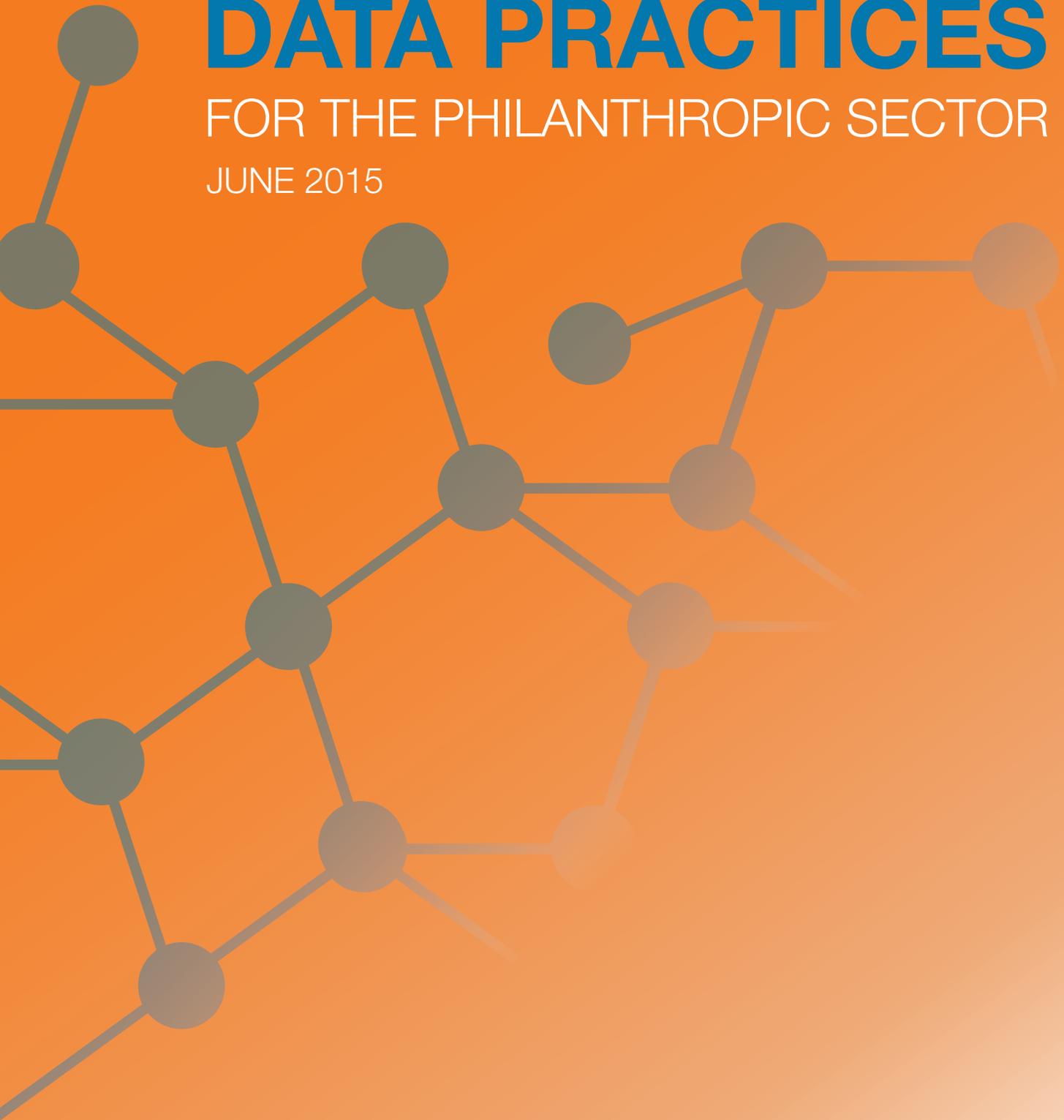


EMERGING **DATA PRACTICES**

FOR THE PHILANTHROPIC SECTOR
JUNE 2015



Philanthropic
foundations
Canada

powered by **DATA**



ABOUT PHILANTHROPIC FOUNDATIONS CANADA

Philanthropic Foundations Canada (PFC) is a member association of Canadian grantmakers, including private and public foundations, charities and corporations and a registered charity. PFC promotes the growth and development of effective and responsible foundations and organized philanthropy in Canada through provision of membership services, resources and advocacy.

ABOUT POWEREDBYDATA

PoweredbyData helps organizations develop data strategies that support their mission and advises governments and funders on publishing open data about the sector.

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Foreword

In 2014, Philanthropic Foundations Canada began to work with new streams of digital data made available to the Canadian public by the federal government through its “open” data initiative. These streams of data about charitable grants, charitable activities and relationships between funders and grantees were released by the Canada Revenue Agency which collected them through the annual “T3010” reports submitted by every Canadian registered charity. How to make sense of such a large data set? And what possibilities did it offer to our members and to Canadian grantmakers in general who are interested in understanding their landscape, spotting opportunities for leveraging their funds, telling their stories more widely and collaborating on their funding initiatives?

What is this “brave new world” of digital data? It’s not only about numbers but also about images, stories and content... anything that can be digitized and therefore shared, manipulated and used to create more knowledge and better practice. We needed expert guides to help us understand the possibilities and the pitfalls of digital data. So we commissioned PoweredbyData to create a guide to emerging digital data practices in order to introduce grantmakers to some of these innovations.

This guide **is intended as a resource for funders wanting to learn about emerging best data practices in the nonprofit sector.** But we know this is a very rapidly changing landscape. So we expect that this guide will need to evolve as the data applications described in these pages are superseded by other even more exciting applications.

We hope that you will find this a useful first step in understanding how digital data practices can inform and improve the practice of philanthropy. We are interested in your feedback and questions so let’s make this a conversation as we move forward in the new world of digital data.

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1. INTRODUCTION

1.1 Setting the Stage

What do we mean by digital data? It is anything that can be digitized, whether numbers, images or stories. The ever-increasing amount of digital information being produced offers transformational possibilities to the nonprofit sector. Every aspect of the sector, including planning, collaboration, resource allocation, impact assessment and communications can be affected by digital data management. In the next few years, we are likely to see a philanthropic sector that is quite different from the one we know now. Funders are seeing data's value as a catalyst for change and are beginning to invest in innovative strategies to harness its potential.

"There's a risk that traditional philanthropy may miss the boat if it doesn't embrace innovation more, as new players set the pace and see traditional models as increasingly irrelevant."

Ten innovations in global philanthropy – New Philanthropy Capital

1.2 Who Should Use this Guide

This guide is for Canadian grantmakers and funders. It is intended to serve as a tool to help them think about how to use new data practices to increase their own impact and that of their partners. The concept of a Canadian nonprofit data "landscape" is relatively new, and some of the terminology will be unfamiliar. This guide is a first step to sorting out some of the data practices that are most applicable to the work of philanthropy. If you are curious to know more about emerging data practices and their potential impact on your work, read on!

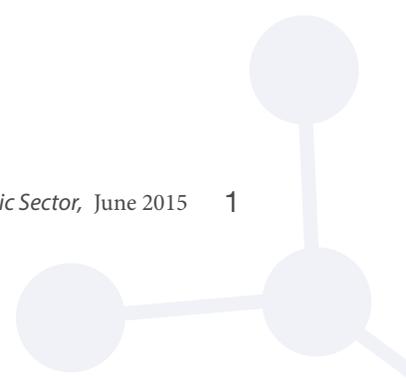
This guide illustrates how data practices can:

- Increase funder knowledge about the grantmaking landscape;
- Increase the ability of funders to share learnings with one another;
- Support recipients' abilities to evaluate their work in innovative ways;
- Offer funders essential information to make smarter, more strategic grantmaking decisions; and
- Increase ALL stakeholders' capacity to use timely information to make impactful decisions.

1.3 How to Use this Guide

Innovations in data management are emerging in different areas of the sector, in Canada and internationally. PFC and PoweredbyData worked together to curate these practices to include what we believe are those most pertinent to the work of grantmakers. We grouped the sets of data practices under three headings:

- Collaborative Practices
- Collection & Measurement Practices
- Data Sharing



Each practice is presented as an innovation in using data to respond to an issue. We highlight both the solution which data management offers to the issue, and some examples of how this solution is applied. Because more data innovation is going on outside of Canada, we have used several examples from the UK and the US, although we include Canadian examples wherever possible.

This guide is not meant to be exhaustive: it is intended as an introduction for funders to learn about some of these new concepts, and to present some practices which could be incorporated into their current work. This is your entry point into a quickly broadening area of interest, challenge and opportunity. Innovative data practices have much to offer the sector, and we encourage you to take advantage of the potential they offer. We recommend you dive in by focusing on the areas you are most curious about. To help facilitate this learning, we have added a glossary of terms and organizations as well as links to project examples throughout.





2. COLLABORATIVE PRACTICES

Collaboration and shared learning are important to philanthropy. Working with other funders on projects means that funding and support can be pooled to have more impact, and learning together means that lessons and best practices are shared more quickly.

How do we encourage and facilitate these collaborations? As a funder, how do you find out who else is funding in your areas, and how do you find opportunities for collaboration? Data is part of the solution and we've presented some examples below in the Collaboration Platforms section.

There is another need for collaboration – to bridge between organizations with a need and people with the skills to apply data and technology. To realize the potential of data and technology to support innovative solutions, such as creating a web application to help organizations track environmental impact, we need to find ways to encourage an organizational culture that is comfortable with mining data and technology. Later in this section we look at the practice of creating dedicated events to bring technology skills together for solutions to issues.

2.1 Collaboration Platforms

The Issue



How can funders use data to connect with one another in time-efficient, expedient ways?

Foundations typically operate independently. However, more and more funders are considering working on collaboration to increase their impact. The benefits include both shared risks and more leveraged funds as other donors are attracted to a common purpose. Up-to-date, relevant information is important to collaboration as it helps funders identify who is working on what in real time. But finding out about the work of similar funders is a challenge. This information is not readily available, and requires a lot of research and effort to find and collect.

Data Solution: Collaboration Platforms

One solution is to use online software applications or collaboration platforms to help funders find potential partners and projects. These platforms contain information or data which has been collected about the funders, grants and organizations, presented in ways that make it easier to sort and analyze what is happening in an area.

Using these platforms makes partnering decisions easier. It allows funders to:

- find other funders who share the same goals;
- learn about other projects and organizations working in an area;
- keep track of emerging trends; and
- engage in dialogue about developing new approaches and sharing practices.

By creating a shared space, these platforms open up possibilities to incorporate other opportunities for collaboration as they emerge. Some platforms function as searchable databases, while others can be described as “funding maps”. PFC’s MemberHub is an example of a searchable database. Two examples of funding maps are on the sites noted below.

The New York-based Foundation Center is creating issue-based web portals for scanning and collaboration. [Foundation Landscapes](#) combines funding information, data visualizations tools, research, news, stories and social media around critical issues in philanthropy. These web portals, developed in partnership with funders and philanthropy networks, make the results of scanning easily accessible and are structured to be updated over time.

[Washfund.org](#) is a “one stop shop” for funding and needs-related data and information for donors, policymakers and other stakeholders interested in water, sanitation and hygiene. The site offers a funding map which allows funders to find what grants have been made by funders in which regions of the world.

Collaboration Platform: PFC MemberHub

The PFC MemberHub is an online platform for members of Philanthropic Foundations Canada. It can be used for multiple purposes: to learn what others in the membership are funding, where and with whom. The platform gives funders a simple interface to search for potential partner foundations, look up grantees that receive funding from other PFC members, and see what they have in common with their fellow members. It incorporates public information, data from the CRA’s public annual tax returns and additional information on each member.

Funder Takeaway

This example shows that collecting and aggregating **data on a dedicated platform can save time and accelerate the identification of co-funding or collaborative opportunities**. It makes use of open data and public information, thus avoiding the need for burdensome data entry by members, and uses that information to help members in their work.

2.2 Tech & Data Collaboration Events

The Issue

- 
- Given financial constraints and a culture unfamiliar with advances in information technology, how can the nonprofit sector access new technology skills?

Technology advances in the last decade have created many innovations for consumers, government, and the private sector. The nonprofit sector has not yet, to the same extent, seen the benefits of these advances. This is partially because nonprofits are often unaware of the potential that technology and data have to benefit their work. If they are aware, they usually lack the technical skills or the financial resources to acquire them. People with data management skill sets are in such high demand that even the private sector has shortages; therefore, their cost can be prohibitive for nonprofits. The sector must focus on finding ways to bring these skill sets into the sector.

Data Solution: Tech & Data Collaboration Events

Events (often called “hackathons”) have sprung up over the past 10 years to encourage professionals from various fields (e.g. healthcare, international development) to collaborate with digital technologists with the goal of developing innovative technology solutions to common social problems.

Tech and data collaboration events help bridge the gaps between nonprofits and technology experts. These one-to-three day events allow those in the nonprofit sector to explain their technology challenges and problems to software developers who use their expertise to address these issues. This collaborative exercise allows non-developer participants to learn how data can be used in their field. It also offers technical participants an opportunity to use their skills for social change. There are many different examples of such types of events including: Hackathons, Open Data Competitions and Data Dives. The glossary to this document defines these various types of events.

These types of collaborations offer:

- access to expertise otherwise unavailable to people in the nonprofit sector;
- cross-disciplinary exploration leading to innovative solutions;
- a chance for nonprofits and funders to learn about applicability of technology in their day to-day; and
- an opportunity for tech developers to put their skills toward social causes.

Some examples of tech and data collaboration include:

- [Data for Good](#): “Data for Good brings together leading data scientists with high impact social organizations through a comprehensive, collaborative approach that leads to shared insights, greater understanding, and positive action through ‘data in the service of humanity.’”

- [Datakind](#): “NGOs and other mission-driven organizations are faced with an onslaught of decisions on how to best collect, analyze and visualize the data that will help them make the world a better place. We create teams of pro bono data scientists who work together with these organizations to understand the need, find a solution, and collaborate to tackle the problem with data science.”
- [ecoHack Montreal](#) “has a thriving community of groups dedicated to different facets of urban sustainability. It is also home to some of the world’s leading computer developers and designers. EcoHack will bring these groups together in a space where people feel comfortable sharing their complimentary areas of expertise. Those with an in-depth understanding of urban sustainability will mix and partner with people with data and programming skills and collaboratively design innovative programs tailored to sustainability issues particularly relevant to Montrealers. EcoHack is an explicitly social hackathon: it is as much about building a social network as it is about building the latest killer app.”

Data Collaboration Event: Aquahack

AquaHacking 2015

A private foundation, the de Gaspé Beaubien Foundation of Montreal has invested in raising community awareness of Ottawa River conservation. In association with Blue Legacy and Ottawa Riverkeeper, the Foundation aims to convince riverine communities, governmental authorities, and leaders of the importance of rehabilitating the Ottawa River. There is a need to improve water quality, foster understanding of the effects of dams on the ecosystem, and increase compliance with laws and regulations. Illustrating the Foundation’s belief in the power of new technologies, it ran an “AquaHacking” coding competition in early 2015 with teams of hackers from Quebec and Ontario who collaborated with mentors and field experts to develop digital applications and provide technological solutions to challenges facing the Ottawa River. This initiative culminated in AquaHacking 2015 – Ottawa River Summit in May 2015.

Funder Takeaway

This example shows us how a Data Collaboration Event can create concrete, meaningful outputs for users that access nonprofit services. By creatively working together on issues, nonprofit organizations and developers can work to realize previously unimagined solutions that greatly improve the day-to-day of those dealing with social challenges.

3. COLLECTION & MEASUREMENT PRACTICES

Funders are aware of the need to incorporate quantitative and qualitative data into their evaluation and impact measurement practices. Common systems and toolkits that standardize that data are emerging, which we examine below.

The ways in which data is collected, both for impact measurement, but also for regular business needs – like a foundation learning more about its grantees or an association understanding its member’s priorities – are also changing. These data collections have been done by telephone or paper but as the systems become more digital new forms and tools are emerging.

3.1 Shared Evaluation Frameworks

The Issue

 **How can we design evaluations that are useful for organizations but still provide information that can be compared to other interventions?**

Nonprofits have varying methods to evaluate their work and to report outcomes in different ways to funders. They face the challenge of having to work with many different reporting frameworks. Funders face the task of analyzing many sets of data from various grantees using different methods. Differences on data terms and collection make it difficult for funders to compare results and outcomes of the projects they fund. It also means that the sector has a harder time sharing lessons about which interventions work. Individual organizations are unable to benchmark their performance against others.

Data Solution: Shared Evaluation Frameworks

To address this problem, sector leaders are developing evaluation systems that set common standards for organizations working in their areas. These systems are called **Shared Evaluation Frameworks**. By using these frameworks, evaluations can produce data that can be compared to other organizations which have used the same frameworks.

These frameworks offer the following benefits:

- individual organizations can benchmark their performance against other organizations;
- funders have an improved ability to evaluate and compare the impact of the projects they support; and
- researchers and policymakers have good datasets to answer questions about which interventions work and why.

The value of shared frameworks is realized when enough organizations adopt them. Reporting requirements are often discussed between funders and their grantees, and therefore funders have an opportunity to encourage the adoption of specific metrics. Encouraging the adoption of these

frameworks in a given granting area is even easier when funders coordinate with each other to develop a specific framework. This results in all the benefits of shared evaluation frameworks but also reduces the reporting requirements of grantees, as they can submit the same evaluations to multiple funders.

In the UK, an organization called [Inspiring Impact](#) has a vision of a world where high quality impact measurement is the norm in the nonprofit sector. They are working towards a world in which the majority of funders seek to increase their impact by using impact data to allocate resources and improve practices. Many charities and social enterprises start to measure from scratch, using their own methodologies, which can make it difficult to share and compare methods and results. Inspiring Impact is working on shared measurement, aiming to develop common indicators and tools for specific fields or interventions to help share and compare results, methods and lessons, and identify the most effective solutions.

Shared Evaluation Framework: Girls Action Foundation

Girls Action Foundation is a Canadian charity that builds girls' and young women's skills and confidence and inspires action to change the world. Girls Action has a provincial network in Ontario of 88 girl-specific programs. A three-year project began in April 2012 to focus on how well girl groups evaluate the impact of their work.

Working collaboratively with girls' programs in the network, this project created evaluation tools to obtain data about the changes that girls experience in the programs. The project works with community groups in different regions of Ontario to pool efforts, increase capacity in outcomes evaluation, and produce much needed quantitative impact data. A shared online evaluation platform was created that collects information over time from many programs to demonstrate impact across the province. This data will continue to expand each year.

Funder Takeaway

The Evaluation Project is a concrete example of how sector leaders can use shared evaluation frameworks to help organizations benchmark themselves, to help funders evaluate their impact and to produce valuable data for researcher's and policymaker's evaluations for an area.

3.2 Data Driven Impact Measurement

The Issue

- **How can organizations have the tools to measure their actual impact in the community?**

Understanding and measuring impact is a focus for funders. Most funders require grantees to provide evidence of the success of their projects. But nonprofit organizations struggle to measure their actual impact as opposed to a stand-in indicator, such as measuring participant's attitudes towards recycling versus the actual amount of materials recycled in a community.

Data Solution: SIA Measurement

To accurately and objectively determine impact in the community, the impact investing sector has developed indicators and metrics of social and environmental health in communities. The practice of employing these metrics is usually referred to as Social Impact Assessment (SIA) Measurement. Using SIA methods provides a baseline against which to measure not just outputs, but actual outcomes in the wider community. SIA emerged from the environmental movement of the 1970s and by the mid-2000s SIA was accepted as a professional assessment method which:

- gives nonprofits a way to measure the health of their community before and after their interventions;
- allows funders to more accurately determine impact; and
- makes it possible to compare impacts between different projects or communities.

The disadvantage to using a SIA method is that it can be complex, costly and hard to employ without significant resources and knowledge. SIA metrics measure effects across a community but may not be helpful as measures of the impact of smaller interventions.

Nevertheless, funders and social investors can now digitally access newly-emerging SIA metrics as standardized, baseline measurements that permit nonprofits to objectively measure their impact, as opposed to measuring stand-in indicators. Catalogs of SIA indicators have been developed such as IRIS (see example).

The Foundation Center provides a [toolbox](#) of resources for measuring social impact. McKinsey also provides an [explanation of social impact assessment](#).

SIA Measurement: Impact Reporting and Investments Standard (IRIS)

IRIS is a “catalog of generally accepted performance metrics that leading impact investors use to measure social, environmental, and financial success.” IRIS is managed by a nonprofit called the [Global Impact Investing Network \(GIIN\)](#) dedicated to increasing the scale and effectiveness of impact investing. It is a free service that supports transparency, credibility and accountability in impact measurement practices.

IRIS was developed by advisors and experts from the impact investment and measurement industries. The catalogue consists of indicators, with standard definitions for each metric within an indicator. It is a set of “building blocks” that can be used to build impact measurement systems.

Funder Takeaway

Funders and nonprofits need to be able to measure both impact and outputs in a standard way. IRIS serves as both a place to develop those measurements and a common resource to find already existing metrics.

3.3 Shared Data Collection

The Issue

- **How can information from separate organizations be made available in one place in order to allow analysis?**

In order to develop effective interventions, it is necessary to track specific activities relevant to an issue. For example, to improve youth nutrition it could be necessary to track the number of school lunches served. This information may already be tracked by individual organizations – in this example, each school – but the data from each organization is not aggregated in one place for comparison or analysis.

Data Solution: Shared Data Collection

Filling out and sending in paper forms is nothing new for the nonprofit sector. When these forms emerged, they represented an innovation in data collection. However, they can be administratively burdensome and suffer from low response rates. Shared Data Collection is a digital data innovation that permits nonprofits to collect information for their own work, while at the same time sending that same information to a central location.

The resulting data can be aggregated and used by funders and organization leaders alike for better decision-making.

Shared data collection simplifies philanthropic work by:

- reducing time and resources spent collecting operational data from multiple organizations;
- providing a centralized source from which to search data; and
- offering a standard dataset to reliably analyze overall activities and set strategic goals.

[CADAC](#) (Canadian Arts Data / Données sur les arts au Canada) is a web based application dedicated to the collection, dissemination and analysis of financial and statistical information about Canadian arts organizations. CADAC was launched in 2008, and has been in development since 2004.

Shared Data Collection: Homeless Individuals and Families Information System (HIFIS)

The federal government's National Homeless Information System (NHIS) provides comprehensive data about the homelessness problem and the activities of organizations providing services for the homeless.

NHIS created a software program called the Homeless Individuals and Families Information System (HIFIS), which is provided free-of-charge to charities working on homelessness. Data produced by the program is aggregated and compiled in the NHIS database.

The NHIS uses the data to analyze and publish information about the nature of the homelessness sector in Canada. That information can then be used to raise awareness, educate the public and better understand how to deliver effective services.

The system:

- standardizes the collection and format of crucial data about homelessness;
- provides a software solution that supports data collection for multiple actors;
- incorporates funding for stakeholders and service providers;
- engages multiple stakeholders – funders, researchers, service providers, and multiple levels of government – and makes collected data available to them; and
- fits in to a long-term vision – having a better picture of homelessness in Canada.

NHIS is a holistic strategy – it involves all aspects of data related to homelessness, from collection to analysis to funding.

Funder Takeaway

NHIS has made it easier for organizations to collect operational data. The tool, which was developed by experts and service providers, gives organizations better access to their records so that they can plan and make informed decisions. From a data perspective, this project is especially interesting because it primarily helps the NHIS to solve a data issue – NHIS is helping create the data that they need to answer questions about the homelessness problem.

4. DATA SHARING PRACTICES

The nonprofit sector does not suffer from a lack of information. There is an abundance of information to be found in client cases, interviews, evaluations and annual reports. The challenge is how to gather, analyze and share that information more effectively. The emerging practice of data sharing permits the rapid and efficient exchange of information among multiple parties. It makes information easier to access and more dynamic.

How do you make your information available to others? What information do you share, and what are the benefits of doing so? How do you build relationships with programmers and software developers who can help you share your data once you are ready to do so? How do you combine data to obtain new insights?

These are important questions and the examples of data sharing solutions we explore in this section hope to begin answering them. These examples are: Application Programming Interfaces (APIs), Dashboards, and Data Publishing Standards.

4.1 Application Programming Interfaces

The Issue

 **How can organizations with large data sets share the data in a way that makes it easy for programmers to incorporate it into their applications, ensuring that the data is always up-to-date?**

Even when the data exists in a single place, it is not necessarily easy to keep up-to-date with the latest information, nor is it easy to build software applications which can use that data without having to prepare it.

Data Solution: API

API (Application Program Interface) is a tool to build software applications. APIs specify ways for software to access a dataset. A good API makes it easier for developers to connect data from multiple sources to build new applications. APIs drastically reduce the amount of time and resources necessary to create new applications. The nonprofit sector needs to access more data to support efficiency and innovation. APIs can make that happen more easily.

Examples of sector-applicable APIs:

[Guidestar US API](#): Guidestar has a large dataset on the nonprofit sector in the US. The API that it provides makes it possible for Guidestar's nonprofit database to "talk" to another organization's website or software.

[New Zealand Charities Services Open Data API](#): In 2011, the New Zealand Charities Commission created an API which allows software developers to freely and readily access charity data and to create new applications. The API contains information on every registered charity in the country, the area in which they work and the areas of revenue.

4.2 Dashboards

The Issue

 **How can organizations display information about their work that communicates their progress, both internally and externally?**

As part of their operations, organizations track specific pieces of information about their ongoing activities and work. This information, while invaluable for monitoring progress and success, may remain in its raw form – locked in spreadsheets or PDFs. Often, different pieces are in several places and documents, which makes them difficult to access or analyze together.

Data Solution: Dashboards

Inspired by the control panel/dashboards of cars and similar equipment, digital dashboards began appearing in the late 1990s to display business data for organizations. Today, digital dashboards are built as generic services that can be customized to the needs of an organization or project.

Dashboards are information management systems that display an organization's data to communicate internally and with stakeholders in a readable way. They offer a simple platform from which to view an organization's metrics and impact in real time, as well as display historical information and predictions based on trends. They serve as an important tool for tracking the success of an organization's work. Important pieces of data can be shared to the relevant actors in a meaningful way.

Dashboards are a great practice for nonprofits that want to learn how to engage with data in standardized, simple ways. TechSoup provides a useful online slide show on this topic called [Finding Meaning in the Numbers: Tools for Data Analysis and Dashboards](#).

Dashboard: One Acre Fund

One Acre Fund, a US nonprofit organization that serves the world's poorest farmers, uses a [customized dashboard](#) to internally track its metrics and to communicate with the public by making it externally visible. Management, staff and board members use the dashboard to monitor the progress of their ongoing projects and determine whether they are achieving their targets. The dashboard easily conveys the successes of the One Acre Fund to the public and to its donors without requiring any sector knowledge.

Funder Takeaway

This case shows how dashboards use data and metrics to create a tool that can serve up necessary operational information to managers, as well as communicate progress and success to donors much more efficiently than a written document.

4.3 Data Publishing Standards

The Issue

- **How can we ensure that information collected by multiple stakeholders in the sector can be usefully aggregated?**

There are two problems in combining data. The first concerns the content of the data – is it measuring the same things? For example, when describing participation in workshops, is the age range of youth considered to be 12-18 years old or 12-25 years old? Unless measurements are the same, it is not possible to combine data.

“The more we know, the better grants we can make.”
360giving

The second problem is that of format – in this context, this not only means file format, but also how the data is structured. It would be difficult to combine information from Word documents, Excel spreadsheets and PDFs. It is also difficult to combine Excel spreadsheets if the columns are in different orders.

If every organization publishes information in an individual format, it is impossible to collect and combine that data. There can be an abundance of data, but without the ability to aggregate it, it is not useful.

Data Solution: Publishing Standards

One solution to this problem would be to creating a shared data collection system. This means the ongoing funding of one organization to operate that centralized system and ensure that other organizations use it.

The alternative is for organizations to agree on a common format to publish their data. This is referred to as a Data Publishing Standard. These standards are specifications of what information to publish, how to structure it and the format in which to release it.

Data Publishing Standards:

- turn disconnected data into information that can be easily combined without manual intervention;
- turn data collection activities from manual processes to fully automated ones which stay up-to-date;
- help software developers access and work with the data; and
- remove the need to “clean” datasets collected from different organizations.

When stakeholders adopt a common publishing format, this provides the benefits of having complete, up-to-date information without the perpetual costs of an infrastructure to collect and clean data on an ongoing basis.

You can learn more about nonprofit data publishing standards by looking at ongoing projects such as [Open Referral](#) in the US and the [International Aid Transparency Initiative](#) in the UK.

Data Publishing Standard: 360giving Standard

360giving is a data publishing standard for grant data. It was created to help UK funders make strategic funding decisions by giving them access to more information about their granting areas. The 360 Giving movement encourages and supports UK grantmakers and philanthropists to publish grant information online, adopting an easy-to-use open standard.

The standard, at its core, is a data creation initiative, which will result in more and better data about granting. The initiative encourages funders to publish their information using its data publishing standard. Funders take a “pledge” that educates and encourages them to release their grantmaking data.

Funder Takeaway

The 360giving standard offers grantmakers unprecedented access to knowledge about their funding partnerships and the broader nonprofit landscape. This allows them to be more strategic and responsive in their work.



5. TYING IT ALL TOGETHER – DATA STRATEGIES

This guide has demonstrated how funders can benefit from the use of new techniques of producing, collecting and sharing data. These new data practices can radically enhance our ability to answer research, funding, development and planning questions.

In order to harness the potential of these practices, we need data strategies. A data strategy is exactly what it sounds like – a comprehensive mid-to-long term plan for data. It sets a long term vision for how data should be collected and used and which methods can be most productively employed to achieve the goals of the organization or project.

A complete data strategy includes not only plans for use of internal data, but also plans for the use of external data, **as well as plans to ensure that the “data environment” is able to support an organization’s work.**

Among other things, a data strategy ensures organizations:

- can benefit from the data collected by other stakeholders (including other nonprofits, funders, all levels of government);
- reduce overlap and increase collaboration with other organizations;
- leverage existing collection activities – for example by incorporating their data needs into the collection done by other actors; and
- stay aware of changes to their data environments (reporting changes, new measurement or data publishing standards) to identify opportunities and threats in time to respond to them.

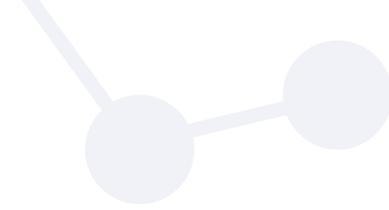
Funders are potential leaders in this area. By creating data strategies for themselves and for their grantees, they can pave the way for Canadian organizations to have more impact.

Curious to Know More?

To learn more about open data initiatives and data strategies, consult a February 2015 Mowat Centre report called [An Open Future](#).

From the summary of this report:

“Current public discussions on open data policy frameworks provide an opportunity for the not-for-profit (NFP) sector to communicate its priorities on the types of open government data it needs. There are also emerging opportunities for the sector to position itself as a source of data through creating, maintaining and opening up datasets that support its work, demonstrate impact and inform public policy. Access to open data is just one part of the picture. Robust open data frameworks and initiatives require thought and action that go beyond conversations about access. It is an issue that touches on questions of capacity and culture change for both NFPs and government. This Sector Signal considers the opportunities around open data for the not-for-profit sector and highlights the priorities, standards, skills and leadership needed for a successful data partnership with government, with open data advocates and within the sector itself.”



Glossary of Terms

Aggregate data: Aggregate data refers to the grouping of data that can be presented as a summary. For example, when all of the data gathered from shelters by the National Homelessness Information System is collected together, we can count the number of beds used.

Application programming interface: API, an abbreviation of application program interface, is a tool to build software applications. APIs specify ways for software to access a dataset. A good API makes it easier for developers to connect data from multiple sources to build new applications. APIs drastically reduce the amount of time and resources necessary to create new applications.

Dashboard: Dashboards are information management systems that display an organization's data to communicate internally and with stakeholders in a readable way. They offer a simple platform from which to view an organization's metrics and impact in real time, as well as display historical information and predictions based on trends. They serve as an important tool for tracking the success of an organization's work. Important pieces of data can be shared to the relevant actors in a meaningful way.

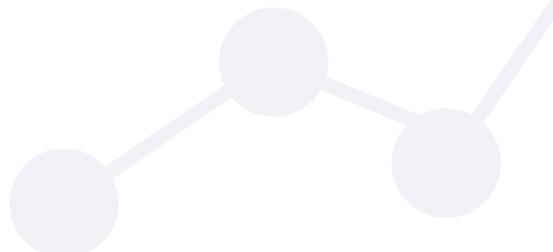
Data: Data are individual pieces of information made of raw values that can be qualitative or quantitative. Collectively, sets of data can be used for analysis, visualization, and reporting.

Data entry: Data entry is the manual process of taking information available only in certain documents and digitizing it by entering it into a database. This is a lengthy and expensive activity, but is a way of creating datasets from otherwise unusable primary sources. The best example is the entry of paper forms into a digital database so that the information can be analyzed and shared.

Data cleaning: When data is collected or published without a data standard, or without strict controls on the content in each field, inconsistencies between datasets can result. For example, the dollar value of a grant could be listed in some sets as a plain number (1000), and in others as a formatted dollar amount (\$1,000). In order to make it possible to aggregate and use these datasets together, they must be standardized automatically or manually. This process is referred to as cleaning.

Data collection: These are activities that collect individual pieces of information. Processes for data collection can be very basic, like collecting the number of visitors to a website, to very complex – like collecting all of the information about individual cases in a counselling program. Examples of data collection activities include surveys, membership questionnaires and tax return filing.

Data Dives: Data Dives are weekend-long events that bring together nonprofit organizations with data scientists to solve a nonprofit's problem. They differ from hackathons in that data scientists focus on analyzing or visualizing available data, while hackathons focus on software developers building applications with available data.



Data environment: In the context of this report, we use data environment to refer to the datasets, collection activities, and general practices around data in the sector or in a particular subsector. A healthy data environment would have many valuable datasets available to the actors that need them.

Data owner: Data, by virtue of it being collected by distinct entities, has owners who dictate everything about a dataset. These owners decide whether to share their data, how to share it and license it, as well as in what format it would be available.

Data publishing standard: A data standard is a specification for a common type of data, which describes what information to publish, how to structure it, and the format in which to release it. These standards can be very complex depending on the subject, but a simple example is an agreement such as requirements gathering and specifications to always list the date a grant was made as the first column in a spreadsheet, in the YYYY-MM-DD format.

Developer: A more common term for a computer programmer in the technology industry. Generally, developers participate more in other facets of the software development process (not just writing code) than programmers, such as requirements gathering and specifications.

Grant data: Grant data refers to the records of grants given by funders. At its most basic, it consists of dollar values, recipient, funder, and a date. However, as more information is added, grant data can become very powerful. Adding grant descriptions, for example, can allow grant data to be used for tracking the types of projects going on in the sector.

Hackathon: Hackathons are short (usually one-to-three day) events that bring software developers, technologists and professionals from fields without technology expertise together to collaboratively develop new solutions to problems in those fields using technology or data.

Open data: Open data is data that is released publicly, with the explicit permission to be freely used, modified or shared for any purpose. A small but important piece is the explicit licensing for commercial purposes, which means that new businesses and services can be built around available open data.

Open data challenge: An open “competition” hosted by a data owner or provider to see what teams can generate the most innovative solutions to challenges in the sector, or facing society, using newly released open data. A challenge can run for a period of time ranging from a day to several months.

Platform: For software users, a platform usually refers to a type of software application where users can perform many tasks related to a central topic. For example, PFC’s MemberHub orients features around member data to allow users to do research, collaborate and renew their membership.

Web application: Web applications are software programs that are accessible only through internet browsers, and run on remote servers instead of on the user’s computer.



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