



# Rethinking data

Changing narratives, practices & regulations

**The Ada Lovelace Institute recognises that there is already a thriving ecosystem within the UK and Europe, and a range of organisations and people who are working to rethink different aspects of data.**

**The Rethinking Data programme will build on the value of that ecosystem of knowledge, focusing on three key aspects of rethinking data:**

- changing narratives**
- changing practices**
- changing regulations**

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# Understanding data

Data is not, and has never been, neutral. Data practices have social practices 'baked in', so when we talk about data we are also talking about the socio-technical structures around its capture. How data has been gathered, interpreted and used reflects accepted social norms.

We are always in the process of constructing data, and our relationship with it is dynamic and often unequal. Choices society makes about the production and use of data reflects the distribution of power and is conditioned by power asymmetries.

Data collection is not new. There is evidence of many early civilisations collecting data, recognising its value and using it to support the purposes of those in power. Among many civilisations, the census of people and possessions was central to the effective implementation of taxation, laying down routes of transport and organising water storage.

If we know what data is collected and which data is given attention, we understand what matters to a society at any point in time – its needs and its driving forces.

What is new are trends in the contemporary deployment of data that drive the development of emerging technologies with 'exponential reach', such as artificial intelligence, biotechnology, nanotechnology and robotics.

These pose enormous challenges that demand that we 'rethink' data – its use, language, purpose, value and governance.

All actors in society must now consider:

- how data might narrow inequalities, rather than widen them
- how data might tackle power imbalances, rather than entrench them
- how data might help us address the global issues of resource allocation, climate change and migration, rather than exacerbate them.

**Data reflects  
aspects of who  
we are and how  
we relate to each  
other back to us.**

**Data is in the eye  
of the beholder?**

**What we see,  
what we choose  
to interpret  
and capture,  
is rarely fixed –  
there is always  
a performative  
and constructive  
dimension.**

**Data is in the eye  
of the power holder?**

# Ada's view on the current use of data

## 1 Data is exploited, rather than treated as a public good. Its true social value is hardly ever articulated.

Data about ourselves plays a central role in shaping some of the most beneficial contemporary advances we have seen in the use of technology: from predicting and diagnosing eye disease,<sup>1</sup> to navigating complex urban environments with speed and ease.<sup>2</sup>

The effective use of data (and data-driven technologies) can make a significant contribution to society – it can help save lives, make vital public services more efficient and effective, and enable us to connect to our loved ones wherever they are.

Yet data is predominantly treated as exclusive, monetised by organisations and siloed in ways that inhibit research and development for public benefit. In particular, the adtech industry draws on practices of personalisation, collating data trails to produce increasingly detailed virtual profiles that enable microtargeting and refined consumer group matching. The objective is primarily to maximise profit over collective benefit. This is a practice that has been described as 'surveillance capitalism', which author Shoshana Zuboff argues 'unilaterally claims human experience as free raw material for translation into behavioural data'.<sup>3</sup>

These approaches are justified by claims that the gains from data use will 'trickle down' to broader society – and that the market, left to its own devices, will realise the benefits of data for all. Experience has proved the opposite, and people and societies have been left to deal with the 'externalities' of many kinds of data misuse, from gross infringements of privacy, to repercussions for human rights and democratic norms.<sup>4</sup>

Realising the social value of data and ensuring its benefits are stewarded for public good requires a central role for governments, regulators and policymakers across the world.<sup>5</sup> It could be achieved through increased investment in the data infrastructure and ecosystem that enables more effective production, analysis and insights drawn from data already held for public good. It also requires policymakers to strengthen public trust through clearer guidance and regulation to prevent 'techlash' – for instance, in relation to cash-strapped local authorities, or NHS trusts handing over valuable data sets in 'data for services' deals.

## **2 Political and administrative institutions have struggled to govern data in a holistic way that acknowledges its central role in the modern world.**

While there are existing EU regulations and legal instruments on data, and distinct rights of privacy and data protection enshrined by the European Convention on Human Rights, there are limited mechanisms that enable effective enforcement so individuals and groups can exercise their data rights.


As the report by the British Academy and the Royal Society shows, traditional concepts and norms for the effective governance of data are under stress.<sup>6</sup> New and emergent concepts, such as group and collective privacy, invite us to question whether additional regulatory frameworks are needed to complement existing laws, protecting privacy in a wider ecosystem where the privacy of groups, not just of individuals, is often compromised.<sup>7</sup>

Existing regulations rarely take into account collective rights for groups, particularly marginalised groups, or explain in detail how individual rights can be balanced against public interest and benefit.

Other regulatory frameworks are increasingly being shaped by the implications of our data-driven economy, and these will require consideration. An example is competition law. The acquisitive practices of large technology companies are often criticised for being anti-competitive. However, existing competition law has struggled to articulate what it means for anti-competitive behaviour to exist in a data-enabled society (in which data-driven services rely on network effects, creating natural monopolies), where access to personal data, not price, is exchanged in return for access to platform services.

## **3 Individuals lack agency over how their data is used, and there are stark power imbalances between people and corporations.**

Individuals are becoming increasingly aware of the scale of data we generate, its potential benefits for society and its monetary value. However, we have limited knowledge or control about who is holding data about us, for what purposes and who might be able to access it in the future. A recent Doteveryone survey found that people feel disempowered by a lack of transparency in how online products and services operate, with 89% wanting clearer terms and conditions, and half saying that they would like to know how data about them is used but are unable to find out.<sup>8</sup> At a discursive level, narratives about data and AI technologies are often framed in a manner that can be deterministic and disempowering.



There is a risk that this disempowerment will increase apathy in individuals concerned, creating a vicious cycle that decreases agency and increases power imbalances between people and data platforms. As access to data-driven platforms such as email communication and social media become an integral part of work and leisure, individuals are forced to give up their data to access de-facto public services that are in the hands of tech monopolies. Privacy policies by private companies are often complex and open to misinterpretation, if they are read at all. So the concept of meaningful consent is expected to do too much 'heavy lifting' – individuals do consent to terms and conditions, but if the alternative is exclusion from social and networked capital, they have little genuine choice.<sup>9</sup>

We know from existing evidence, however, that, when engaged in a way that fosters critical democratic scrutiny, publics are capable of discussing the use of data in a sophisticated manner. In addition to public dialogue work undertaken by the Royal Society on machine learning, and by the Royal Society of Arts (RSA) on automated decision making, the Ada Lovelace Institute's citizen juries in partnership with Understanding Patient Data, NHS England and the UK government's Office for Life Sciences have supported policymakers and regulators to broaden the conversation on the use and governance of data.

**We need to move from a vicious cycle of apathy, disempowerment and disengagement, towards a more virtuous circle: enabling people to have greater control and agency over the governance of their data.**

# Our vision for data

**At Ada, we see data as a common resource that everyone has a stake in and, for this reason, we believe the interests of people should be placed at the heart of every conversation. In developing our work, we will:**

**1. Make the case for the social value of data**

Data has a value that cannot be captured by current models – it has the potential to make a significant positive contribution to society.

To make the case for data having social value, we need to enable both its protection and its liberation, preventing data injustice<sup>10</sup> and infringements of core human rights such as privacy, on the one hand, and tackling concentration, extraction and protectionism of data, on the other.

**2. Tackle asymmetries of power and data injustice**

We recognise the power imbalances inherent in the relations between organisations (public and private sector) who collect and deploy data, and people.

We need to empower communities and individuals with effective legal and technical tools and a clear language to talk about data rights.

**3. Promote, and enable data stewardship – strengthening the trustworthiness of those who use and hold data**

There is a 'data trust deficit' whereby trust in all organisations to use data effectively is lower than trust in those organisations in general.

This is true in the private and public sectors, though service providers (NHS, doctors, the police) are more trusted than for-profit organisations (internet companies, supermarkets or insurance providers).<sup>11</sup>

We need to strengthen the trustworthiness of all institutions that use, manage and steward data.

Data stewardship might be generated for, and on behalf of, individuals and groups who generate data – but also extends to a wider group of beneficiaries, including future citizens. Thoughtful, responsible practices in data collection, access and use must be put in place, and all organisations dealing with data must commit to a stewardship role that cares for communities and individuals.

**Stewardship is often described as an ethic that embodies the responsible planning and management of resources. We see data stewardship as a key basis for data's social value.**

#### **4. Make the case for data infrastructure that enables purpose-driven innovation**

It is important to develop a data infrastructure that enables purpose-driven innovation – one in which private and public actors can be encouraged to make the best possible use of data.

**There is a central role for the state to play in enabling and benefiting from investment in innovation.**

Public bodies often hold large sets of data that are under-produced and under-utilised.<sup>12</sup> As Mariana Mazzucato highlights, the state has already played a central role in the development of data-driven technologies: innovations such as GPS, touchscreen display and voice-activated technologies were initially funded by public sector institutions.<sup>13</sup> We see equivalent potential for state and public investment in the use and access of data for all.

#### **5. Develop, and advocate for data rights and regulation**

It is vital that regulators and law-making bodies act promptly, ensuring that laws keep abreast of technological developments and that legitimacy, democratic oversight and trustworthiness stand at the heart of how data is governed and regulated.

There is a central role for making more effective use and building on the existing regulatory and legislative frameworks in place (such as the GDPR). There is also a vital role for developing and articulating new concepts, and enshrining these in law and regulation.

# How will Ada rethink data?

We acknowledge the complexity of moving from the current picture to our vision for a better model for data, for everyone. We intend to contribute with an integrated, pragmatic approach that researches and engages experts and the public on:

## Changing narratives

Examining and reframing the kinds of language and narratives we use when talking about data.

## Changing practices

Defining what 'good' looks like in practice when data is collected, shared and used.

## Changing regulations

Recommending changes in regulations so that all data rights can be effectively exercised, and data responsibilities are clear.



**Delivering  
our vision**

Each of the areas of intervention matters individually and in relation to the others. If we reframe or reconceptualise data itself, that will have ramifications for the regulatory frameworks and governance we adopt. Certain practical solutions, endorsed for more effective data stewardship, may be impossible

without the appropriate legislative frameworks in place. Top-down regulation might be necessary, but it is far from sufficient. Promoting good practice and thoughtful stewardship are indispensable if we want to embed democratic social values in the day-to-day use of data.

# Changing narratives

## We need to shift the discourse about data governance away from entrenched narratives and realign it with public values.

The failure on the part of policy and industry organisations to open up the conversation to the wider public has moved the current discourse on data out of step with people's expectations and attitudes.

Prevailing narratives are more than an instrument of communication, they have a direct influence on how political decisions are taken. Language and metaphors that orient how media and policy documents refer to data have become an instrument of power: those who have the greatest access to resources are also those who can make their stories count.

### What Ada will do:

Ada will seek to better understand how data is framed in UK media and policy narratives, and the impact this has on shaping what data use is considered acceptable. Building from this understanding, we will aim to reframe narratives of data to work for people and society.

### Our programme will:

- **Synthesise existing research on data narratives:** Existing research has identified prominent themes in how data is framed, such as data as a natural force to be controlled or a resource to be consumed.<sup>14</sup> It has also explored public perceptions of data.<sup>15</sup> Synthesising this work is a crucial first step towards changing data narratives.
- **Analyse how data is being framed in UK media and policy narratives:** Using qualitative research methods, we will analyse recent policy literature and media stories to explore what narratives are being used, how they conceptualise data and what impact this has on public and political discourse.
- **Develop alternative framings of data:** We will engage with the public around our findings to co-create alternative narratives, which frame data in ways that work for people and society.

# Changing regulations

## We need to strengthen data regulation and data rights, working towards a legal framework that builds on the GDPR.

We will identify the legal and policy changes necessary to achieve a data governance ecosystem that will take us towards an equitable societal model for the future. To do so we need to build on the GDPR, identifying existing legislative and regulatory opportunities, as well as make concrete recommendations for governance and regulation.

**The necessity for data regulation and strengthening of data rights is informed by the extent to which ethically indefensible uses of data are increasingly prevalent.**

The 2019 report of the German Data Ethics Commission identifies that these include: 'Total surveillance, profiling that poses a threat to personal integrity, the targeted exploitation of vulnerabilities, addictive designs and dark patterns, methods of influencing political elections that are incompatible with the principle of democracy, vendor lock-in and systematic consumer detriment, and many practices that involve trading in personal data.'<sup>16</sup>

It identifies that there is a need to strengthen the enforcement and implementation of existing legislation, as well as to ensure the existing legislation is strengthened and fleshed out. It proposes the following areas as ripe for further development:

- blacklisting of data-specific unfair contract terms
- fleshing out of data-specific contractual duties of a fiduciary nature

- new data-specific torts
- blacklisting of certain data-specific unfair commercial practices
- introduction of a much more detailed legislative framework for profiling, scoring and data trading.

### Our programme will:

- **Map the gaps for UK and EU-based regulations:** Existing legal frameworks may have some limitations to their provisions. We will identify where there are gaps (if any) and how they might be addressed. This will inform a preliminary report that will lay the foundations of our research in this area.
- **Develop mechanisms to enable redress and accountability:** We will examine which EU and UK-based laws are not as effective as they could be, taking the report of the German Data Ethics Commission as a starting point. A policy-based report, drawing on roundtables and interviews with a range of international experts and stakeholders, will look at the question of redress, where existing rights are not effectively protected or could benefit from increased mechanisms for enforcement.
- **Define where next for governance and regulation?** Having examined where the key gaps are, we will identify major areas for regulatory development and reform, taking the GDPR and other existing regulatory frameworks (national and international) as a starting point. In collaboration with the Rethinking Data working group (see p. 20), Ada will develop key recommendations seeking to effect regulatory change in the EU and in the UK.

# Changing practices

## We need to foster data stewardship and fair data access.

A range of organisations and networks are developing different ways of enabling data flows and data access models that might enable significant benefits from innovation. For instance, the Royal Academy of Engineering has featured ten different case studies in the UK of data-sharing activities in different sectors, seeking to learn about the barriers that inhibit innovation and exploring potential solutions that facilitate more trustworthy approaches to data access and management.<sup>17</sup>

Examples of these different methods include:

- data trusts
- data-sharing contracts
- data co-operatives and data commons models
- design and development of privacy-enhancing technologies.

This area of intervention will examine and take account of the different, emerging data access and sharing mechanisms, describing their respective strengths and weaknesses, and where, and in what contexts, they might most effectively be deployed.

As part of this work, Ada has an interest in developing proposals for the regulatory oversight of public-private partnerships, to enable a fairer value exchange through access to data. Recent ‘techlash’ examples illustrate how challenging this is for public bodies to navigate: in the development

of proposals for a private-public sector partnership for the development of smart cities, such as Sidewalk Labs in Toronto; and the development of proposals for data access and sharing between the UK’s National Health Service and a range of commercial bodies, such as Sensyne Health, Google DeepMind and Babylon Health.

## Fair data partnerships between private and public bodies

While we recognise that partnerships have potential to deliver public benefit, we also acknowledge criticisms of the asymmetry of power and expertise that exists between public and private bodies, the distinct and/or competing interests of organisations and their different relationships with public and private shareholders, and the stark differences in public attitudes and perceptions towards data sharing with public bodies and commercial organisations (which people are far less comfortable with).

The German Data Ethics Commission rightly identifies as a priority the development of standard terms and conditions and licences for public sector data-access arrangements – including clearly defined safeguards for those affected by a data-access arrangement. Their report strongly recommends that ‘provision should also be made against data being used in a way that ultimately harms public interests, and also against still greater accumulation of data and market power on the part of the big players (which would be likely to undermine competition)’.

In addition, the Commission identifies that data held by private-sector organisations also has potential to deliver public benefit, and so: ‘consideration must be given... to a broad range of potential incentives; these might include certain privileges in the context of tax breaks, public procurement, funding programmes or licensing procedures’. It argues for the improvement of data infrastructures and the creation of an ecosystem in which a wider range of players can benefit from such infrastructures, enabling the use of data for public benefit.

**What Ada will do:**

Ada will learn from and make recommendations about existing ways of sharing, accessing and using data between public and private organisations, looking at both successful and unsuccessful examples – highlighting best practice, but also learning from failures. We will make recommendations for new and innovative practices to prototype within the UK, as well as for the creation of a governance and regulatory framework that helps to strike an acceptable balance between innovation and public trust.

**Our programme will:**

- **Understand current practices:**  
We will review existing and emerging case studies of data sharing and access between private and public bodies, learning from and independently reviewing live examples of data access and data sharing from across the world. Through this review, we will identify the key ethical issues at stake and the practical and technical barriers to enabling trustworthy data access, and to creating data infrastructure that benefits all, such as cost, available technology, procurement requirements, regulatory frameworks, etc.
- **Understand public attitudes to fair data sharing and access:**  
We will engage the public to understand what ‘fair’ means in the context of data sharing, when competing interests are at stake. This activity will build on our work in partnership with the Office for Life Sciences, NHS England and Understanding Patient Data in a healthcare context.
- **Make recommendations on best practice and test models for trustworthy regulation:** Bringing together our insights from case studies and the engagement with the broader public, we will draw recommendations on best practices for data access and deployment, and prototype models that can be tested and evaluated.

# Beyond data ownership

## Towards a concept of data commons

The notion of data ownership has been extensively critiqued, and we need to develop an alternative paradigm that underpins our conceptualisation of data governance. The Royal Society, British Academy and techUK concluded in a seminar on data rights, ownership and control that, ‘use of the term “data ownership” raises significant challenges and may be unsuitable because data is not like property and other goods that can be owned or exchanged... Instead discussion should explore the rights and controls individuals, groups and organisations have over data, and should encompass a societal as well as individual point of view.’<sup>18</sup>

This perspective on data ownership is endorsed by the German Data Ethics Commission, which recommends against recognising ownership of data:

*‘Data ownership (i.e. exclusive rights in data modelled on the ownership of tangible assets or on intellectual property) would not solve any of the problems we are currently facing, but would create new problems.’<sup>19</sup>*

We identify the concept of data commons as a potentially useful alternative to models of data ownership and seek to develop an account of commons in practice through this programme.

The notion of the commons has been mobilised at different times over the past three decades in order to democratise the digital economy: the knowledge commons explicitly references the concept, while in the Human Genome Project ideas underpinning the theory of the commons are at work implicitly. Although the classical definition of common-pool resource as a rivalrous and non-excludable good may not precisely apply to data, positioning data as a social resource that people should decide about through collective choice can set effective parameters for democratic data governance.

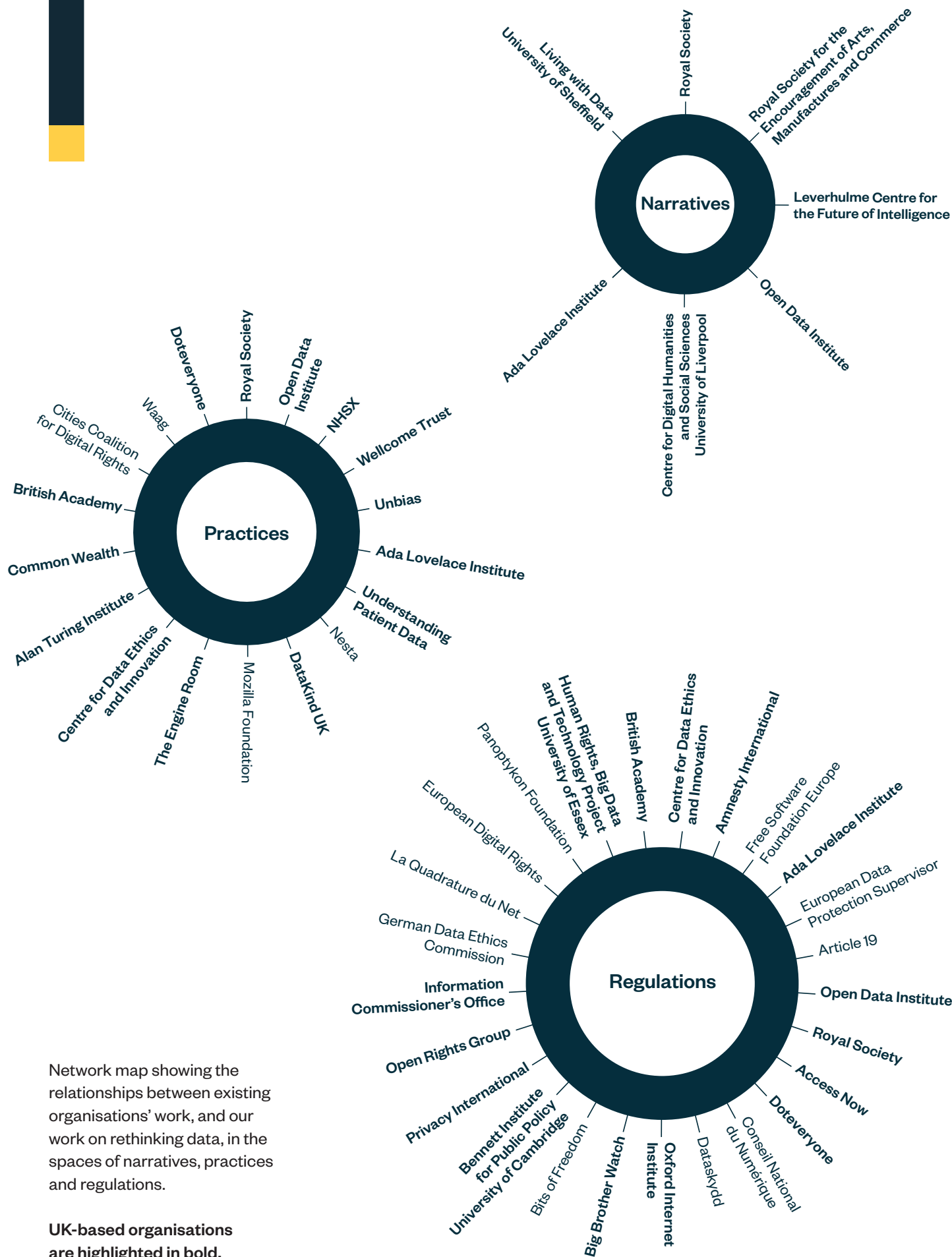
The European Commission’s international programme Decode has developed a new decentralised, privacy-enhancing platform, deployed in the cities of Barcelona and Amsterdam. Decode hosts four pilot projects, two in each city, that offer data-intensive services while giving decisional power over sharing options and applications to the groups of people who generate data. The programme articulates the principle that data is an infrastructure of public interest, and that services that run on it should respond to the needs of people and operate under democratic oversight.

# The existing national and international data landscape

**A range of organisations such as research institutes, think tanks, government, consumer bodies and regulators are rethinking data practices – and the Ada Lovelace Institute’s activities aim to build on established and emerging activity in this landscape, collaborating with people and organisations to effect wider systems change.**

**Note:**

This is a specialised view and not a comprehensive list of all organisations working in this space.



Network map showing the relationships between existing organisations' work, and our work on rethinking data, in the spaces of narratives, practices and regulations.

UK-based organisations are highlighted in bold.

# Partnerships – who we will work with

- **We will work with the public and civil society organisations**  
to reframe data narratives, ensuring that the language we use is open, accessible and relevant to a wide range of people and resonates with them.

- **We will work to enable organisations to become effective data stewards,**  
capable of behaving in trustworthy ways, and being worthy of public trust.

This includes public bodies in the UK and the EU (such as governments, local authorities and health services), as well as private sectors at different stages in their growth and development, from start-ups through to larger technology companies.

- **We will work with interdisciplinary groups of academics, lawyers, regulators and policymakers**  
to understand the current regulatory landscape, and make greater sense of the complexity that characterises it both in the UK and across Europe.

We will make the case for strengthening data rights in the UK with a view to influencing best practice internationally. We are delighted that this work is being supported by the Royal Society, the UK's national academy of sciences, and by the British Academy, the UK's national academy for the humanities and the social sciences.

# Introducing the working group for data regulations

To achieve these goals, Ada has established a working group with a range of interdisciplinary and international expertise, to advise on the development of data governance and regulations that recognise individual and collective rights.

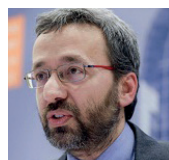
We are delighted that this working group will be co-chaired by Professor Diane Coyle, Bennett Institute for Public Policy (University of Cambridge), and by Paul Nemitz, Principal Adviser on Justice Policy, EU Commission and Member of the German Data Ethics Commission.



**Amba Kak**

*Director of Global Strategy and Programs, AI Now Institute*

Amba Kak is the Director of Global Strategy & Programs at the AI Now Institute at NYU, where she develops and leads the organisation's global policy engagement, programmes and partnerships. Previously, she led public policy for Mozilla in India, working extensively on global data protection law and biometric identity systems.



**Professor Alessandro Mantelero**

*Polytechnic University Turin, Professor of Private Law*

Alessandro Mantelero is Associate Professor of Private Law and Data Ethics & Protection at the Polytechnic University of Turin, and scientific expert on AI and data protection for the Council of Europe. He has served as an expert on data regulation for organisations including the UN, the EU FRA, and the European Commission.



**Amelia Andersdotter**

*Data Protection Technical Expert  
and Founder, Dataskydd*

Amelia Andersdotter is a specialist in mathematical statistics and business law who has worked at the intersection of technology, society and law since 2009. She was network equipment and internet protocol technical standards expert at UK-based human rights organisation ARTICLE19 and a member of the European Parliament for the Pirate Party. Through the Swedish NGO Dataskydd.net she operates the Webbkoll privacy check service for websites, aiming to facilitate better technical data protection measures for all.



**Professor Anne Cheung**

*The University of Hong Kong, Faculty of Law*

Anne Cheung is a professor of Law at the University of Hong Kong. She has researched in areas of law and technology, freedom of expression and privacy. Her recent project is on China's social credit system. Anne's writings include co-editing the book *Privacy and Legal Issues in Cloud Computing* (2015).

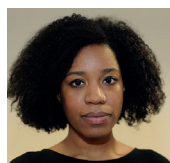


**Professor Diane Coyle**

*University of Cambridge, Department  
of Politics and International Studies  
and Co-director of the Bennett Institute  
for Public Policy*

Diane Coyle is the Bennett Professor of Public Policy at the University of Cambridge. Her research focuses on the digital economic and economic

measurement. She founded Enlightenment Economics, a consultancy specialising in economic issues related to new technologies, innovation and competition policy. She is also an expert adviser to the Office for National Statistics and National Infrastructure Commission. Diane is the author of several books, including *Markets, State, People: Economics for Public Policy*, examining how societies reach decisions about the use and allocation of economic resources, and the bestselling *GDP: A Brief but Affectionate History*, and *The Economics of Enough*.



**Gracie Bradley**

*Policy and Campaigns Manager, Liberty*

Gracie Mae Bradley is a human rights campaigner and policy expert, currently Policy and Campaigns Manager at Liberty. She wrote Liberty's *Care Don't Share* report, which explores government use of data in implementing the 'hostile environment'. She leads work across policing, immigration, counter-terror and surveillance, and campaigns with Schools ABC.



**Martin Tisné**

*Managing Director, Luminate*

As Managing Director of Luminate, Martin is responsible for their Data & Digital Rights impact area, Europe region, and policy and advocacy activities. Martin brings over 15 years of investment and leadership experience to his role, including founding and co-founding two multi-stakeholder initiatives and three NGOs.



**Dr Michael Veale**

*University College London, Faculty of Laws and the Alan Turing Institute*

Dr Michael Veale is Lecturer in Digital Rights and Regulation at UCL's Faculty of Laws and Digital Charter Fellow at the Alan Turing Institute. He specialises in the intersection of human-computer interaction, computer science and technology law, particularly concerning privacy, data protection and digital tracking, and emerging technologies including machine learning, artificial intelligence and encrypted data analysis. Michael's work has been drawn upon widely by regulators and legislatures, and he has authored reports in these areas for a range of organisations, including the Law Society, the Royal Society, the Commonwealth Secretariat and the European Commission.



**Dr Natalie Hyacinth**

*University of Bristol, School of Sociology, Politics and International Studies*

Dr Natalie Hyacinth is a Senior Research Associate in the School of Sociology, Politics and International Studies at the University of Bristol. Her research incorporates Geopolitics, Philosophy and Black Studies. She is part of the Government Equalities Office's Workplace and Gender Equality (WAGE) Research Network and the Sonic Cyber Feminisms collective, and a Researcher for the Race, Culture and Ethnicity (RACE) group of the Royal Geographical Society.



**Dr Orla Lynskey**

*London School of Economics, Department of Law*

Orla Lynskey is an Associate Professor of Law at the LSE and a Visiting Professor at the College of Europe, Bruges. Her research focuses on data protection law and policy, and in particular data protection enforcement and the intersection between data protection and competition law.



**Paul Nemitz**

*EU Commission and German Data Ethics Commission*

Paul Nemitz is Principal Adviser on Justice Policy to the EU Commission and a Member of the German Data Ethics Commission. He has held posts in the Legal Service of the European Commission, the Cabinet of the Commissioner for Development Cooperation and in the Directorates General for Trade, Transport and Maritime Affairs. He is a visiting Professor at the College of Europe, Bruges, teaching EU Law.



**Raegan MacDonald,**

*Head of EU Policy, Mozilla*

Raegan MacDonald leads Mozilla's policy work in the EU, covering a range of issues including privacy, data protection, content regulation and disinformation. Prior to joining Mozilla, Raegan worked at Access Now and before that, at European Digital Rights (EDRi). She is Chair of the board of the Digital Freedom Fund (DFF) and a board member of EDRi.



**Rashida Richardson**

*Director of Policy Research, AI Now Institute*

Rashida Richardson is Director of Policy Research at New York University's AI Now Institute, where she designs, implements, and coordinates AI Now's research strategy and initiatives on the topics of law, policy and civil rights. She previously worked as Legislative Counsel at the American Civil Liberties Union of New York (NYCLU), where she led the organisation's work on privacy, technology, surveillance and education. Prior to the NYCLU, she was a staff attorney at the Center for HIV Law and Policy, and worked at Facebook Inc and HIP Investor in San Francisco.



**Ravi Naik**

*Lawyer, ITN Solicitors*

Ravi Naik is a multi-award-winning solicitor (the UK Law Society's 2018 Human Rights Lawyer of the Year) with a groundbreaking practice at the forefront of data rights and technology. That practice includes the leading case against Cambridge Analytica for political profiling and the leading regulatory complaint against the advertising technology industry. Ravi provides advice to a range of stakeholders on data rights and data protection matters, including multinational commercial firms, international unions, global NGOs through to governmental authorities. Ravi is a well-known advocate and speaker on developing rights in technology, has written extensively and conducts research on the subject.



**Steven Croft**

*Bishop of Oxford and Centre for Data Ethics and Innovation*

Steven Croft is the Bishop of Oxford and was previously the Bishop of Sheffield. He has been a member of the House of Lords since 2013 and was a member of the Select Committee on Artificial Intelligence. He is a founding board member for the Centre for Data Ethics and Innovation.



**Dr Taylor Owen**

*McGill University, Max Bell School of Public Policy*

Taylor Owen is the Beaverbrook Chair in Media, Ethics and Communications and Associate Professor in the Max Bell School of Public Policy at McGill University.

# Next steps

Over the next two years, we will conduct research and engage the broader public about how data is described and discussed, how it is governed and how values of democratic oversight, equality, solidarity and privacy can be embedded in data access and use. We will work with partners to develop a precise and accessible language, making sure that people can join the conversation while still embracing the complexities of the matter at hand.

If you would like to find out more about Rethinking Data as it develops, you can sign up to our newsletter or contact the Rethinking Data team [hello@adalovelaceinstitute.org](mailto:hello@adalovelaceinstitute.org)

We will be communicating about Rethinking Data through Ada's own channels: @AdaLovelaceInst

**Data is a potential source of insight and information about all of us and its use is increasingly shaping our existence, so it's time for people to have greater agency and control over how it is governed.**

- 1 Moorfields Eye Hospital (2019) *Breakthrough in AI Technology to Improve Care for Patients*: [www.moorfields.nhs.uk/content/breakthrough-ai-technology-improve-care-patients](http://www.moorfields.nhs.uk/content/breakthrough-ai-technology-improve-care-patients)
- 2 Transport Network (2019). *Buses to Go Open Data with New DtF Platform*: [www.transport-network.co.uk/Buses-to-go-open-data-with-national-DfT-platform/15789](http://www.transport-network.co.uk/Buses-to-go-open-data-with-national-DfT-platform/15789)
- 3 Zuboff, S. (2019). *The Age of Surveillance Capitalism: The fight for a human future at the new frontier of power*. New York: Public Affairs
- 4 Amnesty International (2019). *Surveillance Giants: How the business model of Google and Facebook threatens human rights*: <https://amnesty.org/en/documents/pol30/1404/2019/en/>
- 5 See, for instance, the work undertaken by Professor Diane Coyle at the Bennett Institute for Public Policy on the value of data: [www.nuffieldfoundation.org/valuing-datafoundations-data-policy](http://www.nuffieldfoundation.org/valuing-datafoundations-data-policy)
- 6 British Academy and the Royal Society (2017). *Data Management and Use: Governance in the 21st Century*: <https://royalsociety.org/topics-policy/projects/data-governance/>
- 7 Mantelero, A. (2016). *From Group Privacy to Collective Privacy: Towards a new dimension of privacy and data collection in the big data era* (extract from book: *Group Privacy: New Challenges of Data Technology*) [www.researchgate.net/publication/312421289\\_From\\_Group\\_Privacy\\_to\\_Collective\\_Privacy\\_Towards\\_a\\_New\\_Dimension\\_of\\_Privacy\\_and\\_Data\\_Protection\\_in\\_the\\_Big\\_Data\\_Era](http://www.researchgate.net/publication/312421289_From_Group_Privacy_to_Collective_Privacy_Towards_a_New_Dimension_of_Privacy_and_Data_Protection_in_the_Big_Data_Era)
- 8 Doteveryone survey: *People, Power and Technology: The 2018 digital attitudes report*: [www.doteveryone.org.uk/project/peoplepower/tech](http://www.doteveryone.org.uk/project/peoplepower/tech)
- 9 Random surveys, run by the University of Pennsylvania in 2009, 2012 and 2015, have showed a persistent belief among interviewees that the existence of privacy policies was enough to limit the extent to which the website they were browsing was sharing data with third parties. Instead of consenting to data use, people resign themselves to it, while surveillance appears increasingly normalised and participation in choices of public interest is curtailed. Clearly, this resignation is not merely a case of apathy.
- 10 Data justice is defined by academic Linnet Taylor at the Tilburg Institute for Law, technology and Society as 'fairness in the way people are made visible, represented and treated as a result of their production of digital data': [www.doi.org/10.1177%2F2053951717736335](http://www.doi.org/10.1177%2F2053951717736335)
- 11 Royal Statistical Society and Ipsos MORI survey on trust in data (2014): [www.statslife.org.uk/images/pdf/rss-datatrustedata-sharing-attitudes-researchnote.pdf](http://www.statslife.org.uk/images/pdf/rss-datatrustedata-sharing-attitudes-researchnote.pdf)
- 12 Coyle, D. (2019). *Valuing data is tricky but crucial for the public good*, Financial Times [online]: [www.ft.com/content/b5bc3762-09f9-11ea-8fb78fcec0c3b0f912](http://www.ft.com/content/b5bc3762-09f9-11ea-8fb78fcec0c3b0f912)
- 13 Mazzucato, M. (2014). *Mission-oriented Innovation Policy: The challenges and opportunities*. UCL Institute for Innovation and Purpose. [online]: [www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/moip-challenges-and-opportunities-working-paper-2017-1.pdf](http://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/moip-challenges-and-opportunities-working-paper-2017-1.pdf)
- 14 See papers on the joint seminar hosted by the Royal Society, British Academy and techUK: [www.thebritishacademy.ac.uk/publications/data-ownership-rights-controls-seminar-report](http://www.thebritishacademy.ac.uk/publications/data-ownership-rights-controls-seminar-report), and Samson R. and Gibbon K. and Scott A. (2019) *About Data about Us*. [online]: [www.thersa.org/discover/publications-and-articles/reports/data-about-us](http://www.thersa.org/discover/publications-and-articles/reports/data-about-us)
- 15 Doteveryone survey: *People, Power and Technology: The 2018 digital attitudes report*: [www.doteveryone.org.uk/project/peoplepower/tech](http://www.doteveryone.org.uk/project/peoplepower/tech)
- 16 The report of the German Data Ethics Commission (2019): [www.datenethikkommission.de/wp-content/uploads/191015\\_DEK\\_Gutachten\\_screen.pdf](http://www.datenethikkommission.de/wp-content/uploads/191015_DEK_Gutachten_screen.pdf)
- 17 Royal Academy of Engineering (2019). *Towards Trusted Data Sharing: Guidance and case studies*: [www.reports.raeng.org.uk/datasharing/case-studies/](http://www.reports.raeng.org.uk/datasharing/case-studies/)
- 18 British Academy and the Royal Society (2017). *Data Management and Use: Governance in the 21st Century*
- 19 The report of the German Data Ethics Commission (2019): [www.datenethikkommission.de/wp-content/uploads/191015\\_DEK\\_Gutachten\\_screen.pdf](http://www.datenethikkommission.de/wp-content/uploads/191015_DEK_Gutachten_screen.pdf)

## These texts are fundamental to thinking about data in the three areas we have identified

(see network map p. 18).

### Regulations

British Academy and Royal Society (2017) *Data Management and use: Governance in the 21st Century*

Amnesty International (2019) *Surveillance Giants*

Bennett Institute (2019) *Regulation of Online Platforms*

Bennett Institute (2019) *Thinking about GovTech*

Centre for Data Ethics and Innovation (2019) *Review into Bias in Algorithmic Decision-Making*

German Data Ethics Commission (2019) *Opinion of the Data Ethics Commission*

Leslie, D. / Alan Turing Institute (2019) *Understanding Artificial Intelligence Ethics and Safety: A guide for the responsible design and implementation of AI systems in the public sector*

### Narratives

Royal Society and Leverhulme Centre for the Future of Technology (2017) *Portrayals and Perceptions of AI and Why They Matter*

Doteveryone (2018) *People, Power and Technology*

Open Data Institute and Royal Society of the Arts (2019) *About Data About Us*

### Practices

Bass, T., Sutherland, E. and Symons, T./ Nesta (2018) *Reclaiming the Smart City: Personal Data, Trust and the New Commons*

Arenas, D. et al. (2019) *Design Choices for Productive, Secure, Data-Intensive Research at Scale in the Cloud*

Mulgan, G. and Straub, V. / Nesta (2019) *The New Ecosystem of Trust*

Open Data Institute (2019) *Data Trusts: Lessons from Three Pilots*

# Our mission

Ada's mission is to ensure that data and AI work for people and society. We believe that a world where data and AI work for people and society is a world in which the opportunities, benefits and privileges generated by data and AI are justly and equitably distributed and experienced.

We recognise the power asymmetries that exist in ethical and legal debates around the development of data-driven technologies, and will represent people in those conversations. We focus not on the types of technologies we want to build, but on the types of societies we want to build.

Through research, policy and practice, we aim to ensure that the transformative power of data and AI is used and harnessed in ways that maximise social wellbeing and put technology at the service of humanity.

Ada was established by the Nuffield Foundation in early 2018, in collaboration with the Alan Turing Institute, the Royal Society (a convening partner of the Rethinking Data programme), the British Academy, the Royal Statistical Society, the Wellcome Trust, Luminate, techUK and the Nuffield Council on Bioethics.

Ada is funded by the Nuffield Foundation, an independent charitable trust with a mission to advance social well-being. The Foundation funds research that informs social policy, primarily in education, welfare and justice. It also provides opportunities for young people to develop skills and confidence in STEM and research. In addition to the Ada Lovelace Institute, the Foundation is also the founder and co-funder of the Nuffield Council on Bioethics and the Nuffield Family Justice Observatory.

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