PolicyWise
BUILD BETTER DATA

Data Lifecycle Resources:
Prepare

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Introduction & Starting Point

The Data Lifecycle is a tool to proactively plan an organization's data journey. It provides a bird's eye view of how data can evolve from inception to reporting and beyond. The intent of the Data Lifecycle is to build a foundational tool for non-profit organizations to use when collecting data to inform service delivery and organizational planning. Good data collection can look different depending on each service organization and their client base and can be reflected upon throughout the Data Lifecycle. It is important to understand how to collect data and then use the data consistently in decisions being made for your organization.[1]

For non-profit organizations, the data lifecycle can be used as a way to inform the planning and implementation of services. The development of outcome measurements is important for the success of the organization and for the progression of clients.[2] Building appropriate processes in advance can also streamline the generation of reports and funding applications when that time comes. The clients are the primary drivers in guiding and generating desired outcomes.[1] It is important to recognize that non-profits are often responsive to community needs and are leaders for underrepresented or marginalized groups.[2]

Data lifecycles provide a structure to organize and think about the activities involved in managing and using data within a project or organization. The data lifecycle resources are organized into the following sections. Each of these topics can be explored in more detail within each section of the Data Lifecycle.

- Considerations & Lenses
- Plan
- Build
- Collect
- Prepare
- Analyze
- Inform

The Data Lifecycle addresses some of the main concerns around data collection, starting with the questions of why and how data is being collected. These sections explore how non-profit organizations can collect data in a manner that is sensitive to the realities of their clients and authentic to their mission. Furthermore, the Data Lifecycle discusses the importance of communication (both internal and external),

[1] Nonprofit hub & Everyaction. (n.d.). *The state of data in the non-profit sector.* https://nonprofithub.org/datareport/

[2] Benjamin, L.M. & Campbell, D.C. (2015). *Nonprofit performance: Accounting for the agency of clients*. DOI: 10.1177/0899764014551987

minimizing data collection, accuracy, interoperability, and good governance. These aspects are engaged in greater detail in the various sections. For instance, Plan explores best practices of data collection and Collect describes how organizations can increase the impact of their data. The Data Lifecycle serves as an organized guide to the most important facets of data collection, providing a roadmap for non-profit organizations as they work with clients.

> *Where to start in your data journey? We encourage starting with two key questions:*

1. Why are you collecting data?

Data may seem disconnected from the overall mission of an organization. Most staff are dedicated to helping clients first and foremost. Collecting data may seem like additional work. Collecting and using data well can contribute greatly to an organization's mission. Effective data collection and use can help improve programming to be more efficient and impactful.[3]

Data fits within an organization by:

- Building trust
- Demonstrating how organizations achieve their missions
- Creating buy-in from staff
- Providing essential information for funders

For more information, go to the following sections of the Data Lifecycle:

Considerations & Lenses 

Plan 

Inform 

2. How are you collecting data?

To support the needs of clients and provide effective services, data needs to be collected. Data is about people's journeys and stories However, in the rush to get the needed information it is possible to compromise relationships with clients. By thoughtfully considering how you are engaging with your clients, you can foster a more positive relationship.

When collecting data from clients, consider:

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[3] Fruchterman, J. (2016). *Using data for action and impact*. Stanford Social Innovation Review. https://ssir.org/articles/entry/using_data_for_action_and_for_impact

- Ways to build trust including engaging in conversation as an accessible way to collect data. For example, questions and response choices reflect their individual circumstances.
- The way in which questions are asked, which depends on the sensitivity of the information that could be provided (e.g., asking about immigration status, emergency contacts vs. services required, postal code) and in demonstrating transparency and authenticity. For example, clients need to know how the information they give will be used to benefit them.

For more information, go to the following sections of the Data Lifecycle:

Build 

Collect 

Analyze 

 [4]

Disclaimer – the information provided in the Data Lifecycle could evolve. If you have ideas or feedback please email info@policywise.com

[4] Icons made by Freepik from www.flaticon.com.

Prepare

Prepare

In the prepare phase, it is important to become familiar with the data collected (e.g., document observations, nuances, and quality of the data) and ensure the data is amenable for further analysis and reporting.

Document your Data

1. **Keep documentation in one place.** Place all of the preceding documentation in a single place which is accessible by all staff. Organize all of these documents accordingly.
   - Data collection staff.
     - Data collection protocols.
     - Consent processes.
     - Process flows for clients based on their needs.
   - Clients who are providing data.
     - Consent processes.
     - Program information.
   - Staff who will analyze data for evaluation and reporting.
     - Data dictionaries. A data dictionary is a technical document describing what each value or response means.
     - Cleaning and validation protocols.
     - Analysis plans, KPIs, strategic documents, funders' applications, etc. that can help guide in the analysis of your data.
   - Data consumers inside and outside your organization (e.g., board members, directors, the general public, funders, partnering organizations, etc.).
     - Include all of aforementioned documentation. They may never need to know all of the details of your data collection program. No less, having them at your disposal will show accountability and will allow you to answer questions as they arise.

2. **Building your data documentation.** First off let's adopt the term 'data documentation'. Intake forms, data collection protocols, and referral forms are some examples of things that can be included in your documentation.

3. **Curating our data documentation.** As workers in the non-profit sector we can simply use the term 'data documentation', which are documents that describe the data and allow us to understand it.

4. **What does your data mean?** Very often data files are just large quantities of numbers arranged by rows and columns. What does it all mean? It is understandable why people may disengage from trying to understand their data. Especially if there is no accompanying documentation. For every data set you collect it is important to have all of the documents associated with it collated in a single place. Remember data is a tool to tell stories. Without enough documentation to explain your data those stories lose impact and context.

Principles of Data Documentation

Every organization should invest time and energy into building their data documentation resources. Just as the data life cycle is a tool for building your data collection program, a data documentation system is a way of documenting that program.

When building your documentation it is helpful to think of metadata. This is a term most often referred to in research or industry. It literally means 'data about the data'. There are many advanced and technical tools for creating and using metadata which are beyond the need of most non-profits. However, adopting a few basic metadata principles will greatly help in building their documentation resources.

1. Think of all the use cases of your data then collate all corresponding documents. Refer to the data life cycle to understand what documentation is needed at each step. Before we get lost in collating of all your documents, consider not only staff and clients, but your audiences as well. Who will be exposed to your organization's data? What would you need to tell them about your data collection program? How do you remain accountable to staff, clients, or people outside of your organization? While many of these groups may never look at your documentation you need to have answers for them as questions arise. This isn't just about the data itself but **contextualizing** the data. It's also about clear **communication**. If someone asks questions about your data you need to be able to answer them.

2. Consider the following groups of people, their questions, and how your documentation will inform them:

Group of People	What questions may arise?	What documentation will help answer the question or guide the process?
Data collection staff	• How do I intake a client? • How is the consent process executed with a client? • What programs do they need to refer clients to?	• Data collection protocols. • Consent processes. • Process flows, eligibility criteria for programs and clients based on their needs.
Clients	• How is their data being used? • What programs do they need?	• Consent forms. • Program information.
Staff who will analyze data for evaluation and reporting.	• What does a certain data element mean? • What checks have been done on the master data set? • What metrics are needed on the upcoming report?	• A data dictionary, which is a technical document describing what each value or response means. • Cleaning and validation protocols. • Analysis plans, KPIs, strategic documents, funders' applications, etc. that can help guide in the analysis of the data.
Data consumers inside and outside your organization. E.g. Board members, directors, the general public, funders,	• Were low referrals to organization X this year due to funding? • Does this agency follow OCAP principles when	• See any of the above documentation. • These groups may never need to know all of the details of your data collection program. No less, your accountability will depend on how prudent your

Group of People	What questions may arise?	What documentation will help answer the question or guide the process?
partnering organizations, etc.	reporting? How is that covered in consent? • Why is this number so low in the report? How was this data cleaned or collected? • How are referrals to a partnering organization handled?	organization is in documenting all aspects of data. • Having these documents at your disposal will increase accountability and allow you to answer questions as they arise.

3. Have a system of maintaining your documentation. Once you have gathered all of the relevant data documentation place your documentation on a network drive. Assign distinct folders depending on the function or stage of the data life cycle. Work with your staff and consider what structure is relevant for your organization. While you may want some discretion on whom to share documents with it is also good to have some transparency. This will help facilitate their understanding of processes.

Also many of your documents will be subject to revisions. Make sure you keep versions up to date but also make sure you keep past versions of documents. This is important for institutional memory or in case staff want to verify past results and processes.

The following folder structure is a suggestion. Maintain a folder structure that reflects the flow of processes in your organization. Consider which groups in your organization will access documents.

Process	Name of Top Folder*	Name(s) of Sub Folder(s)*	Type(s) of Information in Sub Folder(s)*
Data Collection	Data Collection	Intake Process	• Consent • Intake/registration forms
		Programs	• Program A • Program B
Data Analysis	Data Analysis	Data Cleaning Processes	• Intake form data • Program A data • Program B data
		Data Analysis Processes	• Funder report program A • Funder report program B • Analysis of intake program A • Data quality assessment program A
Reporting	Reporting	Funder Program A Report	• Reports from current and previous years
		Funder Program B Report	• Reports from current and previous years

******Note:*** None of these folders will ever contain actual data. It is recommended that data itself are only accessible to authorized staff in a restricted folder. There are a variety of ways of managing and maintaining the security of your data. Make sure that your organization has a plan for maintaining data security and strictly adheres to it.

4. Assign a staff member to maintain data documentation. There are many people who may work with data at your organization. However, not everyone will understand the entire process. Having a single staff member to maintaining documentation will help communicate processes and ensure that institutional memory is captured. It will also help answer any potential questions or issues when they arise.

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