/termsofuse>



The main alternative



Open and community developed; not controlled by a central agency or body.



creative commons
Attribution-ShareAlike 4.0 International (cc BY-SA 4.0)

This is a human-readable summary of (and not a substitute for) the [license](#).
[Disclaimer](#)



You are free to:

Share — copy and redistribute the material in any medium or format
Adapt — remix, transform, and build upon the material
for any purpose, even commercially.
The licensor cannot revoke these freedoms as long as you follow the license terms.

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 **Attribution** — You must give **appropriate credit**, provide a link to the license, and **indicate if changes were made**. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

 **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the **same license** as the original.

Recognising Open Licences

When discovering data online, it is important to be able to check the licence to understand whether the data is open and if so, under what conditions can you access, use and share it.

Take a look at each of the following licences and try to determine whether they are open licences

- [Twitter Terms of Use](#)
- [Open Corporates](#)
- [data.gov.sg](#)
- [Met Office](#)
- [Flickr](#)



training.theodi.org/InADay



Discovering data exercise



Unlocking value from data



In your groups, brainstorm:
What are the opportunities for

Economic

Environmental

Social

impact for your data?



mampu.learndata.info



Knowledge
for everyone



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



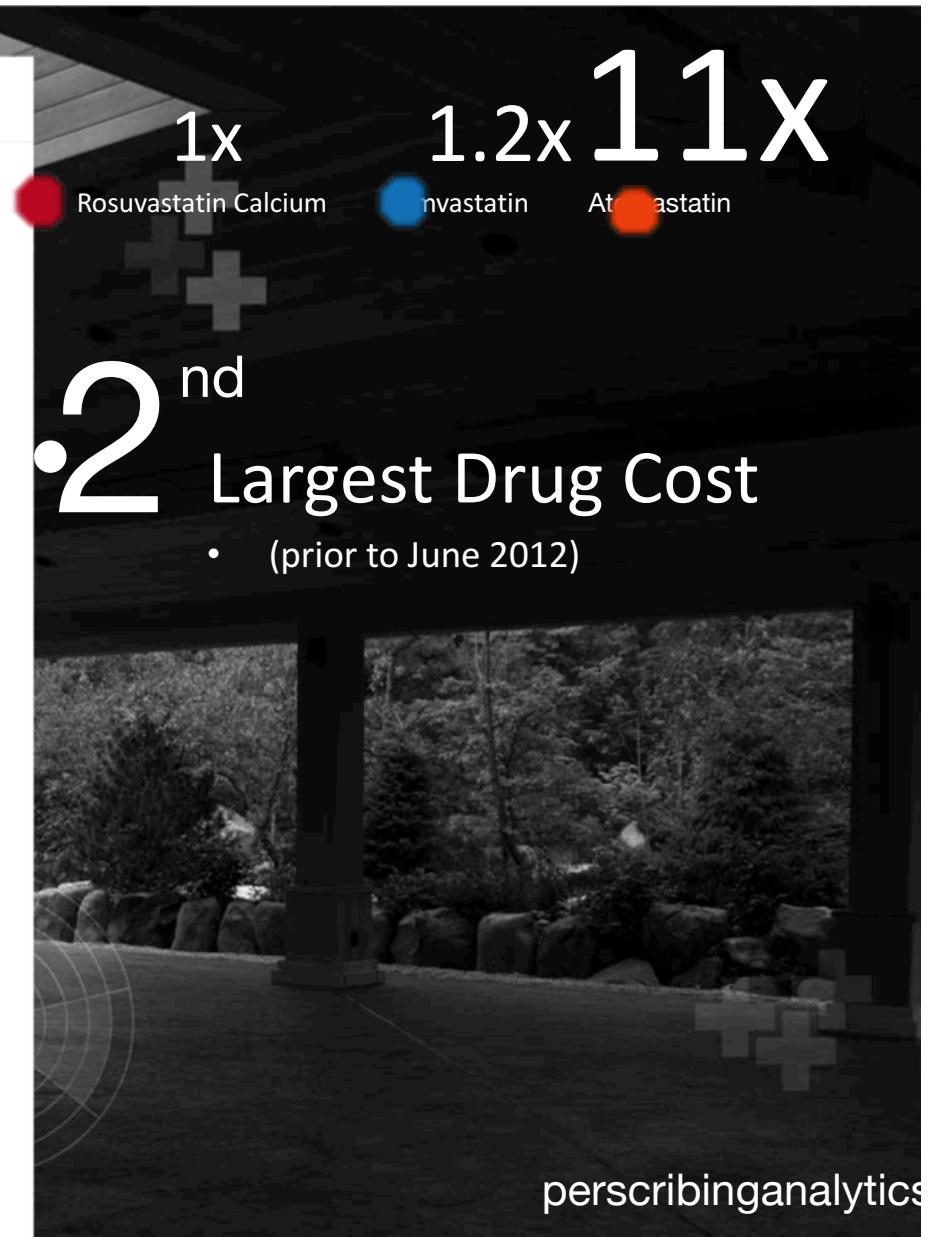
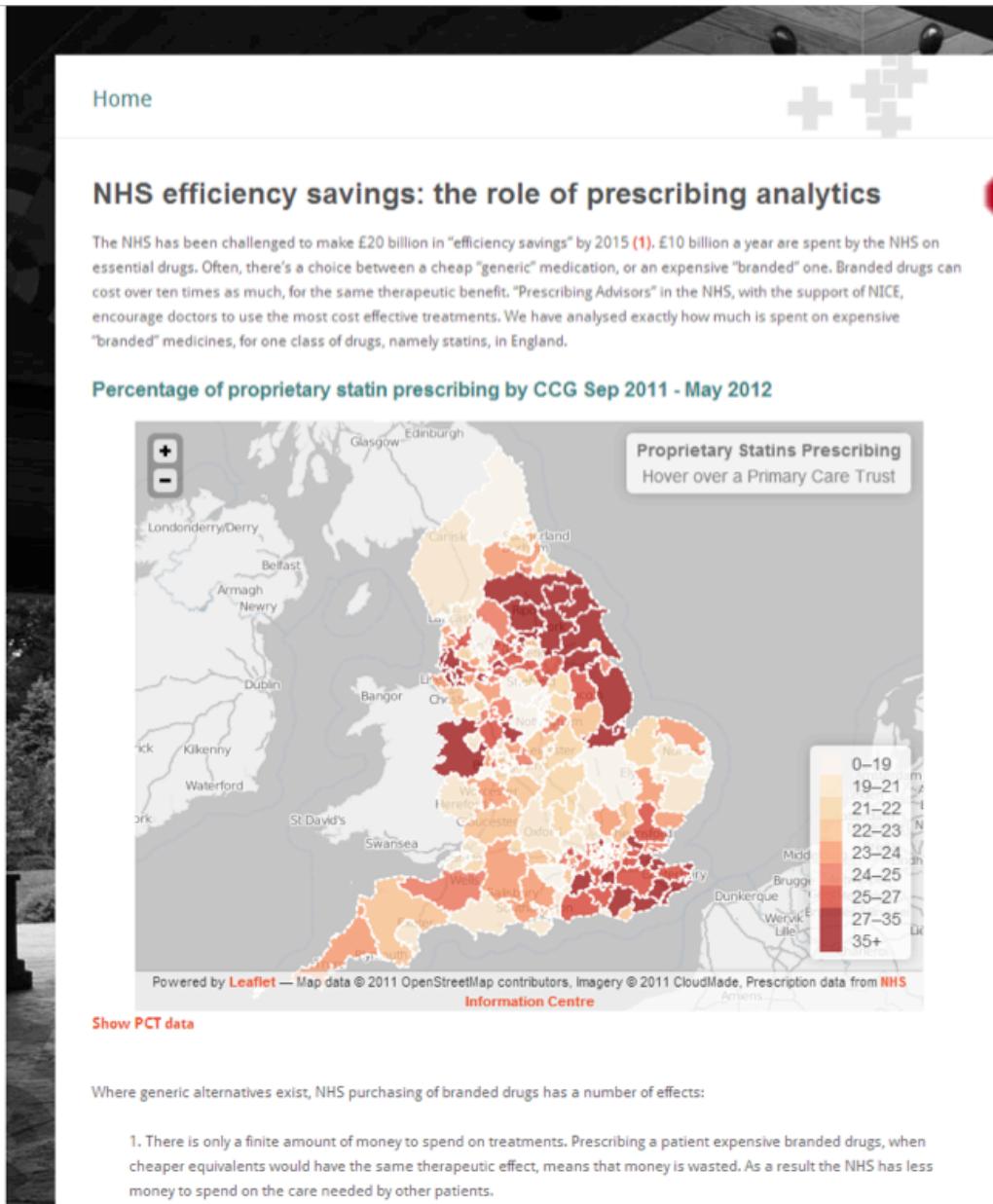


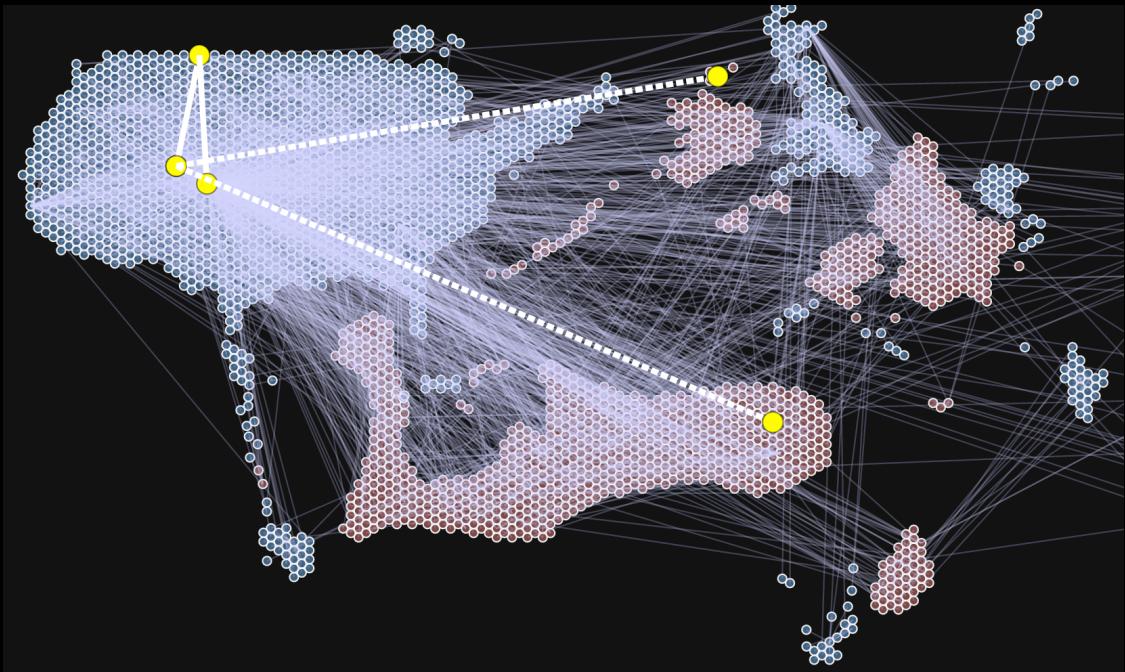
Home
Detailed statin analysis
Why prescriptions matter
FAQ
Methodology
Contact us
About this site

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.

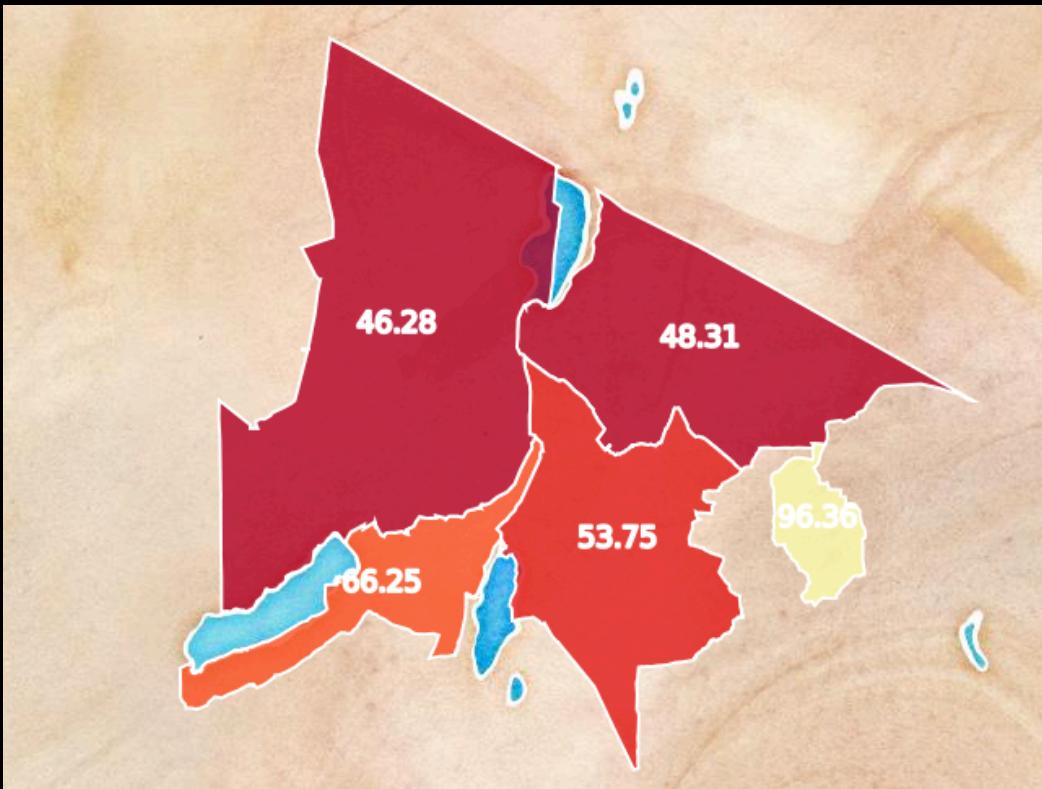
Drop us an email at
info@prescribinganalytics.com





Open data reveals the
'facebook' graph of
global companies

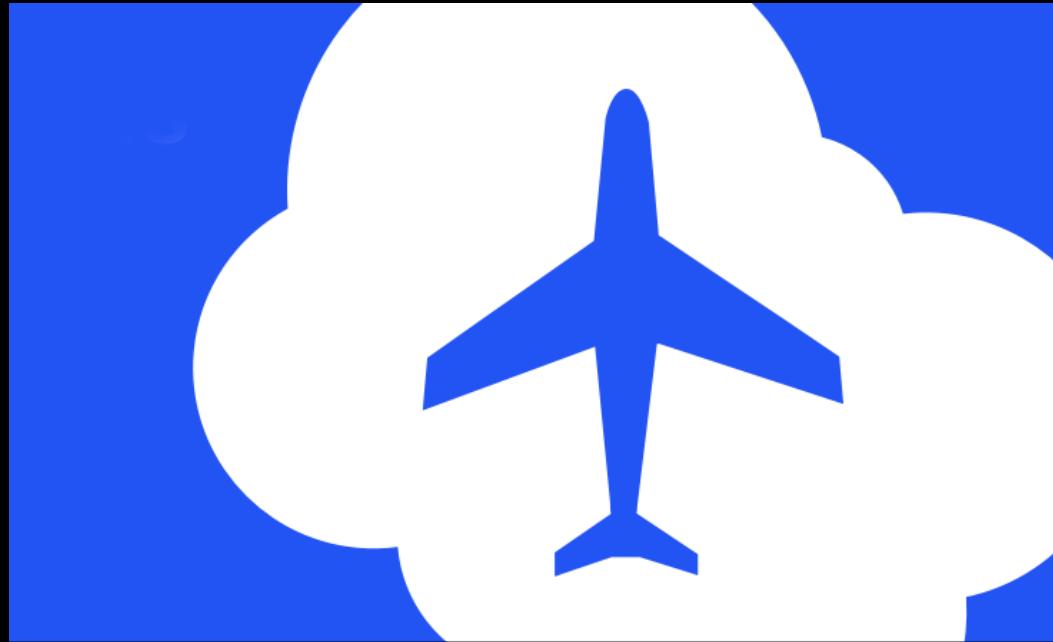




Arusha Region of Tanzania.
50% of children aged 5-19 not in education in urban areas

Open data helps reveal
regions underperforming
in education





Open data democratises
air data to meet local
needs

ODI open
data
institute / Knowledge
for everyone





Publish & receive sensor data

- + 10 million posts a second
- + Real-time publishing
- + Search, storage, analytics

3,000+ users & growing fast

- + Arup
- + City of Bristol
- + Oxford flood network

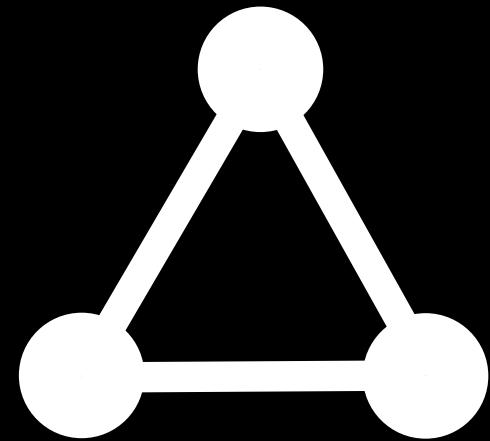
Open Elections



Open data helped deliver a stable transition to democracy in Burkina Faso



Your data increases in value
the more it is connected



Making data usable



Exercise

What makes data usable?

(1 answer per post-it)

You are a data startup. You want to use government open data. You are going to invest time and money in your startup. What guarantees do you need that you can rely on the open data?

What makes it usable? e.g. Consistant



Guidelines



5 - Stars

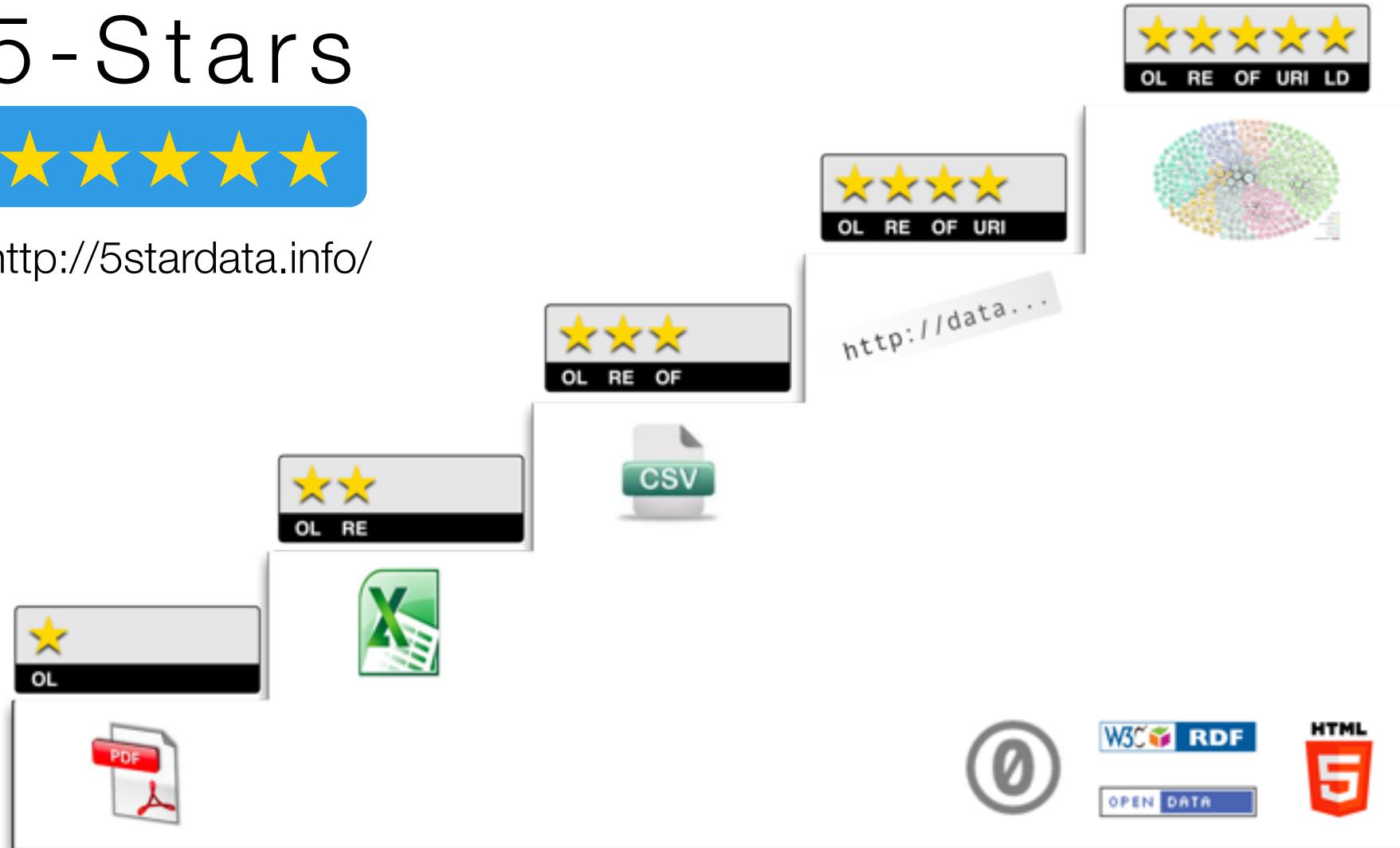


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5-Stars



<http://5stardata.info/>



Open Data Certificate



Bronze level
self certified
GB final

This data has achieved [Bronze level](#) on 29 March 2016 which means this data makes a great start at the basics of publishing open data.

[Embed this on your site](#)

Grants to voluntary community and social enterprise organisations

Summary	
Type of release	ongoing release of a series of related datasets
Data Licence	UK Open Government Licence
Content Licence	Not Applicable
Verification	self certified
Community verification	Other people can verify whether the answers on this

General Information

This data is described at <http://data.hounslow.gov.uk/View/loc...> This data is published by London Borough of Hounslow [\[link\]](#)

The data is published on <http://data.hounslow.gov.uk/>

Legal Information

This data was originally created or generated by its curator [\[link\]](#) The rights statement is at <http://www.hounslow.gov.uk/index/c...>

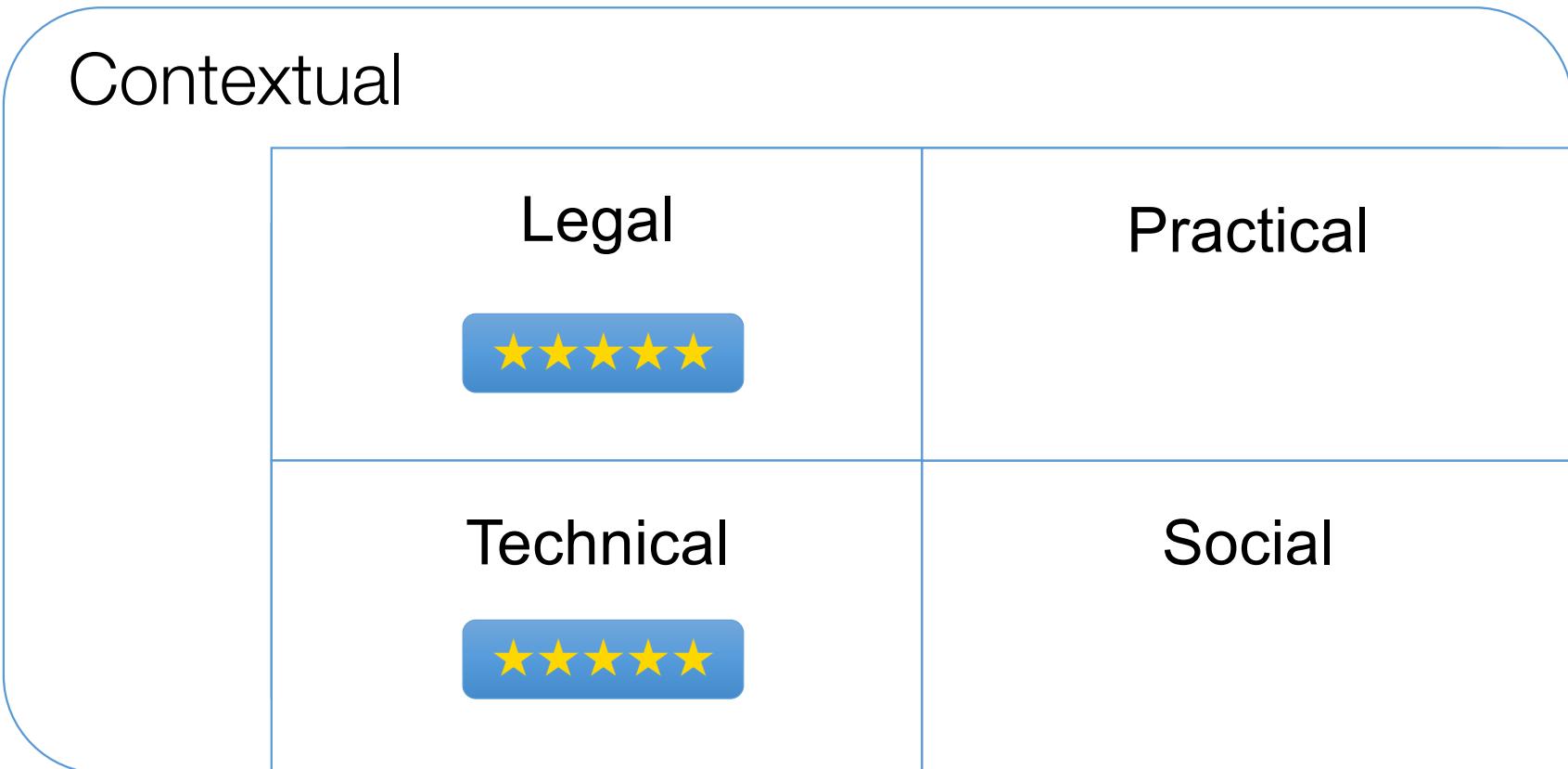
This data is available under UK Open Government Licence [\[link\]](#) There are no rights in the content of the data [\[link\]](#)

<http://certificates.theodi.org>



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5 Aspects



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5 Aspects

Contextual



Legal



Practical



Technical

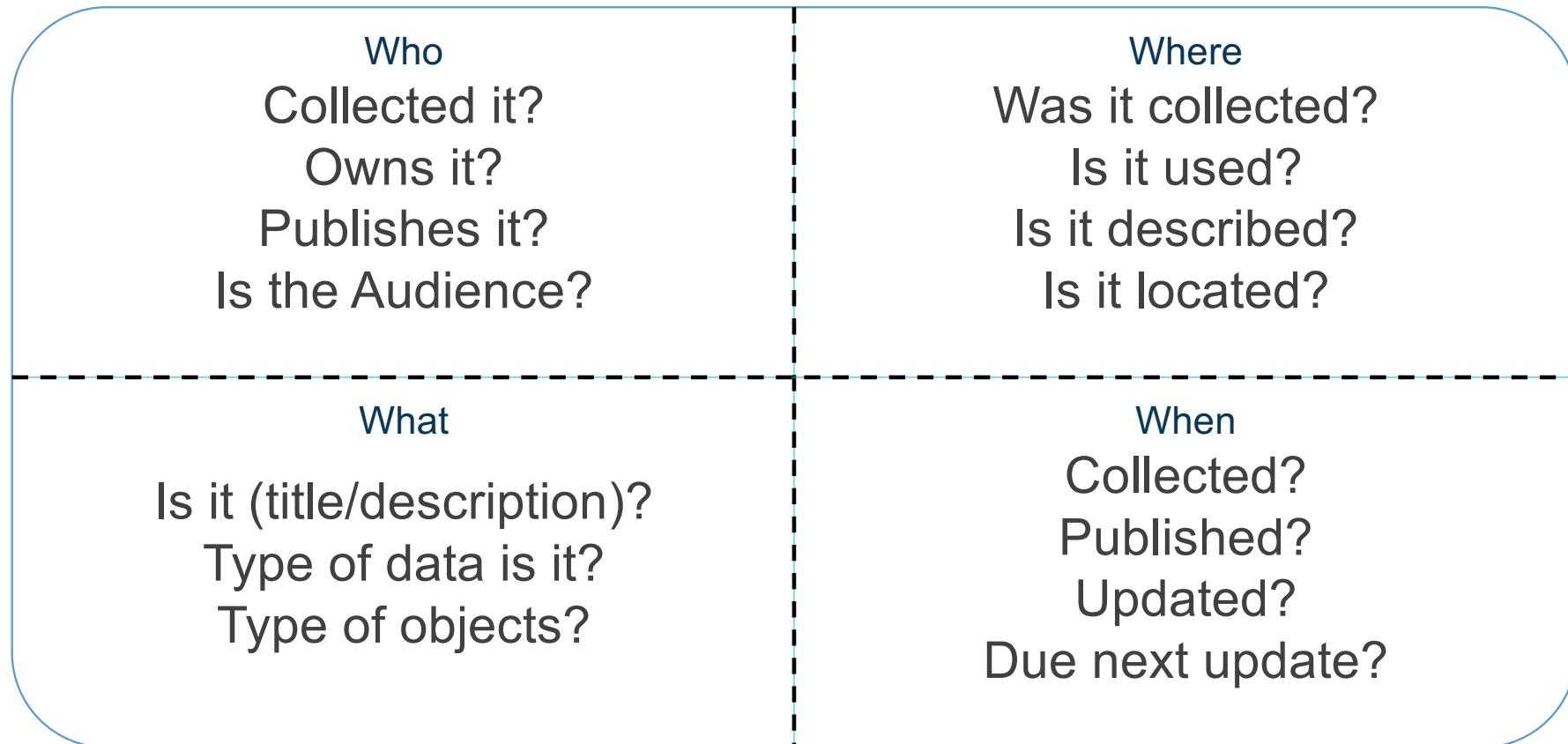


Social



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Adding Context



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General



Title/Description/Publisher/URL

-
-
-
-

Release Type

-
-
-
-



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Legal

Rights to publish	•	•	•	•
Data licensed	•	•	•	•
Content licensed	•	•	•	•
Clear privacy statement	•	•	•	•
Sources of data documented		•	•	•
Audited anonymisation			•	•



Practical

Usable period described



Availability period described



Discoverable from home page



Listed in collection



Referenced from publication/application



Quality problems listed



Quality control process described



Technical

				
Data hosted online	•	•	•	•
Type of data defined	•	•	•	•
Machine readable metadata		•	•	•
Clear technical documentation		•	•	•
Persistent & common identifiers used			•	•
5-Star Linked Data				•
Machine readable provenance				•
Data can be verified				•



Social

- Support for improving/fixing
- Email support
- Discussion groups/forums
- Social media channels
- Supported community
- Tools and guides available to work with data



Open Data Certificate



Where can you create certificates?

Different countries have different laws, so their certificates are slightly different too. Choose your country to create the right certificate.

Senegal

Create a certificate

SN alpha

This certificate hasn't been properly [localised](#) yet, and we need your help! Please contact certificate@theodi.org

Legend

[Certificate in alpha stage](#) [Certificate in beta stage](#) [Certificate in final stage](#)



One Objective

Minimum Requirement



3-Star Data

Silver Open Data Certificate



Open data essentials

- ✓ Open data definitions
- ✓ Licensing
- ✓ Impact of open data
- ✓ Discovering
- ✓ Best practices
- ✓ Quality checking

