

# Stanford SOCIAL INNOVATION<sup>Review</sup>

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## ***Technology for Change Supplement*** **From Measurement to Success**

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# From Measurement to Success

Urban Institute's work highlights the transformative potential of investing in data and tech.

BY KHULOOD ODEH & SHENA ASHLEY

**D**ata and digital technology are crucial for nonprofit work. They can drive innovation, improve operational efficiency, and increase mission impact. But greater adoption requires investment, capacity building, and an impact-driven case.

Having access to quality data along with the appropriate technology to elevate insights and inform decisions can be a real game-changer for nonprofit organizations when it comes to measuring work and reporting on impact. The powerful tools of data and digital technology, when used effectively, can help nonprofits make informed decisions about their use of resources, shape the design and implementation of programs and strategies, and help them differentiate their strategies and approaches for their various stakeholder communities.

Nonprofit leaders know this, and many have taken the effort to build data collection into their program strategies. But many still struggle to get the most value from data and technology. Even when nonprofits are rich in data and have access to open-source and off-the-shelf technologies, there are still real barriers to measuring performance and reporting on impact. The respondents in the second edition of Salesforce's *Nonprofit Trends Report* speak to this dynamic, with 75 percent reporting that measuring and reporting data is a challenge and that time and resource constraints are specific barriers. Even when leaders can overcome these barriers, only 44 percent say that they measure their impact at all, and 69 percent say that it is hard to share personalized impact data from programs with funders.

These numbers are disheartening, but they are consistent with what we hear from

nonprofit leaders. They are also enlightening, as they underline the need for capacity-building support to strengthen and enhance the use of data and technology in nonprofits for measuring performance and impact. Given the time and resource barriers that nonprofit leaders face, it is insufficient and improper to keep placing the responsibility in their hands without providing the necessary capacity supports, such as sustainable funding to build and improve their infrastructure over time, access to toolkit resources and standardized practices for designing impact reports, and group training and peer supports for knowledge sharing.

When the opportunities to harness the transformative potential of data and technology are based on an individual organization's ability to cobble together the necessary resources and skills, it fuels a data and technology performance gap that keeps too many organizations from realizing the full potential of their assets. At a time when nonprofits report an increased demand for transparency, as the *Nonprofit Trends Report* attests, it is becoming increasingly clear that strategic use of data and technology can be a differentiator for a nonprofit. The challenge for the broader social-

change sector, then, is to find ways to make access to the opportunities for performance measurement and impact reporting more equitably accessible to nonprofits of varying sizes and capacities.

## BUILDING CAPACITY

Currently, the state of performance measurement and impact reporting among nonprofits varies widely, and resources to improve capacity are scarce. At the Urban Institute, we are fortunate to work on some of the leading philanthropic initiatives focused on building the data capacity of nonprofit organizations within an equity-based framework that centers accessibility to organizations of different sizes and openness to different approaches to delivering impact. Through this work, we have seen nonprofit organizations large and small, with and without data-focused staff and measurement systems, experience real benefits from building new skills.

Below, we highlight two capacity building initiatives: The World Bank Group-funded Measure4Change program and the Citi Foundation-helmed Community Progress Makers Fund, both of which enlisted Urban Institute staff to deliver technical assistance for measuring and managing performance data. We also describe some ways that nonprofits in these capacity-building programs have used their new data capacities to improve their measurement and communication with stakeholders.

**Measure4Change** | A program of The World Bank Group and the Urban Institute, Measure4Change was designed to build performance measurement capacity among local nonprofits in the Washington, DC, metropolitan area. It aims to fill the long-standing

gap between what nonprofits in the city *want* in their data capacity and what they can actually do. The effort sought to deliver performance measurement training in a way that is practical and accessible for nonprofits over an extended period of time to help it take hold so that the DC region's nonprofits could better understand how they are helping their constituencies and how they can improve.

Measure4Change has three components: grant support and one-on-one



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technical assistance for grantees, a regional community of practice, and knowledge briefs. The unique blending of financial, technical, and community support—definitive of the Measure4Change model—helps organizations that struggle with the technical complexities of measurement and evaluation and the difficulties of the organizational changes and cultural shifts that they demand.

After working with the first cohort of grantees, we have learned that performance measurement capacity building is a “two steps forward, one step back” process. As participating organizations gain additional knowledge and tools, they often find the need to revisit or adapt previously developed resources. When surveyed, nearly all respondents commented that two years was too short a period to expect a full build-out of a robust organizational performance management capacity, much less achieve changes in outcomes. Staff turnover and challenges in implementing new software and data systems substantially limited capacity development. But the knowledge and relationships they gained through the cohort were instrumental in helping all of them move along the journey of improving performance measurement systems.

**Community Progress Makers Fund** | The Urban Institute also provided data capacity-building support to the past two cohorts of grantees in Citi Foundation’s Community Progress Makers Fund. Launched in 2015, the fund builds upon the Citi Foundation’s commitment to supporting local solutions and organizations that are building stronger, more resilient cities that catalyze economic opportunity for *all* residents.

“Community progress makers” are change agents located in six US cities who are addressing a range of urban challenges, from economic development and affordable housing to environmental sustainability and urban infrastructure. The \$20 million grant initiative invites applications from visionary nonprofit organizations in Chicago, Los Angeles, Miami, New York City, the San Francisco Bay Area, and Washington, DC. The inaugural cohort ran from 2016-2017, followed by a second cohort over the 2018-2019 period. The fund provides access to individualized technical assistance on a range of measurement and evaluation topics tailored to the grantee’s needs. Community progress makers also receive monthly group-based webinars focused on building data capacity and sharing new methodologies and technologies.

One of the core skills that the grantees learned was how to connect their program data with population-level data to help them develop and communicate compelling stories that raise awareness for an issue or advocate for an intervention that can influence policy at both the national and local levels. They also learned methods for sharing data with their clients and constituents to create a feedback loop to engage them in the organization’s learning and performance reporting. One strategy advanced for sharing data with clients is the use of “data walks,” which is a method of sharing data and analysis with community stakeholders. In a data walk, program participants, community residents, and service providers jointly review data presentations in small groups, interpret what the data means, and pool their individual expertises. Grantee organizations that have implemented this technique report that it is beneficial in increasing client and constituent engagement and investment in their outcomes.

#### MAKING A CASE FOR INVESTMENT

In this digital age, where data is the new currency, no business or organization can survive, grow, stay relevant to its constituents, and achieve its desired impact without strategically investing in its technology and data infrastructure and capacity. Nonprofit organizations are realizing that—85 percent of nonprofits surveyed said technology is the key to the success of their organizations—and have begun investing in digital transformation efforts. Funders who realized that, including The World Bank Group and Citi Foundation, have started supporting those efforts.

So, why are so many nonprofit organizations still behind, even when they have invested in their technology capacity? The survey provided several insights to answer this question, but the need to make an impact-driven case for investment is the most critical one. Regardless of whether the investment comes from an internal or external source, it is an essential skill for nonprofit leaders to be able to make the case, grounded in impact, for why investments in data and technology capabilities are necessary. As a nonprofit, we at Urban Institute had to build our own capacity to make a compelling impact-driven case, so five years ago, we embarked on our “digital transformation for impact” journey. Today, the office of technology and data science is informing Urban’s policy research work and driving innovation for impact by applying cutting-edge technology, data science, and research methods.

Here are additional insights from the report:

#### Be purpose-, problem-, and human-driven—not just technology-driven.

| Urban is an organization dedicated to elevating the debate on social and economic policy. Our scholars conduct rigorous research with analytic excellence and independence and share insights to help changemakers catalyze and accelerate solutions that advance upward mobility, equity, and shared prosperity. The more we focused on understanding Urban’s mission, operating model, challenges, and the needs of its constituents, the more successful we were in identifying effective technology solutions.

To succeed in leveraging the power of technology and data to transform the way Urban delivers value and accelerate impact, we had to start by asking, “Why?” This gave us a great understanding of Urban’s mission, operating model, and desired impact. Then we asked, “What?” What problem are we solving with technology? What challenges and technical barriers are in the way of achieving the desired impact? And what do our staff and constituents need? We found that the most significant policy research challenge facing Urban—and organizations like Urban—is how to continue delivering power through knowledge so all people can thrive in a fast-changing world. We also asked, “How?” How can we deliver the power of knowledge at the speed of change? When we continue with business as usual, we face several technical challenges:

- Traditional methods take a lot of time.
- We live in an explosion of data in terms of size, sources, and types.
- With the increased complexity of data and policy challenges, the modeling methods and calculations are getting more complex and require intensive computing power.
- Traditional dissemination methods in multi-page reports and data tables make it harder to interact and gain insights to inform decision-making in a timely manner.

We realized that to stay relevant and make policy impact, we have to move beyond business as usual. We can’t empower a policy research organization like Urban with technology alone; we needed to become an empowered institute with experts who understand technology *and* policy and can leverage new research technology and data science methods to remove technical barriers, transform the way policy decisions are informed, and unlock new sources of data that help us tackle existing problems in a new light.

**Think big, start small, fail fast, and scale rapidly.** | Today, our office of technology and data science serves as a bridge between cutting-edge technology and policy research. We work to fill knowledge gaps by accessing new sources and new types of data, and deploying advanced methodologies to unlock them for rigorous analysis. Urban is refining policy design by leveraging advanced cloud computing, artificial intelligence, machine learning, and predictive analytics to strengthen and enhance our microsimulation and policy analysis. And we are making high-quality information more accessible and interactive using new communication tools and technology (think Data Viz, APIs, and microservices).

Our process to get here was to think big, start small, fail fast, and scale rapidly. It began with Urban's leader, Sarah Rosen Wartell, convincing the board to make a multiyear investment in technology and communications infrastructure via the organization's endowment. The aim was to go from laggard to leader in these areas and remain a recognized force in the field of policy research. Urban's leadership had a hypothesis that philanthropic investment in the programs would follow if Urban demonstrated higher capacity.

The hypothesis proved correct, and these contributions moved Urban's technology efforts from reactive to more proactive, agile, and innovative. The strategic investment allowed us to build resilient and modern infrastructure, leveraging the power of the cloud and high-performance computing. For example, to rapidly respond to policy changes, we had to adopt a decoupled architecture approach where we split data, computing, and results into three distinct layers and connect them all with a set of programmable interfaces (APIs) that can get and send the information between the layers and across other applications. And when it comes to technology, speed is everything, so we had to adopt agile methods and rapid prototypes to fail fast and deliver solutions faster. Rapid prototyping allows us to develop solutions quickly, validate them, and continue to build and improve the solution with small investments at each step. And we had to invest in providing space and resources for innovation and building a culture of continuous learning and improvements.

Our work is proof that strategic investments in data and digital technology can not only shape nonprofits, but shape nonprofits' success. ●

# Tech and Data That Inform, Inspire, and Involve

The public radio and television station KQED has thrived amid a tumultuous period in the media industry by using technology and data to optimize the delivery of its grassroots journalism and improve relationships with its listeners.

BY ADRIENNE DAY

**W**ith more than 230,000 members, KQED is one of the most popular public radio and television stations in the United States. Even as changes in the media industry are decimating magazines, newspapers, and other outlets, the member-supported nonprofit based in California has not only survived for nearly seven decades, but flourished.

If you're wondering how, Tim Olson, KQED's senior vice president of strategic digital partnerships, has two words for you: reach and relationships.

Ensuring the station reaches as many listeners as possible involves some familiar and well-tested steps, such as being part of the public news ecosystem—NPR, PBS, and other outlets. Other approaches are newer, involving partnerships with technology companies such as Apple, Google, Salesforce, and Amazon.

"We want to get our stuff out there for people to consume it, whether they are using Alexa, YouTube TV, or Google News," Olson says.

But when it comes to long-term financial sustainability, getting content in front of people isn't enough; the internet has transformed the advertising business, gutting revenues for traditional publishing outlets. Coverage of local news and less sensational topics has largely dried up along with money from ads. Yet KQED's newsroom has grown at least 25 percent over the past decade and includes a robust science team. To fill the financial gap, the station needed to increase listener donations, and to do that, they had to get closer to their audience members than ever before.

"We need them to have a relationship with us," Olson says. "That's a core theme of the publishing world right now. We need to continue to move into the modern age of: You actually know me and you are providing

me digital relationship touch points that are relevant to me."

Building those personalized relationships can be difficult, but technology and data are powerful and essential allies in the struggle, according to Salesforce's 2020 *Nonprofit Trends Report*. Their strength lies in their ability to provide a granular assessment of audience members, helping to provide content experiences tailored to the interests of a single person.

"We used to have a household model, and now it's obviously an individual model," Olson says, comparing it to a group Netflix account that offers different login options for different people.

It's no secret that businesses possessing and acting upon troves of data about their customers can experience extraordinary success—look no further than Google, Facebook, and Amazon, tech behemoths that are both revered and denounced for their intimate knowledge and fulfillment of people's needs and wants. With those prominent examples, it's unsurprising that 84 percent of nonprofits surveyed in the Salesforce report say they use insights from fundraising data to hone their messaging. Yet only 43 percent of them actually measure their fundraising goals, and nearly half "feel challenged in capturing and measuring data on constituents." In addition, only 44 percent of respondents say that they measure their impact, and 50 percent report challenges when trying to glean insights from the data they do collect. And 73 percent say they can't tell if their programs are effective or reaching target populations.

Clearly, nonprofits are struggling to capture and use the information they need. The challenge is two-fold: In the case of KQED, granular measurement involves capturing