Addressing the Digital Skills Gap in Canadian Nonprofits: Outcomes of Prototyped Solution Pilot

APRIL 2025

CANADIAN CENTRE FOR NONPROFIT DIGITAL RESILIENCE

Acknowledgments

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Project Partners

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CANADIAN CENTRE FOR NONPROFIT DIGITAL RESILIENCE

The Canadian Centre for Nonprofit Digital Resilience (CCNDR) works to create a digitally-enabled nonprofit sector, where Canada's nonprofits use data and tech to multiply their impact.

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PROJECT OVERVIEW:

Futureproofing the community service workforce

Unlocking the nonprofit sector's digital skills to strengthen community services

The nonprofit sector is the cornerstone of community services in Canada, delivering invaluable support to people in every region of the country. But as in most sectors, nonprofits are responding to rapid changes to digital technology. A digitally skilled nonprofit workforce is increasingly essential to successfully serve the evolving needs of communities.

However, there is **limited research** that assesses the current skills and future demands for the nonprofit workforce in Canada. What we do know is that there is a **growing gap** between the **digital skillsets and capacity** they have now and what they need to continue delivering services effectively.

In response, **Futureproofing the Community Service Workforce** aims to understand, and then unlock, the nonprofit workforce's facility with Digital Skills Plus (DS+). DS+ encompasses digital as well as adjacent skills often deployed with digital tools, including communication, creativity, innovation, adaptability and problem-solving skills. With funding from Employment and Social Development Canada (ESDC)'s *Skills for Success* program, the project is driven by a consortium of organizations with expertise in nonprofit capacity building and the digital skills economy.

The project has **four strategic phases** and **three objectives**.

Phases

1. understanding the current supply and future demand for DS+;
2. analyzing the gaps in supply versus demand for DS+;
3. co-designing and rapidly testing solutions to close this gap; and
4. creating a scalable DS+ talent model.

Objectives

- Build the evidence base on DS+ needs to inform the nonprofit sector's training and talent strategies and enhance the sector's ability to articulate and close the most pressing skill gaps.

- Use this research to test a prototype of a scalable DS+ upskilling model that equips the nonprofit workforce with practical, tailored training to build digital competencies and foster continuous learning.

- Mobilize findings and learnings via public reports, research briefs, and recommendations.

Who We Are

Futureproofing the Community Service Workforce is led by a partnership between Imagine Canada, The Dais at Toronto Metropolitan University, the Digital Governance Council (DGC) and Blueprint. See below for a more detailed description of partners. The Canadian Centre for Nonprofit Digital Resilience (CCNDR) provides a platform to share information about this project at https://futureproof.ccndr.ca/.

Partners

Imagine Canada. Imagine Canada is a national, bilingual, charitable organization with a mission to strengthen and support Canadian charities and nonprofits so they may better serve and engage individuals and communities, here and around the world. Imagine Canada i) develops and delivers products and services that help charities and nonprofits operate at the highest level of governance and deliver the highest quality programs; ii) creates and mobilizes data, information, research and knowledge that help charities and nonprofits make wise decisions; iii) develops and advocates for public policies that assist charities and nonprofits; and iv) works to improve Canadians' understanding and perceptions of the charitable and nonprofit sector and its contributions to our quality of life.

The Dais. The Dais is a public policy and leadership think tank at Toronto Metropolitan University (TMU), connecting people to the ideas and power needed to build a more inclusive, innovative, prosperous Canada. Since 2015, its team has worked across Canada and internationally to develop new ideas and better leaders, resulting in measurable change in economic, education and technology policy and for thousands of people whose lives have been changed

through their leadership programs. From its home at TMU, the Dais has direct access to scholars, students, entrepreneurs, leaders and networks who can develop new ideas and challenge old assumptions with national and global reach.

Digital Governance Council. The Digital Governance Council is a member-driven organization that acts as a cross-sector neutral convener for Canada's executive leaders to identify, prioritize and act on digital governance opportunities and challenges. The Council leads an Executive Forum for council members, sets technology governance standards through the Digital Governance Standards Institute and certifies the compliance of Canadian organizations in the management of the effective and efficient use of digital technologies. To learn more about the organization and its initiatives, visit **www.dgc-cgn.org** or contact **info@dgc-cgn.org**.

The Canadian Centre for Nonprofit Digital Resilience (CCNDR). CCNDR supports a digitally enabled nonprofit sector, where Canada's diverse nonprofits use data and tech to advance their mission and multiply their impact. It galvanizes people and mobilizes funding to support impactful initiatives; convenes diverse experts across sectors; and prioritizes ideas that can make a broad impact and deliver real progress.

Blueprint. Blueprint is a non-profit, mission-driven research organization dedicated to improving the social and economic well-being of Canadians by helping its clients solve complex public policy challenges. Blueprint works with all levels of government, foundations and nonprofits and socially conscious businesses to design and execute strategies to foster innovation, learn what works and deliver evidence-informed solutions to our most pressing social and economic issues.

Executive summary

This report presents insights from the final phase of the *Futureproofing the Community Service Workforce* project, led by Imagine Canada, The Dais at TMU, the Digital Governance Council, the Canadian Centre for Nonprofit Digital Resilience, and Blueprint. Earlier phases studied the size and composition of the Canadian nonprofit sector, its demand for Digital Skills Plus (DS+), and the nature of its digital skills gap to identify challenges. Early phases also led to the creation of four prototype options proposed to help close the digital skills gap. In this phase, and with input from our design partners, we selected a DS+ talent model then tested it for accessibility, efficacy, and scalability.

Exploratory prototype workshops

Based on our research, we knew our model had to be flexible to support a wide range of nonprofits; empower leaders through targeted tools and resources; focus on core data skills (privacy, security, management, and decision-making); enable tailored approaches to match nonprofits to resources; be accessible, low-cost, and user-friendly; and address upstream challenges to articulate skill gaps and identify funding opportunities.

We incorporated these considerations into four potential prototypes, discussed in detail in our report, *Addressing the Digital Skills Gap in Canadian Nonprofits: Designing Options for Solutions*. Our eight design partners then offered feedback on prototype goals, novelty, feasibility, and beyond. This led to the selection of a prototype that combined elements of various options, designed to help nonprofits gain critical knowledge and skills to improve processes, target upskilling efforts, and increase their capacity to make decisions about data.

Our chosen prototype

Our prototype provides a self-guided toolkit designed to help organizations take a practical, hands-on approach to improving their data processes. It is

applied to one specific process involving data collection at a time, such as client intake; it can then be reapplied for other processes across the organization. It is structured around the following interconnected activities:

- First, nonprofits complete a user story map providing a visual representation of the selected process broken down into steps. For each, users identify roles involved, data captured, and tools used, allowing them to capture a complete 'map' of their workflows.

- Next, users complete three 'synthesis' activities designed to help them understand their data, assess their process, and identify their skill needs:

    1. The first deploys a data inventory exercise and self-assessment to observe the data collected and analyze quality, uncover gaps, and assess security practices.
    2. The second has users focus on process—a review of efficiency, effectiveness, and uniform application—to identify opportunities for streamlining and automation.
    3. Third, users identify skills required for each staff role involved using a digital skill matrix and guiding questions. This helps users assess staff skills, identify upskilling opportunities, and create a plan.

Prototype testing

To help inform process improvements, seven design partners tested our selected prototype over a period of eight weeks, exploring its accessibility, efficacy, and scalability. After an onboarding meeting to clarify expectations, we gathered their perspectives via two surveys and through in-depth interviews.

On accessibility

Most partners agreed that the step-by-step guidance was clear and easy to follow and that they understood each outcome. Partners appreciated the illustrated examples, templates, user story map, and data inventory, which broke up text-based explanations and contextualized tasks.

Not all partners completed all activities due to competing priorities and limited capacity. Some felt the prototype would be time-consuming to complete, which acted as a barrier to engagement. Once started, some partners encountered

early difficulties with the amount of information, though these were alleviated by time. Partners recommended breaking up text with separate files, checklists, and visual elements; uploading materials to centralized accessible locations; and providing digital components in more accessible formats.

On efficacy

All partners reported learning something new and useful, finding the user story map intuitive and effective and the digital skills matrix applicable for hiring and onboarding. Most thought the experience was a valuable use of their time. While some did not understand the purpose of the data inventory, others found it highly useful.

All partners who completed the prototype noted it helped them gain a better understanding of their data—the kind and format collected, whether the data was important or superfluous, and whether the data were captured and shared securely, consistently, and efficiently. The prototype revealed pain points in data collection and management and helped users identify the data they needed to capture.

All partners felt the prototype made them more confident to tackle data-related problems, demystifying the process to help them consolidate and streamline data collection and quality. Most agreed that they developed a better understanding of the digital skills needed at their organization and could better assess comfort among staff. In some cases, this contributed to targeted capacity building initiatives, skill development plans, and plans to update hiring and onboarding processes.

On scalability

Organizations with varying levels of baseline comfort with data management were able to complete prototype activities with little external support. The use of Word and Excel ensured it was straightforward to distribute and adapt across organizations. Partners were able to apply it to a variety of processes—HR workflows, intake procedures, program implementation, and IT support. Most would recommend the prototype to other organizations in similar situations.

Accessibility refinements—light-touch guidance through video explainers, additional examples, onboarding resources, etc.—could improve the learning curve and ensure greater applicability.

What's next?

This final project phase provided us with insights from real-world testing of our DS+-informed prototype, demonstrating a strong potential to enhance nonprofits' ability to navigate and use their data more effectively. By continuing to refine solutions, the sector can work towards bridging the digital skills gap and ensure that nonprofits are equipped to thrive in an increasingly data-driven world. Our *Final Report* (coming in Summer 2025) will provide further recommendations on potential prototypes and policy directions to help bridge the digital skills gap in the nonprofit sector.

Introduction

This report presents insights from **Phase 4**—the final phase of the *Futureproofing the Community Service Workforce* project—designed to create and test a prototype for a scalable DS+ talent model.

In **Phases 1 and 2**, we conducted research to understand the nonprofit digital skills landscape:

- We used 2021 Census data to understand the size and composition of the nonprofit sector's workforce, including the proportion of 'tech workers,' in *Canada's Nonprofit Tech Workforce* (July 2024).
- We analyzed 2023 job posts to assess the demand for DS+ in nonprofit roles in *The Demand for Digital Skills in Canada's Nonprofit Sector* (July 2024).
- We explored the nature of digital skill gaps in Canadian non-profits in *Assessing the Digital Skills Gap in Canadian Nonprofits* (October 2024) through an environmental scan, a sector-wide survey, and interviews and focus groups with nonprofit staff.
  - Challenges included limited access to funding, fragmented training opportunities, and critical skill gaps in data privacy, data-driven decision-making, and digital leadership.

In **Phase 3**, we built on these findings to create four prototype options to help close the digital skills gap, described in *Addressing the Digital Skills Gap in Canadian Nonprofits: Designing Options for Solutions* (January 2025).

Now, in **Phase 4**, we selected and tested a DS+ talent model proposed as a viable solution, gathering feedback from our partners on the prototype's accessibility, usefulness, and scalability. This report describes these findings in four sections:

1. **Prototype selection and development (pp. 13–17)** summarizes our research insights, our four prototype proposals, our partners' feedback, and the selection process.
2. **The prototype: Building data management capacity (pp. 18–20)** discusses the fully developed prototype.
3. **Prototype testing: Key findings (pp. 21–30)** describes results from the prototype's piloting stage.
4. **Conclusions (p. 31)** summarizes insights from the process and looks ahead.

Prototype selection and development

Key considerations from research

Research during the first phases included an analysis of job postings, a sector-wide survey, an environmental scan of existing resources, consultations with our design partners, and conversations with experts in the sector. Based on this work, we determined that our prototype should:

- **Offer flexibility** to support nonprofits of varying sizes and levels of digital development and facing a diverse range of challenges.
- **Empower leaders** by including tools and resources to strengthen leadership skills and ensure they can champion digital transformation.
- **Focus on core data skills** for data privacy, security, management, and decision-making.
- **Enable tailored approaches,** going beyond structured training modules by matching nonprofits to resources and training tailored to their unique needs.
- **Be accessible, low-cost, and user-friendly** to reduce resource constraints.
- **Address upstream challenges**, such as articulating skill gaps and identifying relevant funding opportunities.

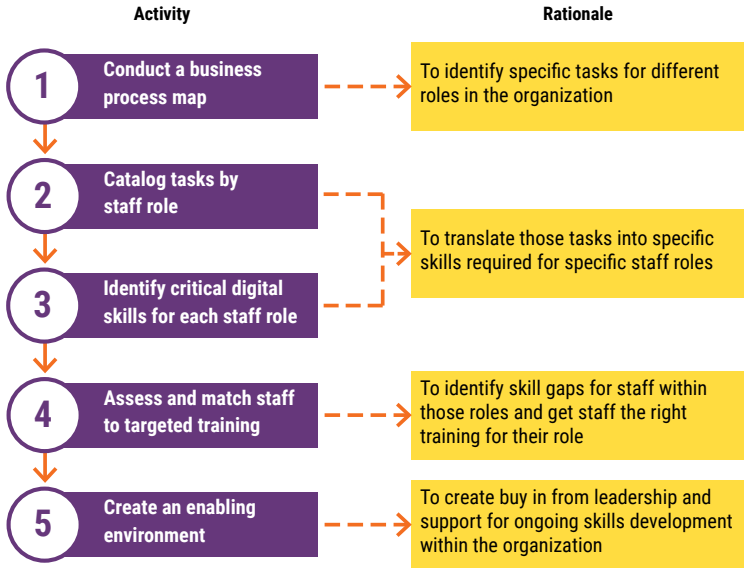
Designing potential prototypes

We incorporated these six considerations into our potential prototypes, which were submitted to our design partners for consideration. For more information about this creation process, see *Addressing the Digital Skills Gap in Canadian Nonprofits: Designing Options for Solutions* (January 2025).

Prototype 1: Identifying digital skill needs across roles

This prototype was designed to address the absence of tools that help nonprofits map organizational processes to specific skill requirements. **Figure 1** summarizes the activities and rationale for Prototype 1.

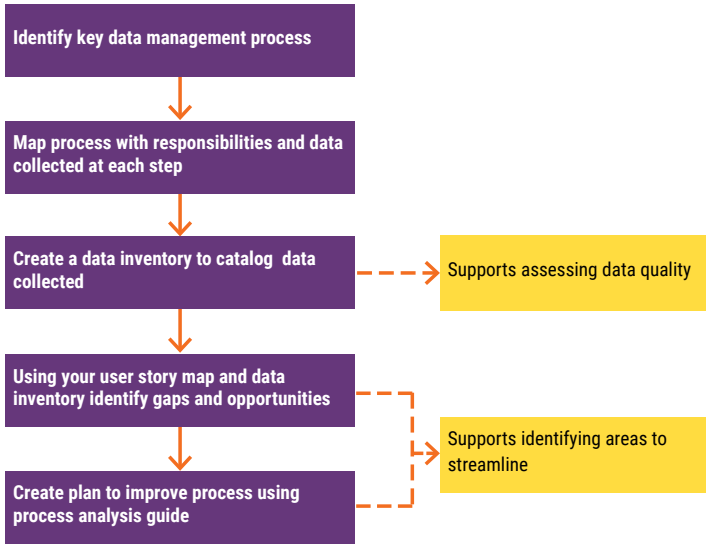
Figure 1: Prototype 1 activities and rationale



Prototype 2: Improving data management practices and processes

This prototype would address the most significant gap for Canadian nonprofits: data management skills. **Figure 2** offers a visual map of the key steps for Prototype 2.

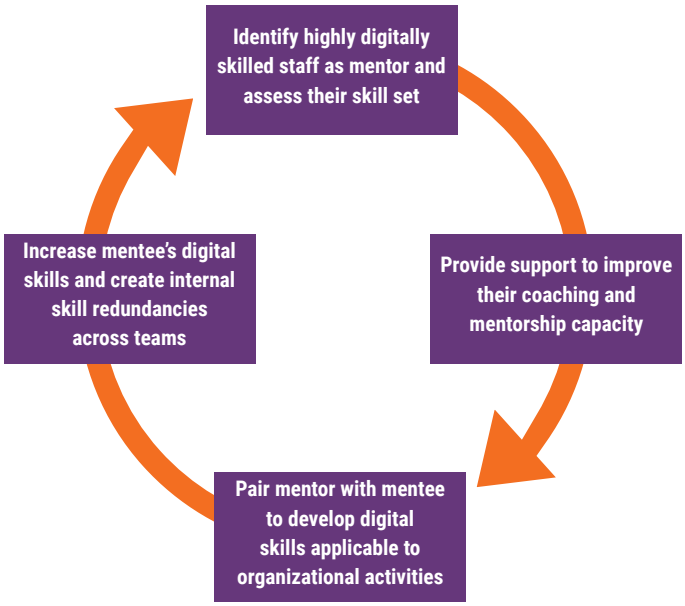
Figure 2: Prototype 2 process steps



Prototype 3: Empowering highly skilled staff to mentor

This prototype would address the needs of "accidental techies": staff who acquire digital skills independently and informally support their colleagues but typically lack structured support or tools to scale their impact. **Figure 3** depicts Prototype 3 activities as a cyclical training process.

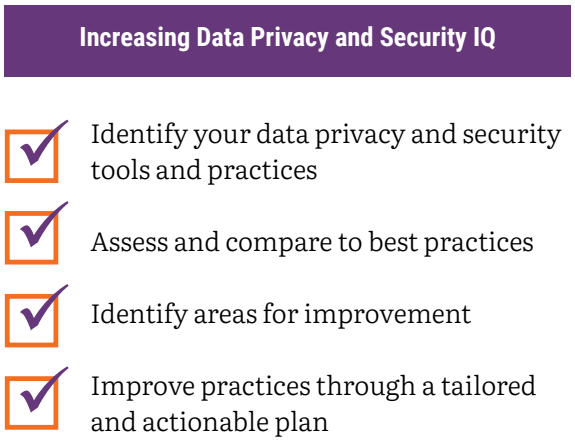
Figure 3: Prototype 3 training process



Prototype 4: Increasing data privacy and security IQ

This prototype would help equip nonprofits with the tools needed to assess and improve their data privacy and security practices and awareness of these areas. **Figure 4** illustrates the four core steps of Prototype 4.

Figure 4: Prototype 4 key steps



Choosing our prototype

We discussed these four prototypes through exploratory workshops with our eight design partners. Workshops helped determine which options addressed the most urgent sectoral needs and which felt most feasible to implement. Specifically, we solicited feedback on:

- the priority level of the prototypes' goals;
- the novelty of the prototypes' proposed tools;
- our partners' perceived ability to implement the prototype in six to eight weeks;
- other concerns or criticisms; and
- their preferred prototype(s).

Overall, we received positive feedback about each option. Partners expressed excitement about most of the designs and noted they addressed challenges they were facing within their organizations. **Table 1** summarizes the feedback we received about each option.

Table 1: Feedback from partners on prototype options

Prototype 1: Identifying digital skills needs	**Prototype 2: Improving data management**
This prototype was met with high levels of enthusiasm and was the first choice for several participants. The struggle to identify correct trainings for staff based on their roles resonated strongly. Our partners wanted to learn more about their data needs as an organization and their employees' current skills levels.	This prototype was also met with high levels of enthusiasm; partners understood the importance of aligning data governance structures with organizational needs and best practices. Some preferred this prototype, feeling the user story map would be easy to use. They noted a high priority around learning how to better leverage data and improve data management processes.
Prototype 3: Empowering highly skilled staff	**Prototype 4: Increasing data privacy and security IQ**
The challenges this prototype articulated resonated with most partners; some felt it had the potential to address an important sector gap. However, others were concerned that incorporating the expertise of 'accidental techies' could result in undercompensated labour.	This prototype elicited mixed reactions. Some partners felt it met a genuine need in their organization. Others felt that it was less relevant to them as they already had specific employees or external contractors who managed privacy within their organizations.

After considering feedback, we concluded that:

- **Prototypes 1 and 2** were likely to address important challenges faced by our partners.

- While our partners recognized the challenges articulated by **Prototype 3**, the solution to empower 'accidental techies' did not resonate strongly. Structural solutions may be needed to address the problem to ensure that 'accidental techies' are properly supported, trained, and compensated.

- **Prototype 4** would not be universally relevant to all engaged.

In response, and to meet partner preferences, we developed a prototype that combined elements of **Prototype 1: Identifying digital skills across roles** and **Prototype 2: Improving data management practices and processes** (the two most well-received). We also incorporated some elements of **Prototype 4: Building data privacy** to respond to the needs of those who did not have staff dedicated to data security and privacy.

The prototype: Building data management capacity

Our chosen prototype focuses on meeting critical gaps in data management capacity, skills, and knowledge among nonprofits. It provides a self-guided toolkit designed to help them take a practical, hands-on approach to improving their data processes. Through structured, interconnected exercises, nonprofits refine one key process at a time, beginning with the creation of a user story map and progressing through synthesis activities that focus on understanding data, assessing processes, and identifying skill needs. In summary, the prototype helps nonprofits:

- Build digital skills through practical exercises and experience.
- Gain a deeper understanding of their data and processes.
- Identify the skills needed for specific staff roles to participate in key processes.

By improving in these areas, the prototype is designed to:

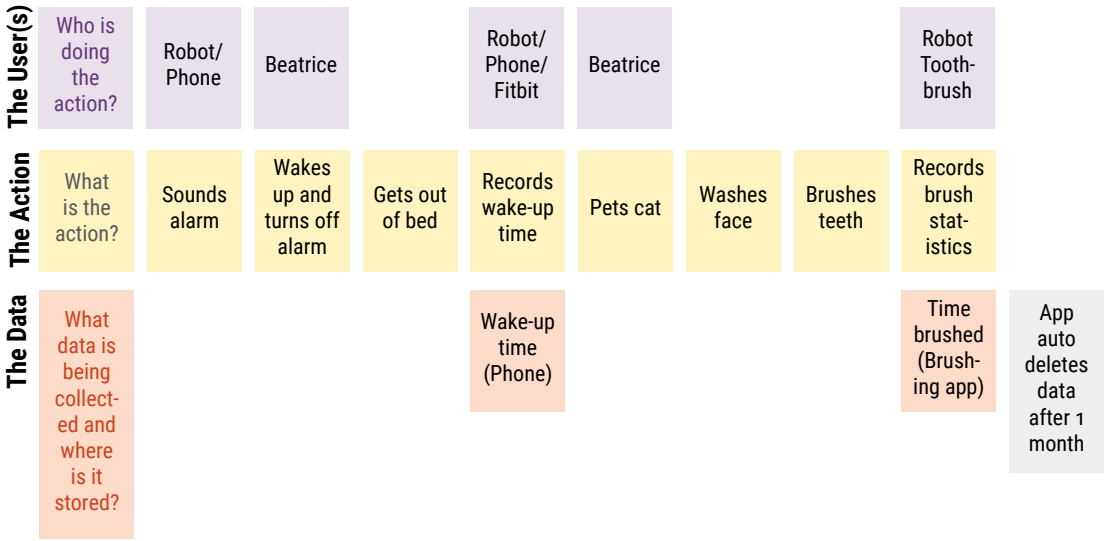
- Increase confidence and capacity to make decisions around data and data management.
- Improve capacity to improve processes to increase efficiency and data quality.
- Provide targeted skills development and knowledge to support training for specific roles.

The prototype is designed to be applied to a specific process that involves data collection, such as client intake or collecting outcomes from program activities. Once users choose a process and apply the tools and activities provided, the prototype can be reapplied for other processes across the organization—all to improve their capacity to make decisions about their data, refine their processes, and target their upskilling efforts.

1. User story mapping

The starting point is the creation of a user story map, which provides a visual representation of the selected process broken down into sequential steps. For each step, users identify roles involved, data being captured, and any tools used. The user story map is estimated to take three hours to complete. The resulting map allows them to capture a complete picture of their workflows and serves as the basis for subsequent prototype activities. **Figure 5** provides an example of a user story map, demonstrating a morning routine for a character.

Figure 5: User story map example



2. Synthesis activities

Users then perform three synthesis activities based on the process charted in the user story map. These activities help them gain further insights and build practical skills to understand their data, assess their processes, and identify their skills needs. Each set of activities is estimated to take two to five hours to complete.

a. **Understand your data.** In this set of activities, users take a closer look at the data collected during the chosen process to review data quality, uncover gaps, and assess security practices. Specifically, users complete three activities:
   - a data inventory exercise via a structured template, helping them document what data are collected, where they are stored, and who has access to them;
   - a data quality self-assessment, answering guiding questions

prompting users to spot inconsistencies, redundancies, and missing information; and

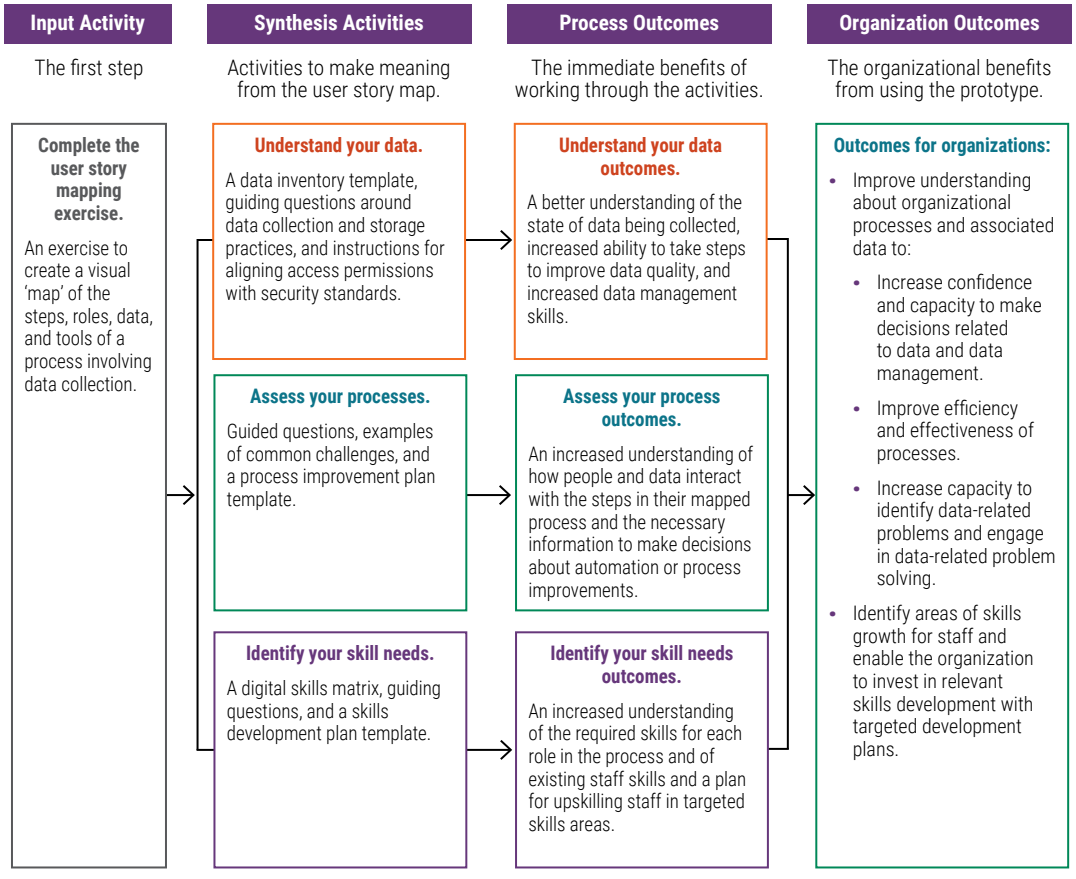
- a security self-assessment, answering guiding questions prompting users to examine where their data are stored and how permissions are managed, ensuring alignment with best practices.

b. **Assess your process.** Here, users focus on evaluating the efficiency, effectiveness, and uniform application of the mapped process across the organization. Through a series of guided questions, participants self-assess the process and identify opportunities for streamlining, automation, or process reordering. Users document these opportunities for change in a process improvement plan template.

c. **Identify your skill needs.** In this final synthesis activity, users identify which skills are required for each staff role involved in the mapped process. Users then group these tasks into different skills areas for targeted training using a digital skills matrix informed by our Digital Skills Plus (DS+) Framework. Finally, users answer guided questions to assess existing staff skills, identify opportunities for upskilling, and create a plan.

Figure 6 provides a visual depiction of prototype inputs, activities, and outcomes.

Figure 6: Building data management capacity



Testing the prototype

Over eight weeks in fall 2024 and winter 2025, we set out to test this prototype with eight design partners to assess whether it effectively reached these goals in a clear, efficient, and scalable way. Insights from this process informed improvements to the prototype and enhanced our understanding of best practices for developing solutions to address the digital skills gap. Our design partners were:

- CUPS Calgary (Calgary, AB)
- Head and Hands (Montreal, QC)
- Inclusion NB (Fredericton, NB)
- Malvern Family Resource Centre (Scarborough, ON)
- Skills for Change Metro Toronto (Toronto, ON)
- Women's Economic Council (Toronto, ON)
- YMCA/YWCA Winnipeg (Winnipeg, MB)
- Yukon Learn (Whitehorse, YK)

Research questions and methodology

We posed the following questions:

1. **Was the prototype accessible?**
   - Were the instructions clear and accessible? Was the prototype easy to use?

2. **Was the prototype effective?**
   - Did our partners feel the prototype was useful overall?
   - Did the prototype help them increase their understanding of organizational data, increase their confidence with data-related processes, and identify key digital skills within their organizations?

3. **Can the prototype be scaled easily?**

We solicited feedback through the following:

- **Pre-pilot survey:** to assess our partners' confidence in data management and collection processes *before* using the prototype.
- **Post-pilot survey:** a survey after the pilot to gather feedback on prototype usage, perceived effectiveness, and improvements in targeted digital skills.
- **Feedback interviews:** in-depth discussions to explore partner experiences implementing the prototype and to gather suggestions for future enhancements.

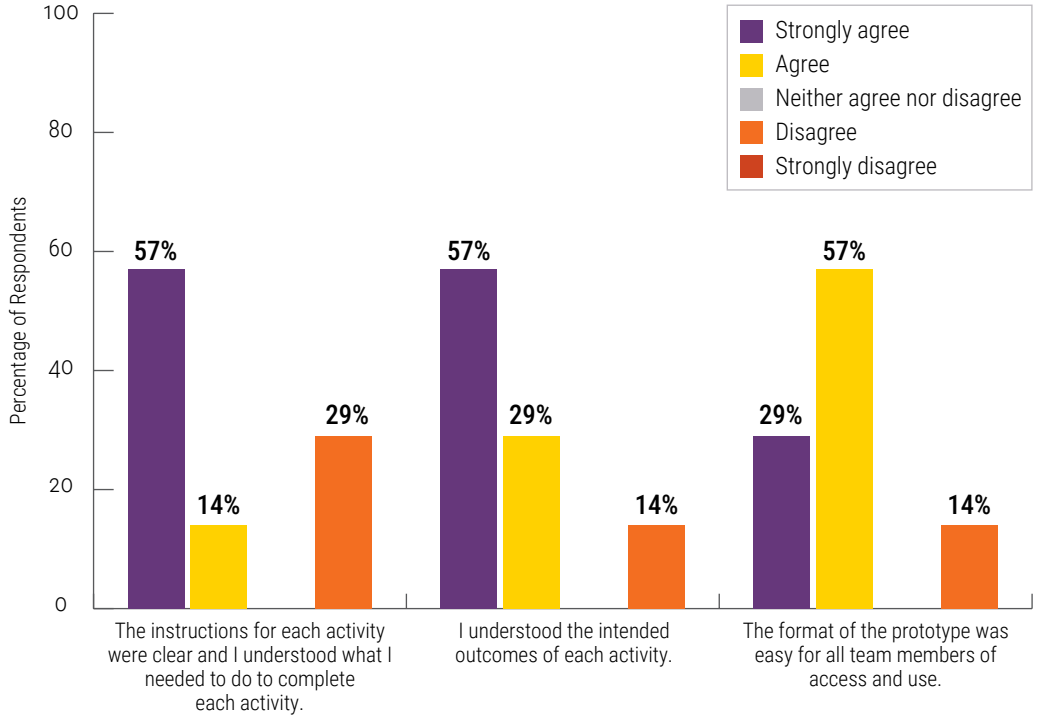
We also conducted an onboarding meeting with each partner to introduce the prototype's components and our evaluation strategy and clarify expectations. Of our eight partner organizations, seven attempted the prototype. The eighth partner was unable to participate due to unexpected organizational-wide changes, including a change in leadership.

Key findings

Accessibility

Respondents replied to a series of prompts about prototype accessibility in our post-pilot survey. Results are detailed in **Figure 7** and findings are discussed below.

Figure 7: Design partner responses to prompts about prototype accessibility (n=7)



Source: post-pilot survey

Were the instructions clear and accessible?

Most survey respondents (**71%**) agreed that the prototype's instructions were clear and easy to follow. In interviews, most partners mentioned feeling initially overwhelmed by the amount of information and text in the prototype. This became more manageable with time and a closer review. Interviewees shared that the step-by-step guidance proved beneficial, and the level of detail helped them feel they were being guided through each activity. As one interviewee remarked :

> *"[Once I looked at the instructions] … I just, you know—I get it. I get why it's so long now. [I realized] I'm just basically going to follow these steps and then we're going to do it together."*—Design partner interview

Did organizations understand the intended outcomes of each activity?

Eighty-six percent of survey respondents agreed that they understood each outcome. Five described understanding these expectations as they worked through the prototype. Two expressed uncertainty about whether they were completing activities as intended, indicating a potential to further clarify expectations. One of these organizations described their experience as such:

> *"It was very detailed … there was never a task that I was like, 'oh, I don't know what the goal of this is.' I like the way it was laid out to be like, this is what we're doing. This is what you're gonna end up getting out of that. This is how you do it. You know, I think that's a really, really helpful way to do it."*
> —Design partner interview

Was the format easy for all team members to access and use?

Overall, **86%** agreed that the format of the prototype was easy to use and access. Interviewees noted their appreciation of illustrated examples and templates, explaining these techniques broke up dense, text-based explanations and helped contextualize tasks to facilitate understanding. Respondents felt the user story map was the easiest component to use thanks to clear, illustrated examples. The data inventory, provided in Excel, was also well received for its simplicity and ease of use.

Despite positive feedback on usability, completion rates were low.

During onboarding, we explained that organizations should ideally complete all prototype sections. However, only two organizations completed all activities and another two completed three of four. Three completed half or fewer of the activities. While organizations felt that the estimated time required to complete the prototype was reasonable, competing priorities, staff turnover, and limited capacity were cited as reasons for incomplete engagement, particularly for smaller organizations.

> *"For smaller organizations, I think it is … difficult to put time into something, even if it'll save us time later, because you have to have an investment mindset of like, 'I'm going to put time in now and this is helpful and useful.' … The most urgent thing is always going to get the most attention in grassroots organizations."*—Design partner interview

Some respondents worried the prototype would be time-consuming to complete, which acted as a barrier to getting started. Though these concerns diminished as partners engaged more deeply with the work, that initial apprehension sometimes acted as a barrier to setting aside the time and capacity.

> *"[Our] initial reaction was, 'My God, this is going to be so much work,' as it is very detailed."*—Design partner interview

> *"Our initial thought was just about our capacity. Obviously, our resources are limited, but at the same time, we know how important it is. But at first, it was … overwhelming … just based on our limited capacity."*—Design partner interview

Suggestions for improving accessibility and engagement.

The prototype was presented in one document with embedded links to templates. A recurring recommendation was to restructure the information to make it less dense by providing separate files for instructions and assignments and a separate checklist or table of contents. Partners suggested separating materials and uploading them to a single accessible location, such as Google Drive or SharePoint. Providing a guide that helps organizations with limited time choose key activities to complete could also help encourage engagement without overwhelming users.

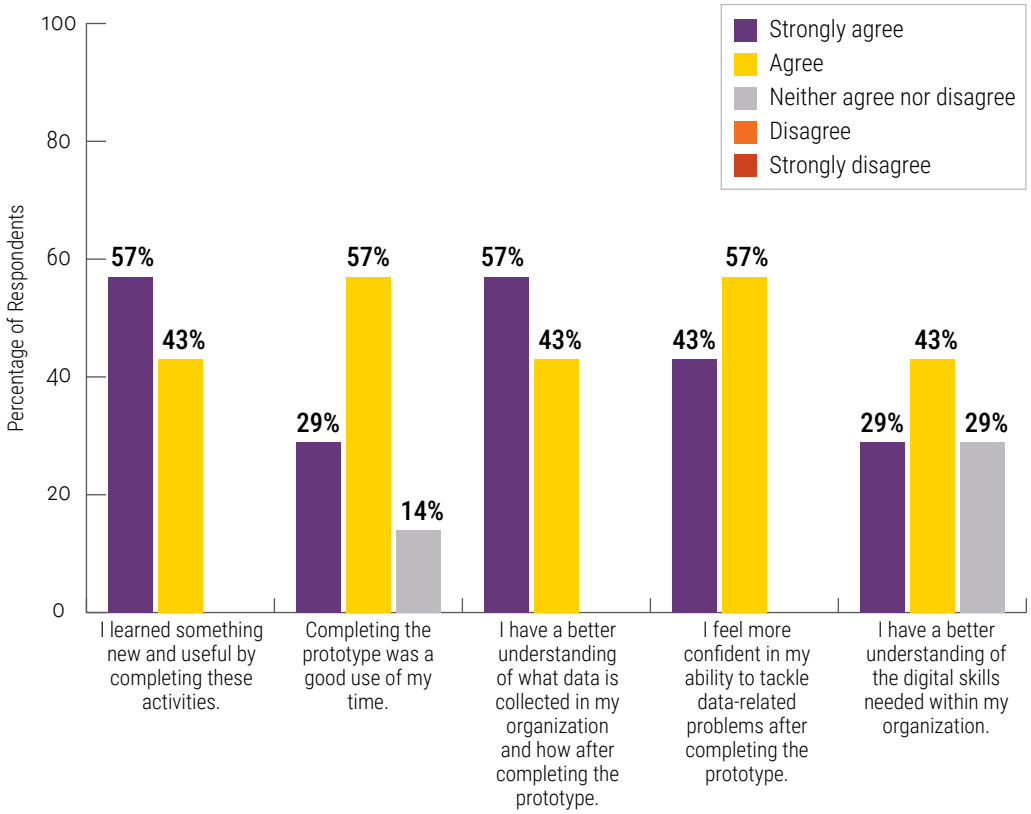
Organizations also recommended increasing the use of visual elements and examples to reduce text density. This could include digital versions with

interactive components and templates in more accessible formats, like PowerPoint. Some suggested adding a video component to explain key concepts and cater to different learning styles.

Efficacy

Post-pilot survey respondents also replied to a series of prompts about prototype efficacy. Results are detailed in **Figure 8** and findings are discussed below.

Figure 8: Design partner responses to prompts about prototype efficacy (n=7)



Source: post-pilot survey

Did our partners feel the prototype was useful overall?

Results from the survey show a high level of perceived utility:

- **100%** of respondents agreed that the activities helped them learn something new and useful;
- **86%** agreed that completing the prototype was a good use of their time;

- **86%** plan to use some of the prototype tools to continue to build data management capacity in their organization; and

- in an interview, the one organization that responded "neither agree nor disagree" to these statements explained that they found the prototype useful but faced other competing and more urgent priorities.

In the survey, all organizations that completed at least part of the prototype reported learning something new and useful. All shared positive feedback in interviews, including organizations that completed only half or less of the prototype. Despite their limited engagement, these organizations still found it valuable to think about their organizations' data skills. This finding suggests that even a small amount of guidance can be helpful to nonprofits that do not regularly focus on data skills.

> *"[This experience] has been truly positive and eye-opening. Data management has always been a concern for me, not just in terms of managing the data itself, but also in getting the team to understand their skills, how they fit into the structure, and how they can contribute to managing data. This tool has been great in helping us think about these challenges in a more systemic way, ultimately leading to creative solutions that not only address the issue but also raise awareness among the team about their own skills."*—Design partner interview

Organizations also shared which tools they found to be the most helpful:

- In interviews, all participants who completed the user story map found it beneficial. Many found it intuitive and felt it helped them understand their data better without requiring much effort. One organization thought it was an effective team-building activity.

- While fewer organizations completed the digital skills matrix, most believed it had significant applicability for future processes, such as hiring and onboarding staff.

- Roughly half the organizations found the data inventory tool highly useful; others stated that they did not understand its purpose.

Did the prototype help organizations increase their understanding of organizational data?

In the survey, **100%** of organizations that completed the prototype agreed that it helped them gain a better understanding of their data. In interviews,

respondents described instances of gaining a better understanding of the kind and format of data they were collecting, whether it was shared securely, and whether staff members were collecting and storing it consistently across the organization. They also described how the prototype helped identify pain points in their data collection and management practices. Multiple organizations identified issues with how data were being collected and managed and opportunities to collect data differently:

- While completing the user story map, one organization discovered they were capturing superfluous data about their clients that funders previously required but no longer needed.

- One organization explained that the prototype helped them identify data that was being collected in inconsistent formats across the organization.

- One organization shared that after completing the prototype, they realized that data was being shared internally via email and should instead be shared more securely.

- After the synthesis activities, one organization noted that the data inventory helped them better articulate the data they needed to capture to tell the stories they wanted to tell.

  "[It] was interesting to look at how many times we're collecting the same data over and over again and don't really need to and [...] the quality of that data and [...] where that data lives and why. Something I think was super useful was thinking through a process step by step and looking at every actor within it."—Design partner interview

Participants also shared concrete examples of changes made to their data management processes:

- One organization planned to find ways to avoid collecting the same client data multiple times.

- One organization explored implementing guidelines to ensure data were captured consistently.

- Several were revisiting what data they collected to ensure they were only collecting the data they actually needed.

Did the prototype help organizations increase their confidence with data-related processes?

Among survey respondents, **100%** agreed that they felt more confident in their ability to tackle data-related problems. Prior to using the prototype, only two organizations felt confident in their ability to address data-related challenges. Both those who started out feeling confident and those who did not agreed that their confidence increased after using the prototype, suggesting that it has the potential to be effective in increasing data literacy in a broad range of contexts.

Staff at nonprofits gained practical experience addressing data-related issues and shared examples of how prototype activities helped them consolidate and streamline data collection and improve their data quality. Organizations were able to practice approaching data challenges methodically, using the tools and frameworks provided to demystify data management. Participants shared that this helped make data management tasks feel more manageable.

> *"I definitely have a better understanding of the data landscape of my organization. I think it's a good way to concretize something that is really difficult to understand. [It helped me think] through the variety of different places and ways in which we store our data. It definitely helped me understand what data is, where it is, and why we're using it."*—Design partner interview

Did the prototype help organizations identify key digital skills within their organization?

Among respondents, **71%** agreed that they had a better understanding of the digital skills needed within their organization after completing the prototype. In interviews, organizations shared that the digital skills matrix helped them identify which skills were needed to perform which tasks. Prototype activities helped them assess current levels of comfort among staff with several positive effects:

- For some, it helped identify existing skills gaps and plan targeted capacity-building initiatives.

  > *"From a managerial perspective, it's helpful to have documentation that helps us speak to staff about what they may need for training and that gives you some sort of a guide."*—Design partner interview

- Organizations shared that they would use the digital skills matrix to help staff decide which digital skills to develop, depending on the needs of their role.

  "The matrix is good … we'll be referencing it to figure out if we have the right skills for each role."—Design partner interview

- Others used it to inform company-wide initiatives. For example, one explained that going through the prototypes' activities with their staff revealed that employees were reverting to phased-out software instead of using new data management systems due to a lack of familiarity and comfort with the new technology. As a result, they plan to implement monthly sessions to help familiarize staff with the new systems.

- Since the matrix helped associate specific digital skills with specific staff roles, many organizations felt it would help inform hiring and onboarding processes. In interviews, most organizations discussed onboarding as a key potential use for the digital skills matrix.

Scalability

Implementing the prototype required little external guidance.

Organizations with varying levels of baseline comfort with data management engaged with the prototype's activities and completed them independently. Only one organization reached out with a clarifying question. While most participants were able to work through the prototype on their own, some found the initial experience overwhelming. This feedback suggests that some refinements could further enhance accessibility and ease of use. Some organizations expressed that light-touch guidance—such as short explainer videos, additional examples, or an onboarding resource—could help reduce the learning curve. Others noted that clearer signposting within the prototype could make it easier to follow without feeling overloaded.

Minor refinements to improve accessibility and usability such as the ones discussed above could ensure the prototype was widely shared and implemented while still maintaining its scalability.

The prototype is presented in a highly scalable format.

Since it was built using widely available Microsoft tools such as Word and Excel, the prototype was straightforward to distribute and adapt across different organizations. Format flexibility ensures organizations with varying levels of digital proficiency can access and use it without requiring specialized software.

Exercise versatility further supports scalability.

Organizations successfully applied the prototype to map a variety of processes, including HR workflows, intake procedures, program implementation processes, and IT support systems. This adaptability suggests that the prototype can be used across different operational areas, making it relevant for a diverse range of organizations. Moreover, the organizations that found it useful were those starting at varying baseline levels of comfort and confidence with their data. This suggests that the prototype has widespread applicability among non-profits of varying degrees of data literacy.

Organizations expressed interest in recommending the prototype to others.

In the post-pilot survey, participants were asked to rate how likely they were to recommend the prototype to other organizations seeking to enhance their data capacity skills on a scale of one to 10. One organization rated their likelihood 7 and the remaining participants gave ratings of either 8 or 9. This finding implies solid potential for broader adoption.

Conclusions

This fourth and final phase of the *Futureproofing the Community Service Workforce* project provides us with insights from real-world testing of our DS+-informed prototype. While based on a small sample size, the prototype demonstrates a strong potential to enhance nonprofits' ability to navigate and utilize their data more effectively.

- **Most users found the instructions and activities accessible and intuitive.** Minor refinements—clearer navigation cues, different formatting, and additional visual components—could further improve usability.

- While many organizations struggled to complete the prototype in its entirety, **all organizations said they gained value**. Partners used the prototype to break down processes, assess data, and identify skill gaps, finding it a valuable use of their time.

- The prototype was implemented with limited external support, making it **a scalable solution for the sector.** Its success demonstrates that nonprofits can benefit from structured, adaptable tools that provide clear guidance on developing digital skills. This positive reception suggests that the prototype can serve as a model for future initiatives aimed at strengthening the nonprofit workforce's digital capabilities.

By continuing to refine and scale solutions such as this, the sector can work towards bridging the digital skills gap and ensuring that nonprofit organizations are equipped to thrive in an increasingly data-driven world. This aligns with the project's core objective: building the evidence base on DS+ needs to inform the nonprofit sector's training and talent strategies.

Our ***Final Report*** (coming in Summer 2025) will situate this prototype in the context of larger, sector-wide challenges. We will explore limitations during testing, such as how to support different types, sizes, and compositions of nonprofits, with a special focus on assisting smaller organizations—those with limited capacity, budget, and timelines—in adopting new digital capacity tools. We will continue to provide further recommendations on policy directions to help empower nonprofits with the resources and capacity necessary to upskill their digital capacity and with prototypes that can help them bridge the digital skills gaps in the sector.

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