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Getting Beyond Nonprofit Performance Assessment with Data

By Adene Sacks

Sometimes even the hottest technologies can move slowly. Big Data is a prime example. Consider the case of Pacific Gas and Electric (PG&E), the main utility provider in Northern California. As of 2011, PG&E had equipped 80% of the homes it serves with much-anticipated "smart meters," which allowed the utility and its consumers to "see" trends in energy usage locally and across the network in real time. Only now is PG&E turning that mountain of data into useable information to drive shifts in their business strategy and conservation efforts among their customers.

As the social sector considers the enormous potential of data analysis, it is important to remember that the technologies that realize this potential are new not only to the social sector, but to nearly everyone. Corporations and government spend valuable time and resources collecting data, but still struggle to extract value. As a society, we are at the humble beginnings of leveraging our data — whether for better shopping or for the greater good.

Assessing to Achieve High Performance, CEP's most recent report, highlights a trend that we at DataKind know intimately. Most of the nonprofits that work to repair our world have yet to take full advantage of the data revolution, leading to frustration on all sides. Nonprofits struggle to add data proficiency to an overflowing plate of organizational priorities, while funders wait impatiently for this data to solve the world's problems more efficiently, with greater impact, and at greater scale.

DataKind sits in a unique spot in this conversation. Our work — to harness the power of data science in the service of humanity — gives us a front-line view of the social sector gold rush to leverage data. We are seeing huge gains for organizations and sectors with the capacity to use advanced data methods to better inform their work. But we are also seeing a growing disparity

between the organizations who have proven able to wield their data for good and those that have not.

To truly accelerate the potential of data, we need to get beyond the focus on nonprofit performance and look to the potential of addressing sector-level challenges with creative data analysis. Funders are uniquely positioned to accelerate the social sector's effectiveness in leveraging data. To do this, funders must shift the focus of data inquiry beyond nonprofit performance, lead collective efforts to leverage new data sources, and play an active role in the essential debates around data ethics and transparency.

The Power of Big Data?

How can nonprofits leverage data in ways that go beyond performance assessment? Consider the case of Crisis Text Line (CTL), a free 24/7 text line available nationwide that connects people in crisis to trained counselors. CTL is representative of a growing segment of nonprofits inundated with data — in this case millions of text messages from individuals in crisis. Given the high volume of texters and their wide range of needs, CTL staff wondered how they could quickly respond to texters requiring urgent interventions. By analyzing logs of text conversations, a DataKind volunteer discovered that people who connect to the organization more than four times or use words like "school," "friends," or "hurt" in their texts are likely to become "repeat texters." By identifying potential repeat texters, CTL can better respond to incoming requests.

Data analysis has potential to extract insights for more effective processes and decision-making, often in real time and at remarkable scale. Data scientists use computational analysis to reveal patterns and trends about behavior that would previously have been arduous — if not impossible — to extract by hand. Moreover, data scientists are often able to generate findings that are relevant across multiple geographies, issues, and organizations. For example, the code used in creating a visualization of child well-being for a Washington D.C.-based organization was used the following year by the North East Child Poverty Commission in the United Kingdom to help their local advocacy efforts to end child poverty.

Having seen some examples, it is helpful to understand general patterns of impact that can be achieved through data analysis. At DataKind, we talk about three classes of insight that data science can provide to enable organizations to work faster, smarter, and more systemically:

- Descriptive insights help measure past and current activity. They serve as an organization's dashboard and are the closest relative to the retrospective offered by traditional measurement and evaluation.

- Predictive insights help anticipate future needs or behaviors. They help flag delays or problems and tell organizations what could be coming.

- Prescriptive insights help envision the future by playing out how next steps could maximize benefit.

To help the social sector achieve these kinds of insights, DataKind teams up data scientists (primarily pro bono) with mission-driven organizations to extract valuable information from untapped sources of data. These teams deploy the same techniques used by companies in Silicon Valley and Wall Street to boost profits but, in our case, to battle hunger or predict where the next human rights abuse may occur.

What is the state of data in the social sector?

As the CEP report suggests, most in the social sector believe that the increased use of data in decision-making will lead to better outcomes. And there is reason to celebrate. The CEP report found that an impressive 76% of organizations polled are using data to inform their performance and 71% want more and better data.

However, there are significant struggles involved in dedicating resources to leverage social sector data. The path to data maturity requires deep capacity investment in learning and adoption of tools, as well as the time and energy required to attract data scientists to engage with the social sector.

Funders have a very clear role to play. By investing in data science capacity, organizations can move beyond traditional reporting and descriptive stats, and become more nimble, effective organizations that can take advantage of predictive and prescriptive insights. On this front, we heartily agree with the conclusion of the CEP report; funders must incentivize and support nonprofit efforts to leverage data in new ways — a key ingredient to amplifying nonprofit performance.

The funder's role: accelerating the use of data for greater impact

Last year, a DataKind team worked with GiveDirectly, a nonprofit organization that sends money directly to the extreme poor in rural Uganda and Kenya. Using satellite imagery, the volunteer team was able to create an algorithm that identifies the poorest households by looking at the roofing material of a home (thatched vs. metal). Previously, GiveDirectly sent staff out on foot, costing precious time and money, before any money changed hands.

But how many others working in Africa on issues related to poverty could use this satellite imagery to optimize their work? And who could look to replicate this algorithm elsewhere? Funders have the opportunity to bridge across the work of individual nonprofits in a way that could benefit the sector as a whole.

To accelerate the use of data for good, funders should:

1. **Shift internal success metrics and incentivize the field.** Funders must understand what data exists about the issues they care about and work to cultivate a more data-centric ecosystem. One simple tool is to build data sensitivity into standard grant agreements. Instead of accountancy(how many people came to those workshops), grant agreements could incentivize analysis (what factors impact turnout). And, instead of narrow definitions of performance (budget growth), funders could look more broadly at impact measures (what in the ecosystem has changed to help/hinder achievement). Lastly, funders could log what data is being collected across the grant portfolios and create a publicly-available index.

2. **Lead collective approaches to leveraging data.** This could consist of inserting a data science team into a pre-existing collaborative effort that is already working at a field level. Efforts like Strive Together, which spans multiple organizations in multiple states, offer an opportunity for greater relevance and reach. Alternatively, it could mean proactively convening cross-sector teams (including both corporate and government partners) to create field-oriented models.

3. **Engage in the deeper implications of data:** Deciding how data assets will be valued — and where and when data privacy should be subsumed for the social good — is, according to Lucy Bernholz, Jon Sotsky, and others, a defining issue for philanthropy. As more nonprofits begin using data that they and others collect, responsible work will require an understanding of a number of other socio-technical issues: potential biases that could be introduced, ethical questions about how the results are used, and the power and limits of new analysis methodologies.

In documenting the growing need for more and better data, CEP has done a great service for those of us who believe passionately that the influx of data and new analytical techniques stand to provide significant levels of adaptive capacity at a moment when our challenges and desire for scaled solutions is monumental.

http://effectivephilanthropy.org/getting-beyond-nonprofit-performance-assessment-with-data/

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