
TRANSFORMING TECHNOLOGY PRO BONO

A CUSTOMER-CENTRIC APPROACH TO
EFFECTIVE TECHNOLOGY PRO BONO

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In 2017, the Taproot Foundation and VMware Foundation collaborated to explore how we can better address social sector needs with pro bono technical talent. Through *Transforming Technology Pro Bono*, we introduced the Solution Development Framework, a customer-centric approach to Discover, Design, Implement, and Maintain successful tech pro bono projects.

In the following 2018 supplement, we delved into Discover and Design, providing practical tools and insights into these two critical phases. In this compilation, we dive into the remaining two phases — Implement and Maintain — and bring all the resources together into one guide.

Since we started this research, the median technology budget for nonprofit organizations has more than doubled to 5.7% of an organization's total operating budget.¹ Simultaneously, nonprofits continue to report not feeling confident they have enough skilled staff or training to effectively use technology. Since most nonprofits operate with limited funds and a lean staff they do not have the luxury of trying new technology that may not ultimately meet their needs.

We believe that tech pro bono can be a key capacity-building resource for the social sector. Our intent remains to provide practical resources that pro bono consultants and nonprofit staff can use to maximize the impact of technology by ensuring that technical solutions are useful and sustainable.

Taproot Foundation
taprootfoundation.org

VMware Foundation
vmware.com/company/foundation

CUSTOMER-CENTRIC MINDSET

Introduction

A customer-centric approach elevates the needs and context of a nonprofit to inform how capacity-building solutions are designed, developed, and deployed. Sometimes the simplest solution that meets a nonprofit's requirements can be the best solution given the organization's resources and constraints.

Taking a customer-centric approach recognizes that the technology itself is only one piece of a larger engagement. The people and process involved in the project are just as critical to a successful solution.

Pro bono consultants and nonprofit staff must think holistically about how best to ensure that the solution is fully implemented and actively used.

Being intentional about investing in a customer-centric approach opens up opportunities for innovative designs, collaborative problem-solving, and effective change management.

All stakeholders have a role to play:

- **For pro bono consultants**, this role is building trust and acting as an empathetic, strategic advisor. Consultants should be prepared to listen to and work together with nonprofit partners to navigate any ambiguity.
- **For nonprofit staff**, this role is being equal thought partners throughout the project. Nonprofit staff should be honest about their organization's context and constraints and clearly communicate what they will need to confidently own the solution and successfully carry it forward.
- **Both pro bono consultants and nonprofit staff** should continuously align around the organization's strategic priorities.

Learning for All: Developing solutions in complex and ambiguous environments provides professional development opportunities for both pro bono consultants and nonprofit staff. Taking a customer-centric approach not only ensures that the nonprofit's needs are being heard but can also be an opportunity for all parties to hone the capabilities needed to succeed and grow in their every-day roles.

GUIDING PRINCIPLES



Good customers allow themselves to be vulnerable. The questions they are asked can be uncomfortable. Creating a culture or environment that is safe for these discussions is key.

- VMware R&D Director



For both stakeholders, there are guiding principles that can help build a customer-centric mindset and contribute to a successful project:

Embrace discomfort: Identifying areas of opportunity often means acknowledging things that are not working. Engaging in these conversations can cause tension, so it is important to create a safe space, practice empathy, build trust, and take risks. This openness will ultimately lead to more relevant, impactful solutions.

Recognize your bias: We all have biases from our lived experiences. Creating sustainable solutions that solve organizational challenges requires being aware of your conscious and unconscious biases and asking for diverse viewpoints

throughout the process. The people who use the solution are just as, if not more, important as the solution itself for the overall success of a project. Effective solutions are found through genuine collaboration and partnership.

Believe in a way forward: The most effective project teams believe in a shared vision. Cultivating curiosity, grit, a growth mindset, and an ability to adapt to new information is the most effective way to align priorities and drive towards successful solutions.

Learning for All: Experts like Center for Creative Leadership rank growth mindset among the top five leadership skills for accelerating performance.² Practicing learning agility in a pro bono context can help both pro bono consultants and nonprofit staff build this vital mindset.

SOLUTION DEVELOPMENT FRAMEWORK

The Solution Development Framework is a customer-centric approach that nonprofit staff and technology pro bono consultants can apply to co-create sustainable solutions that meet a nonprofit's needs.

We identified two key findings based on interviews and focus groups with technology professionals whose work fall in each of the four phases of the Solution Development Framework:

1. Taking a customer-centric approach, and
2. Applying established best practices from the for-profit technology industry to pro bono.

Why use the Solution Development Framework?

The Solution Development Framework is inspired by the Systems Development Life Cycle.³ Applying the complete framework leads to more impactful projects over time and more efficient use of a nonprofit's resources.

One of the most common pitfalls we see with tech pro bono is when nonprofits and pro bono consultants start the conversations focused on the consultants' skillsets instead of the nonprofits' needs. While well intended, this often results in projects that aren't useful and are quickly abandoned.

In the rush to "take action," pro bono consultants and nonprofit staff can lose sight of the critical activities that will make a project a high-impact, long-term success. Many people often skip the Discover and Design phases because they make assumptions about the nonprofit's needs and capabilities. While it may feel faster, skipping to Implement is costly and will often result in projects that take longer, waste more resources, don't connect to existing processes and systems, and aren't maintainable by the nonprofit staff.

Investing in Discover and Design with a nonprofit can result in⁴:

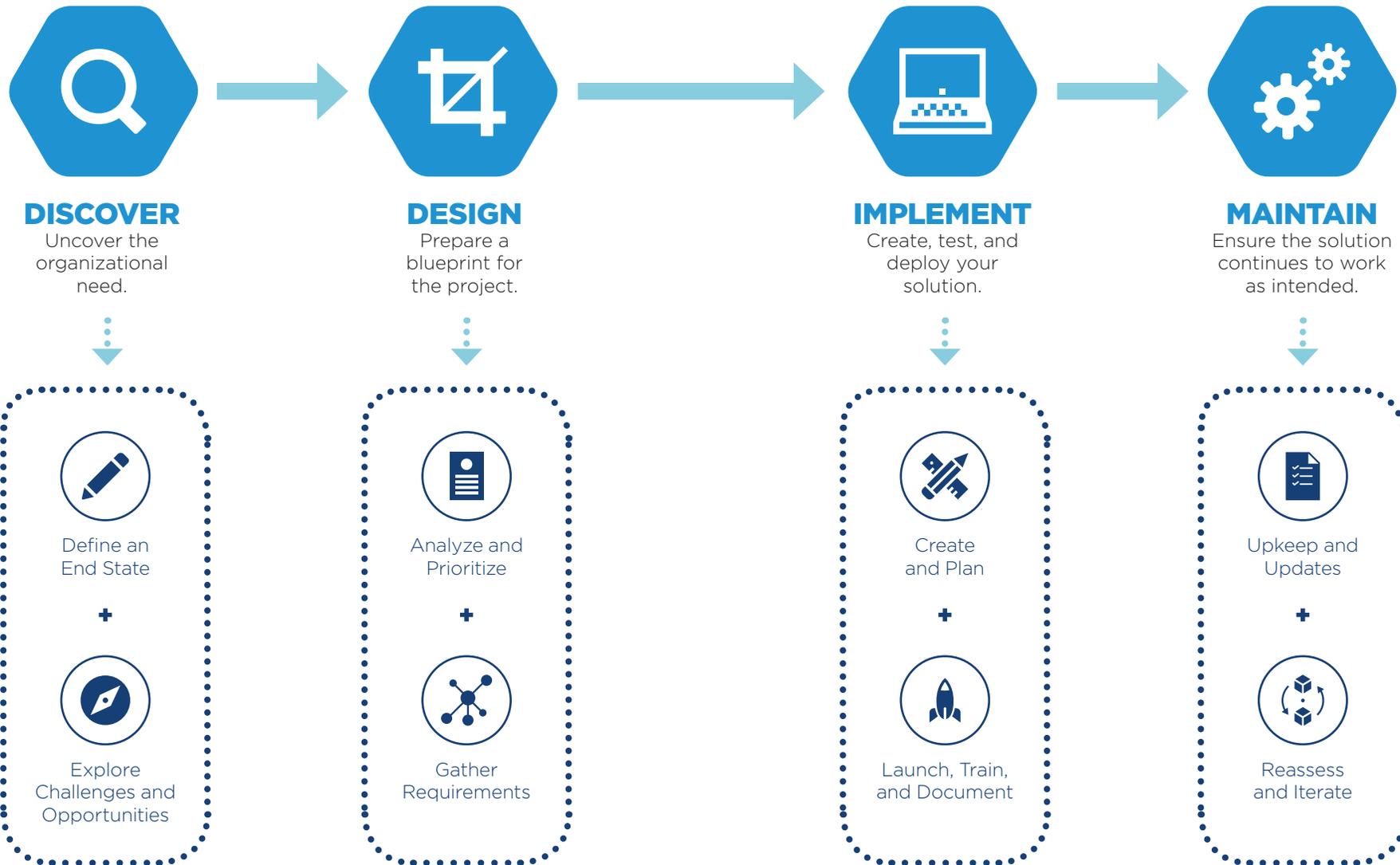
- **2x faster timeframe to deploying a solution**
- **75% increased alignment and efficiency**
- **301% return on investment**
- **33% less development and testing time**
- **50% fewer defects or missed use cases**

While the process of undertaking a tech pro bono project can feel daunting, we have designed this framework to be a thorough, actionable tool to help you get to the right solution in the most efficient manner.

Tip: Throughout an engagement, pro bono consultants and nonprofit staff may shift, especially from one phase to the next. Treating each phase like a distinct pro bono project will help ensure continuity.

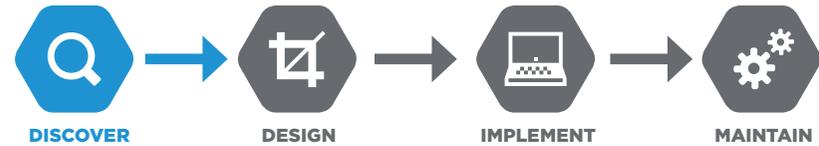
SOLUTION DEVELOPMENT FRAMEWORK

A customer-centric approach to Discover, Design, Implement, and Maintain sustainable solutions that meet an organization's needs.



DISCOVER

Uncover the organizational need.



? Why is this phase important?

Rooting the solution in an organization's context in the Discover phase saves time further along in the process and results in more sustainable solutions. This is a critical and commonly skipped phase.

📌 What happens in this phase?

- Create a shared understanding of the organization's mission, vision, and priorities.
- Explore the challenges and opportunities that can be addressed using the **Discovery Assessment** on pages 34-35 and agree upon desired outcomes.

🗣️ Who are the pro bono consultants to engage?

People who translate organizational needs to the technical experts who design and implement the solution. Look for people who can:

- Gather and analyze data from customers and stakeholders.
- Understand how systems can solve routine business problems.
- Identify opportunities for process improvement.
- Define the scope, objective, and preliminary requirements for potential solutions.

People who will be most successful in this phase will be able to:

- Build trust and confidence with key stakeholders.
- Have courageous conversations to create clarity.

Check out the **Pro Bono Technology Consultant Job Description** on page 36.

DISCOVER GUIDE

DEFINE AN END STATE

Why is this process valuable? Aligning on the organization’s vision and mission will ensure all important stakeholders agree on and understand the outcome and intended results of the organization. Collectively defining and agreeing on an end state will help guide all the remaining decisions the pro bono consultants and nonprofit staff make as they move through the Solution Development Framework.

To maximize the return on everyone’s investment, consider:

- What is your ideal end state?
- What is your role in supporting that vision?
- Who are the primary stakeholders we are serving?

How to put this process into action: Focusing on creating the rapport and partnership needed to make this project a success is key at this stage. This sets the tone of the partnership, establishes why the nonprofit staff and pro bono consultants are working together, and socializes the project with key stakeholders. Tactics that support joint collaboration, like open dialogue, active listening, and Discovery workshops, can facilitate the process.

Debrief:

- How did you come to the shared vision? (e.g. interviews, focus groups, workshops, 1:1s)
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- What was uncomfortable about this process? What assumptions emerged?

Outcome: State and describe your vision of success.
Tip: We suggest recording this information in a living document that is editable by all parties.



EXPLORE CHALLENGES AND OPPORTUNITIES

Why is this process valuable? With stakeholders aligned on the organization’s mission and vision, the next step is to identify how to accelerate impact towards this end state. Balancing the immediate needs of the organization, while planning for proactive solutions, will be key.

To maximize the return on everyone’s investment, consider:

- What is stopping you from doing what you want to do today?
- What do you want to be doing more of?
- What would you do with unlimited time and resources?

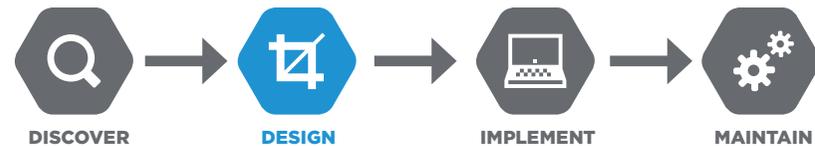
How to put this process into action: Dialogue with various stakeholders can help surface the organization’s challenges. Check out the **Discovery Assessment** on pages 34-35 to help identify opportunities to Run, Scale, and Transform an organization’s operations, processes, and program delivery.

Consider different formats tailored to each audience that can help foster a safe space to explore these challenges. For example, conduct interviews with program managers who have a unique perspective on challenges across all staff, focus groups with outside stakeholders, such as the Board members or constituents served, and whiteboard sessions with various departments to help map the full range of opportunities.

Debrief:

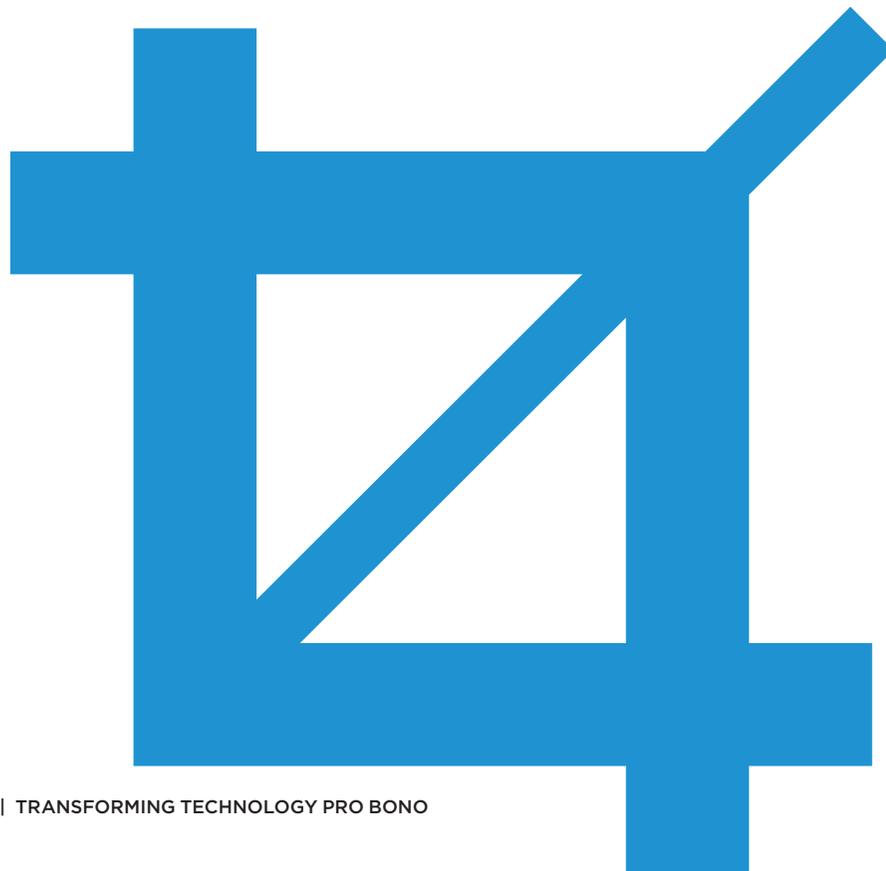
- How did you identify relevant organizational challenges and opportunities?
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- What was uncomfortable about this process? What assumptions emerged?

Outcome: List the organizational challenges that hold you back from the vision using “Run, Scale, Transform” prompts from the Discovery Assessment.



DESIGN

Prepare a blueprint for the project.



? Why is this phase important?

You will structure a solution that meets the needs identified in Discover. All subsequent phases rely on a strong design.

📄 What happens in this phase?

- Analyze and prioritize a set of challenges and opportunities.
- Gather and document requirements in order to design a solution that is sustainable, is compatible with other existing systems, and that the nonprofit can maintain.
- Commit all stakeholders to the project vision, align on the desired outcome, and engage throughout the process.

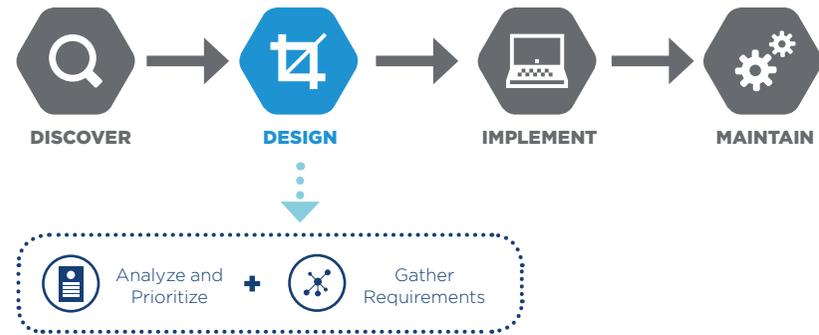
👤 Who are the pro bono consultants to engage?

People who can take an initial assessment and design a viable solution. Look for people who can:

- Create designs or use cases for solutions.
- Understand existing and new systems.
- Advise on whether to buy or build a solution.
- Provide analysis on possible options and recommend best-suited solutions.

People who will be most successful in this phase will be able to:

- Leverage Human-Centered Design⁴ principles.
- Practice empathy to navigate multiple perspectives and identify a path forward.



DESIGN GUIDE

ANALYZE AND PRIORITIZE

? Why is this process valuable?

A successful Discover phase should yield various challenges. To prioritize which challenge(s) to focus on, the nonprofit staff and pro bono consultants will need to identify constraints, assess risks, and check their own assumptions.

To maximize the return on everyone's investment, consider:

- What is the level of organizational readiness (e.g. ability to adopt new processes/technology at this time, leadership support, resources)?
- Will the solution have an incremental or transformational change on the organization's technology, processes, and systems? How does the prospective timeframe for development, implementation, and adoption impact the selected solution?
- When considering a solution, what are must-haves?

oP How to put this process into action:

Pro bono consultants can facilitate discussions with nonprofit staff to explore which needs must be addressed and the trade-offs of making related choices. For example, a workshop with nonprofit stakeholders using sticky notes to rank order problems can encourage a transparent and collaborative process to select which project to prioritize.

oP Debrief:

- How did you prioritize the opportunity on which to focus? What constraints did you take into consideration?
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- Where was there alignment? Where was there disagreement?

✓ Outcome:

State the opportunity you'll address that contributes to the overarching vision.

GATHER REQUIREMENTS

? Why is this process valuable?

Gathering requirements helps ensure the success of a solution. Pro bono consultants will want to have in-depth conversations with nonprofit staff to identify what systems are currently in place, as well as document information gathered and any gaps that need to be addressed by the solution.

To maximize the return on everyone's investment, consider:

- What existing processes/systems do you have in place?
- What functionality do you want to continue? What enhancements are needed?
- Does the organization have this information documented? (See **Project Requirements Worksheet** on page 37 for a helpful template.)

oP How to put this process in action:

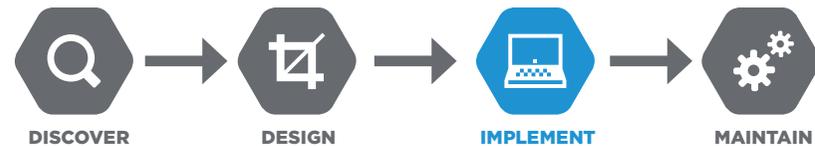
Pro bono consultants and nonprofit staff can document the features and functionality required for the solution to meet the nonprofit's needs. Simultaneously, pro bono consultants can conduct a comparative analysis of existing off-the-shelf solutions to see if any are viable options. Additionally, a landscape analysis across sectors can surface a range of already implemented, successful solutions.

oP Debrief:

- How did you take into consideration the constraints in the design of your solution?
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- What was uncomfortable about this process? What assumptions emerged?

✓ Outcome:

Document completed design, including business requirements and budget.



IMPLEMENT

Create, test, and deploy your solution.



? Why is this phase important?

Thoughtful implementation of the solution is critical. It requires a strong change management plan that actively engages multiple stakeholders and clearly integrates with existing processes.

📌 What happens in this phase?

- Identify a rollout and adoption plan as part of the solution launch.
- Build and test a new solution or adopt one already on the market. Most nonprofits will adopt an existing solution.
- Document all new systems and processes.
- Train staff members and stakeholders on how to use the solution.

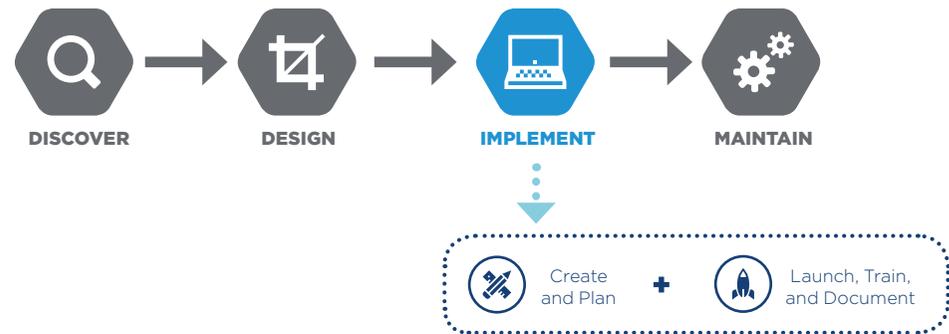
👤 Who are the pro bono consultants to engage?

People who can develop the solution and successfully launch it. Look for people who can:

- Document and transfer all knowledge of existing and new systems.
- Roll out a new solution.
- Test the solution to ensure it works as intended.
- Create and deliver trainings to end users.

People who will be most successful in this phase will be able to:

- Develop partnerships for effective teamwork.
- Apply both a long- and short-term perspective to planning.
- Train and educate stakeholders on how to effectively adopt the solution.



IMPLEMENT GUIDE

CREATE AND PLAN

? Why is this process valuable?

A successful launch is dependent on nonprofit staff being ready for the change and reaffirming buy-in from all stakeholders—from the leaders who sponsor the solution to those who will use it regularly. Effective change management includes clear communications about the implementation plan and proactive education about using the solution.

To maximize the return on everyone's investment, consider:

- Have the appropriate people been engaged and informed?
- How will people be supported and trained through this transition?
- What is the process for rolling out the solution? How does the new solution impact other existing processes?

🗺️ How to put this process into action:

Implementation requires a focus on people, organizational culture, and process, not just the solution. Pro bono consultants and nonprofit staff should outline the key implementation activities and define roles and responsibilities. Nonprofit staff should develop a clear communications plan which takes into account potential sticking points.

🗣️ Debrief:

- What criteria did you use to determine if the solution created meets the needs identified in Discover?
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- How did the nonprofit's unique culture and context inform your change management strategy?

✅ Outcome:

The technology solution is ready to launch. The communication and change management plans account for people, process, and technology.

LAUNCH, TRAIN, AND DOCUMENT

? Why is this process valuable?

It is critical to consider how to fully transition the solution to the nonprofit organization. Ultimately, nonprofit staff will have full ownership of the solution after the pro bono consultants wrap up their engagement. Handoff should include training for nonprofit staff on how to use the solution and identify who will be responsible for maintaining it.

To maximize the return on everyone's investment, consider:

- What documentation do nonprofit staff need to take full ownership of the solution?
- What training methods (e.g., in-person, webinars, written instructions) might nonprofit staff need to use the solution?
- How long after launch should pro bono consultants stay involved before the solution is transitioned to nonprofit staff?

🗺️ How to put this process in action:

Pro bono consultants should ensure nonprofit staff have a clear understanding of and can independently maintain the solution. Nonprofit staff should ask a lot of questions at every stage of the launch to confidently take the solution forward. Getting involved in developing any documentation will give a thorough understanding of the solution.

🗣️ Debrief:

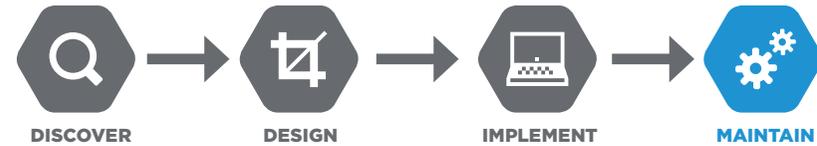
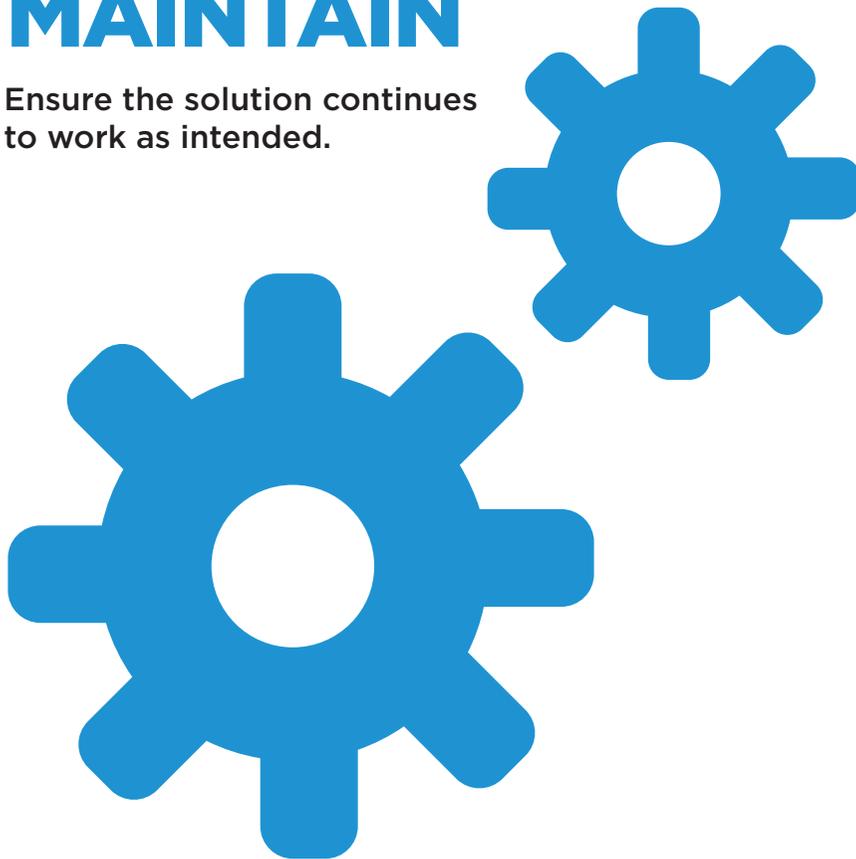
- How did the launch of the solution affect operations?
- How did you train staff? Which methods did you find to be most effective?
- How did you determine the process and timeline for transitioning ownership to the nonprofit?

✅ Outcome:

Documentation of how the solution was designed, detailed specifications and key requirements, and guidelines for managing the solution (see page 37 for **Project Requirements Worksheet**).

MAINTAIN

Ensure the solution continues to work as intended.



? Why is this phase important?

Organizations change and so can solutions. Establish a schedule for regular updates and revisit whether the solution is still meeting the organization's evolving needs.

📌 What happens in this phase?

- Equip nonprofit staff with the tools and processes to effectively maintain the solution over time.
- Address fixes or bugs that arise.
- Evaluate whether the solution is continuing to meet the intended need.
- Identify whether the original organizational need has shifted and may require different solutions. This is a great time to determine whether to begin a new Discover phase.

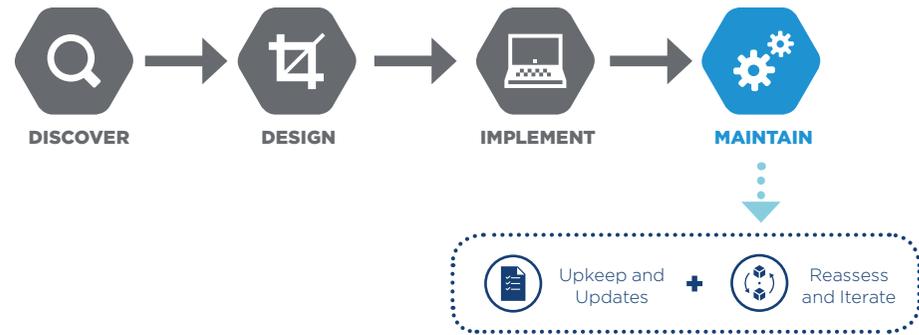
👤 Who are the pro bono consultants to engage?

People who can address challenges and ensure the solution continues to meet the organization's core need. Look for people who can:

- Analyze, test, troubleshoot, and resolve solution issues.
- Revisit project requirements and ensure goals are being met.
- Coordinate with various users to resolve any problems or identify potential solution enhancements.

People who will be most successful in this phase will be able to:

- Navigate ambiguous scenarios and discern important areas of focus.
- Liaise with key stakeholders (especially those involved in previous phases).



MAINTAIN GUIDE

UPKEEP AND UPDATES

? Why is this process valuable?

While it may be tempting to put off updates, allowing them to pile up limits the efficiency of the tech solution and increases the potential for system failure, which can be very costly. Scheduling a regular update cadence and maintaining logs of all changes made to the technology allows all stakeholders to have a common, clear understanding of the current state of the solution and rationale for changes. Another key aspect of maintenance is data integrity. Keeping good data ensures that nonprofits have the information they need to quickly get the solution up and running if something goes wrong.

To maximize the return on everyone's investment, consider:

- What processes are in place to update the solution and back up data?
- What documentation is necessary for a new nonprofit staff or pro bono consultant to plug in after the initial implementation?

- What is your greatest obstacle to successfully maintaining this information?

📅 How to put this process into action:

Nonprofit staff should establish a clear process and well-defined schedule for updates and data backups. If bugs or problems arise, staff and/or pro bono consultants should clearly document troubleshooting so others can quickly get up to speed and avoid wasting time on repeating failed fixes.

🗣️ Debrief:

- How did you prioritize documenting changes and scheduling updates against ongoing organizational/ programmatic projects?
- Who was involved in the documentation process and how were they engaged?

✅ Outcome:

Documentation logs of all upgrades and any changes made to the technical solution.

REASSESS AND ITERATE

? Why is this process valuable?

Technology solutions are never static and will need to adapt to the evolving priorities of an organization. Reassessing the solution will confirm if it is still the right one or if it may need to be adjusted. Over time, a different solution may be more appropriate given shifts in the organization's needs and/or as new technologies emerge.

To maximize the return on everyone's investment, consider:

- How have the organizational priorities and/or needs changed over time?
- Is the solution still meeting its criteria for success as defined in the Discover phase?
- Are there ways to iterate and build more efficiencies into the current solution?

📅 How to put this process in action:

Pro bono consultants and nonprofit staff should set regular touchpoints to evaluate the solution's effectiveness. A mini-Discover process can pressure test the solution against the organization's current needs. Making changes and updates can be challenging, but keeping a solution in place that no longer meets the organization's needs can be disastrous.

🗣️ Debrief:

- How did you evaluate if the solution still meets success criteria or if you needed to restart the process at Discover?
- Who are the stakeholders (internal and/or external) involved? How did you engage them?
- How did you identify and integrate any potential new requirements?

✅ Outcome:

An assessment to determine how the technical solution is performing.

CONCLUSION

In *Transforming Technology Pro Bono (2017)*, the Taproot Foundation and VMware Foundation provided a framework for developing technology solutions to build the capacity of social sector organizations. With this new compilation, we share concrete recommendations for each phase to Discover, Design, Implement, and Maintain sustainable solutions that meet nonprofit needs.

Our intention is that these best practices ensure that solutions, co-created by pro bono consultants and nonprofit staff, deliver the best long-term outcomes. Specifically, we focused on:

1. **A Customer-Centric Approach:** Focusing on the organization's need and employing the Solution Development Framework to ensure long-term sustainability of technical solutions for nonprofits.
2. **The four phases of development:**
 - **Discover:** Define an end state & Explore challenges and opportunities.
 - **Design:** Analyze and prioritize & Gather requirements.
 - **Implement:** Create, educate, and plan & Launch, train, and document.
 - **Maintain:** Upkeep and updates & Reassess and iterate.

We hope that these combined resources will provide inspiration and a practical path forward for nonprofits and potential pro bono consultants interested in pursuing technology pro bono projects. We are committed to building the capacity of social sector organizations as they take on some of our world's most challenging and complex issues and bridging the growing technology divide through pro bono.

GETTING STARTED

Transforming technology pro bono will require coordinated and conscious action from both nonprofit staff and pro bono consultants. In this section, we will outline steps both stakeholder groups can take to adopt this new approach and successfully navigate the Solution Development Framework.

NONPROFIT STAFF

Utilize pro bono early in the process. Partner with a pro bono consultant early on and use the **Discovery Assessment** on pages 34-35 to uncover and prioritize your organizational needs. How do you find that kind of consultant? Check out the **job description** on page 36.

Make the case to donors. The Solution Development Framework is a resource to develop your strategic plan for technology. While donors more commonly fund the Implement phase of projects, having this type of organizational technology plan to share with funders can help make the case for a multi-phase investment.

Be selective about the talent you engage. It's hard to say no to enthusiastic volunteers, but being honest will save you and them energy and time. Use the Solution Development Framework to find the right volunteers by letting them know the type of help you need in each phase.

Identify a point person. It's key to dedicate part (or all) of a staff member's time to provide overall project management and continuity. This may be someone who is involved in your organization's operations and strategic planning or someone who oversees the area of need the solution addresses. It's important they have strategic decision-making power to be most effective.

PRO BONO CONSULTANTS

Determine whether your skills fit the particular need. Ask a nonprofit where they are in the Solution Development Framework to identify their current needs. (If the nonprofit doesn't have a Solution Development Framework yet, the **Discovery Assessment** on pages 34-35 is a great place to begin.) Ensuring your skillset matches what they need at that time will create a more impactful solution for the nonprofit and meaningful experience for you.

Be honest and realistic about your level of commitment. Taking on a technology pro bono project with a nonprofit requires a high level of engagement over a period of time. If your schedule is full, or if you simply don't have the appetite for the level of commitment required, don't take on the project. There may be other, shorter-term, consultative ways to help the nonprofit.

RESOURCES

DEFINING TERMS

- **Capacity building** is an investment in systems, processes, and technology that increases an organization's effectiveness in achieving its mission.
- **Customer-centric** focuses on understanding who customers are and what they need.
- **Donors** include philanthropic partners, funders, foundations, and individual donors.
- **Organizational/Sector Challenges and Opportunities** are unmet needs.
- **Organizational/Sector Needs** are the required people, systems, and resources to sustain operations and programs.
- **Pro bono consultants** refer to an individual volunteer or groups of volunteers.
- **Pro bono service** is the contribution of one's professional expertise to nonprofits free of charge.
- **Service learning** is contributing time and talent in service of a nonprofit and learning through that experience.
- **Social sector** includes nonprofit and third sector organizations.
- **Social sector stakeholders** include nonprofits, pro bono talent, companies, and donors.
- **Solution** is the means to address an organization's need. Technology solutions can be hardware, software, or systems.
- **Technology talent** are professionals with technical expertise and/or who support technology solutions.

For a digital copy of this research paper please visit:
www.vmware.com/go/techprobono

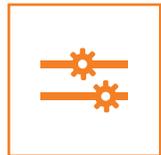
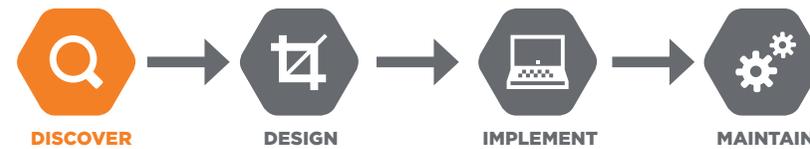
DISCOVERY ASSESSMENT

Identify the organizational opportunities to run, scale, or transform before diving into a specific project.

We know that many nonprofits face a myriad of challenges across their organizations. This assessment can help nonprofits and pro bono consultants hone in on critical nonprofit needs in “Explore Challenges and Opportunities” in the Discover phase.

Why use the Discovery Assessment?

- Address today’s challenges: identify immediate areas of need that are keeping an organization from getting work done today.
- Plan for tomorrow’s solutions: focus on building proactive solutions for the long run while still addressing current needs.



RUN

Run refers to the daily needs of your organization. It includes any necessary fixes to keep programs and services running.

What is stopping you from doing what you want to do today?

- What do your day-to-day activities look like?
- Describe the tools and processes you use to complete your daily activities.
- What isn't working as expected?
- Do you have new, legacy, or outdated systems? How do they interact?
- Do you have staff who can address issues as they arise?



SCALE

Scale refers to how your organization can grow the reach of its operations and programs. It includes the use or expansion of existing systems.

What do you want to be doing more of?

- Are there annoyances about your processes today that could benefit from being changed?
- Are there repetitive activities that consume large portions of staff members' time?
- Do your people need new skills to be more effective in their roles?
- Are any of your goals being hampered by limited resources?
- Describe areas where you want to increase your reach or impact.
- Are your processes getting stuck in multiple hand-offs or waiting for responses/approvals?



TRANSFORM

Transform refers to evolving your organization. It includes fundamental changes in the way operations and programs are managed.

What would you do with unlimited time and resources?

- How might you more effectively and efficiently meet your constituents' needs?
- How might you better engage with your stakeholders?
- Describe what success looks like for your organization in five years.
- If you could have three wishes about your organization's operations and programs, what would they be?
- Describe an organization you admire. What are they doing that you aren't?

PRO BONO TECHNOLOGY CONSULTANT JOB DESCRIPTION

Are you a nonprofit looking to engage a pro bono technology consultant to kick off the Discover phase? Use this job description to craft a clear ask and find your ideal consultant on Taproot+ (www.taprootplus.org)!

Seeking Pro Bono Technology Consultant

Help us identify where and how a technology solution can alleviate core organizational challenges and amplify our existing programs.

We are looking for someone who can:

- Work with subject matter experts and various internal stakeholders to understand business objectives.
- Gather, organize, and document technology requirements.
- Develop and implement scalable, flexible solutions that are responsive to our current and future organizational needs OR can guide us towards other resources to develop and implement solutions.

Who has experience in:

- Translating customer needs into new products, services, or solutions.
- Problem solving and engaging diverse teams to support the development of a product or technology strategy.
- Listening to a customer, understanding organizational needs, and developing relationships with stakeholders.

And who is:

- Curious, patient, open-minded, and passionate.
- Willing to take on tough challenges that can have long-lasting positive ripple effects in our communities.

PROJECT REQUIREMENTS WORKSHEET

The Project Requirements Worksheet can help nonprofit staff and pro bono consultants identify the various elements that are required to ensure a successful solution. The worksheet is a powerful reference tool to understand the original solution setup in order to inform solution upkeep and maintenance overtime. Use it in Design to map out the requirements prior to building the solution and in Implementation to annotate the final exact configurations. You will then reference this information in Maintenance to pinpoint challenges and help manage the evolution of the solution. The worksheet should include:

- 1. Executive Overview:** State organization's mission and describe programming. Outline scope of solution and align in service of organization's priorities.
- 2. Processes:** Describe current and future processes. List all processes and systems impacted by new solution.
- 3. Requirements**
 - **Use Cases:** Describe solution use cases and criteria for success.
 - **Security:** Provide security requirements, including data privacy, data retention, and accessibility.
 - **Timing:** When does the solution need to launch and why (describe drivers)?
 - **Training:** Identify training needed for staff adoption.
 - **Stakeholder Messaging:** Determine level of communication with stakeholders.
 - **Internationalization (optional):** Provide any globalization, localization, or regionalization requirements, if applicable.
- 4. Critical Considerations:** List any assumptions, constraints, dependencies, or risks in the solution design.
- 5. Standards and Guidelines:** Define configuration management standards and procedures, including processes for all implementation activities and configuration settings. List various tools being used and their use cases.
- 6. Changes:** Document any significant changes to configuration and rationale for change.
- 7. Appendix**
 - **Glossary:** Define any jargon or acronyms that are commonly used.
 - **Related Documents:** List and attach any reference documents.
 - **Roles and Responsibilities:** Define and assign roles and responsibilities for all stakeholders.
 - **Review and Sign-off:** Identify required approvals and ensure sign-off.

THANK YOU

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³For more on the Systems Development Lifecycle: http://opensdlc.org/mediawiki/index.php?title=Main_Page

⁴Brown, Benjamin. "The Total Economic Impact™ Of IBM's Design Thinking Practice." Forrester Consulting. Feb 2018. p. 1-2.

⁵For more on Human-Centered Design: <https://www.ideo.org/approach>

ABOUT US

Taproot Foundation, a national US nonprofit, connects nonprofits and social change organizations with passionate, skilled volunteers who share their expertise pro bono. Taproot is creating a world where organizations dedicated to social change have full access—through pro bono service—to the marketing, strategy, HR, and IT resources they need to be most effective. Since 2001, Taproot's skilled volunteers have served 6,627 social change organizations providing 1.68 million hours of work worth over \$193 million in value. Taproot is located in New York City, Chicago, San Francisco Bay Area, and Los Angeles, and partnered to found a network of global pro bono providers in over 30 countries around the world. www.taprootfoundation.org @taprootfound

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