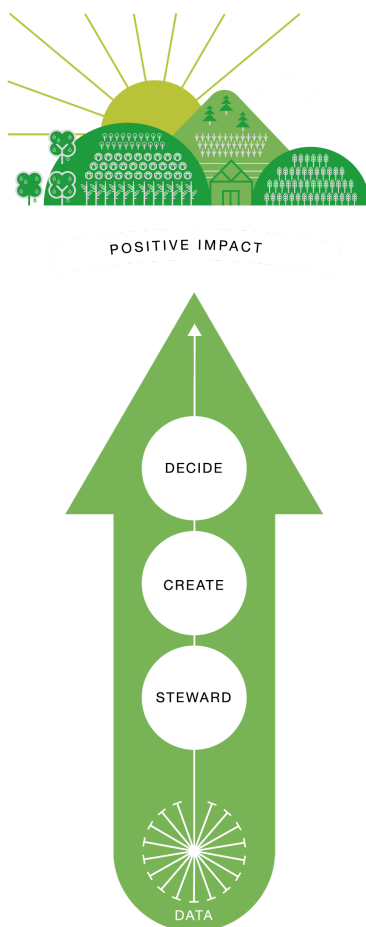


The data institutions programme at the ODI

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1. Why we need responsible data stewardship



Access to the right data can help us to tackle the big challenges we face - from the earlier detection of disease to reducing pollution in urban spaces.

There is a danger, however, that data will not be accessible to those who need it due to organisations hoarding data they've collected. We think of this scenario as the 'oil field', where data is treated like oil, which will limit the wider value that our societies and economies can get from it.

In other scenarios, data might not be collected or used to the extent it could due to unaddressed concerns about the harm that it might cause people and communities. We call this scenario the 'wasteland', where a lack of consideration of ethics, equity and engagement means that we end up missing data and uses of it that could support human flourishing.

Stewarding data is the foundational activity in the lifecycle or value chain of data. It [involves collecting, maintaining and sharing data](#), and as part of this, making important decisions about who has access to it, for what purposes and to whose benefit. How data is stewarded ultimately affects what types of products, services and insights it can be used to create, and what decisions it can inform and activities it can support.

We need data to be stewarded responsibly to ensure that we mitigate against these future 'oil field' and 'wasteland' scenarios, and instead plot a course towards data being used to drive positive economic, societal and environmental impact.

2. The role of data institutions

Data institutions are organisations whose purpose involves stewarding data on behalf of others, often towards public, educational or charitable aims.

Our initial work on data institutions has found that they already play a number of vital roles in different sectors and contexts, including:

- **holding data on behalf of an organisation or person**, or group of them, and sharing it with others who want to use it for a particular purpose. [UK Biobank](#), for example, was set up in 2006 to steward genetic data and samples from around half a million people, and continues to support their use for health research.
- **combining or linking data from different sources**, and providing insights and other services back to those that have contributed data. In the maritime sector, [HiLo](#) takes data generated by around 3,500 ships globally to generate vital risk and safety analyses related to lifeboat accidents, engine room fires and other incidents.
- **creating open datasets** that anyone can access, use and share to further a particular mission or cause. [OpenCorporates](#), [Open Apparel Registry](#) and [360Giving](#) each collate and make accessible important open data, about companies, factories and funding respectively.
- **developing and maintaining common data infrastructure** for a sector or field, such as by registering identifiers or publishing open standards. In the UK, [Open Banking Limited](#) was established in 2016 to develop standards and guidelines to drive competition and innovation in the retail banking sector.

There are also a variety of data institutions emerging [to support people and communities to take a more active role in stewarding data about themselves](#). These include data co-ops, data unions, data coalitions, and bottom-up data trusts.

The language we use to describe data institutions and their role as stewards of data is deliberate. It draws **parallels with different types of institutions that have been established in the past** to protect and ensure responsible access to important assets, such as:

- Elinor Ostrom's principles, which set out how institutions can be designed to [steward communal resources](#) such as forests and fisheries.
- trusts and funds that have been used in law [to enable one party to authorise another to steward an asset](#), such as property or investments, for the benefit of a wider group of beneficiaries.

- [cooperatives](#) in agriculture, finance and other industries, which give workers an equal say in what their businesses do and a share in their profits.

Some data institutions will adapt or mirror these past approaches to stewardship. Others will challenge these ideas or adopt novel approaches in recognition of the fact that data is different to land, investments or capital. To give an example, one person ‘consuming’ data doesn’t reduce the amount available for others in the way that happens with these traditional assets, which has implications for how we might choose to control it.

We need data institutions to help us to steward data more responsibly and ensure that it is put to use to address the social, economic and environmental challenges of our time.

3. What the data institutions programme is set out to achieve

At the ODI [we work with companies and governments to build an open, trustworthy data ecosystem](#).

We advocate for data to be made as open as possible, and help others to build ethical considerations, equity and engagement into how data is collected and used.

The data institutions programme will further this mission by:

1. make significant advances in the theory and understanding of data institutions, and the roles they can play in the data ecosystem.
2. work with organisations to create and improve data institutions in different sectors and fields.

Our work on data institutions is international in scope. We’ll continue to learn from and collaborate with others around the world exploring data stewardship, including organisations such as [The GovLab](#), [Aapti Institute](#) and [Nesta](#), and networks such as those convened by [MyData Global](#), [Mozilla](#) and the [Centre for International Governance Innovation](#).

The programme is also a home for related ideas and approaches - including [data intermediaries](#), [data collaboratives](#), [data collaborations](#), [data spaces](#) and [data access initiatives](#) - and is strongly linked to other topics such as [the value of data](#) and data sharing for the public good.

As the existing examples above show, organisations can steward data on behalf of others without thinking of themselves as data institutions. In others cases, there



won't be a need for data institutions to steward data. However, we think this is a powerful lens to use to help more organisations understand and improve how to steward data, and to design and establish new organisations to do this.

4. What types of work does the data institutions programme do?

The data institutions programme helps organisations, people and communities **build new data institutions**, and **supports existing organisations** to steward data on behalf of others more effectively.

The programme does this by:

- **conducting pioneering research into the theory behind data institutions.** We explore the topics that cut across data institutions, such as how they can demonstrate their [trustworthiness](#) and [pursue sustainability](#), as well as dive deeply into particular types, such as [data trusts](#). We use different methodologies and produce a range of outputs, including academic papers, opinion pieces and white papers.
- **providing advisory services and training to people, communities and organisations building data institutions.** We support others to design and run data institutions, and deliver training to build the competency and skills of those involved. We work with specialist partners to provide input on different aspects of data stewardship - such as the legal forms that data institutions can take, ways to build diverse stakeholders into their decision-making and the technical architecture they can adopt.
- **supporting data institutions in their early stages.** We accelerate new data institutions by providing them with different types of support, including stimulus funding and opportunities to learn from others through dedicated peer networks. We're also exploring ways that we can incubate data institutions by providing physical space and specialist administrative services.
- **developing guidance and tools related to data institutions.** Based on our research and delivery experiences, we create guidance and practical tools that help others adopt good practices in designing and building data institutions. We're particularly interested in developing scalable tools that audit, certify or accredit data institutions and their stewardship of data.
- **advocating for data institutions and responsible data stewardship.** Our advocacy work involves engaging with governments, regulators, civil society



groups, academia, artists, the media and others to promote and test our thinking on data institutions. We also want to explore the role of legislation and other policies in supporting new data institutions to thrive, or that allocate new data stewardship responsibilities to existing organisations.

While we aim to focus on a small number of high impact sectors - currently health and energy/climate - we are interested in working on data institutions in a range of other sectors and fields.

5. What is the data institutions programme currently working on?

We have a number of live projects related to data institutions, including:

- two research projects continuing to explore the topics of [sustainable data access](#) and [building trust through certification](#), which also includes [a stimulus fund](#) to support early stage data institutions and data access initiatives based in the UK.
- a [three-year partnership with Microsoft](#), which includes work to identify, scope and launch data collaborations to address climate change, and a peer learning network to support new data collaborations to take off.
- working with the [INSIGHT Health Data Research Hub](#) to advise on how the public, patients and other stakeholders can be involved in deciding how health data is used and shared.
- a research project with the **Health Foundation** to explore the potential role for data institutions in enabling access to data to assess health interventions.
- working with ODI Partner **Pinsent Masons** to produce a short white paper setting out the potential role for data institutions in the energy sector.

The outputs from our initial research into designing [trustworthy](#) and [sustainable](#) data institutions were published in April 2020, and we've recently collated our [past work on data trusts](#), which are a particular type of data institution.

We are also looking to update guidance and tools we've developed in the past, including making additions to the [Data Access Map](#) and evolving the [Data Trusts Lifecycle](#).



6. Work with the data institutions programme

There are different ways to work with us on data institutions.

For **organisations, people or communities looking to build a data institution or adapt an existing organisation**, use our existing guidance and tools, see if we are currently running a stimulus fund or peer network, or get in touch if you think we could support your work.

For **funders looking to advance the concept of data stewardship and data institutions**, talk to us about our plans for the programme, help identify opportunities for data institutions in particular fields or for particular purposes, and can make introductions to others in search of support.

For **consultancies and independent experts working to apply data institutions**, we hope our research and existing guidance and tools will be useful in your work, and get in touch if you'd like to work on something together.

For **governments, think-tanks and other policymakers interested in the role of data institutions and related topics**, take a look at our research or join us to discuss their policy implications and how to create an enabling environment for them.

For **academics and others exploring data institutions**, find out about opportunities to collaborate on research or about becoming a Research Fellow of the programme.