

Philanthropy and Data: How to better use, work with and fund data and emerging technologies



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Introduction

Foundations all over the world are grappling with their role in the emerging field of data and artificial intelligence. The field is fraught with potential controversy but also with possibility. Data has the ability to help us work at a larger scale than ever before, be more efficient, and solve problems more effectively.

Despite the potential, philanthropy isn't engaging in this field fast enough, and is well behind other sectors. Very few foundations have the capacity or technical knowledge to either shape innovations or make sense of which ones to back, and when they do, they face complex challenges about transparency, ownership and ethics.

While there are many promising initiatives in the field of data for social good, the social sector as a whole plays a relatively minor role, and many initiatives struggle to scale beyond small pilots. Foundations engaging with data and new technologies, or those exploring the potential, have recognised both the positive and negative possibilities are too large for any one organisation to address, and that we must work together.

This is why SIX has spent the last year investigating this topic of how philanthropy can better engage with and fund data and emerging technologies. This work was inspired by conversations at the 2017 SIX Funders Node retreat on [Aligning for Impact](#), when several participants asked how foundations could align around data for greater impact. SIX set out to explore this question, developing a [global scan](#), [case studies](#) and a series of [infographics](#); highlighting how data is being used in different ways for social good, the challenges in this field, and how philanthropy is and can be engaging in this work, both on its own and across-sectors.

About the retreat

To work on the issue in more depth, SIX hosted a small global retreat on Wasan Island, Canada in September 2018. This retreat was supported by the McConnell Foundation and the Robert Bosch Stiftung as part of their partnership with the BMW Foundation, the Breuninger Foundation, and Community Foundations of Canada. The initial scan that fed into the retreat content was also supported by Nesta and Lankelly Chase Foundation.

We invited 19 foundations, representing a mix of private, family, public and community foundations; 3 data practitioners; and 2 universities (Harvard and NYU); with participants travelling from Canada, US, UK and Germany. The participants represented a variety of experiences of working with data and AI; some are just exploring what their role should be, while others are scaling existing pilots and initiatives and integrating data as a key part of their strategy.

As many foundations set their strategies for the next several years, they are aware of the pervasiveness of data and new technologies, but many are still unsure of how best to respond. Our purpose in hosting this retreat was to dive deeper into the different roles that philanthropy can play in this field, share experiences, and collectively work through some of the challenges funders are facing. This field is not limited by geographical or sector borders, and we must learn as a global exchange.

Key questions we explored during the retreat included:

- What is the role of philanthropy in enabling more data-based systems change? What is not the role of philanthropy?
- How are funders approaching this work?
- What are the leverage points for change?
- How do we best develop the capacity, infrastructure and access to accelerate and sustain the use of data for social good?
- What are the next big opportunities for social action and what can we do together?

About this report

This report highlights our learnings and insights from the retreat and shares ideas for future work and opportunities. We first explore the urgency of this work and how foundations are engaging in with different points of intervention. We explore how systems change can be pursued in the field of data for social good, the different roles for philanthropy and equally important, what foundations should not do. We highlight some approaches to this work from foundations present and end with clear opportunities to go forward and reflections for the future.

SIX's programme of work with philanthropy

This work is part of the [SIX Funders Node](#), a programme within SIX to shift funders to be more systemic in their thinking and practice, and increase the flow of funding to social innovation and systemic change.

The SIX Funders Node was established to address the absence of innovation discussions in existing philanthropic forums; the lack of sharing knowledge and connections between funders who are interested in this topic globally; and the need for more, smaller, deeper, peer-led learning opportunities and solution building.

SIX shifts thinking within foundations by challenging, enabling and inspiring funders. Retreats are one aspect of this programme, as are our global scans and provocations. If you interested in knowing more, please email jordan.junge@socialinnovationexchange.org.

Who was there



1. Ben McNamee, Ontario Trillium Foundation, Canada
2. Cathy Stancer, Lankelly Chase Foundation, UK
3. Elizabeth McIsaac, Maytree Foundation, Canada
4. Geoff Mulgan, Nesta, UK
5. Jayne Engle, McConnell Foundation, Canada
6. Jean-Noé Landry, Open North, Canada
7. Jessica Seddon, World Resources Institute, USA
8. Jordan Junge, SIX, UK
9. Justine Greenland Duke, Mastercard Foundation, Canada
10. Kate Coleman, USA
11. Kendra Schreiner, SIX, UK
12. Kriss Deigelmeir, Tides, USA
13. Kristin Wolff, Social Policy Research Associates, USA
14. Lilian Coral, Knight Foundation, USA
15. Marika Baur, Bosch Foundation, Germany
16. Melanie Thomas, Community Foundations of Canada
17. Rizwan Tufail, Mozilla Foundation, Canada
18. Sam Gill, Knight Foundation, USA
19. Stefaan Verhulst, GovLab, USA
20. Stephen Goldsmith, Harvard, USA
21. Stephen Huddart, McConnell Foundation, Canada
22. Volker Hann, Breuninger Stiftung, Germany



Data and systems change

Why is this urgent?

Data is quickly becoming the determining feature of our world; pervasive and intrinsic to many of the apps, services and institutions we use and engage with on a daily basis. However, the divide in terms of resources, capability, and scale between the ‘social good’ and private sectors is vast and growing daily. Over the last 50 years, civil society has had little influence on the direction of technological change, creating a risk that the public interest is excluded from the conversation, and reducing the potential for data to be used for social good..

There is an urgency for philanthropy to first catch up with other sectors and engage in this field and conversation, and second, help to correct this imbalance and ensure data is used ethically and with the long-term good of society in mind. Data can offer a powerful tool to address the increasingly urgent and complex social and systemic issues.

Why should philanthropy engage in this field?

Participants highlighted several reasons why they are engaging in data for social good and systems change:

- To increase efficiency of operations, programmes and resource use.
- To work at a larger scale and be better able to understand and address complex issues.
- To counter the current negative outcomes and uses of data and technology:
 - increasing cohesion instead of isolation and division,
 - respecting people who give their data instead of treating it as a commodity,
 - decreasing inequality with smart cities,
 - and ensuring structural issues don't get lost in 'simple' dashboards.
- To ensure important ethical questions are not missed in this rapidly growing field.
- To use data to increase social and economic rights and influence decision and policy makers.
- To ensure philanthropy and the social good sector are not left behind compared to other sectors.

Why data matters? What does it allow us to do?

- Provides better situational analysis.
- Allows us to become smarter about the variables that explain a situation.
- Enables prediction - understanding patterns from the past to predict the future.
- Measure and assess impact.

Presented by *Stefaan Verhulst, GovLab at NYU*

Points of intervention

'There seem to be three "poles" in the social sector: one is using data for performance and reporting, another is centred around intelligence and evidence, and a third is around real-time analytics and prediction, using data in operations. As such, we are having different conversations among many different data partners, leading to a lack of cohesion.' Geoff Mulgan, Nesta

The following highlights several potential points of intervention, and some initial questions, for foundations to consider:

- 1. Internal data collection:** What data do you collect from grantees for monitoring and evaluation? How are you using it? How can data be used to make internal processes and systems more effective and efficient?
- 2. External data frameworks and sharing policies:** What external policies do you support and engage with around data? How are you sharing your data with others and for what purpose? How are you approaching questions regarding security and privacy?
- 3. Funding data for good services and projects:** Are you directly funding data for social good initiatives? How can they be tested and what do they need to scale?
- 4. Funding data intermediaries:** Are you funding intermediaries in this space (for example universities or specialist data centres)? What is the role of intermediaries to acts as a steward in the field? How can they help reduce technical capacity issues, set standards, define the problems and leverage additional capital from other sources?
- 5. Data for advocacy:** How is data being used to advocate for changes in policy and practice? How can philanthropy influence rules and regulations to better protect the public good?

How data can be used to leverage systems change?

'We're a small foundation, so we look for the points of impact that will have the greatest leverage. We look for careful, systems-based interventions.'

Elizabeth Mclsaac, Maytree Foundation

The systemic issues behind today's most pressing issues are not easily reduced to a dashboard or single query that can be run through computer models.

A key question to ask therefore is where might data 'poke' the system to have a lasting effect? At which leverage points can it have a transformative effect? To answer this, we must first understand what data itself can fundamentally do. During the retreat, Jessica Seddon of World Resources Institute shared two key ways data is changing behaviour at a deeper level:

It can allow new things to be known. For example, using satellite data we can see land use change patterns that could indicate mass displacement in areas inaccessible in-person.



It can create a shift in who knows - a shift in whose knowledge is valued and who has access and to the data. For example, the spread of the internet and mobile phones has enabled millions of people in remote and/or impoverished communities to both learn about the wider world and compare their own experiences. These people can then voice to register their opinions and needs through surveys and other tools, increasing their ability to make demands on the government.

This means individuals can make different decisions, and new relationships are formed – particularly between citizens and states. As a result, power can be redistributed in a more systemic, transformative way.

[SocialCops](#) in India demonstrates how data can create sustainable, systemic change. They partner with multiple government agencies to help unify data from 42 public service schemes across 20 ministries and multiple geographic areas into one dashboard. This system is shifting how decision-making takes place and what good governance means by enabling the formation of new institutional relationships, and creating a shift in whose knowledge is valued.

As well as discussing the current and potential leverage points, participants also asked more fundamental questions of what is considered legitimate knowledge, who has a seat at the table and the capacity to act, and how to influence and shift new institutional relationships.

What is philanthropy's role?

The philanthropic sector is incredibly diverse and there is not a one size fits all approach to this work. There are many different roles and there are also clear areas where philanthropy should and shouldn't engage:

The roles philanthropy can play - several key roles for foundations emerged:

- Funding social data projects through traditional grants.
- Funding and/or supporting enabling environments for social data projects to thrive, including capacity building.
- Acting as a convenor and participating in data collaboratives; sharing lessons learned.
- Supporting the creation of new datasets, and sharing the data that is captured.
- Sharing and donating data.
- Participating and contributing to open data platforms.
- Integrating data into internal operations to increase efficiency, efficacy, and transparency.
- Leveraging other resources and social capital to support data initiatives.
- Disrupting systems that don't work and better repurposing money towards those that do.
- Exposing algorithm biases and acting as a watchdog for seemingly "frictionless" systems.
- Empowering citizens by advocating for demand-driven data projects and the rights of individuals over their data and its use.

No one foundation can play all of these roles, nor are all roles appropriate to every foundation. Better sharing of learning and aligning can help ensure the wheel is not constantly reinvented and the sector is moving forward together.

The roles that philanthropy should not play:

Equally as important, there are certain things they **should not** be doing, as identified by the group:

- Don't collect data you're not going to use and don't have a plan for.
- Don't fund long-term programmes that might be the role of the government.
- Don't play too large a role for too long, instead build the ecosystem by enabling others and developing their capacity.
- Don't be too prescriptive about data you want to collect or think is important, which can exclude certain insights or place too heavy of a burden on partners.
- Don't decide on your own terms and in isolation what the question is and what the data strategy should be - work with others.
- Don't focus purely on 'shiny' new technology and ignore the larger systemic questions.
- Don't neglect underlying power dynamics and structures throughout each part of the process.
- Don't make grants slowly and incrementally when larger systemic efforts are needed.
- Don't be supply-side driven; focus on the demand side.
- Don't focus on data for data's sake, but remember the larger social issue.
- Don't move forward without a clearly articulated set of ethics and principles.



How do we get there: approaches to this work

Case: Investing upstream - the Knight Foundation and autonomous vehicles, USA

The John S. and James L. Knight Foundation is investing early stage in emerging technology, flipping the often reactive tendencies of philanthropy. In September 2018, they [announced](#) a new a five-year, \$5.25 million initiative to take a citizen-centered approach to studying autonomous vehicles (AV) in 5 US cities to better understand how the technology will affect urban mobility.

'Philanthropy is often after the fact. With this initiative, we're trying to get in early and put citizens first, before the technology becomes too disruptive. By getting in early, we want to inform the pilots and influence the technology to be more solutions-oriented and co-create with residents. Working with citizens themselves is key, we're not just after passive engagement. We hope all of this engagement and investment will lead to more effective pilots for all involved. The role of philanthropy is really unique here, we can help build trust. We're not invested in technology for its own sake, but in the civic process itself and ensuring that citizens are a part of this.'

The investment is the largest of [Knight Foundation's efforts](#) to develop people-centered Smart Cities. All 5 of the AV pilots will aim to creatively foster community engagement; to use technology to better understand local needs and preferences; and to establish best practices for other cities looking to innovate. The pilots range from integrating with other forms of transport to better connect residents to their homes and work, and slowing the growth of single-occupant vehicles in cities to reduce congestion and greenhouse gases.

The AV industry is developing fast, with pilots happening in over 70 cities worldwide. However, few of these are considering the needs of local residents. This programme aims to change this and ensure that they reflect community input. *'Important conversations are happening among government and industry on what these changes mean for the future, but residents have largely been left from the table. Without their input, we risk designing cities for new kinds of cars, rather than for people'*, Lillian Coral.

Case: Using data to change institutional relationships - Lankelly Chase Foundation, UK

Lankelly Chase Foundation (LCF) is trying to drive institutional and systems change with data in the UK through their work addressing severe multiple disadvantage. In 2015, they conducted published a series of statistical profile, trying to use big data to create a profile of those facing severe and multiple disadvantage and what their lives are like. The study drew together several different government datasets on homelessness, substance misuse and criminal justice, mental health and poverty. This was unique as these datasets are often looked at in silos. The [research](#) made it exceedingly clear that these issues do not exist in isolation, which has influenced government thinking through its use by the [Complex Needs & Dual Diagnosis All Party Parliamentary Group](#) and [NHS Scotland](#). It was also cited in the UK government's Budget of that year.

The work also generated valuable learning about the consequences of a social issues, in this case 'severe and multiple disadvantage' being defined by a foundation in a particular way. In future studies, Lankelly Chase and partners want worked to expand beyond the datasets, to attend to marginalised people excluded by the definition employed and to bring in voice and inclusivity from the data subjects. While the long-term outcomes are as yet unclear, the data has resulted in new dialogues between different government institutions, and with that the possibility of changed institutional relations and perhaps new ones altogether.

Systematising your internal approach to data,

as presented by Jean-Noe Landry, OpenNorth

- Change the discourse from 'open by default' to 'publishing with purpose'.
- Be at the table to discuss standards and network with others.
- Work to sustain and maintain multi-stakeholder data collaboratives.
- Encourage open discussion about perceived and real risks and benefits of data.
- Strengthen interoperability in the openness-network.



Opportunities for philanthropy to lead

Whilst there are many different ways philanthropy can use data, there was consensus at the retreat that philanthropy's unique offer in this field should be in the protection of values and principles. There is an urgency for foundations to engage faster in this work to ensure important questions of power dynamics and ethics are not overlooked or disregarded by the main players. They can bring the human back into this conversation by working with partners and grantees to use data as an instrument for social change, rather than treating data as a just a commodity.

There are several ways philanthropy can play a leading role in the debate:

Creating common standards

Creating common standards could provide a blueprint for others, helping to direct resources and knowledge towards what works based on shared learning. The group identified that this would be particularly helpful in the area of smart cities, where there dozens of pilots are taking place worldwide but little understanding of what others are doing, struggling with or learning; meaning that the wheel is being continuously reinvented across the world. The group believed that the creation, sharing, and adoption of common standards for smart cities would help future pilots leapfrog ahead to new stages.

Advocating for ethical practice and standards in the field

Foundations could use their unique position, networks and social capital to provide thought leadership in this ethics discussion with other sectors and institutions. For example, there is a real risk that algorithms can perpetuate and entrench social issues and biases. Foundations can work with organisations to ensure algorithms expose already existing biases in society and look at why they do exist and how they can be eliminated. They can also work with private sector companies who may be aware of this biases but are uncertain of how to solve this.

Embedding ethics in your approach and moving from talk to action

Ensuring that foundations act and grant with intentionality, inclusion and in an ethical way is important to further progress this field. This can be pursued through the adoption of a set of organisational standards and ethics for data projects, and applied consistently to both the foundation and grantees. To help inform this process, see below for a guide with 10 key questions to help guide ethical decision-making.

There are also risk in not moving beyond ethics conversations and not using data. There is a lot of funding for think tanks on ethics in AI. But at the same time, almost no money has gone into AI technology that directly empowers people. Philanthropy can have a role in working out how to move beyond just research in labs, nudging academia to achieving real impact.

Writing new rules and changing social contracts

Data is changing social contracts and new rules are being written all around us. Philanthropy can do more to shape the way data will shift social contracts to reflect the values that social good actors wish to anchor in society, rather than a commercial, market-driven logic. Alongside encouraging others to consider a broader range of stakeholders and communities.

For example, within smart city data collaboratives, the role of foundations could be to not just curate data partnerships, but to ensure the project is driven by tangible meaning for all citizens (prioritising social change, not just the technology), that is driven by demand (not just by vendors) and improves the lives of people and communities.

Four considerations to guide foundations:

The following emerged at the retreat to help guide foundations as they think about ethics and standards in this field. These considerations build on existing practice:

Context matters - Understanding context is vital to determine the proportion of time and focus on ethical considerations - For example, the use of predictive algorithms in child welfare services concerns underage, vulnerable subjects and can have life-altering effects; extra caution is thus required.

Consider power dynamics - The data gap between those who have access to or who are represented in data is large and growing. As technology advances, it creates a risk that those most vulnerable will be left ever further behind, or that they will not have a say in how their data is used.

Actions today have future implications - Decisions made today will impact future generations so foundations should think beyond their 3-5 year strategic plans.

Learn with reflective practice - Change is happening at a faster rate than ever before, both in technology and in the challenges we are facing. When moving into this new field, foundations should build in the space and capacity for continual reflection, along with a willingness to stop and shift when necessary.

10 questions to help guide ethical data-related decision-making

A small group at the retreat identified some key questions that funders could ask to help guide ethical decision-making. These questions are in no particular order and are by no means definitive; they can be added to, reduced, or adapted according to the context.

- Who owns the data?
- Who is asking the questions and defining the problem? Is this appropriate?
- What groups are included in the data set, and which are not? Why?
- In what way is the target group part of the decision making and what power do they have over the usage of the data?
- What are some of the possible unintended consequences? Are they created by/exacerbated by the data aspects of the project, or would they exist otherwise?
- Have you considered power dynamics? Is there any identity, age or ability to consent-related issues?
- How accountable are you? What is the recourse available to the target population, should there be any negative consequences? What individual or organisational level complaint mechanism is available?
- What due diligence has been done? (Research, feasibility studies, scenario planning)
- What is the in-built reflective process for both grantees and funders? Is there clear policy for being able to 'fail' and let go or change course?
- Test of necessity and do no harm: should this project actually be done? Is it worth the risk?



Going forward: opportunities for action

Participants at the retreat took concrete steps toward forming partnerships around common interests and current work which coalesced around four main topics:

1. **City data collaboratives** - The lack of sharing of information and learning between smart city projects, especially across borders was discussed several times. Some of the foundations are going forward together to share learning gain a better understanding of what does and does not work, to determine the metrics for success, and to explore the right governance structure of city data collaboratives.
2. **Ethics** - While there have been many disparate conversations about ethics, values and principles, with some frameworks created; funders noted that the spread and

uptake of these has been limited and would like to explore ways to increase this. Some participants agreed there was a need to further develop the concept of an inclusive, ethical data ecosystem and understand what this might look like in practice.

3. **Skills & Talent** - Participants agreed that investing in data skills and talent is key to building up the capacity of the social sector to engage in this field. We need clarity on what the base components of 21st century data skills are, and what core elements compromise data literacy. A number of foundations are interested in exploring this. The first step is assessing the level of needs and experience that exists, building the data infrastructure inside foundations and NGOs (so they aren't manually tracking data), and introducing a shared training platform with resources that can lower the entry costs for smaller foundations into using data.
4. **Data Activism** - Foundations can use their social capital to advocate in unique ways, and data activism is one way to use the production and collection of data to challenge existing power relations. A group from the retreat are interested in developing a community of practice around [data activism](#), to understand and articulate its distinctive features and principles, highlight success stories, and encourage more foundations to be data activists.

Conclusion: What's needed to change the game?

As the pace of technological change increases, it's clear that foundations and the social sector will need to up their game. Catching up won't be easy - the gap between private and social sector capacity and influence is growing. But foundations have the opportunity to change the game if they act quickly.

The role of a foundation is more fundamental than just funding, increasing cross sector collaboration, building capacity and skills, and sharing best practice. Foundations can set a new direction and new standard for this emerging field by addressing power ethical concerns and bringing the underlying values and principles that drive our work to the fore. Data, after all, is not the end result, nor even just a tool to ameliorate symptoms of a broken system. Our shared values and principles are key if we want to avoid perpetuating the underlying power dynamics that drive current social issues. Foundations can use their unique position and strong social capital to set a new narrative, support best practice, encourage others to do the same, and thereby creating new rules for a new game.



About SIX

SIX is a social innovation exchange built on mutual value, relationships and knowledge. We work globally to facilitate purposeful cross-sector conversations, that challenge and inspire people to use innovation to increase social impact.

See more at www.socialinnovationexchange.org

