How can we increase access to data while retaining trust?

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theODI.org
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Contents:

1. Introduction to the ODI and its work on increasing access to data while retaining trust
2. What is ecosystem mapping and why could it be useful for data portability?
3. Mapping data portability ecosystems
4. Sharing the maps
5. Final thoughts
The team

Founded in 2012, the Open Data Institute (ODI) is an international, independent and not-for-profit organisation based in London, UK.

Dr Jeni Tennison  
CEO

Sir Nigel Shadbolt  
Chairman

Sir Tim Berners-Lee  
President
The Data Spectrum

Small / Medium / Big data

Personal / Commercial / Government data

Internal access
- Employment contract + policies
- Sales reports

Named access
- Explicitly assigned by contract
- Driving licences

Group-based access
- Via authentication
- Medical research

Public access
- Licence that limits use
- Twitter feed

Anyone
- Open licence
- Bus timetable

Closed

Shared

Open

theodi.org/data-spectrum
Our mission

We work with companies and governments to build an open, trustworthy data ecosystem.
Our vision

We want people, organisations and communities to use data to make better decisions and be protected from any harmful impacts.
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ODI R&D on increasing access to data while retaining trust

- **Discovery**
  - User research
  - Concept of trust research
  - Research into models for data access
    - Prevalent models
    - Rarer models
      - “Data trusts”
- **Alpha**
  - Prototyping...
Concept of trust

Courtesy of Kieran O'Hara

https://theodi.org/article/framing-for-our-thinking-about-trust/
An incomplete mappe of ye data access models
de l'Amiral de Fonte,
et autres Navigateurs Espagnol, Angleis, et Russes
pour la recherche du Passage a la Mer du Sud.
Par M. De Hale à l'Académie royale des Sciences &c.
Publicé, Paris en Septembre 1792.

1:1 contractual agreements
Multiparty contractual agreements
Interactive reports
Static reports

Data trusts
Data commons
Data cooperatives

Data marketplaces
Data marketplaces
Data marketplaces

Data commons

Personal data rights ecosystems

Blockchain / DLT

Access

Research

Open data (yay!)

Regulatory

Certificates

Portals

Platforms

Scrapers
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personal data marketplaces
personal data ecosystems
platforms
portals
open data (yay!)
scrapers
research access schemes
regulatory access
fellowships
data marketplaces

blockchain / DLT
We found five groups of definitions:

- A data trust as a repeatable framework of terms and mechanisms
- A data trust as a mutual organisation
- A data trust as a legal structure
- A data trust as a store of data
- A data trust as public oversight of data access
A data trust as a repeatable framework of terms and mechanisms.
A data trust as a mutual organisation.
A data trust as a legal structure.
A data trust as a store of data.
A data trust as public oversight of data access.
In a UK context...

Promotion of human flourishing

Key principles:

- protect individual and collective rights and interests
- ensure that trade-offs affected by data management and data use are made transparently, accountably and inclusively
- seek out good practices and learn from success and failure
- enhance existing democratic governance
A "Good" data trust should align with our theory of change
Data infrastructure principles:

- Design for open
- Build with the web
- Respect privacy Respect rights
- Benefit everyone
- Think big but start small
- Design to adapt
- Encourage open innovation
Working definition of a data trust

A data trust must abide by data infrastructure principles and have:

- a clear purpose
- a legal structure, constitution & trustees
- (some) rights and duties over stewarded data
- defined decision making processes
- a description of how benefits are shared
- sustainable funding
How do we do test it...
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Data ecosystem maps help to visualise, understand and communicate how data is published, accessed, shared, and used by different people and organisations.
How can we increase access to data while retaining trust?

Data ecosystem maps include:

- the data assets that are being accessed, used and shared
- the people and organisations involved in either creating outputs using data, or benefiting from its use
- the relationships and roles that these actors have in the ecosystem
Mapping data ecosystems

In this guide, we introduce a tool for documenting and mapping data ecosystems. We have provided guidelines for how to do this by yourself, or in a workshop setting. We welcome feedback on the methodology, how it can be used, examples of its use in different contexts, and ways in which we can improve it in the future.
How can we increase access to data while retaining trust?

- understand complex systems visually
- help communicate interactions in a simple way
- think about the role different stakeholders play, the relationships between them
- identify gaps and opportunities
- help make decisions about different ecosystems to join/advocate for change within/etc
How can we increase access to data while retaining trust?

data sharing agreements, open data publication, data commons, data marketplaces, data trusts, data exchange protocols, data portability initiatives, blockchain/DLT, smart city projects, public services, data fellowships, PETs, PIMs/PDSs, data donation, ...
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You have 30 minutes to:

1. Split into groups of 5/6
2. Choose a data portability ecosystem
3. Use the pens, paper and post-its to map the ecosystem
How can we increase access to data while retaining trust?

Who is directly involved in the ecosystem?
What role does your organisation play?
What types of data flows around the ecosystem?

What data does each organisation use, who provides it, how is it accessed?
What data does each share and for what purposes?

How is data shared (eg via downloads, API?)?
Are there any data standards in place?
Who is funding what?
## How can we increase access to data while retaining trust?

<table>
<thead>
<tr>
<th>Stakeholder types</th>
<th>Description of role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steward/collectors</td>
<td>Responsible for collecting, managing and ensuring access to a dataset</td>
</tr>
<tr>
<td>Contributor</td>
<td>Helps curate data in a dataset, using tools provided by the steward</td>
</tr>
<tr>
<td>Reuser</td>
<td>Uses data to create an output, e.g. chart, app, article, report</td>
</tr>
<tr>
<td>Intermediary</td>
<td>Provides value-added services that enhance, host or enrich a dataset</td>
</tr>
<tr>
<td>Aggregator</td>
<td>Type of Intermediary. Packages together datasets from many sources eg to create an app or service</td>
</tr>
<tr>
<td>Beneficiary</td>
<td>Benefits from activity of reusers</td>
</tr>
<tr>
<td>Subject</td>
<td>Person or organisation represented in a dataset (ie who data is collected about)</td>
</tr>
<tr>
<td>Policymaker</td>
<td>Create principles and measures to generate outcomes</td>
</tr>
<tr>
<td>Capacity developer</td>
<td>Supports capacity and skills of actors within the data ecosystem</td>
</tr>
<tr>
<td>Publisher</td>
<td>Releases/shares data in form for reuse by others</td>
</tr>
</tbody>
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Share your ecosystem maps in 2 minutes!

- What are the main data assets that are being accessed, used and shared?
- Who’s involved? What are the different relationships like?
- How did you find the process?
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Get in touch

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