

Solving the “Last Mile” Problem of Technology, Tools, and Talent in the Social Sector

Getting the Right Tools into the Hands of Nonprofit Practitioners for Better Outcomes



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PROJECT
EVIDENT



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Project Evident is testing a new approach to evidence building that places social sector practitioners in the driver’s seat, with the goal of increasing the supply of outcomes-producing programs for communities who need them. One critical piece is that building evidence of outcomes requires technology, analytical tools, and talent for effective and timely use of data. But the social sector has long experienced what is known in the logistics and telecommunications worlds as the “last mile” problem, where available technology, tools, and talent are simply not making their way to the hands of nonprofit practitioners. In this brief, we explore some of the barriers that have led to this problem in the nonprofit sector, and what Project Evident is doing to help.

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Introduction

In a product's journey from a warehouse shelf to customer doorstep, the "last mile" of delivery is the final step of the process — the point at which the package finally arrives at the buyer's door. It is also the most inefficient, most expensive part of the journey.

The last mile is an apt metaphor for the lack of a strong evidence infrastructure in the social sector: the hardest part of getting products to market and in the hands of consumers is frequently the very last mile of a long journey. The for-profit sector has long embraced cutting-edge technology and tools to capture and use data to better serve their customers; this includes data collection, data storage, data transformation and preparation (wrangling), data analysis, and data visualization. However, these tools, along with the talent and services to guide those who use them, have largely not made it into the hands of the nonprofit sector, where the outcomes hold enormous consequences not just to individuals but to the well-being of our communities.

There are many reasons the social sector lacks a strong evidence infrastructure, some simple, some complex. We discuss a few of the key barriers below.

Key Barriers to Accessing Technology, Tools, and Talent in the Social Sector

1. Traditional Nonprofit Funding Paradigm

Nonprofit funding paradigms have traditionally encouraged organizations to funnel resources toward direct services whenever possible, rather than indirect or overhead costs. Organizations are rewarded for keeping overhead expenses to a minimum. Unfortunately, this inadvertently discourages investment in the tools, talent, and services that can allow nonprofits to build evidence and test program innovations for continuous improvement — both of which are critical for shaping direct services for the populations the nonprofits serve.

In the current funding paradigm, the cost of widely prevalent tools is frequently out of reach. A software title that requires \$5,000 a year, while it may be relatively inexpensive compared to staff or external evaluation costs, can be a hard pill to swallow for nonprofits trying to keep overhead down. The same is true of technical

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We are trapped in a mindset that stigmatizes spending beyond direct program work. This mindset keeps many nonprofit leaders from recognizing and pursuing the investments needed to drive long-term impacts.

Fred Ali, President and CEO of the Weingart Foundation and Antony Bugg-Levine, CEO of the Nonprofit Finance Fund in the Summer 2016 Stanford Social Innovation Review

implementation and advisory services.

In our work with nonprofits, we have learned that even when organizations have access to inexpensive or free software titles, the operational assistance and/or maintenance they need can cost enough to push these applications out of reach. In an assessment of the social sector's data for evidence ecosystem conducted for Project Evident, experts at Monitor Deloitte concluded that "the same capacity barriers that limit evaluative efforts can work against the adoption of new technologies, risking the growth of a digital divide" in the nonprofit sector.

2. Gaps in Talent and Skills

The Monitor Deloitte assessment also found that "organizational evaluative and technical capacity among nonprofits is low"; this includes limited availability of data and technology talent and professional development. With ever increasing demand and compensation for technology and data skills in the labor market, nonprofits find themselves wholly unable to compete for these talents. In a 2018 survey of 3,400 nonprofit leaders across the country, nearly two-thirds responded that offering competitive pay and employing enough staff were the top challenges they faced when staffing their organizations.¹

Other factors that exacerbate the skills gap in the nonprofit sector include: (a) the natural drive for organizations oriented towards social good to focus on hiring talent for direct service rather than technical infrastructure and (b) the light focus on technology and technical systems at many education and training programs for social sector professionals, including programs in public policy, nonprofit management, and social work.

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We see in talent and organizational capacity that most nonprofits are small, with limited evaluation capacity, rudimentary data infrastructure, and very limited staff training and time resources....

The current system is not working for time- and resource-constrained nonprofits who are clear about the desire for better data.

Landscape Assessment of Data for Evidence Ecosystems by
Monitor Deloitte

¹ "2018 State of the Nonprofit Sector Survey," Nonprofit Finance Fund. Accessed July 16, 2018. <https://nff.org/surveydata>

3. External Pressures and Requirements

Many organizations in the education, health, and human services use external data and reporting systems in their day-to-day operations, but their needs are different from those of public, private, and philanthropic funders. As a result, many organizations design their data and technology systems around the requirements of the buyers or payers, whose evidence needs may be considerably different than their own. The Monitor Deloitte assessment found that “different funder reporting specifications and project-specific work lead to internal technology and data storage fragmentation” in the social sector.

4. Complexity of Solutions Architecture

Building technical solutions that enable effective and efficient data collection, analysis, and reporting is not simple and can require stringing together multiple tools and services. Here is a relatively straightforward example:



Social sector organizations can't build a technical infrastructure that meets their evidence needs without information and support (for example: What is the most appropriate tool for a specific need? How is it set up? What does it work well with? What is the real cost of ownership?). Resources that string together the right data tools in the right way and that can offer guidance on how to use them are few and far between, and resources tailored to the needs of nonprofits are even harder to find.

5. A Niche Market

The social sector is served by a small, niche industry of vendors that develop data and technology tools and services for this market. While these vendors understand the mission-driven nature of nonprofits, they also face the constraints of serving a small market with limited resources. The result is often tools that do not harness cutting edge innovations in technology, don't work well with one another, require additional cash outlays to function well, and lack large user communities that could support staff development and troubleshooting.

Project Evident's Approach

Given the barriers discussed in the last section, it will require a concentrated effort by those in the field — including public, private, and philanthropic funders, policymakers, and technology companies — to create an ecosystem in which social sector organizations can lead their own evidence agenda and have the tools and talent to do so. Project Evident is steadfastly committed to several strategies that we believe will significantly lower the entry requirements for nonprofits that want to establish an infrastructure for continuous evidence generation, learning, and improvement.



Easy Access Points for Critical Tools

The first part of our approach is to give nonprofits easier access to evidence-generating tools. After working closely with practitioners to understand their needs and considering those needs in light of critical industry and academic best practices, we will help organizations understand when they need a tool, what type of tool to use, and how to use it.

As part of Project Evident's proof-of-concept phase, we are designing a prototype for a repository of evidence-building tools that will include — to start — tools for: data management, processing, and preparation, data exploration and visualization, data science and analytics, and policy, procurement, and cost analysis. The Monitor Deloitte analysis and a feasibility assessment conducted by Context Partners confirmed that nonprofits want to learn and connect through a digital platform but concluded that additional design work is necessary to develop key features, to target participants, and to ensure certain necessary elements are in place. We are drawing heavily on user-centered principles to design a resource library where our audience can access content based on their own queries. The repository will contain content created by experienced data and technology professionals who understand the needs of our audience.

Our goal is to identify tool options for nonprofits that:

- Strengthen organizational capacity for continuous evidence building and improvement,
- Minimize purchase and operational costs and more inexpensively meet organizational needs through adoption of free, low-cost, or open-source tools,
- Help organizations test program innovations more quickly and rigorously, and
- Shorten the evidence-building life cycle for organizations to demonstrate program impact.



Easy Access to Critical Talents

In Project Evident's first year, we have learned that it's not enough to make tools easier to discover and access; practitioners also need access to specialized technical talent and expertise. While most people understand that organizations require access to basic social statistics and evaluation expertise, they don't yet grasp that, as data management, business intelligence, analytics, and data science fields expand, mature, and in some respects, converge, there is an increasing need for new types of talent in the nonprofit sector. We want to make it is easier for practitioners to access that talent.

In our work with nonprofits thus far, we have received requests for assistance both when organizations know that they need help but cannot specifically articulate the need, and when they have a relatively concrete understanding of their need but can't access the requisite talent. We are preparing to provide organizations with technical advising and assistance with:

- Solution architecture (how to assemble a high-performing and optimized data analytic environment),
- Selection and technical application of tools for working with data to answer analytical questions,
- Methodological approaches,
- Cost-benefit analysis,
- Policy, procurement, and pay-for-outcomes deals, and
- Technical application of standard security and privacy practices and regulations in data use.

Project Evident's Work to Date

Our approach for building and testing scalable solutions for the nonprofit sector has been continuously informed by our direct work with nonprofits during our proof-of-concept phase. Here is a summary of the key engagements and activities during our first year.

1. Piloting Tools and Technical Assistance

We are piloting a range of applications and services that are well-regarded in the for-profit sector but largely unused or underused by nonprofits, including **Amazon Web Services (AWS)** for cloud storage, **Excel** for advanced data analysis and simulation, various **R statistical packages** for rigorous statistical analysis, and **Tableau** for data preparation, advanced reporting, data exploration, and data visualization. We are working with a range of organizations to launch these applications and to provide support from Project Evident experts. This will allow us to better ascertain the resources required to truly launch a tool, above and beyond the fiscal costs.

An example includes our work with one nonprofit to build internal reporting capacity using Tableau; this work included a hands-on training. The goal was not just to get the application downloaded on their computers but also to demonstrate how to use the tool effectively. Our pilot training was designed to help the organization develop monthly Excel charts and graphs more efficiently by:

- Introducing Tableau as a new tool for improving the layout and design of routine reports,
- Designing a template that could be updated automatically each month, and
- Creating stored calculated fields in Tableau to reduce manual calculations and updates in Excel.

Since the pilot, the nonprofit has asked for an organization-wide roll-out of Tableau to extend new, personalized reporting to all their programs and to different staffing levels. Our goal through these pilots is to better understand the talent and training needs of practitioners in the field. We will continue to refine our approach in order to make technical support and talent less expensive and easier to access.

2. Piloting Guidance for Solutions Architecture

We are piloting solutions architecture exercises to help nonprofits identify how they can most efficiently increase technical capacity and make the best decisions on technology, data infrastructure, and tools. We have completed the first of these exercises with First Place for Youth, a national nonprofit that serves foster youth. First Place partnered with Project Evident to pilot the creation of a [Strategic Evidence Plan](#) (SEP) – a multi-year roadmap to accelerate investments and activities for continuous evidence generation and program improvement that are grounded in the organization's operational reality and

learning agenda. The SEP process surfaced the need for First Place to strengthen the integration of its systems and tools to support evaluation and continuous improvement priorities.

“We knew what we wanted to do, but we had no idea how to get there or what it would take, or even which technology professionals and tools were ‘must haves’ versus ‘nice to haves,’” said Erika Van Buren, the Vice President of Learning and Evaluation at First Place. She added: “As an evaluator and program designer, entering the world of software engineering, database administration, and systems architecture was very new and very daunting. Nevertheless, I’ve been working quite effectively with Project Evident to explore and prioritize our options and opportunities for systems integration with the right minds at the table, to build out the strategy in manageable stages, and to help us grapple with what we need to build and what we buy as we enter these uncharted waters.”

For First Place, we conducted a light-touch assessment to help the organization achieve greater control of their technology and data infrastructure by:

- Assessing the interplay between existing data and technology systems that make up their evidence-generating infrastructure (including case management system, data storage system, predictive risk modeling application, dashboarding and reporting applications, and other ancillary and one-off data sources and systems), and
- Identifying opportunities for improvements and greater use of proximal tools for evidence generation.

Through our SEP work with other organizations, as well as our strategic planning, field building, and business development efforts, we have learned that many nonprofits would benefit from such guidance in solutions architecture. To meet the need, we are exploring these issues in greater depth within the context of SEPs, developing ways to provide these supports as standalone, cost-effective engagements, and partnering with organizations to offer low-cost services that focus on solutions architecture and data environment optimization.

3. Creating Partnerships and Alliances

As previously noted, to substantially shift the ways nonprofit practitioners access technical evidence-generating tools, talent, and support will require working with other key stakeholders. We are actively pursuing partnerships with technology vendors and other organizations to extend our reach and the scope of the resources we can offer.

- **Technology partnerships:** Many vendors have built applications that are highly relevant to evidence generation. Some, such as Tableau, Microsoft, and Amazon, have identified innovative ways to partner with nonprofits and have entire divisions dedicated to supporting them. Project

Evident is partnering with organizations like these, as well as actively seeking out additional partnerships to help get these products into practitioners' hands.

- **Talent and training partnerships:** We are looking for ways to extend talent from resource-rich environments back to the social sector. We are also partnering with training organizations, such as DataKind and Uptake.org, to help nonprofits access talent and training opportunities.



Looking Ahead

Taken together, we believe that Project Evident’s approach will help social sector practitioners by providing more robust access to the tools, talent, and supports they need to continuously generate fast and rigorous evidence and to use it to inform better program outcomes.

At the same time, Project Evident is only one organization, whereas several thousand social sector organizations are ready to do more to build evidence for their programs. The field needs collective action to bridge the divide that separates the social sector from critical evidence-building resources. The faster and more durably we can create pathways to extend technology, tools, and talent, the more social sector leaders can grow our collective evidence bank of promising solutions to problems faced by vulnerable individuals, families, and communities.

There are many forms this support can take. Funders – whether public or private – can ask for SEPs as a condition of funding, and can prioritize outcomes, not just services. They can also offer social sector organizations support as they build capacity and infrastructure, thereby setting practitioners up to lead their own evidence agenda. Public agencies and policymakers can further encourage building and use of evidence by choosing outcomes-based procurement and making it easier to access data. Evaluators, data scientists, and technology vendors can make more conscious efforts to meet practitioners where they are and to help them develop the talent and tools they need to do this work at lower costs.

For our part, Project Evident will continue to work towards low-cost, accessible tools and talent, including a user-centered repository of evidence-building tools and a shared-services platform for contract solutions and technical assistance. Through our engagement with the Monitor Institute, we are exploring the value of a living landscape – an open-source map that practitioners and funders could use to discover resources and opportunities in the market. And we are creating learning opportunities for funders, including advocating a new funding framework that recognizes capacity building for continuous data use, learning, and evaluation as part of the core of nonprofit operations.

Only together will we solve the “last mile” delivery problem. Only together will we create a robust pipeline of resources for social sector organizations that helps them solve the problems faced by vulnerable communities.

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At Project Evident, we believe in the commitment and courage of social sector practitioners. They have a singular view, and with the right tools and talent, are uniquely positioned to address challenges facing children and families on an ongoing basis. With support from like-minded funders, practical and sustainable positive change is more likely. As a trusted partner, we help practitioners and funders accelerate social impact. We are currently concluding an ambitious proof of concept phase to develop, demonstrate and plan the future of a shared services platform for continuous evidence building in the social sector. The Project Evident team looks forward to continued efforts to strengthen the evidence ecosystem and to working directly with practitioners and funders to produce better outcomes for communities.

Evidence is reason to believe.