# Collaborating for Greater Impact

## Building an Integrated Data Ecosystem

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Enabling Environment

MowatNFP

NPC

# Acknowledgements

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NPC is a charity think tank and consultancy with more than 15 years of experience working with charities, funders, philanthropists and others to deliver the greatest possible impact for the causes and beneficiaries they exist to serve. NPC is driven by the values and mission of the charity sector, to which it brings the rigour, clarity and analysis needed to better achieve meaningful outcomes. thinkNPC.org.



Imagine Canada believes governments and charities must work together to solve today's complex social and environmental challenges. Mowat NFP's Enabling Environment series is a timely contribution to the wide-ranging issues that impact how the government and sector work together. Imagine Canada is utilizing the papers to support public policy discussion and development in the sector. Stay up to date at imaginecanada.ca/earlyalert.



This research series from Mowat NFP explores different dimensions of an enabling environment in the relationship between the charitable and non-profit sector and government. The series is intended to help the federal government and the charitable and NFP sector develop a modern federal policy framework that enables the sector and strengthens its ability to improve the quality of life of Canadians and people around the world.



Mowat NFP undertakes collaborative applied policy research on the not-for-profit sector. As part of an independent think tank with strong partnerships with government and the sector, Mowat NFP brings a balanced perspective to examine the challenges facing today's sector and to support its future direction. Mowat NFP works in partnership with umbrella organizations to ensure our research and policy recommendations are timely and relevant to the sector and reflect its values.

# Mowat Centre
## ONTARIO'S VOICE ON PUBLIC POLICY

The Mowat Centre is an independent public policy think tank located at the School of Public Policy & Governance at the University of Toronto. The Mowat Centre is Ontario's non-partisan, evidence-based voice on public policy. It undertakes collaborative applied policy research, proposes innovative research-driven recommendations, and engages in public dialogue on Canada's most important national issues.

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"Because civil society also rests on a digital infrastructure, organizations — nonprofits and foundations — need to understand how digital data and infrastructure work and how to use them within civil society's infrastructure of principles and norms to achieve their social purpose."[1]

*LUCY BERNHOLZ*
*Stanford University Centre on Philanthropy and Civil Society*

1  Bernholz, L. (2016). "Philanthropy and the Social Economy Blueprint 2017: The Annual Industry Forecast." Grantcraft. Available at: http://www.grantcraft.org/assets/content/resources/blueprint_2017final.pdf. See also: Robinson, D. and Bogan, M. (2016). "Data Ethics: Investing Wisely in Data at Scale." New York: Upturn. Available at: www.teamupturn.com/reports/2016/data-ethics.

# 1 INTRODUCTION

As a key service delivery partner with government, the charitable sector[2] has a wealth of data on a wide range of issues - everything from environmental sustainability to homelessness and poverty reduction. Data is essential for a charity to be effective: it can be used to assess local needs and identify service gaps, inform organizational decision-making, understand trends over time, advocate for policy change, evaluate the outcomes and impact of programs and services and provide accountability and transparency to service users and the general public.

However, charitable organizations, funders and governments have identified many data challenges within the sector, including a lack of technical skillsets and organizational capacity to collect, manage and analyze data and limited culture and incentives to share data and collaborate across organizations. Data privacy legislation and regulations are essential to safeguard individuals and organizations from data breaches but often require significant organizational expertise to ensure compliance.

These data challenges are shared across governments, funders, charitable organizations and academic institutions. By working together, these sectors can use resources more efficiently, avoid unnecessary duplication, and maximize social impact. Better understanding and use of data is a core requisite for innovation and will be an important consideration in Canada's forthcoming Social Innovation and Social Finance Strategy.[3]

This paper provides recommendations to support charities, funders, governments and academic institutions in creating a more enabling environment[4] for data collection, analysis and sharing.

3  Employment and Social Development Canada (2017). "Social Innovation and Social Finance Strategy − Consultation Document". https://www.canada.ca/en/employment-social-development/programs/social-innovation-social-finance/consultation/discussion-guide.html.
4  An enabling environment is one where the government safeguards the public interest, supports the sustainability of charities and nonprofits and optimizes the policy landscape for innovation and experimentation. Lalande, L. and Cave, J. (2017). "Charting A Path Forward: Strengthening and Enabling the Charitable Sector in Canada." Toronto: Mowat Centre. Available at: https://mowatcentre.ca/charting-a-path-forward/.

2 For the purposes of this paper, "charitable sector" includes charities, nonprofits, and social enterprises.

An enabling environment for data promotes openness, transparency and collaboration at all levels – from the overarching legislative and regulatory framework to the policies and procedures that govern individual organizations. Enabling environments provide the resources, tools and framework for organizations to maximize the potential value of their data. The recommendations in the paper are intended to support the transition towards a data policy framework for the charitable sector in both Canada and the UK.

Charities are not alone in trying to make sense of the issues and challenges that come with being data-informed organizations; there is a broader "data ecosystem"[5] that can work together to use data in an ethical, efficient and creative way. Using the concept of a data ecosystem, this paper articulates how Canada and the UK can move forward to advance charitable sector data policy and enhance organizations' ability to deliver programs and services that are evidence-based, outcomes-oriented and responsive to the needs of the communities they serve.

While data *about* the charitable sector is a strategically important asset, this paper focuses on data that is accessed, collected, shared and analyzed *by* the sector as part of its service delivery, research, evaluation and policy advocacy activities.

This paper:

» Defines the data ecosystem

» Summarizes the charitable sector data policy context in Canada and the UK

» Outlines emerging trends in charitable sector data policy across both jurisdictions

» Provides recommendations for building a more enabling environment for data collection, analysis and sharing

» Informs the development of a policy framework for the data ecosystem in both Canada and the UK

5  Mowat NFP has also referred to the data ecosystem as an evidence or information ecosystem in its publications. For the purposes of this paper, a data ecosystem is synonymous with an evidence or information ecosystem.

## Research Approach

This paper draws on academic literature, non-academic literature and interviews with leading data experts in both Canada and the UK. Examples of existing data-sharing initiatives in Canada and the UK are provided for context. As a partnership between Mowat NFP and the UK-based New Philanthropy Capital, this paper provides a comparative perspective on the role of data in the charitable sector.

A comparative approach is particularly relevant to the topic of charitable and nonprofit sector data ecosystems, as the data landscape varies significantly by jurisdiction. There are useful examples from both Canada and the UK of how charitable organizations have developed data infrastructure, collaborated on complex and innovative data projects and navigated the legislative and regulatory environment. This paper focuses on opportunities for mutual learning and exchange, recognizing that the charitable sector in both Canada and the UK have valuable lessons to share.

This paper is part of Mowat NFP's *Enabling Environment* series, which intends to help governments and the charitable sector develop modern policy frameworks that can strengthen the sector's ability to build thriving communities and improve well-being.[6]

6 Improved well-being refers to improved material living conditions (e.g. housing, income, jobs) and improved quality of life (e.g., community, education, environment, governance, health, life satisfaction, safety and work-life balance). The measurement of well-being focuses on the experiences of individuals, households and communities. The definition is used by the United Nations Statistics Division (UNSD) and was developed by the Organization for Economic Cooperation and Development (OECD). See:OECD (2011). "How's Life? Measuring Well-being." OECD Publishing.

## Defining Data

Before defining the data ecosystem, it is important to first clearly define "data" (see Figure 1). Data are raw values or facts that can be qualitative or quantitative in nature.[7] The drive towards digital technology has expanded the volume of data collected electronically, but vast amounts of data still continue to be collected and stored in printed formats.

The collection, management and use of data is increasingly a public conversation, as organizational data practices come under further scrutiny by governments, funders and the general public. There is greater emphasis on how data is owned and managed — whether data is private, shared or open.

7 Van Ymeren, J. (2015). *An Open Future: Data Priorities for the Non-Profit Sector*. Available at: https://mowatcentre.ca/an-open-future/.

## FIGURE 1
Defining Data[8]

| Data vs Information | |
|---|---|
| **Data** is made up of raw values or facts. It can be qualitative or quantitative and can be collected and stored in printed or electronic formats. | **Information** is made up of data. Information is data that has been processed or analyzed within a context to make it useful. In this way, data are the facts that create information. |

| Types of Data | | | |
|---|---|---|---|
| Charitable sector data generally align with one or more of the following categories: | | | |
| ADMINISTRATIVE DATA | PROGRAMMATIC DATA | BASELINE DATA | BEST PRACTICES (WHAT WORKS) DATA |
| Administrative data refers to operational data that governments and organizations collect as part of their service delivery (e.g. emergency shelter users in a particular time period). It is collected for administrating services and not research purposes. It is typically collected as part of record keeping (e.g. T3010 data from the Canada Revenue Agency). | Data about the programs and services available to the public. Data is collected through program and service delivery, generally at the individual/ client or community level (e.g. client pre/ post assessments or satisfaction surveys). This type of data can help people navigate the social care system, and identify opportunities for sector collaboration. | Population level data that provides demographic or descriptive characteristics (e.g. Statistics Canada census data on low-income households in a community). Baseline data is often used to understand the community context or to conduct a needs assessment. This type of data is essential for governments in outcomes funding arrangements. | Data that compares program or service delivery models for cost-effectiveness or impact (e.g. randomized controlled trials, systematic reviews).<br><br>It involves developing standards of evidence, collaboration models, and shared measurement practices. This type of data can be used to identify trends and service gaps, improve interventions, and inform policy systems and funding priorities. |

| Private, Shared, and Open Data | | |
|---|---|---|
| An organization's approach to access and ownership impacts how data is used and shared (e.g. organizations that have proprietary datasets with client information). Data can be private, shared or open. | | |
| **Private data** refers to data that is currently held in the private domain. Data that is not publically available or shared. Private data is the default for most datasets developed by nonprofits or businesses if they do not share their data with other partners.<br><br>Some datasets, such as anything that includes personally identifiable information, should be kept private. Other datasets can be made open (McCullagh, 2008). | **Shared data** is data that is shared with relevant stakeholders, often to researchers or partners through data sharing agreements. Most open data advocates argue that, in general, data that is shared should instead be anonymized and then opened (Tennison, 2014). However, within the human and social services sector, some argue that there may be a need for access to linked client-level de-identifiable data that may not be appropriate for wider distribution. | **Open data** is data that "can be freely used, modified, and shared by anyone for any purpose" (Open Knowledge Foundation, 2014). The Open Definition also lays out the principles of openness, including requirements that data be:<br>» available under an open license<br>» available in a convenient and modifiable form<br>» machine-readable<br>» accessible as a whole, with little or no cost associated with its use.<br><br>Unlike private data, open data is a resource that is available to anyone with the skills and desire to use it. |

8 Van Ymeren, J. (2015). *An Open Future: Data Priorities for the Non-Profit Sector.*

# 2 WHAT DO WE MEAN BY A DATA ECOSYSTEM?

This paper uses the term data ecosystem (see Figure 2). A data ecosystem consists of:

» Individuals

» Charities

» Funders

» Governments

» Businesses (such as investors, for-profit data management companies, etc.)

» Academic institutions

A data ecosystem can be described as a "data supply chain" or cycle, in which data flows from the individual and program level to higher levels of aggregation (the community, subsector and systems level).[9] While this paper focuses on the data ecosystem in which the charitable sector operates, it was developed with recognition that the ecosystem cuts across the public, private and nonprofit sector.

A data ecosystem requires shared platforms or infrastructure that can support collaborative activities (e.g. creating common datasets). The benefits of the ecosystem are realized when stakeholders gather, use and share data in an efficient and ethical way to realize their program and community objectives. It is important to acknowledge that data, by itself, is often not meaningful until it is analyzed and understood within an organizational and systems context.[10]

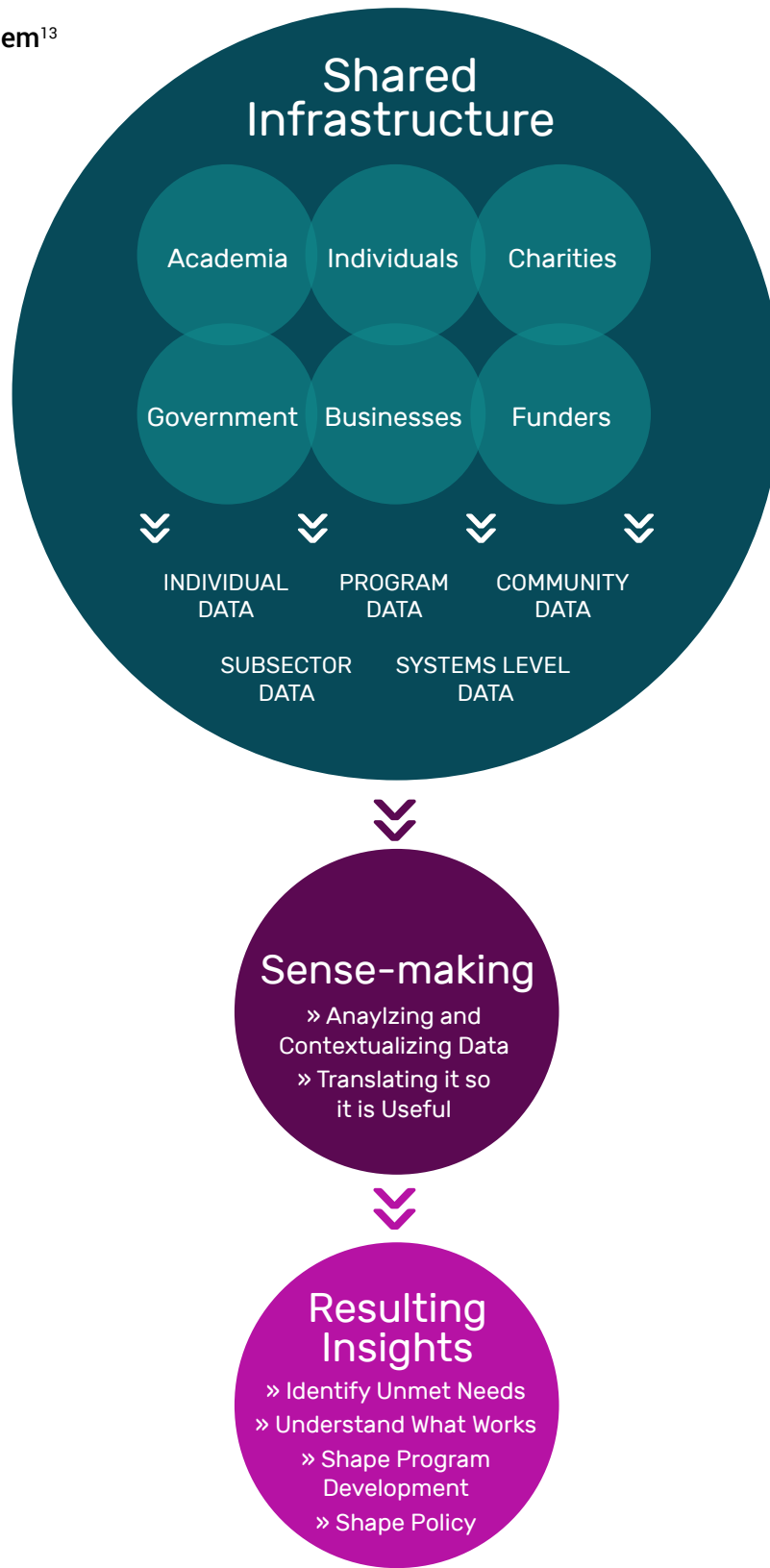This means that the data must be processed, analyzed and translated to end users[11] to accomplish the following:

» Identify unmet needs in the community;

» Understand the real-world impact of policies and programs;

» Support performance management[12] or budget monitoring;

» Inform how funds can be directed in a more strategic way;

» Improve services to beneficiaries;

» Demonstrate outcomes and impact to funders; and/or

» Shape policy.

9 Fruchterman, J. (2016). "Using Data for Action and for Impact." Stanford Social Innovation Review. Available at: https://ssir.org/articles/entry/using_data_for_action_and_for_impact.
10 Bagwell, S, Bertolotto, E, and Boswell, K. (2017). *Data with Destiny: How to Turn Your Charity's Data into Meaningful Action*. NPC. Available at: http://www.thinknpc.org/publications/data-with-destiny/.

11 For the purposes of the paper, end users are defined as charitable organizations, practitioners/service providers, beneficiaries, research/academic institutions, policymakers, funders, the media or members of the general public. Cave, J., Aitken, K., and Lalande, L. (2017). *Bridging the Gap: Designing a Canadian What Works Centre*. Available at: https://mowatcentre.ca/bridging-the-gap.
12 Performance measurement (also referred to as performance monitoring) is a term often used by business and government actors for collecting data on key indicators (e.g. financial, output, operational data) to assess the social or environmental performance of companies, portfolios, investments, etc. While it can focus on accountability, it can also support organizational learning.

**FIGURE 2**
The Data Ecosystem[13]

## Shared Infrastructure

Academia  Individuals  Charities

Government  Businesses  Funders

INDIVIDUAL
DATA

PROGRAM
DATA

COMMUNITY
DATA

SUBSECTOR
DATA

SYSTEMS LEVEL
DATA

## Sense-making
» Anaylzing and
Contextualizing Data
» Translating it so
it is Useful

## Resulting Insights
» Identify Unmet Needs
» Understand What Works
» Shape Program
Development
» Shape Policy

13 The illustration was adapted from IBM's Institute for Business Value Analysis' insights ecosystem illustration. Melley, D., Schoen, C., Nguyen, T., Mullins, M., and Shockley, M. (2017). *Leap Before You Lag: Nonprofits With Deeper Data Capabilities See Stronger Impact Transparency and Decisions*. IBM Institute for Business Value. Available at: www-935.ibm.com/services/us/gbs/thoughtleadership/analyticsleap/. Page 17.

# Why Explore the Concept of a Data Ecosystem?

Issues addressed by the charitable sector are more complicated and entrenched than ever before. There is greater recognition that, in the pursuit of long-term social change, organizations must address the root causes of social issues.[14] Sector leaders, seeking ways to contribute to meaningful, lasting social change, are shifting towards a systems perspective that moves beyond organization and sector-level analysis.

*"Collective strategy and transformative action are needed to tackle complex community issues and create lasting change. Harnessing the power of data to learn and generate new insights allows us to be strategic, focused and adaptive, course-correcting in real time."*

*Blair Dimock, The Ontario Trillium Foundation*

The movement towards increased use of digital technology ensures that data will increasingly become embedded within the functioning of many organizations. Charities are not alone in trying to make sense of the issues and challenges that come with being a data-informed organization. Questions about data privacy and security have heightened expectations for the charitable sector to develop rigorous standards and protocols for how they organize, store and provide access to data.

To effectively address root causes and protect the populations they serve, it is essential that charitable organizations understand the system they operate in, collaborate (where possible) and take action.[15] While charities need to develop their own organizations' data management, taking an organizational view alone is likely to lead to duplication of data, time and resources. An isolated organizational approach will also result in missed opportunities to use data to impact beneficiaries.

In practice, beneficiaries of a program or service often connect with different stakeholders (e.g. housing, mental health, income support, children and social services). As a result, the value a dataset may hold might only be realized once another stakeholder has access to it. Data, when shared ethically and responsibly, can be used by multiple organizations in a strategic way.

A policy framework for the data ecosystem would provide a strategic, integrated perspective and guidance on the data issues facing charities and create the groundwork for an enabling environment for the sector. More importantly, it can benefit the people who make use of programs and services delivered by charitable organizations.

14  Abercrombie, R., Harries, E., and Wharton, R. (2015). "Systems Change: A Guide To What It Is And How to Do It." London, UK: New Philanthropy Capital. Available at: http://www.thinknpc.org/publications/systems-change/.

15  Abercrombie, R., Harries, E., and Wharton, R. (2015). "Systems Change: A Guide to What It Is And How to Do It." Lankelly Chase and NPC. Available at: http://www.thinknpc.org/publications/systems-change/.

# FIGURE 3

Collaborating for Greater Impact - Shifting To An Integrated Data Ecosystem



## Organizational Data Management

## Integrated Data Ecosystem

| Organizational Data Management | Integrated Data Ecosystem |
|---|---|
| Data is collected for administrative purposes only | Value of data recognized and understood as part of an ecosystem <br><br> Rights of the data subject are recognized, with processing of data made transparent |
| Data is collected and used to achieve an organization's aims | Recognition and alignment of priorities (where possible) of key stakeholders |
| Data is processed in a way that is compliant with relevant privacy legislation | Privacy legislation is aligned and/or innovative legislation and regulatory tools introduced to allow improved data sharing and integration |
| Organizations invest in training and capacity building for staff | Sector invests in training and capacity building for workforce |
| Data is isolated and segregated. Needs/impact is assessed using organization's data | Data is linked across organizations/providers to provide a systems perspective. <br><br> Needs/impact is assessed using community and system-wide data |
| Data is proprietary with access restricted | Data is shared within private networks or openly to support cross-organizational collaboration |

Robust organizational data management practices are essential for organizations and the sector to thrive. The illustration above demonstrates that while an integrated data ecosystem is a shift in mindset, both approaches are needed for the sector to use data effectively. While individual organizations are increasing the sophistication of their internal data practices, the concept of a charitable sector data ecosystem in both Canada and the UK remains relatively nascent.

16 Note that the attributes of a data ecosystem listed in the table are intended to reflect opportunities for increased data sharing, collaboration and integration when it is feasible, appropriate and compliant with privacy legislation.

"Most charities have masses of data, but most of it doesn't get analyzed. They're grappling with increasing volumes and sources of digitized data (e.g. from: spreadsheets, databases, CRMs (Customer Relationship Management), social and web analytics, evaluation and feedback surveys). Harnessing this data, and managing it as a resource so it works for good causes is one of the sector's greatest challenges."

*SIAN BASKER*
*Data Orchard*

# 3 THE CURRENT LANDSCAPE

## Legislative and Regulatory Environment

The legislative and regulatory environment continues to evolve in both Canada and the UK as governments and the sector's use of data becomes increasingly sophisticated. In Canada, the legislative and regulatory environment continues to lag behind the innovative approaches that the sector is exploring. While the UK is more advanced on these issues, there are opportunities for both countries to draw upon each other's best practices.

The following table summarizes the current legislative and regulatory environment in both countries:

| Canada | UK |
|---|---|
| » Charitable sector data governed by multiple legislative and regulatory frameworks, depending on the province and subsector.<br><br>» Legislative and regulatory environment is largely disjointed; no unifying policy framework across the sector.<br><br>» The federal Personal Information Protection and Electronic Documents Act (PIPEDA) applies only to charities that engage in commercial activities; otherwise, provincial legislation may apply (e.g. *Alberta's Personal Information and Privacy Act* (PIPA)). | » New General Data Protection Regulation (GDPR) enhances current data protection legislation on the use of personal data, and strengthens the rights of individuals over their data. It is being implemented across the European Union, set to be in place in May 2018.<br><br>» Introduction of new regulations has resulted in all organizations that control or process personal data— including charities— needing to review, document and strengthen their data management policies and procedures to ensure compliance.<br><br>» Under GDPR, the Information Commissioner's Office, which is the regulator for data protection, can issue fines up to £17 million or 4% of global turnover for breaches. |

## Stakeholder Contributions in Current Data Ecosystem

The current landscape isn't solely influenced by the legislative and regulatory environment. Key stakeholders are leading by example and actively shaping the culture of data collection, analysis and sharing. The following stakeholders, as members of the data ecosystem, have a significant role in shaping the current landscape:

## Charitable Umbrella Organizations:

In both Canada and the UK, charitable umbrella organizations have had an important role in convening working groups and data initiatives to identify needs, priorities and opportunities for policy reform. However, many of these umbrella organizations have their own capacity challenges to developing sector-wide infrastructure. While there has been important work done in Canada, there is currently no dedicated effort to develop a sector-wide data policy framework.

## Governments:

Governments have assumed a significant leadership role in both Canada and the UK, particularly in increasing the transparency and openness of their administrative data. The UK Government's 2012 strategy *Unleashing The Potential* made significant headway in improving the accessibility of administrative data, placing the UK second in the Global Open Data Index in 2016.[17] The Government of Ontario launched the Open Data Initiative in 2013, which included opening up datasets on a variety of issues like hospital wait times, student achievement and transit.[18] However, in both Canada and the UK there are few examples of government leadership on data initiatives and frameworks specific to the charitable sector.

## Foundations/Funders:

Funders in both Canada and the UK are increasingly recognizing the importance of building data capacity, both internally and through the projects and organizations they fund. Funders are experiencing increased pressure to improve the transparency of their internal grant data. The Ontario Trillium Foundation was the first granting agency in Canada to make all the granting data open in machine readable format.[19] 360Giving in the UK is one example of a standardized platform for funders to share their grant data for external analysis. Foundations and funders are also improving their ability to integrate data at all stages of the funding cycle (from identifying needs to measuring impact).

## Businesses:

The private sector has led the way in creating and developing data and digital products and services. Organizations such as Facebook have enabled charities to support greater community building and fundraising efforts.   Others are providing services and products directly with and for the charitable sector e.g. Oxford Consultants for Social Inclusion and CAST in the UK; Ajah and Powered by Data in Canada. There are a growing number of commercial businesses that have the capacity and resources to collect, manage, and analyze large amounts of charitable sector data. While this holds great potential for the sector, there are limited regulations guiding these organizations in their use, and protection of, charity data.

## Academic Institutions/Research Granting Councils:

In both Canada and the UK, there are promising examples of larger collaborations between research institutions, governments and community-based organizations that promote access to administrative data (e.g. Statistics Canada's Research Data Centres program and the UK's Administrative Data Research Network). Research granting councils have made significant advancements in data policy frameworks (e.g. Research Data Canada's Statement of Principles) that may be useful models for the charitable sector to emulate.

17 Open Knowledge Network. Available at: https://index.okfn.org/place/.
18 The Government of Ontario. Available at: https://www.ontario.ca/page/lets-open-government-new-possibilities.

19 The Ontario Trillium Foundation. Available at: https://otf.ca/news/otf-first-canadian-grantmaking-foundation-join-open-data-movement.

# Current Challenges

Despite these advancements, key stakeholders in both the Canada and UK data ecosystem that were interviewed identified the following challenges posed by the constraints of the current legislative/regulatory environment:

## Lack of Data Literacy and Capacity:

Many charitable organizations and policymakers have a limited understanding of the potential of data – and its limitations. The lack of technical skillsets and sector-specific training opportunities results in significant outsourcing for support with data collection, analysis and sharing. While this is sometimes the most appropriate arrangement for organizations with limited resources, it can reflect limited internal capacity to engage with data-related issues in a strategic way.

## Lack of Coordination:

There are few examples of robust sector-wide data initiatives, particularly those that provide the infrastructure, tools and training for data generation, use and sharing. This lack of coordination results in frequent duplication, as smaller collaborative initiatives attempt to build new data infrastructure from scratch or advocate for legislative/regulatory reform specific to their subsector or issue area. While the number of data-related working groups, conferences and initiatives are increasing, there are few tables to coordinate strategic objectives across organizations.

## Culture of Fear/Risk Aversion:

Conversations about data in the charitable sector often raise questions about ethics, privacy, accountability and security. While these are all very important considerations, they can contribute to a culture of fear and risk aversion when it comes to exploring, experimenting and innovating with data. Concerns about privacy and legislative compliance (often resulting from a lack of data literacy) can inhibit data sharing between organizations and exacerbate a "siloed" approach to data collection and analysis.

## Misaligned Incentives:

For many charitable organizations, funding is still structured as a grant for an individual organization rather than a system-level initiative. This type of funding relationship implicitly defines individualized incentives for data collection and analysis and sometimes discourages proactive data sharing or collaboration because of the emphasis on accountability. Project grants with limited resources for overhead are particularly challenging for organizations that are trying to improve their data capacity or improve their data practices. Furthermore, some organizations reported that the current legislative, regulatory and funding environment creates few, if any, incentives for organizations to improve their own data practices, let alone contribute to collaborative data projects with other partners.

## Legislative/Regulatory Inertia:

In Canada, there have been very few signals that the federal and provincial governments are interested in modernizing, or aligning, the current legislative/regulatory framework for data collection and sharing in the charitable sector. One of the largest gaps in Canada is legislation that permits system-level linked data, drawing upon both government administrative data and data collected by charitable organizations and service providers in the community. While the UK has experienced significant growth and transformation in its legislative/regulatory environment, charitable organizations (and Canadian governments) need more support and training to adapt their practices and pursue innovation.

# 4 PROMISING PRACTICES

In both Canada and the UK, there are outstanding examples of how charitable organizations, governments, funders and academic institutions have worked together to advance their data practices and identify innovative solutions to the challenges previously mentioned. The following trends and examples illustrate some of these approaches that both countries should consider when moving forward with a data policy framework for the charitable sector.

## Raising the bar for organizational and sector-wide privacy standards

In both Canada and the UK, privacy legislation remains a significant barrier to collecting, analyzing, linking and sharing data. The general public often have concerns about data, particularly administrative data from government sources, being misused or shared inappropriately.[20] As the charitable sector moves towards a more sophisticated, connected data ecosystem, these privacy concerns can be addressed and mitigated by defining clear, purposeful research questions, developing data sharing agreements and protocols at the beginning of collaborative projects and only collecting necessary data. Some organizations and initiatives, such as DECODE, are exploring innovative tools and platforms to mitigate some of these privacy concerns by engaging citizens directly in the process.

### An Example of Citizen-Led Privacy Practices – DECODE (Europe)

The Decentralized Citizen Owned Data Ecosystem (DECODE) is a 3-year, €5M project funded by the European Commission with a consortium of 14 European organizations, including the UK-based innovation think tank Nesta.[21] DECODE is currently creating digital tools using blockchain technology[22] that allow citizens to control how their personal information is used, stored and shared on the Internet. Individuals can decide to what extent they want their personal information stored on a shared data commons and how that data is shared (e.g. how it is anonymized). DECODE will be piloted in Amsterdam and Barcelona between 2017 and 2019.

21 DECODE (2017). Available at: https://www.decodeproject.eu/have-more-questions.
22 Blockchain technology is a "means of processing an online transaction without an intermediary" (DECODE, 2017). The information in a blockchain is decentralized and stored on a virtual network, rather than one centralized server. The virtual currency Bitcoin is one example of blockchain technology.

20 New Philanthropy Capital (2015). "New Philanthropy Capital Manifesto 2015: A Vision for Change." Available at: http://www.thinknpc.org/publications/npc-manifesto-2015/.

## Introducing innovative legislation and regulatory tools to improve data sharing and integration

While it is a time-intensive process, new legislation and regulations are important, and largely underutilized, tools to support effective data policy. Canada and the UK appear to be in different stages of aligning data and privacy legislation. The UK is forging ahead with the implementation of the European-wide General Data Protection Regulation (GDPR). In contrast, charities in Canada generally operate within a fractured legislative and regulatory system, which creates barriers to collecting, analyzing, linking and sharing data. However, there are some promising practices emerging provincially. Lessons can be drawn from these initiatives to develop a unifying policy framework for data sharing in Canada.

## An Example of Government–Charitable Sector Data Partnerships – PolicyWise (Canada)

An example of a unique government-charitable sector data partnership is PolicyWise, an Alberta-based charitable organization that mobilizes research and evidence on child and family well-being. PolicyWise (formerly the Alberta Centre for Child, Family and Community Research) leads the Child and Youth Data Lab, which was designated as the arms-length partner for data analysis relevant to children and families. The Child and Youth Data Lab links and analyzes health and social services data under the respective legislation (Alberta's *Health Information Act and Freedom of Information and Personal Privacy Act*) on behalf of the Government of Alberta.

In 2013, the Government of Alberta passed the *Children First Act,* which named PolicyWise as the recipient of anonymized health and social data relevant to children and families for the purpose of conducting research. This legislation, the first of its kind in Canada, allowed PolicyWise to receive government administrative data to support cross-sector research and evaluation initiatives. Since 2017, PolicyWise has been publishing findings from a longitudinal study to improve policy development and program/service delivery on a range of issues affecting children and youth, including involvement in the justice system, socio-economic status, school achievement, mental health, FASD, and autism. Direct access to this data currently remains restricted; however, an interactive program overlap matrix, profiles and reports can be accessed and downloaded from the PolicyWise website. Saskatchewan and Manitoba have since introduced similar legislation.

## Linking data across organizations/ providers to capture a systems perspective

Linking data across organizations is essential to understand social and environmental issues from a systems perspective.[23] Data linking is the process of combining multiple sources of data to create a new, richer dataset using identifiers common to each dataset such as a person, organization or geographic area. One example of shared infrastructure for linked datasets is Population Data BC, a multi-university collaboration to facilitate research on population health and human development. Population Data BC supports access to linked, de-identifiable population health datasets and provides training and capacity-building opportunities for researchers and practitioners.[24] Population Data BC was cited as one of Canada's leading examples of linked dataset initiatives in a recent paper exploring the opportunity for a Canadian Child Data Strategy.[25]

To evaluate the impact of an organization's activities, there will often be a need to use personal data to track and assess the outcomes of individuals, such as impact on offending or educational attainment. Charities often try to track beneficiaries of their services over time, but this can be difficult due to challenges establishing contact. In addition, this type of longitudinal research can introduce bias as those responding to research questions may be the most or least satisfied. Despite these challenges, many core outcomes that charities aim to measure are routinely collected for government administrative purposes. As a result, government administrative data may be used as a potential source of outcome/impact data for selected programs and services.

## An Example of Linked Datasets – Justice Data Lab (UK)

Data labs have emerged as one promising practice to "liberate" government administrative data for charitable organizations and funders. The UK Government's Justice Data Lab is one example of how information from personal and sensitive administrative data can be used by charitable organizations. Criminal justice organizations in the UK now have easier access to client re-offending data to assess program outcomes.[26] Organizations submit a data request form using a common template and the lab returns a standard report with their clients' re-offending data, data from a statistically matched control group and notes on the metrics used and their limitations.[27] Since its launch in 2013, over 204 interventions have been evaluated using this method, increasing the evidence base not just for the organization, but for the whole criminal justice sector.[28]

23 Lalande, L. and Cave, J. (2017). "Measuring Outcomes in Practice: Fostering an Enabling Environment for Measurement in Canada." Toronto: Mowat NFP. Available at: https://mowatcentre.ca/measuring-outcomes-in-practice/.
24 Population Data BC (2017). "About PopData BC."Available at: https://www.popdata.bc.ca/aboutus.
25 Torjman, S. (2017). "National Child Data Strategy: Results of a Feasibility Study." Ottawa: Caledon Institute of Social Policy. Available at: http://www.caledoninst.org/Publications/PDF/1113ENG.pdf.

26 UK Government (2014). "Accessing the Justice Data Lab service." Available at: https://www.gov.uk/government/publications/justice-data-lab.
27 Powered By Data (2017). "Unlocking Administrative Data: Maximizing The Impact for the Social Sector." Available at: http://transform.thesector.ca/unlocking-administrative-data.
28 Adler, J, and Coulson, M. (2016). The Justice Data Lab: Synthesis and Review of Findings. Technical Report. NPC. Available at: http://www.thinknpc.org/wp-content/uploads/2016/10/NPC-Middlesex-Justice-Data-Lab-Review-2016.pdf.

## Providing the infrastructure and framework for system-wide data sharing

Sharing data at the systems level is vitally important, but the missing ingredient for many organizations is the infrastructure or guiding framework to contribute to system-wide data sharing initiatives. System-level data initiatives also provide support for individual organizations to integrate data into their community practice. However, some charitable umbrella organizations and foundations are showing leadership in this area. In the UK, the Inspiring Impact project is a partnership of leading infrastructure organizations working together to support the charitable sector to measure their impact and share learning.[29] Inspiring Impact focuses on encouraging the sector to embark on shared measurement[30] by providing advice to organizations on how to get started.

Inspiring Impact also features case studies highlighting the challenges and benefits of system-level data sharing.[31]

In Canada, the forthcoming Social Innovation and Social Finance Strategy is a significant opportunity to realize the sector's goals of promoting systems change and social innovation through data use.[32] System-wide data sharing is necessary to achieve broader systems-level change and promote a collaborative, data-driven culture within the sector overall.

## An Example of Systems-Level Data Sharing – SafeLives (UK)

SafeLives[33] is a national UK-based charity dedicated to ending domestic abuse. It runs the largest national database of domestic abuse cases in the UK, called Insights. Currently 42 organizations use Insights, from small to large national charities. SafeLives used data from Insights to advise a government department on its strategy to end violence against women and girls. The civil service team told SafeLives that the data and analysis from Insights had been instrumental in the department securing new funding from the Treasury.[34]

33 www.safelives.org.uk/.
34 For more case studies and examples of the benefit of shared measurement, see Handley, S., Sabri, F., and Kazimirski, A. (2016). "Shared Measurement: Greater Than the Sum of Its Parts." Inspiring Impact. Available at: http://inspiringimpact.org/wp-content/uploads/2016/02/Shared-measurement_Greater-than-the-sum-of-its-parts_Feb-16.pdf.

29 http://inspiringimpact.org/about/.
30 http://inspiringimpact.org/resources/blueprint-for-shared-measurement/.
31 Ni Ogain, E., Svistak, M., and de Las Casas, L. (2013). Blueprint for Shared Measurement. Inspiring Impact.
32 Employment and Social Development Canada (2017). "Social Innovation and Social Finance Strategy – Consultation Document." Available at: https://www.canada.ca/en/employment-social-development/programs/social-innovation-social-finance/consultation/discussion-guide.html.

"Community organizations and researchers have a vast amount of untapped data. Often, the challenge is access - we need to focus on making this data accessible for secondary analysis and linking this data across organizations for integrated service delivery."

*ROBYN BLACKADAR*
*PolicyWise*

# 5 KEY CONSIDERATIONS

The increased focus on charitable sector data is a significant opportunity and also a source of great confusion. Building capacity and data literacy in the charitable sector and integrating a fragmented data ecosystem will be challenging. The following key considerations should be explored further as Canada and the UK move towards a data policy framework for the charitable sector:

## It's not just about tools and techniques

Many organizations have difficulty determining the systems and capabilities required to advance their data practices and manage the growing volume of data available to them, both internally and externally.[35] The volume and variety of organizations within the charitable sector means that organizations are at different levels of data maturity. Data Orchard CIC and DataKind UK developed a data maturity framework[36] for the charitable sector, which enables organizations to assess where they are and how their organizations can become more evidence-led.

Organizations can range from being 'unaware' to having mastered a range of critical factors that enable data maturity: leadership, skills, culture, data, tools, uses and analysis, with the crucial factor being people. "Tools and techniques are of course important and the raw material (i.e. the data itself) is essential. But the leadership's vision, the collective cultural drive towards greater impact, and the investment in people's continued learning and skills ultimately drive data maturity."[37]

## Approach data in a strategic, lean way

Given the resource constraints in the charitable sector, the use of data must be purposeful and strategic.[38] Interviewees in both Canada and the UK expressed concern over a lack of understanding and awareness of existing datasets, tools and databases that currently exist or are in development. There are also significant opportunities to modify, scale up or broaden the mandate of existing data initiatives to incorporate the charitable sector.

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35 Ontario Nonprofit Network (2015).
36 Please refer to Appendix C for a picture of the framework.
37 Data Orchard CIC, Datakind UK. (2017). Data Evolution Project Report. Available at: http://dataevolution.org.uk/wp-content/uploads/sites/8/2017/01/Full_Report.pdf. Page 6.
38 Ontario Nonprofit Network (2017). "Making Evaluation Work in the Nonprofit Sector: A Call for Systemic Change." Available at: http://the-onn.ca/wp-content/uploads/2017/07/ONN.Making-Evaluation-Work.Full-report.pdf.

It was clear from interviewees that charitable organizations, funders and governments need to understand the value and potential of data, with real case examples being important to develop interest and inspire change. Key to making changes was the importance of leaders that understood the importance of collecting good quality data and were able to discern both when data is important and impactful and when it is not. The most effective organizational data management practices are developed within the context of the larger data ecosystem.

Good, quality data can help charities reflect on their aims, mission and strategy to ensure they are achieving their intended impact. This entails setting the questions that data/information is required to answer, using the information to assess whether the strategy is working and using that knowledge to confirm or amend the operations and strategy.[39] This cycle should be continual, helping the charity focus on its mission and ensure its programs and services address needs in the community that are supported by real-time data. It requires organizations to have a learning culture and access to resources. Here is what that looks like in practice for charities:
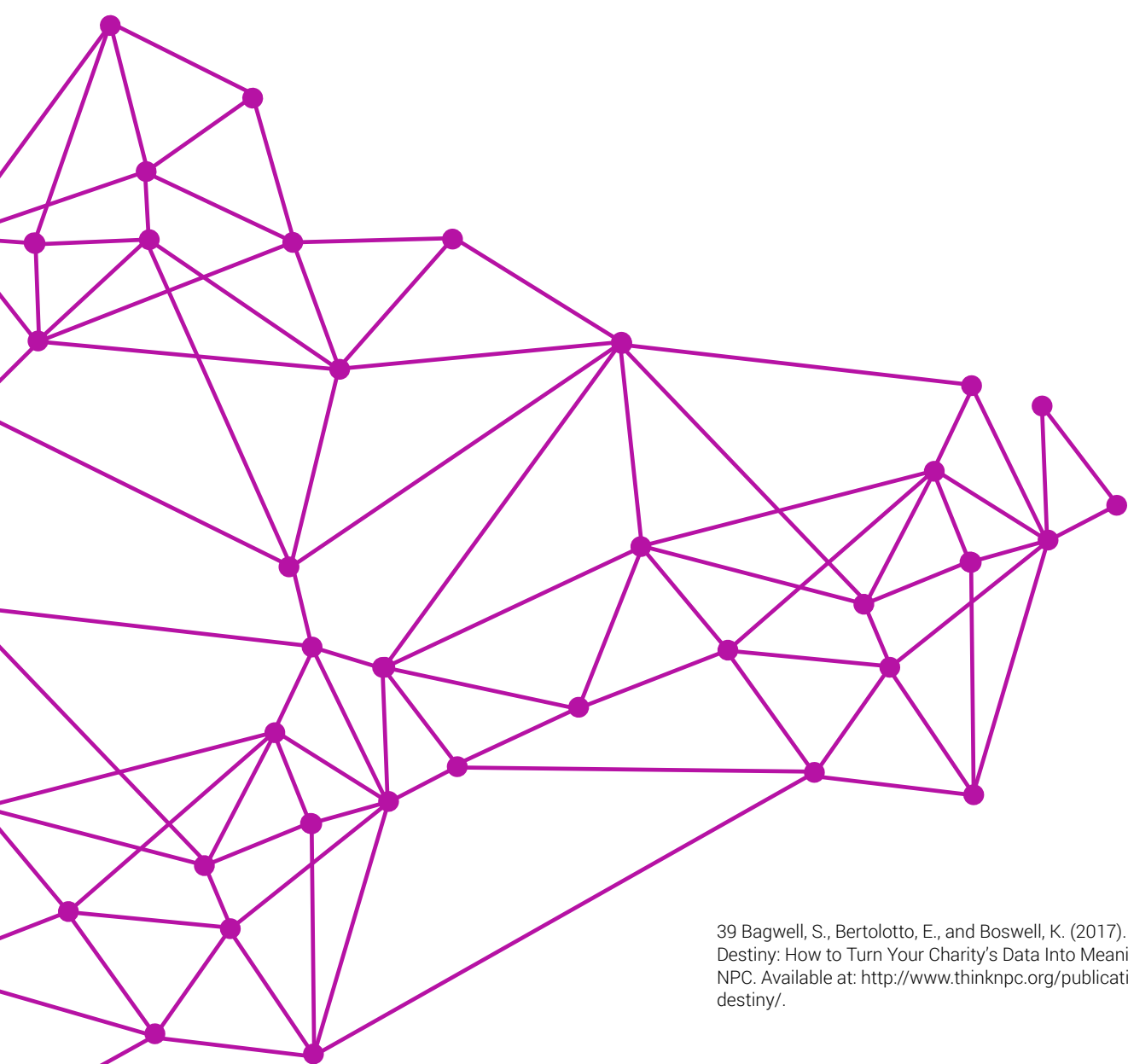
39 Bagwell, S., Bertolotto, E., and Boswell, K. (2017). Data with Destiny: How to Turn Your Charity's Data Into Meaningful Action. NPC. Available at: http://www.thinknpc.org/publications/data-with-destiny/.

**FIGURE 4**
Using Data Strategically:
The Charity Data Cycles[40]
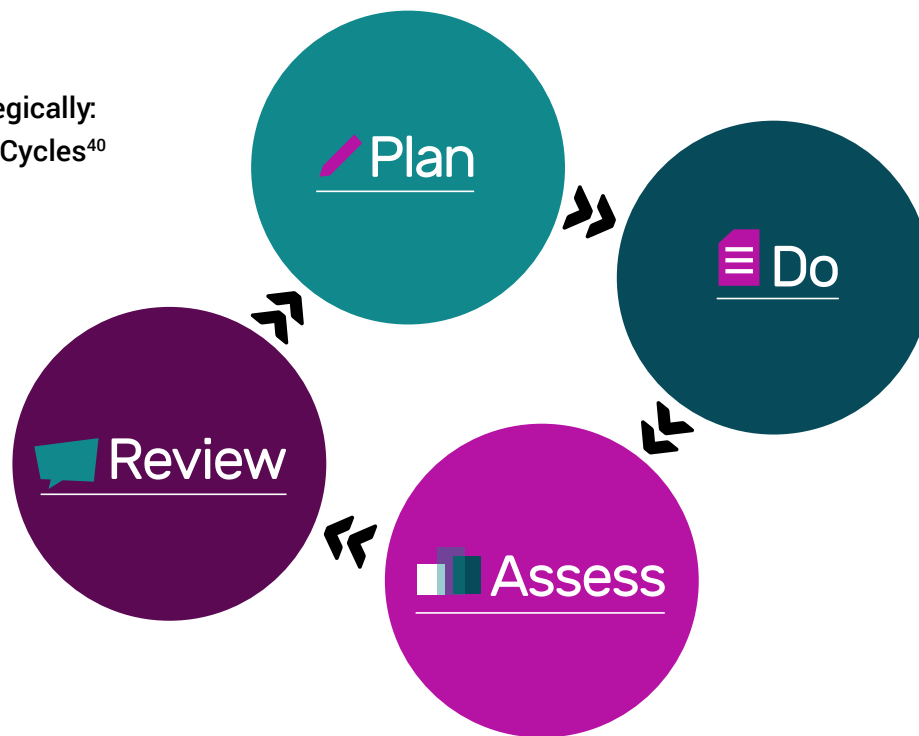


| | ACTIVITY | ACTIVITY DESCRIPTION | DIGITAL DATA SOURCES |
|---|---|---|---|
| **Plan** | Understanding need | Demand analysis | Open data, social science research |
| | | Supply analysis | Charity Commission Data, Own data, 360 Giving |
| | | Market gap analysis | Compare supply and demand data |
| | Funding | Prospecting analysis | Funder databases |
| | | Funding collaborations | Input from needs review |
| | | Program design and delivery | Academic research, review of existing models & services |
| | | Application process | Needs analysis, financial data |
| **Do** | Activity management | Advertising service | Charity data digitised, made open and searchable |
| | | Budget monitoring | Management information system (MIS) |
| | | Case management | User, engagement and feedback data[41] |
| | | Staff feedback | MIS, internal chat boards |
| **Assess** | Key Performance Indicators | Performance data | MIS and data dashboard |
| | Outcomes & Impact | Outcomes- short term effect of service | Qualitative and quantitative data (surveys, focus groups captured with digital devices) |
| | | Impact- longer term difference made | Government admin data e.g data labs, large scale surveys |
| | Benchmarking | Benchmarking internally | MI systems, data dashboard, staff feedback |
| | | Benchmarking with other charities | Shared data, common data standards |
| | Efficiency | Cost effectiveness/cost benefit | MIS/long term impact |
| **Review** | Evaluation | Did results match expectations? | Outcomes/impact data |
| | Review | Performance management | Evaluation data |
| | | Strategy review | |
| | Communicating impact | Sharing of findings | |
| | Building knowledge base | Publish policy & evaluation reports | Evidence hubs/depositories |
| | Influencing policy and practice | Campaigns | Evaluation reports |

## Recognize the challenges, limitations and risks of data

When organizations move quickly to improve their access to data, they are often overwhelmed by the volume of data and requirements to ensure it is used, managed and stored safely. Given the capacity challenges in the sector, it is imperative that charitable organizations improve their privacy practices as they collect, access and share data on a larger scale. For small organizations, improving data practices should be an incremental process that is proportionate to the organization's capacity.

Power dynamics are also inherent in data collection and use, especially for organizations that work with marginalized populations or collect sensitive personal, health or financial information.[42] Ethics, privacy and security must be paramount as organizations and the sector move forward with improving their data practices.

## Technical skills are a significant gap in the charitable sector

Charitable organizations are often limited by gaps in technical skills and capacity for data analysis among their staff. The shortage of data analysts not only affects the charitable sector, but also governments and the private sector.[43] This prompts the question of how charities can compete with better paying sectors for data analysts.

*"Recruiting data scientists can be very difficult. The charitable sector can show real societal value to the work they do, and should use this as an opportunity to attract talented people."*

*Tom Smith, UK Office for National Statistics, Data Science Campus*

There is also a need to become more skilled in making requests from data, without necessarily becoming a data analyst. Data support organizations, which make use of data analysts/ scientists from other sectors to run specific data programmes, will become increasingly important (examples include DataKind UK, Pro Bono Economics and Pro Bono Operational Research in the UK). The same is true for those that provide data analytical services. Charities will need support in navigating this growing area, and resources to tap into, or develop the analytical talent needed.

Data support organizations, such as the UK-based Open Data Institute (ODI), offers a range of online and in-person courses on topics including data science, open data, data visualization, applying data in government and managing risk with data. ODI has also developed a skills framework to identify the core competencies that policymakers and practitioners require to use data effectively.

42 Pohar Manhas, K., Lau, J., and Cui, X. (2017). "Sharing Data and Protecting Privacy: A Case Study from Alberta." The Philanthropist. Available at: https://thephilanthropist.ca/2017/11/sharing-data-and-protecting-privacy-a-case-study-from-alberta/.
43 Mateos-Garcia, M. and Windsor, G. (2015). "Analytic Britain. Securing the Right Skills For the Data Driven Economy." Nesta and Universities UK. Available at: https://www.nesta.org.uk/sites/default/files/analytic_britain.pdf.

## Building capacity and data literacy costs money

The erosion of core funding to charities is challenging their ability to build robust organizational data management systems and practices. Investments in people, processes, and technology typically fall under the rubric of administrative costs. Charities face a lot of pressure to keep administrative costs low. There is often little room to invest in anything that isn't direct service delivery.[44]

## Consider the role of Indigenous data sovereignty

Indigenous data sovereignty is a highly politicized issue in Canada that has a significant impact on the charitable sector, and is one example of how a charitable data policy framework must address complex social and ethical questions. Indigenous data sovereignty can be defined as a process where Indigenous communities can take the lead, supported by federal, provincial and territorial governments, to build "community-driven, Nation-based data governance capacity that will enable the accounting for relationships, investments and outcomes."[45]

Charitable organizations are implicated in Indigenous data sovereignty issues when they collect First Nations data, deliver programs or services with First Nations communities or collaborate in research or data-sharing projects.
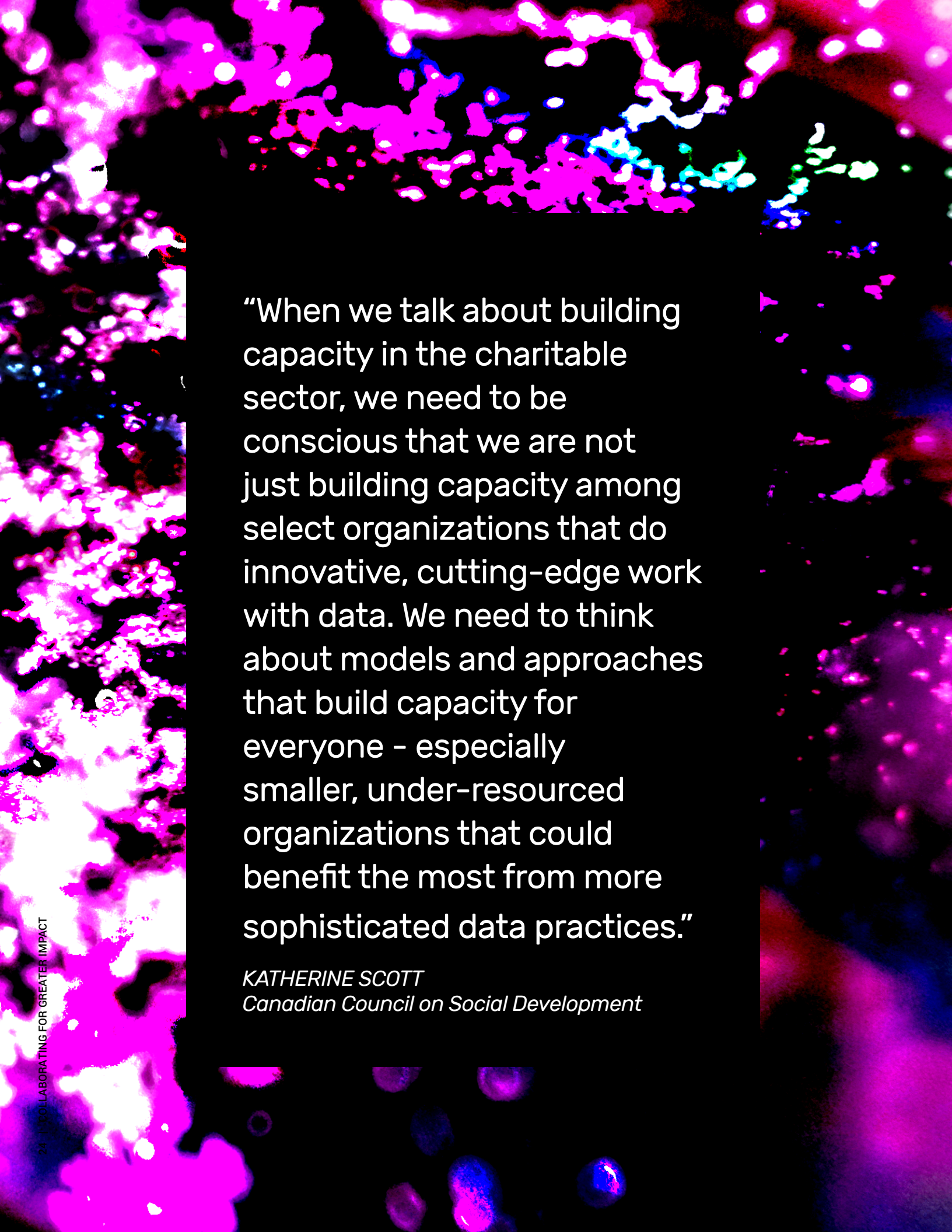
## OCAP Principles

The OCAP (Ownership, Control, Access and Possession) principles developed by the First Nations Information Governance Centre provide a useful framework for organizations to navigate the privacy and ethical issues related to collecting, analyzing or storing data on First Nations communities.[46] Questions of data sovereignty, privacy and ethics are particularly salient for charitable organizations delivering programs and services with, and for, First Nations, Métis and Inuit communities.

46 First Nations Information Governance Centre (2017). "The First Nations Principles of OCAP." Available at: http://fnigc.ca/ocap.html.

44 Van Ymeren, J., Lalande, L. (2015). "Change Work: Valuing Decent Work in the Not-for-Profit Sector". Available at: https://mowat-centre.ca/change-work/.
45 British Columbia First Nations Data Governance Initiative (2016). "Concept Paper – BC." Available at: http://www.bcfndgi.com/initiative-history/.

Currently, Indigenous data owned by First Nations is subject to the Government of Canada's intellectual property laws. Many provincial and federal government agencies and departments continue to collect data from First Nations communities without fostering a true Nation-to-Nation relationship. The British Columbia First Nations Data Governance Initiative (BCFNDGI) is one example of how Canada is moving forward on Indigenous data sovereignty issues. The Initiative was developed after the 2010 British Columbia Tripartite Data Quality and Sharing Agreement was signed by the First Nations Leadership Council, Government of British Columbia and Government of Canada. The Initiative has since advocated for a National Data Governance Strategy that addresses Indigenous sovereignty issues.

While this paper does not explore Indigenous data sovereignty issues in depth, it will be an important consideration for a data policy framework for Canada's charitable sector. While it is less applicable to the UK context, it provides a useful example of how highly sensitive data can be used in a collaborative, respectful and ethical way.
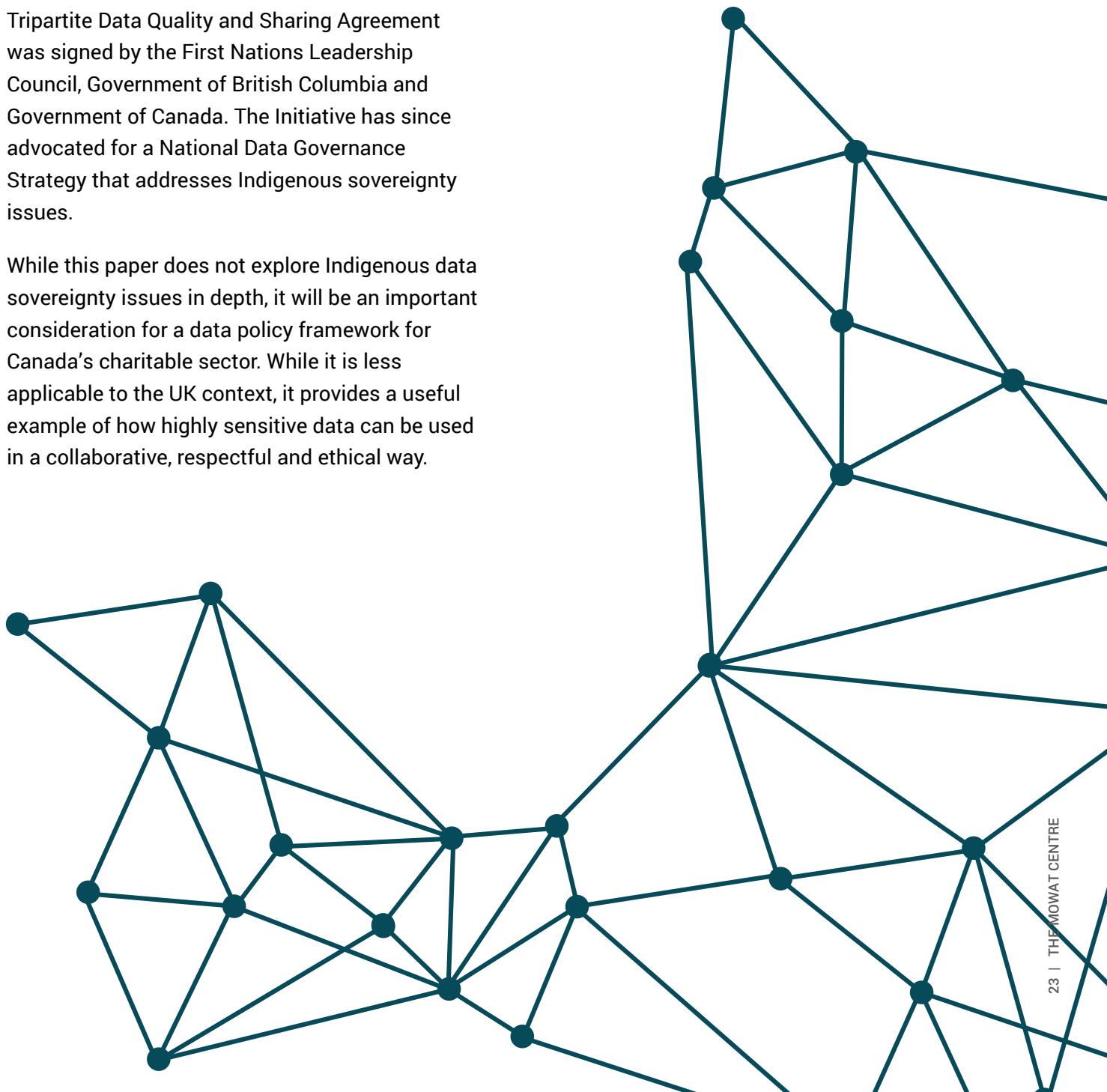
"When we talk about building capacity in the charitable sector, we need to be conscious that we are not just building capacity among select organizations that do innovative, cutting-edge work with data. We need to think about models and approaches that build capacity for everyone - especially smaller, under-resourced organizations that could benefit the most from more sophisticated data practices."

*KATHERINE SCOTT*
*Canadian Council on Social Development*

# 6 RECOMMENDATIONS

The following recommendations for governments and the charitable sector are key components of a data policy framework. They can be understood as critical milestones to build a more integrated data ecosystem:

## 1] Develop a data charter for the charitable sector

Data sharing protocols are frequently established for partnerships between governments, funders and charitable organizations on a one-off basis, but there are no unifying data charters or frameworks specific to the charitable sector in Canada or the UK. Governments are starting to develop and publish their data sharing protocols and guidance documents in the public domain,[47][48] but the charitable sector lags behind in this area.

A data charter should be values- and principles-led, supporting all aspects of the data cycle for charitable organizations. The Stanford Center on Philanthropy and Civil Society's Digital Civil Society Lab has outlined four guiding principles for the use of digital data (i.e. permission, privacy, openness and pluralism).[49] The Worldwide Initiatives for Grantmaker Support, Foundation Center and CENTRIS Global Philanthropy Data Charter[50] proposes a code of practice and a framework for cross-sector engagement in philanthropic data. These frameworks provide a useful starting point for a charitable sector-specific data charter. A charter would provide the guiding framework/approach for the other recommendations discussed in this paper.

Charitable umbrella organizations can show leadership in this area by consulting key stakeholders, conducting an environmental scan of existing guidance documents/data-sharing protocols and drafting a sector-wide charter for charitable organizations to reference.

47 Government of Canada (2010). "Guidance on Preparing Information Sharing Agreements Involving Personal Information." Available at: https://www.canada.ca/en/treasury-board-secretariat/services/access-information-privacy/privacy/guidance-preparing-information-sharing-agreements-involving-personal-information.html.
48 Information Commissioners' Office (2011). "Data Sharing Code of Practice." Available at: https://ico.org.uk/media/for-organisations/documents/1068/data_sharing_code_of_practice.pdf.
49 Stanford Center on Philanthropy and Civil Society (2017). "Digital Impact Toolkit: Four Principles." Available at: https://digitalimpact.io/digital-data/four-principles/.
50 Foundation Center and CENTRIS (2017). Global Philanthropy Data Charter 2017 − Second Edition. Available at: http://www.grantcraft.org/curated-content/global-philanthropy-data-charter-2017-second-edition.

## 2] Where possible, align data priorities among key stakeholders

Governments, funders, charitable organizations, academia and businesses often have competing priorities for the collection and use of data. Identifying these priorities, and the key leaders who can affect change are vital in mapping stakeholders and aligning their interests. Governments are often highly risk averse and focused on privacy, compliance and risk management, and businesses are often concerned with intellectual property issues.

Charities can utilize their social purpose status to unlock datasets. They may also be working with hard-to-reach communities - unique datasets which should be of interest to other sectors within the ecosystem. Incentives can be a strategic tool to move towards greater alignment, and governments and funders are often best-positioned to use incentives to influence the culture of data-sharing.

In the UK, Devon's County Council experienced significant success aligning data projects across the municipality. The Council appointed a dedicated data lead, who works across the Council supporting data projects to promote transparency and evidence-based decision-making. The data lead also works with Devon Communities Together, a local infrastructure body for charities that is leading their open data working group. Currently, the Council is developing an interactive map which will overlay data from a number of sources relevant to accessing services in Devon. Much of Devon is rural, so the map will be used to identify where people are likely to be isolated due to lack of services.[51]

51 Devon Communities Together (2017). "Harnessing Open Data For Communities." Available at: https://www.devoncommunities. org.uk/News/open-data.

## 3] Provide funding or incentives to improve capacity for data analysis in charitable organizations

As governments and funders increasingly prioritize outcomes, charitable organizations are often challenged to "catch up" by building their capacity for measurement, evaluation and data analysis. As a result, governments and funders have a significant opportunity to incentivize capacity-building for data analysis through legislative, regulatory and funding mechanisms.

Some possible incentives/tools could include:

» Earmarking portions of grant funding for technical training, skill development, software or staff/consultants with data expertise

» Dedicating funding streams for collaborative data projects with multiple charitable organizations as partners, including funding for data infrastructure

» Developing legislation that appoints charitable organizations in a particular issue area/ subsector as the lead data sharing partner (similar to PolicyWise and Alberta's *Children First Act*)

» Providing training programs, resources or materials for charitable organizations (particularly those with limited resources or capacity)

» While capacity-building at the organizational level largely focuses on a basic data literacy skillset, there is also a need for more advanced data analytics expertise that would be better suited to an intermediary or backbone organization.

# 4] Introduce, or scale up, issue-specific data labs in partnership with government

Data labs like the UK Government's Justice Data Lab have proven to be very successful with a high demand for their services.[52] New Philanthropy Capital is currently supporting the development of an education, employment and health data lab in the UK to follow the success of the Justice Data Lab, and has also advocated for a data lab specific to substance misuse, mental health and housing.[53]

We recommend identifying one or two issue areas for a Canadian data lab pilot project at the federal level, leveraging existing resources and data infrastructure. These issues could be identified by conducting an environmental scan of existing data infrastructure or convening a committee of key stakeholders.

# 5] Provide opportunities to link existing datasets and open those datasets for broader analysis

Linking datasets increases the statistical power, predictive capability and value of data, moving towards a community or systems-level perspective. However, charitable organizations need to have clear paths to contribute to shared datasets and the benefits for their participation should be made explicit.

Governments and funders are well-positioned to show leadership in this area by developing common codes, protocols and standards, hosting shared datasets with backbone data infrastructure and contributing their own de-identifiable administrative data. PolicyWise's Child and Youth Data Lab in Alberta and NHS Digital in the UK[54] are two compelling examples of the potential of linking existing datasets that could be emulated in other jurisdictions.

# 6] Align/streamline relevant legislative and regulatory frameworks that relate to the charitable sector's use of data

In Canada, there are opportunities to streamline, refine or update existing legislation or regulations related to charities' use of data. Charitable organizations often expend significant resources to ensure they are compliant with existing privacy legislation.[55] There is opportunity for increased legislative alignment due to the federalist system and overlap between provincial, federal and Indigenous jurisdictions. This process of legislative alignment could accompany the fourth recommendation from the Canada Revenue Agency's Consultation Panel on the Political Activities of Charities, which proposes modernizing the overarching legislative framework for the charitable sector.[56]

52 Adler, J. and Coulson, M. (2016). "The Justice Data Lab: Synthesis and Review of Findings." Middlesex University London. Available at: http://www.thinknpc.org/wp-content/uploads/2016/10/NPC-Middlesex-Justice-Data-Lab-Review-2016.pdf.
53 Gyateng, T., Pritchard, D. and de Las Casas, L. (2013). "Creating a 'Data Lab': Increasing Not-For-Profit Organizations' Access To, and Demand For, Data for Impact Measurement." Available at: http://www.thinknpc.org/publications/creating-a-data-lab/.

54 De Las Casa, L., Gyateng, T. and Pritchard, D. (2013). "The Power of Data: Is the Charity Sector Ready to Plug In?" London: New Philanthropy Capital. Available at: http://www.thinknpc.org/publications/the-power-of-data/.
55 Pohar Manhas, K. (2017).
56 Canada Revenue Agency (2017). "Report of the Consultation Panel on the Political Activities of Charities." Available at: https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/resources-charities-donors/resources-charities-about-political-activities/report-consultation-panel-on-political-activities-charities.html.

## 7] Explore, or expand, existing data consortia and networks to improve access to data relevant to the charitable sector and enhance data literacy and practice

While governments are making significant strides with open data, there is an opportunity for the consortia model[57] to be used to create economies of scale for dataset access and data sharing. The Canadian Council on Social Development (discussed further in Appendix D) is one example of a national data network that improves access to statistical data and makes it more affordable for community-based organizations. The UK-based Child Outcomes Research Consortium (CORC) is one example of a consortia model specific to an issue area (children's mental health) that aggregates, analyzes and shares data. CORC also emulates some of the qualities of a What Works Centre[58] or evidence institution, in that it supports shared data infrastructure and common outcome measurement practices.[59]

Consortia models align strongly with the third recommendation, which identified the possible need for intermediaries or backbone organizations to build data capacity at the community or issue area level. Data consortia could be part of these backbone organizations to maximize access to government data at scale.

Mowat NFP recently released the paper *Measuring Outcomes in Practice*.[60] The paper explores what is needed to create an enabling environment for Canada's charitable sector to participate more readily in measurement activities. Some of the recommendations are worth noting here as they are critical to the development of the data ecosystem in Canada, such as mapping the charitable sector data ecosystem to understand the sector's current data assets, opportunities and gaps,[61] establishing a backbone organization like a What Works Centre and introducing a national outcomes fund. Please refer to the paper for more details.

60 Lalande, L. and Cave, J. (2017). "Measuring Outcomes in Practice: Fostering an Enabling Environment for Measurement in Canada." Toronto: Mowat NFP. Available at: https://mowatcentre.ca/measuring-outcomes-in-practice/.
61 The UK Evidence Map is one example of where this process has proven to be particularly effective. Available at: http://www.alliance4usefulevidence.org/infographic/.

57 A group of organizations in a structured relationship focused on implementing a shared public service goal.
58 Cave, J., Aitken, K., and Lalande, L. (2017). Bridging the Gap: Designing a Canadian What Works Centre. Available at: https://mowatcentre.ca/bridging-the-gap.
59 Child Outcomes Research Consortium (2017). "About CORC." Available at: http://www.corc.uk.net/about-corc/.

# 7 CONCLUSION

The collection, management and use of data is one of the most important issues facing the charitable sector in both Canada and the UK. In Canada, the legislative and regulatory frameworks related to data remain underdeveloped and misaligned. In both countries, there are few backbone or umbrella organizations with the resources and capacity to support charities in their data practices at the depth they require.

The recommendations discussed in this paper point both Canada and the UK in the direction of a charitable data policy framework. A policy framework would provide a strategic, integrated perspective on the data issues facing charities. This includes challenges navigating the legislative and regulatory environment, barriers accessing government administrative data and a lack of shared data infrastructure to contribute to systems-level outcomes measurement, research and evaluation. These challenges are, in part, the result of an erosion of core funding in the charitable sector over the last 20 years.

As charities increasingly recognize the value and benefits of using data, many will require leadership, sufficient support and resources to apply data to their day-to-day work in a rigorous, sophisticated and meaningful way. This will pave the way for the sector to both strengthen organizational data management practices and develop an efficient, integrated data ecosystem at the sector and systems-level.

The effective collection, management and use of data is a key component of an enabling environment for the charitable sector. When used appropriately and efficiently, data can help charities improve their organizational decision-making, understand their impact, allocate their resources more effectively and advocate for policy change.

**Collaborating for Greater Impact: Shifting To An Integrated Data Ecosystem**
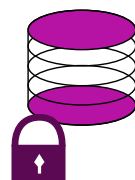


Organizational Data Management
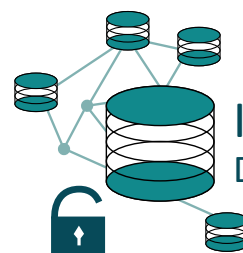
Integrated Data Ecosystem

# APPENDICES

## Appendix A: Acronyms and Glossary

### ACRONYMS:

| | |
|---|---|
| BCFNDGI | British Columbia First Nations Data Governance Initiative |
| CCSD | Canadian Council on Social Development |
| CIHR | Canadian Institutes for Health Research |
| DECODE | Decentralized Citizen Owned Data Ecosystem |
| ESRC | Economic and Social Research Council |
| GDPR | General Data Protection Regulation |
| NPC | New Philanthropy Capital |
| NSERC | Natural Sciences and Engineering Research Council |
| SSHRC | Social Sciences and Humanities Research Council |

### GLOSSARY:

**Big Data:** The integration of multiple data sources and the application of mathematical techniques to analyze/discover new information from a combined dataset. Big data is often described by "3 V's": velocity, volume and variety.

**Consortium:** A group of organizations working together in a structured relationship focused on implementing a shared public service goal.

**Data Ecosystem:** "Complex, adaptive systems that include data infrastructure, tools, media, producers, consumers, curators and sharers. They are complex organizations of dynamic social relationships through which data/information moves and is transformed into flows."

**Data Infrastructure:** Consists of data assets, the organizations that operate and maintain them and guides describing how to use and manage the data. Data infrastructure includes technology, processes and organization; useful data infrastructure is sustainably funded and has oversight to provide direction to maximize data use.

**Data Governance:** Standards that define how data is captured, stored and curated for accountability purposes.

**Data Literacy:** The "desire and ability to engage constructively in society through and with data." This requires basic skill competencies and confidence with using data in an organizational setting.

**First Nations:** Descendants of the original inhabitants of Canada, who lived in the country thousands of years before the arrival of European settlers. First Nations people identify to the Nation to which they belong (e.g. Mohawk, Cree).

**Indigenous Data Sovereignty:** Process(es) whereby Indigenous communities take the lead, supported by federal, provincial and territorial governments, to build "community-driven, Nation-based data governance capacity that will enable the accounting for relationships, investments and outcomes."

**Open Data:** Data, often from the government, made freely available to the public.

**Outcomes Measurement:** Systematic way of assessing the extent to which a program or intervention has achieved its intended results. It is a term often used in the nonprofit sector. Outcomes measurement is distinct from other, more elaborate or complex types of evaluation.

**Performance Measurement (also referred to as performance monitoring):** A term often used by business and government actors for collecting data on key indicators (e.g. financial, output, operational data) to assess the social or environmental performance of companies, portfolios, investments, etc. While it can focus on accountability, it can also support organizational learning.

# Appendix B: List of Informants

## UK INFORMANTS

Emma Prest, DataKind UK

Sian Basker, Data Orchard

Katherine Duerden, 360Giving

Graham Lally, Oxford Consultants for Social Inclusion (OCSI)

Nick Halliday, Government Digital Service

Tom Smith, Office for National Statistics Data Science Campus

Victoria Moody, UK Data Service

Tanvi Desai, Administrative Data Service

Tom Steinberg, Big Lottery

Gina Crane, Esmée Fairbairn

Gaia Marcus, Ombré

Jamie Whyte, Propolis

Lucy Knight, Devon County Council

## CANADIAN INFORMANTS

Robyn Blackadar, PolicyWise

Ashley Casovan, Government of Canada

Sheila Currie and Boris Palameta, Social Research and Demonstration Corporation

Jean-Noe Landry, Open North

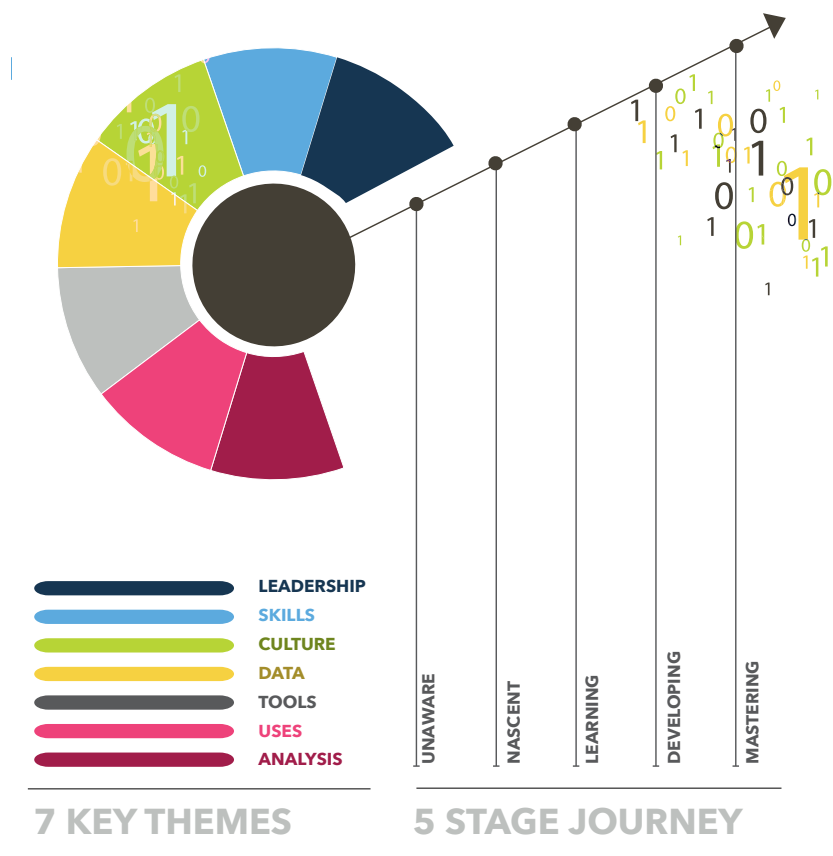Tracey Lauriault, Carleton University

Blair Dimock, The Ontario Trillium Foundation

Michael Lenczner, Ajah and Powered by Data

Harvey Low, City of Toronto

Anil Patel, Grantbrook

Heather Dryburgh, Statistics Canada

Rebeccah Mullen, Vancouver Foundation

Gwen Phillips, Ktunaxa First Nation

Katherine Scott and Michel Frojmovic, Canadian Council for Social Development

Cathy Taylor and Ben Liadsky, Ontario Nonprofit Network

Anne White, Privy Council Office

Geoff Zakaib, Data For Good

# Appendix C: Data Maturity Framework,[62] Data Orchard CIC and DataKind UK

## FIGURE 5

Social Sector Data Maturity Framework



**7 KEY THEMES**

LEADERSHIP
SKILLS
CULTURE
DATA
TOOLS
USES
ANALYSIS

**5 STAGE JOURNEY**

UNAWARE
NASCENT
LEARNING
DEVELOPING
MASTERING

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Source: http://dataevolution.org.uk/the-framework/

62 Data Orchard CIC and Datakind UK (2017). "Data Evolution Project Report." Available at: http://dataevolution.org.uk/wp-content/uploads/sites/8/2017/01/Full_Report.pdf. Page 6.

# Appendix D: The Canadian Council on Social Development's Community Data Program

The Canadian Council on Social Development (CCSD) is an independent, nonprofit organization that partners and collaborates with all sectors to promote social development across Canada. They established the Community Data Program in the mid-1990s due to increasing demands for community-level information to inform policy and practice, the high costs of data, and a need for community-based research and evaluation. It is Canada's largest and only national network of local community data users (www.communitydata.ca).

## WHAT IS THE COMMUNITY DATA PROGRAM?

The Community Data Program (CDP) is a membership-based program open to any Canadian community sector organization and municipality with a local service delivery or public policy mandate. The CDP's goal is to enable communities to track and report on social and economic development trends in their communities.

## HOW DOES IT WORK?

The Community Data Program provides:

» **Access to Web-Based Customized Data**
  The CDP acquires national datasets at the smallest geographic levels available to meet members' needs. The collected data is stored in a members-only catalogue available on a website; there are currently over 800 web-based customized community-level data products available to members. The CDP team currently works with over 20 public and private sector data providers to secure pricing and licensing agreements for data.

» **Capacity Building - Data Analysis and Tools**
  The CDP team supports members in their efforts to analyze and report on community trends using CDP data. They offer in-person training and technical assistance via e-mail or telephone. They also have tools and resources for data analysis, reporting and visualization.
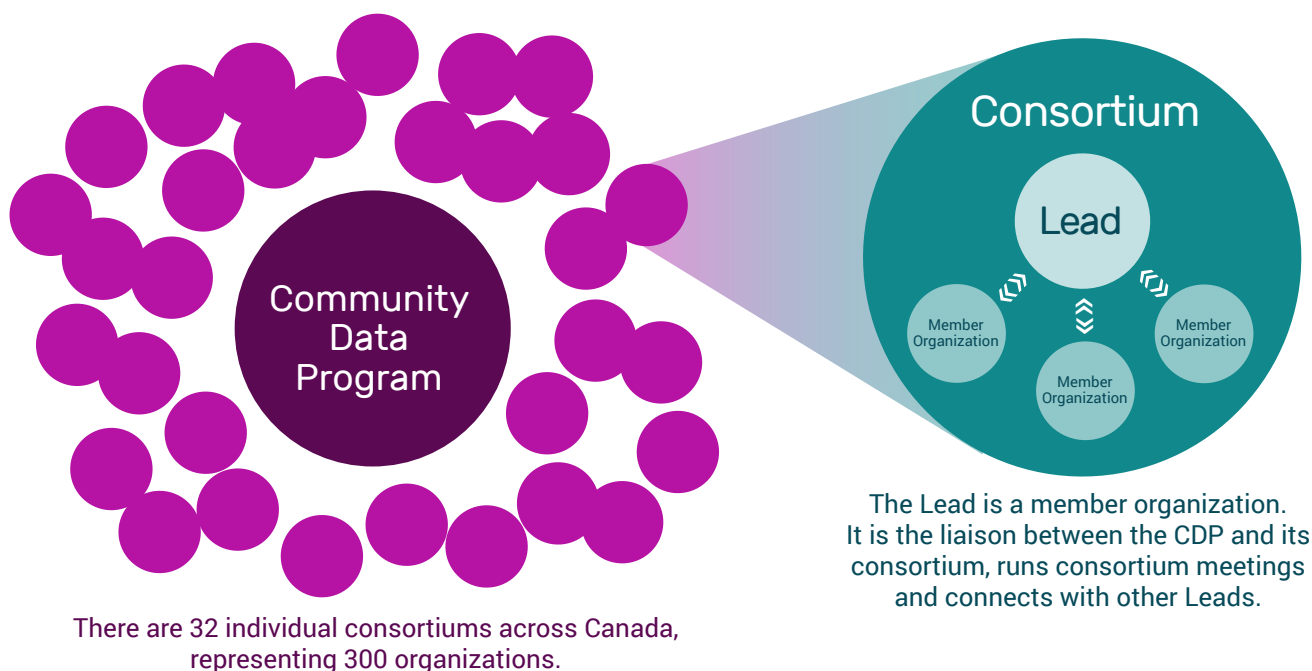
» **Networking and Learning**
  They provide members with opportunities to connect through webinars, teleconferences and annual face-to-face events. Members share information on practices and impact, align priorities and develop partnerships to achieve their community development goals.

## HOW IS MEMBERSHIP STRUCTURED?

The Community Data Program is a consortium model which consists of groups of local organizations working together towards a shared public service goal. Organizations in local consortia include municipal governments, Social Planning Councils, United Ways, libraries, schools, police boards, public health/regional health authorities, community health centres, nonprofit housing corporations, economic development agencies and a variety of other community sector agencies. Members pay fees to join and combine their resources to purchase collected community data through the CDP at reduced costs.

Each consortium in the CDP has a member organization which serves as the liaison between their consortium and the CDP project team (see Figure 6). This organization is referred to as the "Lead." Together, the Leads constitute a nation-wide "hub and spoke" network of community-based social data users. While there are principles and protocols to observe, the CDP's governance model offers a great deal of autonomy at the local level for member organizations to choose how to arrange their respective consortium.

**FIGURE 6**
Community Data Program



There are 32 individual consortiums across Canada, representing 300 organizations.

The Lead is a member organization. It is the liaison between the CDP and its consortium, runs consortium meetings and connects with other Leads.

## HOW DO MEMBERS USE THE DATA?

The data is used to monitor and report on social and economic development trends and conditions[63] within local communities. It is used for strategic planning, research, policy development, monitoring and evaluation, advocacy, performance measurement and funding proposals.[64] For example, data accessed through the program has been used recently to develop the District of Nipissing Social Services Administration Board's Ontario Works Service Plan, the City of Toronto's Poverty Reduction Strategy, Vancouver's Social Housing Inventory, as an input to local community data portals in Peel Region and Newfoundland and Labrador and to map levels of individual debt and bankruptcy risk in Halton and Winnipeg.

63  Data is used by most members in relation to issues such as poverty, children and families, ageing populations, immigration and affordable housing.
64  They generate their own products such as neighbourhood profiles, fact sheets, printed/interactive online mapping, reports, presentations and media releases.

## WHAT ARE SOME OF THE CDP'S CURRENT CHALLENGES?

» **Developing Members' Data Capacity**

There is a gap between the current data capacity of many member organizations and the capacity required to work with the data and tools provided by the CDP.

» **Communicating the Value of Data**

There is a perception within the sector and among funders that needed community data is freely available when it is in fact not. The CDP must regularly communicate to its stakeholders the value of the data and the costs associated with data tailored to community needs.

» **Securing Funding Sources**

There are limited funding sources for intermediaries like the CCSD and, specifically, for capacity building in data management in Canada. The CDP is funded almost entirely through membership fees and struggles with its own capacity needs to run the program and pursue innovation.

» **Prioritizing Data Requests**

Given existing financial resources, the CDP has to prioritize (based on membership input) which data products it requests. The cost of these products can be expensive, ranging from $1,000 to $20,000 per product.