FUTUREPROOFING THE COMMUNITY SERVICE WORKFORCE

Synthesis Activity 1: Understand your data

Building Data Management Capacity

CANADIAN CENTRE FOR NONPROFIT DIGITAL RESILIENCE

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Activity Overview: Understand your data

An overview of how to understand your data and what sub-activities to expect

Activity Overview: Why understand your data?

Key Objective
This activity uses the User Story Map to create a light touch data inventory, describe the data you collect and offer guidance on how to improve data quality and data security.

Why understand your data?

Understanding your data will enable you to:

- Enhance the efficiency and quality of your processes by improving your data quality
- Reduce time spent collecting unnecessary data by understanding what data is essential to collect.
- Secure data practices and smarter decision making by understanding how your data is collected, stored, and protected.

Activity Overview: Sub-activities to expect

1.1. Build a Data Inventory

Articulate the who, what, when, where, why and how of the data being collected in the process you are analyzing by filling in a simple spreadsheet to create your Data Inventory.

1.2. Document your data access

Add a new column to the existing Data Inventory to understand who has access to your data to maintain data quality and improving collaboration

1.3. Assess your data quality

Reflect on guiding questions using the completed Data Inventory to help you assess your data quality by identifying pain points around data collection and determine if the right data is being collected

1. Understand your data sub-activities

1.1. Build a Data Inventory
1.2. Document your data access
1.3. Assess your data quality

Prepare for Synthesis Activity 1: Understand your data

Who should lead this activity?

The staff who created the User Story Map or someone familiar with the process and data collection.

Tip



Not all desired changes or pain points need immediate implementation. Awareness is important to be able to act on desired high-impact changes when possible.

What types of sub-activities to expect?

Sub-activities 1.1 and 1.2 involve creating a **simple Data Inventory** in an colour-coded Excel sheet followed by sub-activity 1.3 that involves **guiding questions** to help you reflect on your data quality.

Tip



If time is limited, simply reviewing the guiding questions can still serve as a helpful reference when assessing any organizational process. Additionally keeping the Data Inventory to the data only collected through the process can reduce the scope of this activity.



How much time to estimate for this activity?

2 to 4 hours depending on the how much data you collect throughout the User Story Map process.

1.1. Build a Data Inventory
(1/2)

What is a Data Inventory?

A Data Inventory provides instant insight into the data sources an organization has, what information these sources collect, where this data is stored and what happens to it. It can serve as a reference tool to know what kind of data your organization collects and uses for reporting, in addition to support planning for future changes. The first step is to build a simple Data Inventory to articulate the following:

WHO?

Who is responsible for collecting, managing and/or protecting the data?

WHAT?

What is the data (define it)?
What is the data type?

WHEN?

When is the data collected?
How often is it updated?

WHERE?

Where is the data stored?

WHY?

Why is the data collected, i.e. what is the data used for?

HOW?

How is the data collected, i.e. what tool is used to collect the data?

1.1. Build a Data Inventory
(2/2)

Building a Data Inventory

1. **Make a copy of the Data Inventory template.** It contains three key tabs:
   - Tab 1 - Sample Data Inventory: An example Data Inventory based on the example User Story Map
   - Tab 2 – Instructions and Definitions: Contains definitions of each column and instructions on how to use the template
   - Tab 3 – Data Inventory Template: A blank Data Inventory template of Tab 1
2. **Review the Sample Data Inventory (Tab 1)** to get a sense the information documented.
3. **Start to fill out the Data Inventory Template (Tab 3)** using the "Data" row in your User Story Map.

   Example: Socio-demographic (for example Ethnicity, Gender, Languages spoken) are collected in the Intake Form and is stored in Acme CRM
   - Ethnicity, Gender, Languages spoken would each be on an individual row under what data is being collected (Column C)
   - Each of these fields would have Intake Form for How it is collected (Column I)
   - Each of these fields would have Acme CRM to answer where is it stored (Column J)
4. **Continue to build on the data inventory** to include data points across multiple processes and to add additional columns to record additional information about your data (metadata), if desired. To keep the scope manageable, focus on the data collected through the process mapped in the User Story Map activity.

1.2. Document your data access
(1/1)

Understanding who has access to your data is crucial for keeping it safe, especially as your organization scales up and integrates more systems. Mapping out which types of users have access to which kind of data clarifies responsibilities for ongoing management, protection, and access.

Documenting your data access

1. In your existing completed Data Inventory, for each field, list out the specific users that have access to each data point (Column O).
2. Review which users have access to which data, refer to the user story map to ensure that the correct users have access to the appropriate data.

Tip



The **principle of least privilege** means granting users only the access they need to perform their jobs. Examples include:

- If someone only needs to view the files of clients in their program, they shouldn't be able to access the same data fields associated with clients in other programs.
- If someone only needs to view files, they shouldn't be able to edit or delete them as it reduces the risk of mistakes or misuse.

1.3. Assess your data quality
(1/1)

Data quality is a critical aspect of data use, especially as an input to decision making. Understanding the quality of your data allows your organization to identify pain points around data collection and determine if the right data is being collected to tell the right story. Review your data inventory and address the following guiding questions, where possible, to address some of the most common data quality challenges.

Guiding Question	Considerations
1. Are there data points being captured that don't have a purpose e.g. the Why column is empty?	• If you are collecting data, especially Personally Identifiable Information (PII), that isn't being used, consider stop the collection of it • Reducing how much data you collect can lower data entry burden, improve efficiency in data cleaning for analysis and reduce the risk of holding sensitive data that is not used for anything.
2. Are you collecting the same data in multiple places? e.g. you have two forms where all the contact info is collected	• Aim to collect your client's data once by linking the main form to autopopulate any additional form, so common fields like name, phone, or postal code are automatically transferred. • If you cannot alter the funder-managed, note which fields should be considered the source of truth, the most relevant and accurate information. This is usually the form or field that is updated more frequently. This is especially helpful in data cleaning and reporting as it helps identify which fields to prioritize and supports identifying duplicate participants.
3. Are you collecting the same data in the same way? e.g. do the dropdowns for gender match across systems	• For common data points such as gender, ensure that all options in drop-down menus match across systems. While funder requirements may limit standardization, it is best to try to align common drop-down menus across systems to help identify duplicates and simplify reporting.

These are guiding questions and considerations. You know your organization best and why the organization may need to deviate from the best practices described above.