

Data Trusts: from theory to practice

WORKING PAPER 1

**DATA TRUSTS INITIATIVE
26 NOVEMBER 2020**

Data trusts: from theory to practice

Working Paper 1

Summary

The challenge of data governance in the 21st century is to bridge aspirations to share data for personal or public benefit with concerns about the harms to individuals, communities and society that can emerge from data (mis)use. Current legislative frameworks already create a constellation of data rights to mitigate against these harms, but exercising these rights can be difficult, demanding time, resources and expertise that are out of reach for many. By empowering individuals to assert their data rights, data trusts offer a way for individuals and groups to influence how and why organisations are able to use data about them. However, despite much recent excitement surrounding the role data trusts could play in creating trustworthy data governance institutions, gaps in understanding about the form and function of these trusts remain.

A workshop convened by the Data Trusts Initiative on 26 November 2020 set out to explore the areas in which further work is needed to advance the development of data trusts, delineating the questions where interdisciplinary research can help make progress in establishing data trusts that respond to real-world challenges.¹

Key findings

Further action is needed to lay the foundations for data trusts that are accessible, reliable and effective, including research to better understand their conceptual underpinnings and ways of working, and pilot projects to identify best practice in data trust design.

Areas to address in the next wave of data trust design and development include:

- **Conceptual clarity:** How do data trusts fit in the wider data governance landscape, and which core capabilities must sit at the heart of any real-world data trust?
- **Accountability:** Beyond those already provided by trust law, what institutional safeguards would help ensure a data trust represents and operates for the benefit of those it purports to serve?
- **Participation, inclusion and digital equity:** Which interventions can help make data trusts accessible to all in society, and ensure that all those in a trust can meaningfully contribute to decision-making?
- **Finance and sustainability:** Which business models can help ensure the continued sustainability of a data trust?
- **Implementation issues:** Which use cases can help clarify how data trusts would work in practice?

¹ The Data Trusts Initiative would like to thank all those that participated in the 26 November workshop. This note summarises discussions at the workshop. It is not intended as a verbatim record and does not reflect an agreed position by workshop participants.

1. Background: disturbing the one-size fits all approach to data governance

Achieving the promise of the digital economy will require robust data governance frameworks that allow data sharing – helping develop new data-enabled products and services – while protecting individual rights and freedoms. A variety of legal tools to support data sharing already exist, based on contractual, cooperative or corporate structures. These may seek different goals, including:

- *Promoting individual interests*, creating benefits for individuals or organisations through sharing data.
- *Addressing societal concerns*, or pursuing ‘social good’ activities, including improvements to public services or the natural environment.
- *Managing vulnerabilities*, often stemming from power asymmetries that are emergent or embedded in social relationships and that can be compounded through poorly governed use of data.
- *Promoting enfranchisement*, supporting individuals or groups to seek redress after mistreatment or to pursue representation in the digital environment.

Adding to these existing data governance approaches, a data trust is a mechanism for individuals to pool the data rights created by current legislation into an organisation – a trust – in which trustees make decisions about data use on their behalf. Complementing the regulatory regimes that already exist in many countries, these new ‘bottom-up’ institutions would seek to manage the vulnerabilities to which individuals and groups are exposed as a result of shifting patterns of data use, and to empower individuals to influence the terms by which data about them may be used. The core characteristics of a data trust include:

- **Independent stewardship:** A defining concept in trust law is the idea that one individual can hold rights on behalf of another, and in so doing can be subject to a duty to use those rights for a purpose. Almost any right can be held on trust, and an emerging body of case law – for example, around managing rights relating to cryptocurrencies – illustrates how this concept is applied in the digital realm. In exercising data rights held in trust, trustees have a fiduciary responsibility to the beneficiary. These require that trustees act with undivided loyalty in pursuing the best interests of the trust’s beneficiaries and create safeguards that help ensure trustees operate independently of other interests when managing the trust.
- **Institutional safeguards:** Trust law has some well-established processes for holding trustees to account, with the overseeing Court offering a route to remedial action against a trustee considered to be in breach of the terms of a trust. In the event of a claim, it is for the trustees to demonstrate that they have sought to promote the beneficiaries’ interest with appropriate degrees of impartiality, prudence, transparency and undivided loyalty.
- **Collective action:** The ability to pool rights in a trust, coupled with the flexibility of trust law in managing a range of different types of right, is core to the ability of data trusts to act as powerful intermediaries in negotiating data use. Instead of being faced with the choice of either agreeing to lengthy terms and conditions or being unable to access digital services, individuals would task a data trustee with negotiating more favourable terms of data use on their behalf. That trustee could set out to promote data use for certain purposes, or restrict its use for others, using the power associated with the aggregation of rights in the trust to increase their influence in negotiating terms of use.

2. Conceptual clarity: connecting rights, tools to manage them and institutional purpose

Creating trustworthy data governance institutions,² centred around the principles of honesty, competency and reliability, has been a central goal of many recent data governance initiatives. While trustworthiness as a goal is relatively well-established, the pathway to achieving it through data governance is not yet clear. Evidence from public dialogues consistently shows that, when evaluating the trustworthiness of a technology or organisation, people care about who is developing the system, for what purpose, and for whose benefit. These questions – about how to make institutions trustworthy and why individuals trust an institution or not – will be central to the development of data trusts.

Some elements of trustworthiness come from the effectiveness of the independent stewardship, institutional safeguards, and collective action that should be embedded in how data trusts operate. In designing trustworthy data trusts and progressing these ideas, further work is required to better understand some of the underpinning assumptions and legal foundations. For example:

- *What duties fall within scope of 'fiduciary responsibilities' in different contexts?* The courts' delineation of the content and contours of fiduciary responsibilities has evolved differently in different jurisdictions. Understanding the precise nature of the fiduciary responsibility that is required to provide trustworthy data governance will be necessary to define the role of the data trustee.
- *Could alternative legal models fulfill similar functions?* Other legal structures can deliver benefits that are similar to those proposed by data trusts. For example, if seeking an intermediary to act on their behalf, individuals can enter into contracts with an agent. In such a relationship, the individual would task the agent to exercise those rights on their behalf, with the agent being placed under a fiduciary responsibility to act in the individual's best interests. While there are key differences in how trusts and agents operate – for example, a relationship with an agent would end upon the contracting individual's incapacity or death – their ability to act on behalf of another party, and their responsibility to exercise fiduciary care in doing so, means agent relationships could fulfil some of the functions of a data trust, and there may be circumstances where they present a desirable alternative.
- *What tools might be available in civil law jurisdictions?* The possibility of employing different legal structures to achieve the core functions of a data trust is potentially helpful when considering cross-jurisdictional issues. While trust law is a feature of many common law jurisdictions, it is unfamiliar in many parts of the world. Clarifying the specific attraction of trust law as a model could be a first step in enabling the creation of trust-like institutions in jurisdictions without a history of trusts or common law.
- *What powers would a data trustee have to act on behalf of the trust's beneficiaries?* Both data trusts and data agent-style relationships presuppose that it is possible for an individual to mandate another party to act on their behalf. The European Commission's recent draft Data Governance Act (2020) states that "it is important to acknowledge that the rights under Regulation (EU) 2016/679 can only be exercised by each individual and cannot be conferred or

² Inspired by Onora O'Neil's Reith Lectures, which are available from <https://www.bbc.co.uk/programmes/p00ghvd8>

delegated to a data cooperative”.³ This provision arises in part from concerns about the extent to which the ability to delegate rights to another party could be misused in ways that circumvent the ability of an individual to consent to data collection or use. It suggests there may be limits on the extent to which individuals are able to delegate rights (and potentially mandate the exercise of those rights). Trust law offers potential ways of working around such transferability concerns. Each ‘data subject’ could hold on trust the beneficial interest in the GDPR right for the data trustee, and reciprocally the data trustee would hold that same beneficial interest in trust for the data subject. This circumvents the need to transfer any right(s).

Fundamentally, these questions seek to make certain that the action of creating and participating in a data trust can lead to the desired outcome of increasing accountability of data controllers and empowering data subjects. If contributing to an environment in which citizens are informed and engaged in debates about data use, influencing the activity of powerful actors in the digital environment, then data trusts could be an important tool for empowering data subjects. In pursuing this vision, however, those developing data trusts will need to be mindful of the tensions between increasing individual agency while aggregating rights (or beneficial interests therein), between creating financially sustainable trusts while disrupting the incentives to monetise data, and between creating institutions that integrate easily into daily life while seeking to encourage individuals to engage in discussions about how their data is used.

3. Accountability: embedding institutional safeguards

The role of the data trustee is crucial to creating successful data trusts. Data trustees would be responsible for entering into negotiations with organisations seeking to use data, for representing the interests of a potentially diverse group of beneficiaries, and for ensuring that the data trust is financially sustainable while operating independently of outside interests. If working effectively, this role would function as a trusted intermediary in negotiations around data use. Achieving this outcome will require checks, balances, or safeguards to ensure there is a healthy dynamic between the beneficiaries, trustees, and those seeking to access data.

What action can be taken if a trustee fails in their duties? The court overseeing each trust offers built-in mechanisms for redress if a trustee is found in breach of the terms of a trust, with reversal of the burden of proof. These powers of intervention are more robust than the mechanisms for redress offered under many contractual frameworks and go some way towards addressing concerns about accountability. However, questions remain about whether these would provide sufficient safeguards against the range of potential issues that could arise in operationalising data trusts. For example, the time, resources, and know-how to engage in court action may be available to only a narrow group of beneficiaries, and there may be ways in which data trusts fail to operate as desired without such failures falling within the scope of court action. An independent oversight body – potentially complemented by a professional regulatory body – may also be needed to provide additional safeguards.

³ The draft Act is available at: <https://ec.europa.eu/digital-single-market/en/news/proposal-regulation-european-data-governance-data-governance-act>

What wider systems of accountability are needed? Situations may arise in which trustees fail to meet desired standards of behaviour without formally breaching trust – an underperforming trustee who is not actively neglecting their duties, for example – and new institutional safeguards may be necessary to hold trustees to account in these instances. Such safeguards could come from specifications set out in the terms of a trust regarding its ways of working, organisational procedures to ensure transparency around decision-making, or wider interventions from civil society. Examples of such mechanisms may be found from ways of working in existing trusts. Bond trusts, for example, have developed processes for negotiating disagreements between beneficiaries and for managing the risk of trustee ‘capture’ in situations where the relationship between trustee and bond issuer has become too close. In this respect, one advantage of trust law is the availability of existing law that can provide examples to show what actions by trustees are, or are not, permissible and the action that can be taken when conflicts arise.

What support is needed to create a cohort of data trustees? The actions of trustees are central to each of these mechanisms for accountability, and the role of ‘trustee’ in any organisation comes with significant responsibilities and liabilities. Many charitable organisations already report difficulties in finding high-quality trustees, and creating a pool of candidates that are ready, willing and able to perform these duties will be central to the success of data trusts. This will require further work to identify, for example, how trustees would be remunerated, whether they may eventually form a new profession, with concomitant professional standards and entry requirements, and what sources of training or support should be available to help them in their roles.

4. Participation: increasing inclusion and digital equity

Evidence from public dialogues suggest that awareness amongst members of the public about the ways in which data relating to their daily lives and activities is collected and used by different organisations is generally low.⁴ While there is no single ‘public view’ on data governance, individuals tend to express a desire for independent oversight or scrutiny of how data and digital technologies are being used, with a preference for promoting uses that deliver significant benefits to them personally or to society’s health and wellbeing. These insights suggest there may be a latent demand for structures such as data trusts, which are able to act as independent intermediaries to promote data use for desired purposes. Engaging effectively with different groups to understand this demand will be central to the success of data trusts.

How can data trusts be made accessible to all? Data trusts have the potential to reduce the burden that currently falls on individuals to understand how their data is being used and take action to address any misuse. If successful, they could be a powerful tool for communities that are under-served by current data governance regimes, offering a route to increase digital equity. However, the knowledge and tools to create a data trust would first have to be available to those communities, and raising the profile of data governance issues and data trusts across communities remains a challenge. The ways

⁴ A summary of recent public dialogue work is available in Royal Society (2019) *Engagement as a mode of operation*, available at <https://royalsociety.org/-/media/policy/projects/ai-and-society/RS-CDEI-Roundtable---Note-of-Discussions.pdf?la=en-GB&hash=77B3238C023D4240B12277865A119F33>

of working and institutional safeguards that are built into data trusts would also need to be designed with accessibility in mind – from how beneficiaries contribute to decision-making to the forms of redress available in case of trustee wrongdoing.

What mechanisms can help promote engagement? Further action will be needed to engage a wide range of communities in the design and development of data trusts. There are examples of areas in which such action has been prompted by policy interventions. The introduction of automatic enrolment into workplace pension schemes, for example, sought to respond to concerns about the vulnerabilities that could arise from inadequacies in systems for long-term financial planning. Such opt-out systems for data trusts may sit at one end of a spectrum of activities that could seek to improve engagement with these initiatives.

5. Finance and sustainability: building a sustainable ecosystem of trusts

Employing trustees, storing or managing data, and funding operational costs associated with a data trust require access to resources. Data trusts will require revenue streams or sources of funding to enable them to continue operations, either through private or public funding.

What business models can build an ecosystem of trusts? Despite trusts having a long history in the UK, data trusts have few parallels in the existing economy. The challenge in creating data trusts is to foster a new type of public interest activity, which can finance itself over the long-term. Addressing this challenge requires business models that could underpin data trusts, informed by understandings of how wider market forces can help foster an inclusive digital economy.

What action can help develop a plurality of data trusts? A recent legislative intervention points to the ways in which a market for data trusts might be developed. Through the draft Data Governance Act (2020), the European Commission is seeking to create the conditions in which organisations are able to share data with intermediary platforms, free from concerns about whether those platforms might use such data access to develop competing products or services. Its intention is to encourage organisations and individuals to make data available in a way that helps them maintain control over how that data is used.

6. Implementation issues: moving from theory to practice

As detailed in the preceding sections, there continues to be a range of questions about the fundamental purpose of data trusts, their institutional design, and how they would operate. Any data trust would likely be a mix of enabling technologies, legal mechanisms and organisational processes. In creating this mix, there may be practices or lessons to be drawn from existing work in other organisations. For example, data trusts could deploy privacy-by-design principles in its data management policies, or employ Data Protection Impact Assessments in building understanding of the implications of different data uses. Ensuring that these different components mesh together in ways that deliver a trustworthy system is a complex design challenge.

What lessons have been learned from similar areas of work? In some areas, there are clear parallels between the development of data trusts and other fields of study or recent innovations in data governance. Cooperative governance, for example, offers lessons in how to organise decision-making

amongst stakeholders with potentially disparate views; the case law surrounding trusts can provide insights into ways of managing different rights or the relationships between trustees and beneficiaries; history and economics can provide insights into how new forms of economic activity emerge and persist, and the factors that contribute to the success or failure of new institutions. Current practices under the GDPR may also inform how data trusts manage personal data rights, for example through understanding legitimate interests in data use and the type of transparency that is needed around how data is being used.

What use cases could form the basis of future discussions? In other areas, it seems likely that uncertainties around the form and function of data trusts could be best resolved by exploring case studies of how these trusts would operate in practice. Such discussions would bring together those with expertise in civic engagement, the law, technology, economics, and more, to better understand the purpose for which a data trust may be established, the incentives for different parties to engage with a trust, and the mechanisms that ensure its effective and continued operation.

7. An emerging research agenda?

Areas in which further action is needed to clarify the conceptual framework within which data trusts can be developed and identify the practical actions that can ensure their effective operation are summarised in the below. As the data trusts agenda progresses, and as different groups seek to implement data trusts in ways that best serve their interests or communities, further questions about the design and implementation of data trusts will arise.

Conceptual clarity: connecting rights, tools to manage them and institutional purpose

- Trusts and trustworthiness: What factors influence whether an institution is trustworthy? How do these apply to the development of data trusts?
- Trust law and alternative models: What core purposes or data governance functions could data trusts fulfil? What other models of data stewardship might be available to achieve these, and what are their advantages and disadvantages?
- Fiduciary responsibilities: What different understandings of the nature and extent of fiduciary responsibilities have emerged from different contexts, and what are the implications for the development of data trusts?
- Rights, consent and mandatability: What powers would a data trustee have? What tensions arise between the desire assert rights more effectively through aggregation strategies, and concerns about preserving ongoing consent to data use? How can data trusts manage these tensions?
- Incentives: What are the incentives for different individuals, groups, or organisations to engage with data trusts?
- Interactions between institutions and technologies: In constructing a data trust, what role do technologies, the law, professional standards and operational processes play in creating a trustworthy institution?

Accountability: embedding institutional safeguards

- Institutional safeguards: Aside from the safeguards and redress mechanisms 'built into' trust law, what mechanisms are needed to ensure that the data rights held in trust are exercised in an accountable and empowering way for the trust's beneficiaries?
- Managing conflicts within a trust: What processes already exist that can help design ways of negotiating differences between beneficiaries or hold trustees to account for any conflicts of interest?

- Developing a mandate for trustees: What is already known about the preferences people have over how their data is used? What forms of participatory governance could be implemented in a data trust to influence the actions of a data trustee?
- Identifying and recruiting trustees: Who would be responsible for recruiting data trustees? How would their decision-making processes be determined? Might data trustees eventually form a profession, governed by a professional body setting entry requirements, rules of conduct and other standards?
- Creating a cohort of data trustees: What support will data trustees need to effectively fulfil their role? What action is needed to ensure that those working for a data trust have the digital and trustee skills that they need?

Participation: increasing inclusion and digital equity

- Widening participation: What action is needed to make sure data trusts are accessible to all in society?
- Engagement with a trust: How can the work and decisions of a data trust be explained in ways that are understandable and influenceable for a wide range of users? What mechanisms for participation can help ensure a data trust effectively represents the interests of all its beneficiaries?
- Understanding demand: Where is there a demand for data trusts from data subjects? What type of needs could they meet?
- Perceptions of trust: What would make a data trust seem trustworthy, or not, and how does this vary across communities?
- Communications: What simple methods could help communicate how data is being used?

Finance and sustainability: building a sustainable ecosystem of trusts

- Finance: Who would pay for the creation, operation and governance of a data trust?
- Sustainability: What are the business models through which data trusts could achieve financial sustainability? What mixes of public or private financing could be available, and what are the implications for how data relating to the individuals in the trust is governed?
- Economics: What actions or frameworks are needed to build an ecosystem of trusts? What is needed to ensure there is a plurality of trusts? How might privately funded and publicly funded trusts co-exist?

Implementation issues: moving from theory to practice

- Global interoperability: How would it be possible to form a data trust in civil law jurisdictions? Are there functionally equivalent legal structures? How would data trusts operate across jurisdictions?
- Lessons from previous data governance initiatives: What lessons does recent experience of cooperative data governance or existing data institutions provide for the design and development of data trusts?
- Lessons from other areas of law: What can be learned from other areas of law, including case law around the establishment of trusts, or rights aggregation for collective copyright management?
- Use cases: In what areas could data trusts play a role in empowering communities? What might be the case studies that could help build understanding about how data trusts work in practice?
- Transparency: How could transparency be maintained in the complex flows of data surrounding data trusts?
- Legislation: What are the implications of the EU's Data Governance Act for the development of data trusts?
- Trust assets: Aside from the data rights, how might the data itself be held in trust (for those trusts that choose to do so)? What would be the underpinning technological systems?
- Viability: How large would a trust need to be to achieve its aims of renegotiating terms of data use?

About the Data Trusts Initiative

The Data Trusts Initiative is an interdisciplinary programme that pursues research at the interface of technology, policy and the law to better understand the role data trusts can play in addressing the challenges of data governance in the 21st century.

Supported by a donation from the Patrick J McGovern Foundation, the Data Trusts Initiative will fund research and engagement activities to clarify the conceptual foundations of data trusts and explore potential models of operation. By building a community of researchers and social entrepreneurs, the Initiative will shift discussions about data trusts from principle to practice.

For further information about the Initiative, and opportunities for funding in some of the areas discussed in this note, please visit www.datatrusts.uk