COLLECTED VOICES
DATA-INFORMED NONPROFITS
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Introduction

What happens when nonprofits make a real commitment to collect healthy data about their programs and operations; manage it well; and make savvy, data-informed decisions? And what happens when you connect energized, smart, data-passionate nonprofit professionals for a year of learning and knowledge sharing?

In 2013, NTEN, Microsoft, and some of the brightest members of the nonprofit technology community set out to discover the answers. The 18 members of the Communities of Impact pilot program spent the year connecting through two in-person retreats, monthly calls with seasoned data practitioners from all sectors, and ongoing online discussions and resource sharing.

The best way we could find to capture the lessons, insights, and discoveries from this year of work is by compiling case studies from participants with resources and conversations that emerged during their work together. This is not a report, per se; it isn’t a guide or a handbook. Just as these participants plan to continue working on the ways their organizations collect and use data, we hope that this collection can serve you and your team in learning about what others are doing and where you may go next.

Thank you to Microsoft for recognizing the value in convening community members to think, learn, and tinker together, and for generously supporting this work. Thank you, also, to the participants who shared their time and smarts with each other through this program.

Please let us know what you’re working on by sharing on the NTEN Discuss list or connecting with NTEN or the COI program participants.

In collaboration,
Julia Smith and Amy Sample Ward
Why Communities of Impact?

At NTEN, we see the power of the nonprofit technology community every day – whether in online discussions, educational programs, events, or simply watching the #nptech conversation fly by on Twitter. This community, now 50,000 people strong, has diverse experiences, ideas, and missions. Underneath it all is a recognition that technology can help us do more to meet our goals, regardless of our geographic area or cause, and that by sharing and learning together we are all able to improve.

The Communities of Impact program in 2013 is a pilot, a test run, an experiment. Generously supported by Microsoft, this program brought together an interesting mix of nonprofit staffers representing a 30+ year span of ages, organizational missions on a local and a global scale, and budgets ranging from very small to very large. There was no set plan or course, no required end point. The plan was to come together for one year, focused on data projects, and see how far they could go.

WHAT WE LEARNED

At NTEN, we learned a lot throughout this year about how best to support a program like this one.

**Staff Changes:** During the course of this pilot year, we had four participants change jobs. Skill building was a core goal to this pilot and part of why we designed the program to be based in cohorts, so participants could learn and share with each other, not just independently. Before launching, we discussed what to do if participants changed jobs during the course of the pilot – first for the logistics of finding a new participant or having them continue in a new organization, and secondly for understanding what that meant about success or failure of the program. This is a tricky topic and after discussing it with the participants we see two answers to the question of what staff changes indicate in a program like this one.

We believe that having direct access to people working on similar topics or projects in other organizations, especially in a dedicated and facilitated space like the Communities of Impact program, provides a valuable educational growth opportunity mixing hands-on projects with discussions and access to experts to expand thinking. It also serves as a tangible example of the kind of skills and work products that a participant is capable of even if not normally identified in their job title or description. This is the key piece for increasing their potential for landing new jobs.

It also feeds into the sector wide subject of debate around brain drain and staff turnover. In the case of our participants, it was a mixed result of some having staff at the organization who could continue the cohort work after the original participant moved on while other organizations did not have a clear replacement that could join. We discuss more of the issues around staffing, internal capacity building, and change management in the following collection.

**Cohort Size:** In designing the goals for the pilot year of the Communities of Impact program, we struggled with the ideal size of a cohort. Would any one participant feel there was "too much to do" if the group was too small? How many participants would be too many to effectively facilitate
forward motion? We found that about ten people per cohort was a good number, and we could have done with a few more.

We discovered something interesting throughout the process that we had not necessarily anticipated ahead of time: that tremendous value wasn’t simply in the single cohort discussions and collaboration but when both cohorts came together to speak to experts (for formal webinars or presentations at our retreats) and to one another (in person or through more informal video chats), discuss the struggles or successes they were experiencing (either in their organization or in their specific projects), and help identify solutions collectively. This cross-pollination is a common process in communities of practice and something we found helped bring energy into the separate cohort’s focus areas and progress.

Projects Over Missions: In the nonprofit sector, it is common for a nonprofit staff person to be grouped up with others that have the same job type or that work in a similarly focused organization either for peer networking or collaboration. We were really excited to see that diversity successfully supported a dynamic working scenario in these cohorts where participants had a wide range of job types (not just in title but also in the departments represented), organization sizes, and missions.

By bringing people together that were facing similar hurdles and shared a goal for the kinds of projects or products to develop, the cohort participants had more than enough in common to tackle a year’s worth of work together. Many discussions highlighted similarities across participant experiences, bridging organizational budget sizes or mission areas. This year’s cohorts reinforced for us that participants working together in this way should have a clear understanding of why they are participating but not be bound by the kind of organization they may represent.

WHAT’S IN THIS COLLECTION?

There are many ways that we learn, and many ways that we share what we’ve learned. This collection brings together stories, interviews, discussion notes, and more all with the intentional that there is something from every one of the participants and something that will resonate with you and your staff.

Please enjoy. Please share. Please stay in touch so we can continue to build these resources together!
WHY THIS COLLECTION?

Starting and Leading Conversations about Data

Your nonprofit’s compass should be informed by data. It’s one of the few ways to honestly assess where you organization is, and what direction to move forward. The reasons for its use are as varied as the missions represented in our sector: interest groups may use it to inform voting records of political candidates; community groups may use it to understand what areas need more access to recreational facilities; or a network of preschools may share their data to spot common behavior patterns.

Every organization has different data to measure, and that data could be shared in different ways with different implications for the larger sector in which it operates.

WHY IS THIS SO HARD?

In spring 2013, NTEN’s Communities of Impact (COI) conducted a small survey (n=69) of nonprofit professionals asking how their organizations were engaging with data. We then conducted follow-up interviews. Some interesting insights emerged, as summarized by Andrew Means for the NTEN blog:

- **The “why”:** As with much in the nonprofit sector, funding is the driving force behind the decision to collect data. Nearly 75% of respondents said that they collect data to report back to funders. Another 75% said that they collect data for program evaluation purposes, which is often done as either a funding requirement or a way to attract new funding.

- **The “why not”:** Many organizations are struggling to collect data. The culprits are unsurprising as well: the top three challenges cited are lack of time, lack of money, and lack of training.

- **The “who”:** The vast majority of organizations reported that program staff decide what to measure, what it means, and are in charge of the capture, management, and sharing of data. Yet data analysis is difficult and requires significant social science training – let alone the technical training necessary for the storage and sharing of data. Can we really expect all of our program staff to be equipped to run high quality programs, be data collection experts, and know how to analyze complex data in ways that lead to program improvement?

“Data in and of itself is not useful. Untouched, unmanipulated, unchanged, it’s valueless, but once transformed, it can serve any number of purposes. The nonprofit sector is still trying to figure out how to transform its data into something valuable.”
The survey revealed a sector struggling to figure out how data fits. We are limited by resources, training, and technology. (The number one reported data storage tool was Excel.)

But the problem also seemed to lie with the word itself. Data is not any single thing. When you talk data with development professionals, they often think of giving history and campaign metrics. With someone from marketing, the conversation might veer toward click-through rates or even market segmentation analysis. With someone from the programs team, their minds might jump to program evaluation or assessments. And on and on.

Data in and of itself is not useful. Untouched, unmanipulated, unchanged, it’s valueless, but once transformed, it can serve any number of purposes. The nonprofit sector is still trying to figure out how to transform its data into something valuable. Nonprofit leaders need to continue to mature and invest in the resources necessary to help their staff navigate this process.

**THERE’S CLEARLY A HUNGER FOR THESE CONVERSATIONS**

- Between the articles and webinars on the topic flying fast and furious, our resource list could have been several pages longer — and, we suspect, will likely feel dated within a matter of weeks.
- NTEN saw at least 25 data-themed session proposals for our 2013 and 2014 Nonprofit Technology Conferences. We accepted six for 2014 and have added a special pre-conference session about data.
- Andrew Means, Communities of Impact participant, launched the annual Do Good Data conference, drawing 150+ people to Chicago; the second annual conference will take place in May 2014. (Read about this evolution in the Case Studies section.)
In November 2013, a new NTEN member named Shari Cartun launched a Community of Practice called Nonprofits and Data, which offers a space on the my.nten.org platform for anyone interested in the topic to share resources, get advice, and talk shop. Shari wrote, “I formed this COP with the hopes that current data scientists, future data scientists or anyone else interested in the use of data to help nonprofits would also be interested in this forum for sharing, learning and networking.” The group will launch monthly conference calls in January 2014.

In December 2013, Deborah Elizabeth Finn created the infographic above which illustrates that data only becomes relevant when you can provide appropriate context and actions to the data collected. It’s the human part (the “plus” part) of the diagram where the power and action come from.

**SO HOW DO WE BEGIN, AND HOW DO WE MOVE FORWARD IN MEANINGFUL WAYS?**

It’s important to create an understanding of what data is important to help your organization succeed. If you’re a direct service provider then quantifiable numbers (and goals) about how many services are provided should be easy to measure. But what if your goal is to increase or improve these conservation efforts in your state? What numbers can you measure now and in the future to show the efforts?

These conversations should include appropriate staff (from ED/CEO down) to determine what helps make your case for funding, for actual results, etc. Starting with the end in mind will get you a lot further along and knowing what kind of data and reports are needed will point you down a path to tracking the right data. Nell Edgington’s post for the NTEN blog, *How Do We Measure Nonprofit Effectiveness?*, offers a good starting point.
WHY THIS COLLECTION?

Data Adoption Scale

AMY SAMPLE WARD

Through NTEN’s annual Technology Staffing and Investment survey, NTEN has established the Technology Adoption Scale. Respondents rate their organization’s approach to technology in a series of questions; responses categorize respondents into one of four Tech Adoption levels, defined as:

**Struggling:** “We are struggling; we have a failing infrastructure, and our technology time and budget generally go towards creating workarounds, repairing old equipment, and duplicating tasks.”

For data-focused projects, a Struggling organization statement might sound like, “We aren’t sure that we are collecting data in an organized or accessible way. We have different management processes for various systems that may have data, like our event registrations and email lists.”

**Functioning:** “We keep the lights on; we have basic systems in place to meet immediate needs. leadership makes technology decisions based on efficiencies, with little-to-no input from staff/consultant.”

A Functioning organization looking at data might say, “Sure, we are collecting data, but there is no plan in place about how we manage it, validate it, or otherwise use it. If someone wants a report about something, we pull what the database can report.”

**Operating:** “We keep up; we have stable infrastructure and a set of technology policies and practices. Leadership makes technology decisions based on standard levels according to industry/sector information and gathers input from technology staff/consultant before making final decision.”

When it comes to data management, Operating organizations may say, “We collect data based on various interactions or transactions. We also create reports based on departmental goals though recognize some of the data in these reports is convenient and may not be the most strategic.”

**Leading:** “We’re innovators; we recognize that technology is an investment in our mission, and leadership integrates technology decisions with organizational strategy. Technology-responsible staff are involved in overall strategic planning.”

For Leading organizations, talking about data management might sound something like, “Our strategic plan sets the tone of the outcomes we want to to reach and gives us the guidance for the kinds of metrics we should track as indicators towards that impact. We regularly report and monitor data, sharing either those reports or access to the data itself with supporters, donors, and other organizations.”
You can learn more about the TA Scale and review the annual reports on the NTEN website at nten.org/research/it-staffing.

Of course, your organization may be struggling in some areas and leading in others. Share your triumphs and challenges in the Nonprofits and Data Community of Practice discussion forums on MyNTEN, or read the case studies at the end of this collection to see how the Communities of Impact members are taking steps large and small to move their organizations along this scale.
DATA CULTURE AND COMPETENCY

Organizational Buy-in

When leading your colleagues in conversations about data, you’re likely to run into all kinds of philosophies and hang-ups. You’ll gain trust and longer-term support for this work if you can:

• establish yourself as a good listener who understands the organization’s mission and audiences
• demonstrate competence and transparency when designing your experiments
• go back to basics with the good old scientific method
• show actual numbers through analytics or point to examples from similar organizations in your field

Here are stories from three COI participants that show that open-mindedness, reflection time, and a willingness to experiment can go a very long way in transforming your organization’s culture and strategies.

First, Mark Mathyer explains how his organization used data to overcome a museum membership myth.

I’ve been at the Museum of Science and Industry for more than ten years, working in the External Affairs Division, which includes the Development, Membership and Strategic Initiatives departments. Several years ago, we discovered a gap in our donors spectrum—a range with only a few participants, who were contributing very little—and we made some changes to grow their numbers and increase their impact.

The departments in External Affairs have historically tried to reach and nurture relationships with two different audiences. First, there are members, who pay $55-215 a year for different levels of access to the museum. We think of their mindset as “I’m buying free admission to the museum because I like to go there a lot.” Then we have donors, who typically give between $1,000 and $50,000 every year. They’re recognized as being members of the Columbian Society, and they contribute primarily because they believe in the mission of the institution. Their mindset is different; free admission is not a main motivator for their giving.

Since before I arrived at the museum, it was understood that there were these two different groups and a gap in between them: “Nobody gives between $250 and $1000.” I started wondering whether this was a myth, and began running the numbers. Looking at the period from 2000 to 2010, Our number of Member families has varied between 30,000 and 40,000. During that same period our Donor population was between 1200 and 1500. In the ‘gap’ between the two groups, I found an average of just 115 each year.

We recognized that part of the problem might be that we weren’t making asks in this range. So, around 2008, we started adding asks to the Member newsletter, and doing an annual mailing to
Members, hoping to move them up to Donor levels. But we didn’t get good results. The population in the gap actually decreased in 2009 and 2010. When we looked into why our Members were not responding to the same types of solicitations that our Donors responded to, we found several key problems.

First was the size of the gap: the jump from $215 to $1000 was big. To ease the transition, we added two new donor levels. We created an “Explorers Society” at the $250 level and a “Catalyst Society” for those who gave $500. We found that there was also a difference in perception: ‘membership’ is collegial, warm and fuzzy, and self-selecting while a ‘society’ is exclusive, secretive, something you have to be invited into. So we started referring to our donor levels as Premium Membership levels.

Then we had a problem with the renewal cycle. Members were used to getting a 12 month membership that ran from the time of purchase (so if you bought or renewed in April, your membership was good until April a year later). The Donor Societies were used to renewing for ‘next year’ – so if you made a donation anytime in 2012, it covered your membership in 2013. This was confusing for Members. So, we got the Individual Giving team to change the renewal cycle to a 12 month model.

As we rolled out these changes, participation in the gap rose to 282 in 2011, 385 in 2012, and we are on track to pass 450 in 2013. Since 2010, we have more than tripled the number of donors in this range, mostly by moving up members from lower levels. A few new donors have started at this level, but we are not seeing higher level donors dropping down in levels.

Our transition to a Membership model has been so successful that the Individual Giving team is moving away from the term ‘Donor Societies’ and is now using the term ‘Annual Fund Members’.

This process was driven by data analysis and research, not by the fundraisers – who were initially skeptical that there was an opportunity for growth with this group of supporters. Now, after three years of positive results (and a lot of unrelated turnover), the Individual Giving Team thinks that it was their idea – which is what we wanted all along!

It’s gratifying to look back and see that we recognized this gap in our data; took the time to drill down and figure out what opportunities we were missing; and have nurtured a whole new group of supporters.

**Gianna Short, on how she’s working on foster a more data-informed culture at the Maine Conservation of Voters.**

After joining the Communities of Impact, I rewrote my job description and title to better reflect what I was already doing and wanted to do more, including weaving in the directives regarding data I made up at our kickoff retreat. My boss was impressed and I got “promoted” from Admin and Online Coordinator to Data and Communications Coordinator. However, next year I am heading back to school, and MCV has decided that rather than replicate my position, we really need a grassroots organizer to build our membership and do elections work. So I now have an additional
goal: to diffuse data awareness and practice into everyone’s job so it will stick around. We’ve already seen a few small successes.

Here’s one example: The staff tended to focus a lot on our Facebook page stats. I had looked at this benchmark infographic and realized that our Facebook fans to email list ratio was way off relative to the average. We were almost 1:1. Obviously, the effort that we were putting into Facebook was paying off in those “likes and shares” but not paying off in terms of fundraising or meaningful action – we need people on the email list for that. So I shared this info around the office and our development director agreed with me that it made sense to shift our focus more towards building our email list rather than our Facebook page. Together we hatched the idea and began using the petition platform at MoveOn.org which has helped us more than double our email list in less than a year.

Peter Campbell reflects on some of his positive experiences with data.

This isn’t a long tale about a successful data project, although I do have some of those under my belt. It’s one that acknowledges that no organizational success or failure story involves a single person, and all of my data success stories have been realized because other people championed and utilized my efforts.

My first example pulls back to the 90’s. I was working as IT Director at a law firm, and the technology demands were growing, particularly as Y2K approached. I got permission to hire a Database Administrator (DBA), While I got some strong resumes from external candidates, I had someone internal in mind. The manager of the records department had ignored the protests of his technophobic boss and spent his off hours designing a records management database to replace the paper records that we had traditionally kept. It was a secret project, and he had the sense to invite me when he unveiled it to his boss. She was furious. I was thrilled. Naturally, I let him know that I wanted him to apply for my position and I hired him for it. Throughout my career as a manager, I’ve always known that recognizing internal talent and rewarding it is a recipe for a great hire. He appreciated being acknowledged for his efforts; I had a DBA who, while not terribly experienced, was exceptionally talented. A win.

My second example was at my next job, San Francisco Goodwill, where I was VP of IT. My big project there (which is documented in a case study in NTEN’s book “Managing Technology to Meet
"Your Mission") was to put in new point of sale and inventory management systems, and develop my own retail reporting and management application in PHP and MySQL. When I started the project, I met with some resistance from the retail staff. Much of that resistance was resolved by showing (not telling): I sent the whole team to Seattle, where a system similar to the one that I was developing had been deployed. They came back with much more confidence in the project. But I still was dealing with some key managers who were happy managing by intuition rather than information. And then we had some turnover, as the VP of Retail and Director of Operations both moved on to other orgs. They were replaced, maybe oddly, but, for me, fortunately, by the CFO, who took on a dual role running finance and retail, and the Controller, who switched jobs to take on management of operations. And I suddenly had finance people, who simply love numbers, as the end-users for my product. We went from having one 45 page report on 8.5 by 17 paper in .7 type to a web-based, drill-down reporting system that allowed us to much more strategically analyse our sales. But, most important, we had retail staff who knew what to do with such a system, and our thrift store sales went up ten percent year over year for two years in a row after deploying the system, despite the fact that we also closed two stores.

My biggest data wins? Working with people who get data.
DATA CULTURE AND COMPETENCY

Shape Data Plans with Strategic Planning: Overhauling NTEN’s Organizational Dashboard

KARL HEDSTROM, NTEN’S ORGANIZATIONAL DASHBOARD


For several years now I’ve been in charge of maintaining NTEN’s organizational dashboard. The three main tasks involved have been:

1. Figuring out what data to track
2. Collecting and analyzing the data
3. Presenting the data clearly

However I’ve recently come to realize there’s a fourth potentially more difficult challenge here, and that’s finding the time to revisit the first three challenges on a routine basis to make sure the data maintains its relevancy. As technology and the nonprofit sector continue to evolve, most organizations make it a priority to adapt their programs and operations to stay relevant, but this same priority isn’t often given to updating their internal dashboards.

This is what I’ve been experiencing here at NTEN, as our internal dashboard has begun to outlive its relevancy. On the one hand, there will always be other projects that seem more pressing than updating the organizational dashboard, but if we’re already budgeting time to collect the data, it seems foolish not to also budget time to make sure we’re collecting the right data.

The first step of course is admitting there’s a problem, so I’m happy to say NTEN is in the process of kicking off a new project to overhaul our dashboard and get it back to the place where it can once again help guide our strategic decisions and actions.

Learn more about our plans to do this on page 26.
DATA CULTURE AND COMPETENCY

From Silos to Ecosystems

When the Communities of Impact participants met for a kick-off retreat in January 2013, the conversation quickly moved from what their organizations may have already been doing with data to the incredible potential for efficiency, effectiveness, and collaboration if data could be more easily shared and used between organizations. That’s not to say that participants wanted to add to the sea of data files available without context, but that many organizations work in either an existing affiliate or chapter network, or have strategic partnerships with other organizations.

Collecting data for the organization’s own use is a simpler matter than collecting, cleaning, and sharing data to another organization working in the same geographic area or mission focus. The participants noted, as anyone who has tackled this kind of valuable data sharing might, that it wasn’t as easy as sharing a file—it would be issues of taxonomy, organizational culture, and more to tackle before data sharing could reach its potential. That potential, however, was great enough to outweigh the issues to be resolved; inspiring them to start those conversations, make plans, and work not just on a single data project but also on the organizational shifts that it would take to make data collection and sharing valuable.

COI participant Jeff Piestrak embodies these principles. He is an Outreach & Engagement Specialist at Mann Library at Cornell University in New York, but he also contributes to state and regional organizations and networks like the Northeast Sustainable Agriculture Working Group (NESAWG). “I have several threads of activity that at this point seem somewhat disconnected—at least in any formal way—but I can see the big picture of how they come together,” Jeff says. In partnership with others, he aims to create resources, spaces and systems that help people share and use data, and learn together while identifying solutions to common problems.

As part of this effort Jeff is currently developing an Agriculture and Food Data Users reference guide. He initially created this for the Cornell Cooperative Extension Ag Marketing and Community Development Program Work Team. This work team, scattered across New York state, wants to find and use data to tell persuasive stories demonstrating the value of agriculture. Jeff’s initial goal is to get the AMCD-PWT engaged at a beta level to ensure that the reference guide meets their own data needs. After that, he will share it publicly, and then begin using and adapting it more broadly with groups like NESAWG.

This is challenging, of course. “I can create long lists of resources, but that can be overwhelming for people trying to track down what’s useful for their specific needs. And a lot of the data has been stored in different formats so it’s hard to pull it together nicely. That’s a huge challenge as we try to encourage organization-to-organization data sharing: we have a balkanized system. People have things spread out in different formats and places. And they don’t have time to sift through and figure out what they want to share, so what’s publicly accessible is just a fraction of what might potentially be available. So any guide we create is only useful to some extent.”
Still, Jeff is hopeful and optimistic. “Tomorrow I’m giving a presentation to the Cornell University Library Data Discussion Group, where library staff get together with their colleagues and learn about data-related issues. I’m hoping to get them excited and interested in this work happening across the Northeast, using the university’s Land Grant mission as a framework for action. I think that it’s really key that we have a narrative about why data sharing is so important. We need to extend this beyond the data geeks and get librarians and government folks and others interested in being a part of, and supporting this effort.”

Here’s more from Jeff:

_The trick is finding the right balance between planning and coordination on one hand, creating the more formal arrangements, standards and infrastructure needed to nurture and support collaborative relationships, trust and data sharing over the long term, while allowing the more emergent, entrepreneurial activity that is characteristic of the local/regional food systems movement to flourish. This creative tension can be seen in some of the ways funders are steering and evaluating projects, including the recent infatuation with “collective impact”, getting multiple initiatives to collaborate around shared measures of progress in order to move larger levers of systems change. I see this, and the broader search for indicators of project impact, as driving a lot of current efforts around data gathering, and in a more limited way, sharing._

_On the other hand, some are calling for a more “network-centric” approach, making it easier to find, connect and repurpose information and data for a variety of uses, including many initially unforeseen. Those working around Linked Open Data, and the semantic web are certainly making this case. And community developers like Bill Traynor are advocating for this less direct strategy, supporting as many opportunities as possible for the “creation and exchange of value” within networks. Similarly, within the food systems movement, folks like Rich Pirog are advocating for collaborative networks and information sharing systems or hubs which support “collective sense-making”, helping individuals and groups more organically come to shared understandings, self-organizing and evolving in response._

_In many ways I see these two strategies as quite complimentary, though I think sometimes there is too much of a hurry to get to the collective impact part without first investing enough in the necessary groundwork and network building strategies. The simple fact, at least in my experience, is that even though we may be talking about the exchange of bits and bytes, that isn’t going to happen until human relationships of trust and understanding, and what Rich calls “complex reciprocity”, are formed. If we’re going to truly understand how are investments in systems change are paying off in the long run, we’ll need indicators which represent these relationships, and data systems which generate and capture them, and make them come to life in dramatic and persuasive ways. Tools like Social Network Analysis are one effective way of gauging and visually mapping that, particularly when combined with more qualitative data gathering, like capturing personal narratives/stories._
What models and tools can we look to? For the Northeast Food Knowledge Ecosystem project we’re drawing on several. In fact it’s amazing how much is already out there, though many are disconnected from each other. One “emergent platform” we’re excited about is the work NYC based developer Nuams is doing with their NuCivic suite of products. Building on other projects like the Comprehensive Knowledge Archive Network or CKAN, they’re developing a suite of web-based open source tools supporting data sharing, management, and use (including visualization). They also have tools supporting organization of hackathons, and cataloging of apps developed through them. We see both of these functions as vital to the long term evolution of NEFKE, which we hope will become a vibrant and open innovation ecosystem. Nuams has been good about making this data sharing narrative compelling to government, and we’re hoping to extend that into the Good Food movement, and the role data can play in supporting healthy, resilient, and just food systems.

For us, some of the most innovative and inspiring work is happening around international development and agriculture. In many ways it’s leapfrogging what’s happening in the U.S., and Europe seems much more invested in this. Mann Library is involved in several projects internationally including AgriVIVO, an international registry facilitating connections between a variety of actors in the agricultural field, bridging separately hosted directories and online communities. Other initiatives we’re involved with that serve as useful models are CIARD, and AgriDrupal, Drupal is a preferred platform for our NEFKE pilot project given its modular nature, worldwide collaborative development community, and robust capabilities, including “baked-in” capabilities for seamlessly sharing data.
DATA CULTURE AND COMPETENCY

Understanding Options and Risks: What to Consider Before You Buy a Data Management System

PETER CAMPBELL

In late 2007, NTEN, Idealware, and Beaconfire put together a detailed rubric outlining key considerations when purchasing a data management system. Getting Your Systems Talking - A Framework to Evaluate APIs and Data Exchange Features is still a timely and useful resource for anyone about to invest in a new CRM, Finance System, Grants Management System, or just about anything with a database underlying the user interface. The article provides an organized rubric of the questions that should go into a Request For Proposal, and protect you from vendors who, under the pretense of giving you tools, actually put your data at risk. In the interim since 2007, things have improved, and many of the items listed in this article are included in good, NPO-focused software, but there are still plenty of vendors out there who believe that locking us into their proprietary systems and file formats is an easier recipe for customer retention than the one that involves providing quality software. This is highly recommended reading.
KNOWING WHAT QUESTIONS TO ASK

Building Context on the Data Landscape

ONE USEFUL EXERCISE

At the COI kickoff retreat in January 2013, we asked one another this question: If you were promoted to your boss’s position, what metrics would you ask your successor to report to you regularly?

Gianna Short of Maine Conservation Voters (MCV) included “check website analytics every month!” on her list – something she had never done before. She began doing this herself. Here’s what happened.

MCV’s website focuses on politics, but in April of 2013, I noticed that four of the top ten Google searches that brought people to the website were some variation of “native animals of Maine.” It turned out that this was a result of a random project we’d assigned to an intern months earlier, to “figure out Pinterest and do something cool.” Our intern created a Pinterest board displaying Animals Native to Maine, with adorable photos that linked to our website.

From April through July of 2013, we had on average about 700 unique visitors a month, and surprisingly, that intern project was actually drawing traffic to our site! This realization was a lightbulb moment; I had found a piece of data we never would have thought to look for or thought existed. In May, I looked at more data and saw that over 60 site visitors had landed on the page with native animal photos. In June, 98 people landed on our site on that page, but the dropoff rate was huge: 91 dropped off right away. I realized this we were missing a big opportunity, because someone coming from Pinterest had nowhere to go from that page. There was no clear way to engage on a deeper level.

I tried linking it to our Bill Tracker (“help protect these cute animals in Maine with legislation!”), but that page was so dense. From a user perspective, going from cute fluffy owls to a dense page about the legislative process didn’t make any sense. So when we redesigned our site this year (see case study, page 48), we envisioned the whole layout to be content-rich with that middle step of engagement between fuzzy bears and bills about legislative positions.

Now it’s a priority to keep track of analytics on our new site, to see how people are using it, and to continue improving the user experience. I’m going to work with our site developer on this so we have a buddy system.
Here’s a story from NTEN’s Karl Hedstrom about “how not to design a data-driven experiment.” As a COI participant, Karl wrote this for the NTEN blog in August 2013. We’ve modified it slightly for this collection.

*During my 7 year tenure at NTEN, I’ve had the pleasure of looking at a lot of data, and figuring out ways to use that data in strategic ways to drive the organization and our community forward.*

*In late spring of 2012, one thing that had been on my radar for awhile was an interesting correlation between our membership renewal rates and event registrations. Specifically, members who had registered for at least one NTEN event over the course of the year were 37% more likely to renew.*

*After presenting this finding to staff, my hypothesis was that if we were able to increase event attendance, we should see an increase to our struggling renewal rate. This seemed reasonable enough to everyone, so as an experiment we decided to try making all our summer programming free to members in order to increase attendance.*

*Going into the experiment, I already had a few reservations about our methodology and how exactly we were going to track the results, but momentum pushed us on with the thought that we could sort out those details once we had all the data in front of us. As they’d say on “How I Met Your Mother,” that was a problem for “Future NTEN.”*

*Jumping forward three months when it was time to actually analyze the data, it quickly became clear that our poor methodology and lack of planning had doomed us to a quagmire of inconclusive results, not to mention any lost staff time or webinar revenue. Of course, it wasn’t a complete loss as we did learn several valuable lessons in how not to design a data driven experiment.*

**SPECIFICALLY, MY TOP 5 TAKEAWAYS FROM THE EXPERIENCE ARE:**

1. **Don’t change too many variables.** While we did actually see a jump in attendance for those free events, we forgot to account for the fact that our event calendar that summer and the rest of the year was vastly different than any previous year, meaning there were already far too many variables in play for us to see what affect our “free events” change had actually had. There was also the issue that our renewal numbers are based on a full year of data, while this experiment only ran for 3 months, adding a further layer of difficulty to any analysis.

2. **Set up a control case.** In addition to dealing with too many variables, we also had no way of telling what would have happened had we not made those events free. This meant that even if our results had shown a clear shift to support or disprove our hypothesis, there still would have been a question of whether that shift was a result of our experiment or just a random change that would have occurred regardless of what we had done.

3. **Plan out the full experiment ahead of time, including the analysis.** We likely would have foreseen many of these issues had we made a plan for the exact data we’d be looking at after the experiment, and how that data was going to help us prove or disprove our hypothesis. Unfortunately, by not doing this work up front, we instead ended up with a lot of cloudy data that just raised several new questions instead of answering the one we were asking.
4. **Start with small, easy to design experiments.** This was by far the largest data driven experiment NTEN had tried to date, and our lack of experience clearly showed. Looking forward, our new plan has been to hone our skills with smaller, easier to design experiments, and build a foundation of experience that will eventually allow us to explore these larger and more comprehensive strategic questions.

5. **Double check your plan against the scientific method.** As a physics major, the scientific method was well ingrained in me in college. However, as this failed experiment plainly demonstrates, the 10+ intervening years have somewhat lessened it’s hold on me. While I’m not suggesting you incorporate strict double blind testing for every website A/B test you conduct going forward, it is still worth re-familiarizing yourself with the scientific method concepts in order to catch any major flaws in your experimental plan.

With any luck, my next case study on this topic will be about “Future NTEN’s” successes with data driven experiments. In the meantime, hopefully you can benefit from these lessons we learned the hard way.
Knowing What Questions to Ask

Assessment and Evaluation

Earlier we introduced you to Jeff Piestrak. Here’s how these themes are coming into play in his work with the Northeast Sustainable Agriculture Working Group.

Identifying useful indicators, that are directly (and logically) related to larger desired outcomes, is a key goal for our NEFKE pilot project. We felt it important to first step back and look at the really big picture of where our pilot group wanted to go (Farm to Institution New England in this case), before we could begin developing a data and knowledge sharing ecosystem that served them and their network. To do that, we hired Yellow Wood Associates, who have a long track record helping groups and communities clarify their goals, and develop logical, strategic plans for reaching those. Their You Get What You Measure workshop helped us map out where we wanted to go, what the key leverage points were, and how we might measure progress. This generated a wealth of information we are now using to guide the second year of our project, which will entail work on not only web tools and data sharing infrastructure, but support systems and services to assist users in meeting their goals. Interestingly, it also identified some key (and perhaps flawed) assumptions regarding what they were doing and why. This has brought to the surface several “research hotspots” that we’ll be using to guide development of our data and information gathering and delivery systems.

We’re also looking at tools like the Cornell Office for Research on Evaluation Netway, which can help individual programs develop and map their own theories of change, or network pathways, within a collaborative (online) space that makes it easier to link programs together for mutual benefit and systems change.

For further reading on assessment and evaluation, try the Getting Started with Data-Driven Decision Making workbook or the Getting Your Systems Talking: A Framework to Evaluate APIs and Data Exchange Features report.
KNOWING WHAT QUESTIONS TO ASK

Internal Organizational Approaches: Measuring Your Impact in Two (Complex and Nuanced) Steps – and One Big Trap

BY ANDREW MEANS

Note: This piece was written for the December 2013 edition of the NTEN: Change Journal. Learn more about this free quarterly journal and download all editions at http://www.nten.org/ntenchange.

Nearly every week I have people asking me how their organization can begin to measure its impact. It’s a tough question to answer; partly because I’m not sure we have a clear understanding of impact.

For a lot of organizations when they talk about their “impact” they tell stories. We see these stories in “Impact Reports” and hear them in annual galas. When someone questions the validity of our organizations we turn to these stories, but these are not accurate representations of our impact.

In my work at The Impact Lab, I remind my clients that every nonprofit organization exists to solve a problem or further a cause. In both scenarios a finish line exists in which the organization has accomplished their mission. Impact, then, is the progress they are making towards that goal.

STEP 1: IDENTIFY GOALS
So what is step 1 in measuring your impact? Identify your goal.

You might think that most mission-driven organizations would be able to clearly and quickly articulate the goals they have set out to achieve. We have mission and vision statements, lists of values, and organizational strategies. Yet I find that organizations struggle when asked to put these often abstract concepts into concrete language.

If your organization finds itself struggling to concretely describe its finish line, ask these questions: How will you know you have succeeded? What is something you would be able to observe that would tell you that your organization has achieved its goal?

One of the tools that I frequently find helpful to organizations working on goal identification is a logic model. Logic models help organizations to think about how their programs are designed and how they logically see causation working (i.e. if we do this, then this will happen which will produce this outcome).
**STEP 2: TRACK PROGRESS**

The final step in our two-step process is to track progress towards that goal.

Once your organization has identified its goal, it needs to track progress towards that goal. How will you know not only when you have arrived at your destination, but that you’re 25% of the way there? Additionally, in more actionable language, how will you know if you’re closer to your goal this year than last?

This can come in the form of benchmarks; for example, last year 20% of high school seniors in our program graduated and this year 30% did. Take care to ensure that the populations are comparable and that other factors aren’t also causing the change.

You can also build regression models to help you understand your impact. I know regression models can sound scary for the uninitiated. Put simply, a regression model takes all of the known outcomes and draws a line that comes closest to them. Online classroom Khan Academy has some great resources to get started here.

Tracking progress is often complex and nuanced work. This can make it difficult to identify plug and play programs that automatically inform your organization about its impact.

That’s it! Those are the two steps to measuring your impact. Identify your goal and track progress towards it.

Obviously within those two steps is a ton of work. What’s the right data to collect? What’s the right goal? Is our program really designed to achieve that goal?

**A TRAP**

One of the traps I see organizations fall into when “measuring their impact” is focusing too much on outliers.

Everyone’s lives are changed by involvement in our programs. For some, the change might be miniscule, for others, our programs are massively successful and their lives are radically changed. For most people, however, it’s probably somewhere in the middle.

We tend to focus on the positive outliers: the people whose lives were completely changed by our program (or at least while enrolled in our program, but that’s a whole other article). These are the stories we tell in staff meetings and at galas. They adorn the covers of our annual reports and we make videos of their lives hoping they go viral. These outliers can tell a very misleading story of your organization’s impact. It’s not what’s true for the majority of your participants.

So whose story should you focus on? The median participant. The median participant is the one for whom half of participants saw more improvement and half saw less. It’s the person exactly in the middle.

The median story is a beautiful thing because it forces you to become much more realistic about your organization’s impact. How much does the median student improve? How much more does the median farmer make?
OUR RESPONSIBILITY AS A SECTOR

We live in a world with incredible problems and limited resources. We need to focus those resources on programs and organizations that are working best. That is only possible if organizations are proactive and transparent in identifying, measuring, and communicating the progress they are making towards clearly identifiable goals.

We have a responsibility to do this as a sector. We’ve been given a public trust. We must rigorously pursue our impact because only then will we be able to improve our programs and truly make progress in solving the most intractable problems facing our world today.
In-House – NTEN’s Dashboard Overhaul

In the previous section, Karl Hedstrom explained why NTEN is in the process of overhauling its dashboard. Here are the steps NTEN will take:

**FIGURING OUT WHAT DATA TO TRACK:**
While the most direct path forward here may be to analyze what data is available to you and go from there, I believe it’s much more helpful to step back and instead start with the question, “How do we know if our organization is succeeding?” For NTEN, this question led us to create the following list of goals we’re looking to achieve:

1. Technology is an essential part of a nonprofit organization’s operations.
2. There are an increased number of technology champions within nonprofit organizations.
3. Those nonprofit technology champions are equipped to make well-informed decisions to help their organization’s abilities to fulfill their missions.
4. Conditions exist that support helping nonprofits using technology to fulfill their missions.
5. NTEN is a sustainable organization with healthy financials, operations, human resources, and cultural practices.

From this list, we next identified a handful of indicators that point towards whether we’re achieving each outcome. For example, one of our indicators is: “Do organizations include technology in their strategic plans?”, and the second indicator is, “How many technology champions are there?”

The final step in this process was to identify the specific metric or data that would be useful in measuring each of our indicators. This is where we could finally go back and take a look at what data we had available to us, but this time with a much more focused lens than if we had just started there.

One final note on identifying what data to track that can easily get lost in this process, is that wherever possible, it’s important to make sure that the data is actionable. For example, once your dashboard is up and running, you may occasionally see one of your metrics not performing quite the way you’d hoped. If there’s no action you can take to affect its performance though, it probably wasn’t the right metric in the first place since the whole point of tracking is to be able to identify and take action on any small issues before they become big issues.
COLLECTING AND ANALYZING THE DATA

Once you’ve determined what data to track, the next step is figuring out how that data is actually going to be collected and analyzed. That is:

1. Who’s collecting it?
2. How often is it being collected?
3. What system(s) is it coming from?
4. What analysis or data manipulation is required to turn the data we have into the data we want?

What you’re really doing here is building your organization’s specific data collection process, which should hopefully be pretty straightforward but there are a couple common pitfalls you’ll want to make sure you avoid.

The first is to realistically assess how much time this entire data collection process will actually take, and then either explicitly budget for that time, or adjust your data needs as necessary. This sounds simple enough, but when overlooked it has the potential of undermining your entire dashboard project if it means shortcuts are being taken, or the data isn’t getting collected properly.

The second is to identify any process improvements you can, but at the same time make sure you’re not using more time creating these improvements than you’ll end up saving. That’s of course a good rule to remember for any process you want to make more efficient (unless you’re Rube Goldberg), but it’s especially important for those processes which may be replaced or overhauled on a shorter time frame.

PRESENTING THE DATA CLEARLY

Now that you’ve figured out what data to track and built a process for collecting it, the final step is presenting it in a way that will be useful for your organization. When most people look at your dashboard, they’ll quickly glance at the first section or two, and if they don’t immediately understand what they’re looking at, they’ll give up and all the work you’ve done up to that point will be lost on them.

To avoid this, you’ll want to design a “Front Page” for your dashboard that shows only the most critical data in a clear and concise way, and with minimal other distractions; think infographic rather than a spreadsheet full of numbers and formulas. Now while the specifics of good infographic design are beyond the scope of this article and outside my expertise, this could be as...
simple as a few big and easy-to-read graphs that are clearly labeled, and with nice visual cues about the data (e.g. green=good, red=bad).

Finally, assuming you create the proper hook with your front page, you may have the occasional reader who wants to dig further into the data, so while you don’t want all your raw data and calculations front and center, you do still want to make them available as necessary for those deeper dives.

REPEAT ABOVE STEPS ON A ROUTINE BASIS:
Like I said at the beginning of this article, probably the most important and most difficult challenge in creating an organizational dashboard is making time to routinely go back through the previous steps to keep the data as relevant to your organization as possible. I’d also say from my own experience that the more frequently this is done, the quicker and easier it is, whereas when a dashboard is left to stagnate for months or years, the process of revamping it also grows until eventually you’re faced with creating a brand new dashboard nearly from scratch.

So while we still have a bit of work to do before we launch a new and updated organizational dashboard here at NTEN, I’m hopeful that this time around we won’t repeat the mistake of letting its evolution stall, as it’s this ability to change along with the organization that is at the heart of any good dashboard.
Community: Engaging the Community to Assist with Your Data-Driven Challenges

PETER CAMPBELL

Do you have cutting-edge data management and web development gurus on your staff? More power to you. Many nonprofits have capable web managers and good consultants, and limited budget for the latter. At Legal Services Corporation, the key application on our website is the “Find Legal Aid” app that helps the people that our grantees serve find their local legal aid provider. As of this writing, the app has all of the sexiness of any circa-1997 web tool. It has gray dropdowns that let you select a city and/or county, and the results are a clean, simple list of provider names and contact info. So we looked at the similar apps with their fancy Google Map integration and wished that we had more java and GIS talent in-house than we have.

At the same time, we were wrestling with another data-related issue. As an organization that allocates federal funding to legal aid programs, we have a commitment to transparency. Since I came on board in January, one of my goals is to put all of the public data we have up on data.gov and other places where it can be made available to civic-minded hackers who want to report on what we do. I dipped my head into that community last summer, hoping to have datasets available for the National Day of Civic Hacking. I blogged about this here: http://tig.lsc.gov/hacking-justice.

The effort was unsuccessful, because I learned that all of our data is stored in relation to our service areas, a unique geography that is mapped by random lines, sometimes consistent with state or county lines, and sometimes not. Since our demographic data wasn’t sortable by zip code or state, it was pretty useless to the hacker community, as any good mashup has to have common denominators to start from.

A few months later, we made friends with some members of DC Legal Hackers. Their group focused on developing technology apps and solutions for issues that border on the edge of the law and technology. Access to Justice, our cause, was right in their bailiwick. They held their first hackathon in October, and one of the projects was to map our specific “service area” geography

“We took a giant leap toward solving our most basic open data roadblock. We’re in debt to our community, and we champion their work.”
to something more standard, and develop a new Find Legal Aid application based on that work. They provided us with a sharp web app that was about 80% complete, with enough work established so that our developer (a self-professed “not a GIS guy”) could pick up how it worked and complete it. The new app should be live by the time this is published, and our success story is two-fold: we updated the most popular tool that people in financial need use to find legal help, and we took a giant leap toward solving our most basic open data roadblock. We’re in debt to our community, and we champion their work.

Participant Jeff Piestrak explains why NESAWG will begin hosting hackathons in 2014:

Our project is looking to serve as a catalyst for future efforts, from the public, civic/non-profit and private sector. Rather than trying to build one large central, unwieldy portal, we’re trying to initiate a development ecosystem that others can run with and extend over time, building on and extending our initial work. To support these outcomes, we want to encourage open source, open standards, open access solutions, and will be hosting a hackathon in the coming year, offering a “bounty” to programmers who can meet a stated design challenge (likely directly related to our work supporting data/information exchange and transparency along Farm to Institution value chains). We’ve partnered with Farm Hack for this, and hope to use Nuams NuApps platform to support and catalog this work.
SYSTEMS AND TECHNOLOGY TO SUPPORT EXECUTION

Architecting Healthy Data Management Systems

PETER CAMPBELL

INTRODUCTION

The reasons why we want to make data-driven decisions are clear. The challenge, in our cash-strapped, resource-shy environments is to install, configure and manage the systems that will allow us to easily and efficiently analyze, report on and visualize the data. This article will offer some insight into how that can be done, while being ever mindful that the money and time to invest is hard to come by. But we’ll also point out where those investments can pay off in more ways than just the critical one: the ability to justify our mission-effectiveness.

Right off the bat, acknowledge that it might be a long-term project to get there. But, acknowledge as well, that you are already collecting all sorts of data, and there is a lot more data available that can put your work in context. The challenge is to implement new systems without wasting earlier investments, and to funnel data to a central repository for reporting, as opposed to re-entering it all into a redundant system. Done correctly, this project should result in greater efficiency once it’s completed.

Consider these goals:

- An integrated data management and reporting system that can easily output metrics in the formats that constituents and funders desire;
- A streamlined process for managing data that increases the validity of the data entered while reducing the amount of data entry; and
- A broader, shared understanding of the effectiveness of our strategic plans.

Here are the steps you can take to accomplish these goals.

TAKING INVENTORY

The first step in building the system involves ferreting out all of the systems that you store data in today. These will likely be applications, like case or client management systems, finance databases, human resources systems and constituent relationship management (CRM) systems. It will also include Access databases, Excel spreadsheets, Word documents,
email, and, of course, paper. In most organizations (and this isn’t limited to nonprofits), data isn’t centrally managed. It’s stored by application and/or department, and by individuals. The challenge is to identify the data that you need to report on, wherever it might be hidden, and catalogue it. Write down what it is, where it is, what format it is in, and who maintains it. Catalogue your information security: what content is subject to limited availability within the company (e.g., HR data and HIPAA-related information)? What can be seen organization-wide? What can be seen by the public?

Traditionally, companies have defaulted to securing data by department. While this offers a high-level of security, it can stifle collaboration and result in data sprawl, as copies of secured documents are printed and emailed to those who need to see the information, but don’t have access. Consider a data strategy that keeps most things public (within the organization), and only secures documents when there is clear reason to do so.

You’ll likely find a fair amount of redundant data. This, in particular, should be catalogued. For example, say that you work at a social services organization. When a new client comes on, they’re entered into the case management system, the CRM, a learning management system, and a security system database, because you’ve given them some kind of access card. The key to our data management strategy is to identify redundant data entry and remove it. We should be able to enter this client information once and have it automatically replicated in the other systems.

**SYSTEMS INTEGRATION**

Chances are, of course, that all of your data is not in one system, and the systems that you do have (finance, CRM, etc.) don’t easily integrate with each other. The first question to ask is, how are we going to get all of our systems to share with each other? One approach, of course, is to replace all of your separate databases with one database. Fortune 500 companies use products from Oracle and SAP to do this, systems that incorporate finance, HR, CRM and inventory management. Chances are that these will not work at your nonprofit; the software is expensive and the developers that know how to customize it are, as well.

More affordable options exist from companies like Microsoft, Salesforce, NetSuite and IBM, among others, at special pricing for 501(c)(3)’s.

**DATA PLATFORMS**

A data platform is one of these systems that stores your data in a single database, but offers multiple ways of working with the data. Accordingly, a NetSuite platform can handle your finance, HR, CRM/Donor Management and e-commerce without maintaining separate data stores, allowing you to report on combined metrics on things like fundraiser effectiveness (Donor Management and HR) and mail vs online donations (E-commerce and Donor Management). Microsoft’s solution will...
incorporate separate products, such as Sharepoint, Dynamics CRM, and the Dynamics ERP applications (HR, Finance). Solutions like Salesforce and NetSuite are cloud only, whereas Microsoft and IBM can be installed locally or run from the cloud.

GETTING FROM HERE TO THERE
Of course, replacing all of your key systems overnight is neither a likely option nor an advisable one. Change like this has to be implemented over a period of time, possibly spanning years (for larger organizations where the system changes will be costly and complex). As part of the earlier system evaluation, you’ll want to factor in the state of each system. Are some approaching obsoletion? Are some not meeting your needs? Prioritize based on the natural life of the existing systems and the particular business requirements. Replacing major data systems can be difficult and complex -- the point isn’t to gloss over this. You need to have a strong plan that factors in budget, resources, and change management. Replacing too many systems too quickly can overwhelm both the staff implementing the change and the users of the systems being changed. If you don’t have executive level IT Staff on board, working with consultants to accomplish this is highly recommended.

To read the adventures of two very different organizations who have worked to architect and implement data systems, head to the case studies.

BUSINESS PROCESS MAPPING
The success of the conversion is less dependent on the platform you choose than it is on the way you configure it. Systems optimize and streamline data management; they don’t manage the data for you. In order to insure that this investment is realized, a prerequisite investment is one in understanding how you currently work with data and optimizing those processes for the new platform.

To do this, take a look at the key reports and types of information in the list that you compiled and draw the process that produces each piece, whether it’s a report, a chart, a list of addresses or a board report. Drawing processes, aka business process mapping, is best done with a flowcharting tool, such as Microsoft Visio. At right is a simple process map.

In particular, look at the processes that are being done on paper, in Word, or in Excel that would benefit from being in a database. Aggregating information from
individual documents is laborious; the goal is to store data in the data platform and make it available for combined reporting. If today’s process involves cataloguing data in an word processing table or a spreadsheet, then you will want to identify a data platform table that will store that information in the future.

DESIGN CONSIDERATIONS
Once you have catalogued your data stores and the processes in place to interact with the data, and you’ve identified the key relationships between sets of data and improved processes that reduce redundancy, improve data integrity and automate repetitive tasks, you can begin designing the data platform. This is likely best done with consulting help from vendors who have both expertise in the platform and knowledge of your business objectives and practices.

As much as possible, try and use the built-in functionality of the platform, as opposed to custom programming. A solid CRM like Salesforce or MS CRM will let you create custom objects that map to your data and then allow you to input, manage, and report on the data that is stored in them without resorting to actual programming in Java or .NET languages. Once you start developing new interfaces and adding functionality that isn’t native to the platform, things become more difficult to support. Custom training is required; developers have to be able to fully document what they’ve done, or swear that they’ll never quit, be laid off, or get hit by a bus. And you have to be sure that the data platform vendor won’t release updates that break the home-grown components.

CONCLUSION
The end game is to have one place where all staff working with your information can sign on and work with the data, without worrying about which version is current or where everything might have been stored. Ideally, it will be a cloud platform that allows secure access from any internet-accessible location, with mobile apps as well as browser-based. Further considerations might include restricted access for key constituents and integration with document management systems and business intelligence tools. But key to the effort is a systematic approach that includes a deep investment in taking stock of your needs and understanding what the system will do for you before the first keypress or mouse click occurs, and patience, so that you get it all and get it right. It’s not an impossible dream.
I have recently been reviewing data from the survey and follow-up interviews that our COI team did this year. There are clear messages in the data that reinforce ideas that I have heard frequently over years of dealing with data on a large scale. Basically, people want their data to be useful—they want to get information out of it that furthers their mission. If that information can be shared to help others, most people are willing to share.

• **People want to know that their data is good.** We want high quality stuff, free of errors, accurately gathered, and easy to access. For small organizations that often means a set of lovingly curated spreadsheets. We know that spreadsheets are not a database, but they are the tool that we can manage. Larger organizations might have the luxury of massive databases, intricately linked, and manipulated using a variety of purpose-built interfaces. But organizations large, small, and in between spend lots of time fussing with their data to insure accuracy—or in many cases, wishing that they had the time to.

• **People want to know that they are following best practices.** We want to know that what we are doing is as good as what our peers do. If we have that basic reassurance, we have a starting point for improving what we do. If we can find best practices clearly explained in a journal, shared at a conference, or in an online discussion group, we will listen and try to learn. A colleague in Evaluation and Research recently said: “We may not be following best practices, but we haven’t found any, either.” External validation makes us all feel better, but we won’t let lack of it stop us from doing our job.

• **People want to understand their data.** We want our data sets to contain the answers to all of the questions that we ask. Our data contains information. It show patterns of past behavior, paints pictures of processes, illuminates failures and illustrates successes. On good days, the information in our data shows us new ways to do things, and allows us to predict what will happen. We are willing to share information with others because often the process of sharing improves outcomes for everyone. In my community, many of the Preschools share program enrollment data because the overall picture of services available in the community is meaningful to Funders and Customers. Sharing information also makes us feel good because of that need for external validation that I mentioned earlier.

• **People want more.** It is important to us to feel like we understand what we are doing well enough that we gather all of the important data in anticipation of needing it. But, when questions come up that we can’t answer, our first reaction is often to collect more data. We want more time to spend with our data—there are interesting things in there that we just haven’t had time to find yet. We want more knowledge about how to examine our data, how to see the information in it,
and how to effectively present that information to others. We want more tools – we know they allow us to do our jobs better, we just have to find the right ones.

In summary, most of us feel an emotional attachment to our data. We have a lot of time and effort invested in it. We want it to be useful. And we want others to acknowledge its value.

“Organizations large, small, and in between spend lots of time fussing with their data to insure accuracy – or in many cases, wishing that they had the time to.”
SPECIFIC OUTPUTS

Trends In – and Tools for – Data Visualization

BY ANDREW MEANS

The role of nonprofit analyst requires a diverse array of skills; analytical, computational, technical. But the one that I hear the most about is the ability to communicate. You may have many other skills, but if you cannot share insights then they’re of no help to the organization you serve.

One of the primary ways that an analyst can communicate is through data visualization. I define data visualization as the visual representation of data to foster insight and understanding. Data visualization then has a goal – it is not the goal itself. The visualization is merely the tool you use to achieve your goal.

Data visualization encompasses a wide range of trends today. The first is mapping. It seems like everyone and their brother is asking for maps. The more and more that we capture data in geographic terms (location, movement, etc.), the more maps can help us interact with our data in new and interesting ways. Learn more about maps on page 39.

The next trend I see in data visualization is creating interactivity. Instead of developing static images that tell a single story, you can create dynamic applications that allow the user to interact with their data. As analysts we can either tell people the insight or allow them to come across it by interacting with their data. When someone comes across the story on their own it is a much more powerful way to foster insight and understanding. The Microsoft Local Impact Map is one example.

A final trend that has developed in the sector is the use of infographics. I usually argue that infographics don’t really fall within the scope of data visualization because they generally aren’t visualizing underlying data, they are visualizing a story built on aggregate data. They also tend to be human generated as opposed to computer generated. But they are playing an important role in the communication of insights and information.

There are lots of tools people use to create data visualizations:

• For those that purely use Excel, check out Think Cell. It’s a nice plug-in that allows for the creation of more complex chart types as well as better integration with Powerpoint for presentations.
• The open-source statistical computing language R also offers some great ways to build complex data visualizations on large data sets. The best data visualization package is ggplot2, which offers some great chart types and ways of manipulating visualizations.
• **D3.js** is another programming based language used to build some of the most beautiful visualizations I’ve seen. It does require some basic knowledge of javascript but it is a very powerful tool for creating very interactive and engaging visualizations. Check out some examples [here](#).

• **Google Fusion Tables** offer a great way to build maps quickly, simply, and for free. While it shouldn’t be used to build maps on private, proprietary data, it is good for public facing online maps. Check out some awesome examples from Derek Eder, a Google Fusion table pro, [here](#).

• The tool I use the most for creating data visualizations is **Tableau**. It is a very powerful Business Intelligence software package that can easily connect to a wide range of data sources. It’s easy to work with and features a drag and drop interface allowing the analyst to quickly manipulate data and build everything from maps to bubble charts to dual axis line graphs.

As I think about building data visualizations I keep a few things in mind:

• **Focus on the end user.** It’s easy as analysts to create what we find interesting or tell the story we think is important and we can forget to engage the consumer of creations. To help me focus I ask myself three questions. 1) What do they care about? 2) What do they need to know? 3) What do I want them to do with this information?

• **Keep it simple.** It can be very easy to create very complex and convoluted visualizations. If they don’t foster insight and understanding then they are not accomplishing their goals. I once heard a consultant say, “If you can’t explain it with two bars and a squiggly line, it’s too complex.” While not necessarily a great rule to follow to the letter, this is a good rule in spirit.

• **Lastly, don’t lie.** Just like statistics, data visualizations can lie. They can mislead. They can lead the user to the wrong conclusion. As analysts we must do our best to create honest visualizations that accurately portray the underlying data and its intents clearly and simply.

Data visualization is a powerful tool for the analyst. It can communicate complex information very quickly. Edward Tufte, the godfather of data visualization, has said, “Modern data graphics can do much more than simply substitute for small statistical tables. At their best, graphics are instruments for reasoning about quantitative information. Often the most effective way to describe, explore, and summarize a set of numbers—even a very large set—is to look at pictures of those numbers. Furthermore, of all methods for analyzing and communicating statistical information, well-designed data graphics are usually the simplest and at the same time most powerful.”

**NEW TO INFOGRAPHICS?**

Two additional resources that might be useful include *Infographics for Outreach, Advocacy, and Marketing: From Data to Design* (a free guide from Idealware) or the *What’s Hot: Free Data Visualization Tools* list published in a recent NTEN:Change journal.
SPECIFIC OUTPUTS

Getting Started with Maps

BRIAN OCONNELL

For a specific example of how Brian’s organization is using maps, check out this case study.

There are many geocoding services available today that were not available just a few years ago. Geocoding is taking a mailing address and converting it into latitude and longitude. This is the first step in visualizing the data. The easiest way is to use Bing Maps on an individual address and copy the coordinates, but chances are you need to do hundreds or thousands at once. How you do this depends on your database, but most map sites (Google, Yahoo, Bing, OpenStreetMap) have API services which allow you to upload a large amount of data and get back the geocoded data added. Perhaps the hardest part is configuring your database to speak to the API(s). You may have to apply for a free developer key or account for access to the API. This is as easy as signing up for a Gmail account.

Once your addresses are geocoded (i.e. you have added columns for latitude and longitude in your database or spreadsheet), you may need additional layers. These are available from many sources: openlayers.org, Tableau Public, Google Earth, municipal, state, and national government agencies, etc., and may take the form of environmental, economic, demographic, scientific, or other data. Be sure to search for “open data” in your area. In our case (at QSAC), the district boundaries came from the New York City Department of Planning in the form of ArcGIS files. Combining your organization’s data with publicly available layers can bring new insights that you would not have noticed before or have thought to ask before.
SPECIFIC OUTPUTS

A World Full of Data to Explore

JASON SHIM

You may know ahead of time which questions you need answered, but sometimes it is helpful to be aware of the different layers of data that are available to explore, as you may discover trends you hadn’t thought of before. Below are some examples of datasets that may be viewed together that may yield some rich insights:

- Transportation
- Land Use
- Census Tracts
- Postal Codes
- Demographics
- Property Assessment Data
- Location of buildings (schools, police stations, grocery stores)
- Community and social boundaries (county lines, municipal boundaries, parishes, school districts)
- Emergency data (police, fire, ambulance boundaries)

For example, if your organization provides direct services, it may be useful to import that address data of clients (sometimes, just the postal code is sufficient) and overlay that data on a dataset of the locations in which your organization is located. This can yield some quick visual insight with regards to the ease of accessibility of your services.

Another example is using client, transportation and grocery store/farmer’s market datasets to to identify individuals who may be residing in food deserts where affordable healthy food is difficult to obtain.
SPECIFIC OUTPUTS

Reports and Reporting

JASON SHIM

It you are using an online platform like Google Analytics to track your web traffic, it is good practice to regularly review reports to identify trends, patterns, and anomalies. However, for others in your organization who may not be directly responsible for web analytics, this may not be practical, even though the data may be relevant to the work they are doing. There are a few things that you can do to make this data more easily accessible and shareable.

AUTOMATED EMAIL REPORTS

The reporting functions in Google Analytics can be very helpful in providing useful information to specific departments of your organization. Once you have identified the report that you want to share with your colleagues, simply select “Email” near the top of the screen and set up who the report should be sent to and how often the email should be sent out (One time, daily, weekly, monthly or quarterly.)

CUSTOMIZED REPORTS

Google Analytics offer a good array of Standard Reports, but its Custom Reports are frequently overlooked and can provide rich insight into what is happening on your website.

Using Custom Reports, you can provide highly specific data that is relevant to the different functions in your organization. However, it can be cumbersome to build your own custom reports, but there are many people who have shared their reports that you can import into your Analytics and modify to fit your needs. A quick search for “Custom Google Analytics Reports” will yield many results, but a good place to start is this post by Avinash Kaushik.

Custom Reports* that may be particularly useful in a nonprofit context are:

- Conversion By Time of Day (Get Report)
- Search Traffic Report (that excludes “not set” and “not provided”) (Get Report)
- Unique Visitors by Page (Get Report)
- Top Converting Landing Pages (Get Report)

* Report credit to Greg Habermann’s article on SearchEngineWatch.com

These reports can be used to segment parts of your website and translate it into relevant information for various departments in your organization to provide some insight as to how their content may be viewed online or may be contributing to goals of the website.

Here are other resources for Custom Reports.
REAL-TIME REPORTING

Google Analytics offers a real-time dashboard that details how many visitors are on your site, what people are viewing, as well as conversions, but it is not very visually appealing.

There are other useful real-time data visualization tools such as Geckoboard.com and Ducksboard.com which allow you to share relevant data that is directly pulled in from Google Analytics as well as other platforms such as SalesForce, Zendesk, Adwords, and MailChimp. The benefit to using one of these services is that it provides a very easy way to visualize KPIs and share them widely within your organization, or even your stakeholders.

While reports can be helpful, it can be easy to get caught up in all the data and to generate reports for everything. It is important to ensure that reports are detailing useful metrics that help guide direct action to improve organizational performance.
What’s Next?

We’ve covered a lot of ground in this collection. Hopefully you’ve found something practical you can try right away, something you can work towards, and some ideas to discuss with your team.

One intention of this collection is to show the diversity in applications, strategies, and even the hurdles to data management. Hopefully the case studies and resources in this collection serve to illuminate ideas or issues you and your team face, and provide a starting place for discussing new solutions. Please share any or all of these materials and please also share your own examples, stories, and ideas.

This is your invitation to make data part of all the conversations you have – whether with staff, board, funders, or partners.

And we hope that you’ll share back with the community what you learn, what you try, and what you discuss. Contact NTEN at any time: http://www.nten.org/contact.
CASE STUDY: Prioritizing Data and Avoiding “Analysis Paralysis”

ANDREW MEANS
DATA ANALYSTS FOR SOCIAL GOOD

NTEN: Andrew, you've written for NTEN before about your experiences at the YMCA of Metro Chicago. Now you work at Groupon and spend a lot of your “spare time” launching Data Analysts for Social Good (DASG), which offers webinars, a LinkedIn group, and an annual conference. Why did you start DASG?

Andrew Means (AM): I saw no one talking about data well. Fundraising analysts, marketing analysts, program evaluation people...everyone was so siloed. We were all using the same skills, underlying tools and methods, but applying them to different parts of our organizations. Data shouldn’t be siloed to one team or one person who pulls lists. The real power of analytics and social science research is that you can address a number of questions using the same kinds of tools and skills. And most organizations don’t know where to begin. We have very little human capital around this in the nonprofit sector – although this has grown immensely over the past couple of years. DataKind and others are doing phenomenal work connecting data scientists to nonprofits, but the long-term solution is to have the next generation of executive directors, nonprofit leaders, and people entering the sector really understand these tools from the get-go.

NTEN: How are you creating a data-informed culture as you grow DASG and prepare for your second annual Do Good Data conference?

AM: The hard thing about starting an organization is that you have no data to begin with, so you have to create your own. I’m enough of an analyst to know my data points are really weak. But I try to use data as much as possible to generate content. I put out a survey in the early stages of planning the second conference, asking potential attendees what they want to learn. Now, as I line up conference speakers, I can look at that survey to make sure I’m delivering.

Another example: Every two weeks or so I send an email out to my list. I track click-to-open rates to make sure I’m giving people what they want, and sending these at effective times of day on the best days of the week. I used to believe that I should send all emails at 5:00 a.m. so that they’d be in my subscribers’ inboxes first thing in the morning. But when I paid attention to the numbers, I started to see a bit of a jump in opens if I sent them in the early afternoon.
I use a lot of free tools: MailChimp for email, Eventbrite for RSVPs, Google Analytics, and Google Forms. They’re fine for now. That’s something not enough people really consider. It’s OK to say “I have what’s necessary. I don’t want to use it forever, but it works for now and I’m moving forward.” It’s worth dipping your toes in the water.

**NTEN:** What else should people keep in mind as they dip their toes in?

**AM:** We live in a world that makes it possible to measure so much, from apps that track what we eat, to Fitbits that track where we go. How do we allow these things to inform us but not control us? With that in mind, I ask myself: Is my community growing? How many people can I reach through social media? When are the best times of day to do that? Did this email outperform the list average? It’s not super formal – I’m letting the data inform me, but getting the email out is more important than succumbing to “analysis paralysis.”

**NTEN:** That said, you are looking to grow DASG strategically. How do you see yourself “professionalizing” this organization? Is that the goal?

DASG started as a happy hour 18 months ago when I sent out a few tweets. I have been surprised by its success. It’s easy to get caught up just doing the work of running a growing organization; I forget to step back and look at, say, the Eventbrite data from the past year which can help me analyze which webinars performed best. I want to standardize my email practices and create standard surveys for all webinars. I got a tremendous response when I surveyed the people who came to our first conference. So it’s about taking the time to collect the data but also to reflect on it. And for me, that’s about rhythms: taking the time weekly or monthly to reflect and plan.

**NTEN:** If you hired an employee, what “rhythm” would you want them to be in? What would you ask them to regularly report to you?

**AM:** Right now email is big. I’d definitely ask for regular reports on:

- Revenue, since we have to make sure this is sustaining itself
- Attendance at webinars and events
- List growth for both email and LinkedIn

Where people on both the email list and LinkedIn are coming from geographically. In 2014, I’d love to do more events outside Chicago. I need to see where we have the highest concentration of subscribers.

**NTEN:** Why is it so important to you to create spaces where people can come together and talk data with their peers?

**AM:** Everyone is talking about data, but not in ways that will benefit us in the long term. Of course there are some organizations I really respect. But too often, analytics are used to maximize our inputs, not our outcomes. We use data to raise more money, attract more donors, and send effective direct mail campaigns. I’m not seeing data applied as rigorously to help us think about actually being better organizations. We need to step back and think critically about what we exist to do.
CASE STUDY: Turning Teammates into Data Heroes

JORDAN MICHELSON, ACADEMY OF HOPE (AOH)

NTEN: Jordan, give us a snapshot of your work at AoH.

Jordan Michelson (JM): AoH provides a variety of programs and services around Adult Basic Education to meet the needs of adult learners in Washington, DC. We have a staff of 25 and an operating budget of $1.5 million.

We reached a huge milestone this year with a total of 55 graduates for the school year, our largest graduating class in history. And next year we’re going to evolve in a new direction as we launch a charter school, which we got approval for this spring. We have one year to put all of the details together, which gives us an opportunity to examine our program across the board, look closely at our processes, and determine what needs adjustment.

Before I was hired, most data work was focused on reporting, and was being done by various program staff at all different levels. Initially I balanced classroom instruction, program coordination, and administrative support with a new focus specifically on data and outcomes coordination. The latter has been a new opportunity for AoH and for me.

NTEN: What are some of the challenges you face in this role?

JM: As my position straddles programs and administration, it’s been challenging for the rest of the organization to understand my position and responsibilities. The more time I spend on programmatic issues, the less time I have to focus on our data needs.

When I started this position I made a list of goals that included launching a dashboard to evaluate how our classes were meeting the needs of our learners because I’d like to see us move from data used solely for reporting purposes to making data-informed decisions about our programs. I haven’t been able to push that needle yet.

Being in the nonprofit world comes with a certain amount of feasibility-checks – I’m sure that everyone on staff wants the things I just mentioned, but it may not be feasible to divert time and energy away from all of our other needs. It’s a tough balance, and it’s especially hard when you come to realize that this really good thing you want to do just isn’t a priority right now. But it’s important to remain optimistic, and know that the work you are doing is making a positive contribution to the organization’s mission.
NTEN: And you had proof of that recently! Tell us about your “data win.”

JM: I've been trying to link data to our organization's mission whenever possible. One opportunity to drive the point home was when a student leader came to us for some information. She wanted to petition the city council to win funding for students to get to and from school, and she had some basic questions: How many of our learners in our student body receive bus tokens? How many face other barriers getting to AoH due to transportation?

We were able to provide this information quickly because of our student contact log. It's a simple Excel workbook that's kept on a shared drive where we keep track of every time a student calls to let us know they need to miss class. One field on the log is “reason for absence.” We were able to quickly look over the data from the term and the year, and come up with quantifiable numbers about how many students were facing these types of barriers.

Logging phone calls is not glamorous work and it doesn’t take a “data hero” to do something like that, but filling that log in consistently and actually looking back at it has the potential to make a big impact. And Excel is a system that everybody is able to use.

NTEN: That's great! How did you celebrate it?

JM: I emailed all staff with a note of encouragement and affirmation. I wanted to help people see that even though this seems like a pretty mundane task, there’s a connection between them taking the time to fill in the log and a direct advocacy effort that really means something to our learners and community. People were excited; one coworker even turned it into a meme involving the Star Trek character, Data.

NTEN: How will you continue to foster a culture of data moving forward?

JM: I’d love to send all-staff emails highlighting our data wins on a semi-regular basis. I haven’t figured out a system for doing that, but that’s a next step.

Another exciting opportunity is on the horizon. We’re participating in a “best practices” meeting with other adult education providers in the DC area. I am hopeful that this will include data best practices and be a natural space to broach the topic of organization-to-organization data sharing – or at least start having the conversation about what we’re all measuring, and how.
CASE STUDY: Transforming Data from Static to Intuitive

GIANNA SHORT, MAINE CONSERVATION VOTERS

NTEN: Gianna, tell us about your work at MCV.

Gianna Short (GS): MCV plays a critical role in turning public support for conservation into new laws to protect our air, land, water, and wildlife. I’m the Data and Communications Coordinator so most of my work is done in front of the computer. However, there are only four of us on staff, along with a couple of consultants and interns, so I end up doing all kinds of other things. Our budget is under $400,000 per year.

NTEN: How are you working to make your data more publicly accessible?

GS: We’ve been publishing an Environmental Scorecard for the Maine State Legislature highlighting environmental bills and votes since 1986. This is valuable information in politics, and without fail, when an election is approaching, reporters and campaign managers call MCV to ask for a particular candidate’s score on environmental issues. We literally have been pulling old paper copies of the Scorecard off the shelf and tallying up scores for different sessions by hand, which is cumbersome to say the least.

Making this robust dataset more accessible is a new challenge, but also an exciting opportunity. We distribute our Environmental Scorecard to 13,000, but believe it could be useful to many more people. It’s great data that is unique to our organization. We have a different tax status than most environmental nonprofits which allows us to publish this kind of information and really sets us apart. You can learn so much about a legislator by examining these votes through the years.

NTEN: Why tackle this now?

GS: We’ve been redesigning our site over the past year, so I’ve worked with our web developer to build an easily accessible way to house all of that data directly into the website architecture. Our national partners at the League of Conservation Voters also recently relaunched their website with comprehensive voting records. We’re looking toward that as a model for our site.

NTEN: What did you do with the data to make this happen?

GS: Each legislator has several votes per year, and many serve several terms, in both houses, during multiple different time periods. It can get confusing. We had to determine the best type of relational setup to use in order to make the data searchable and coherent. Our web developer ended up creating a pretty ingenious system over the last few months. It’s both versatile and simple to use.

NTEN: How long did this take, how much has it cost, and how will you measure success?
GS: We started brainstorming the redesign in the summer of 2013. The new site will be finished in December with a total budget under $4,000.

So far, we have scorecard data since 2011 up on the site, and it seems to be working well. Now it’s just a matter of data entry for all the preceding years, and quadruple checking for accuracy.

One way we’ll gauge success is by using Google Analytics to see who is using the site and how they are interacting with our content. People tend to find us when they use search engines to look for Maine legislators. If this type of visitor then clicks on a specific bill page and reads about an issue, that’s a success. If the visitor then ‘takes action’ by writing an email to her legislator about the issue, that’s a huge success.

NTEN: Who else from your organization was involved?

GS: Our web developer Lauren Meir and I basically did the whole project ourselves. MCV’s office culture is built on trust, so I have almost total autonomy over the web realm. This is wonderful and terrifying at the same time, and has been a great professional challenge for me. I am starting to do some ‘hallway testing’ with the staff and board members now that the site is up.

NTEN: You’ve been working hard to create a more data-informed culture at MCV. What advice would you offer to others at small nonprofits like yours?

GS: Learn what other successful nonprofits are doing with data, and present that information in an inspiring way to your coworkers. Show your office what these other organizations are doing better, and then offer to take the lead on trying something new. With a little intra-sector competitive spirit, and the knowledge that what you want to introduce has been tried and tested by others already, people can get pretty excited about new ideas.

“Learn what other successful nonprofits are doing with data, and present that information in an inspiring way to your coworkers.”
CASE STUDY: Optimizing the Data Collection Process

THOMAS PELLEGRINO, Shoes That Fit

NTEN: Thomas, tell us about your work at Shoes That Fit.

Thomas Pellegrino (TP): Shoes That Fit was founded in 1992 to provide children with much-needed new shoes so that they can go to school in comfort and with dignity, and focus on their studies rather than their circumstances. We have 8 full-time staff and an army of volunteers, and in 2013, we partnered with 1,600 schools in 46 states. That spring we helped over 130,000 students get a new pair of shoes. I’m the IT Support Technician and Salesforce Co-Administrator.

NTEN: In what ways is your organization improving when it comes to data? What are some specific pain points you’ve been trying to overcome?

TP: Shoes That Fit used an Access database since our inception. By the time I joined the team, it was so customized to suit our business model, no other product was so customized to our particular way of working.

We needed measure our impact by showing how many shoes we’ve given away over the years. We wanted an accurate tool that would track exactly where our donations were going. We also wanted to be able to display that to the public.

In August 2012, we made the move to Salesforce.

NTEN: Did you have data that helped you name the problem? If so, what did the data show?

TP: After implementing Salesforce in August 2012, we realized the person on staff handling data entry was spending 7 to 12 minutes on each gift (entering the donation into the system, processing the thank you letter, then closing the gift). If the staff member also scans the acknowledgment letter and attaches it to the donor’s record, my understanding is that this process can increase and take up to 20 minutes.

This data caused us to question our needs for certain kinds of data, and to discuss how to quicken the whole process of gift processing. I think this is a classic paradox: how do we raise funds and keep the lights on, while also running a streamlined program?

NTEN: What did you do to fix or improve the situation?

TP: On the subject of staff time: At the request of senior leadership, we now send weekly reports, instead of monthly ones, about how long staff spend on the data processing. As part of our Salesforce implementation, we also brought in an outside consultant. He suggested we do a cost analysis process to show how much that was costing us in time and resources.
As for the larger questions of tracking, reporting, and data integrity, we got a free trial of Geopointe, a program that integrates with Salesforce to help us to track and showcase all of the counties where our donations were being made. It's a testament to the power of peer groups like the Communities of Impact (COI) that I finally used this. My first link to the free trial had expired, and months went by before a COI video chat inspired me to reach out to Geopointe for a second link.

After experiencing the old process and using the free trial of Geopointe, the business case to investment in Geopointe would save time and solve other problems, such as address quality, reliability, automated updates, mapping, county accuracy, location, and geocoding, and it only cost us $210 a year for a single license – compared to the weeks of time it took me to do the same thing with more uncertainty.

**NTEN: What do you still need to work on?**

**TP:** Like at many organizations, we still have some silos to address. It also cost a lot of time for me to justify the Geopointe expense.

**NTEN: What went well? Do you have data to prove it?**

**TP:** Considering we were using such a complicated system just a year and a half ago, it has been helpful to move everything over to Salesforce, to work with a consultant on that process, and to see my colleagues gain confidence in that system.

Being a part of the larger nonprofit tech community, including NTEN’s COI cohort, helped with all of this, too. Initially, our leadership was wary about COI because we were talking about “data,” a rather broad and ambiguous topic. Over time, my participation in the group through video chats and online threads proved more and more valuable because I was able to say to my organization, “We are not alone. Other, bigger organizations struggle with the same things: mailing lists, how to ask the right questions, and gathering meaning from the data that you have.”
CASE STUDY: Visualizing Data to Enhance the User Experience

ERIC EAGON, POLICY INNOVATORS IN EDUCATION (PIE) NETWORK

NTEN: Eric, tell us about your work.

Eric Eagon (EE): With a membership of 45 organizations in 28 states and DC, we connect state-based education advocates to one another and to our national policy and advocacy partners. We do this through a variety of in-person and virtual networking opportunities. We also support advocates with targeted decision support tools and a social media presence that amplifies their work.

I’m one of seven full-time staffers, and I came on board as a Senior Associate for Policy and Communications in September 2012.

NTEN: What’s one way you recently addressed a specific challenge related to data?

EE: We conduct an annual survey of our whole network. For our first few years, we used SurveyMonkey and then put all of the data into a massive report.

But it wasn’t getting much traction. When we looked at Google Analytics for the 2012 report, we saw just 82 views of the summary page and only one download. We had tons of information that could help our members collaborate with one another and plan better supports, but it wasn’t presented in an inviting, useful way.

NTEN: What did you do to fix or improve the situation?

EE: We made two major changes. We conducted phone interviews to supplement the online survey and capture more stories. We also created an interactive map to make it much simpler for our members to find what they need.

We launched the map at our conference this fall, creating interest among our 300+ attendees. We also led webinars; refer people back to it whenever possible; and now track the Google Analytics on the map to see how people are using it.

NTEN: Wow! How did you make it happen?

EE: The Deputy Director and I handled most of the policy work and ran the annual survey. Then, with our summer Fellow and Communications Director, we conducted 50 phone interviews that each lasted 30+ minutes, plus additional time for participants to edit our notes.

That summer, we happened to begin contracting with new website developers, a shop called P’unk Ave based in Philadelphia. They had created one map for us, and we asked if they could use the same format for a new one.
We entered all of the survey and interview data into the new map so that members can sort by year and policy issue. Bills show up in green if they passed, red if not, orange if they’re pending. Members can view summaries of bills, who worked on them, lessons learned, related resources, and contact info.

**NTEN: How did you get buy-in from the rest of your team?**

**EE:** There was some concern, especially because the work coincided with our conference, which is an all-hands-on-deck initiative. Did we have time and capacity to do this? Could it wait for next year?

But the previous report had only been downloaded once. P’unk Ave could build a shell into which we could add more details over time, rather than providing all of the data up front. And our Fellow could handle the data entry once it was built. Ultimately, we decided this was a priority. We try to make sure that all of our work is driven by member demand and needs.

**NTEN: What went well? Do you have data to prove it?**

**EE:** The map is much more engaging than a 50-page report. In less than three months since the launch, we’ve had over 350 unique views, many return visits, and good anecdotal feedback from members.

The interviews went well because we’ve been very intentional about building and maintaining trust with people in our network. This map is not available to the general public. It’s password-protected for members only. People were candid because they trust that this is for the betterment of the education reform movement more broadly.

**NTEN: What didn’t go so well? What do you still need to work on?**

**EE:** We’ve made one minor change so far, tweaking the policy categories on the survey and map. We want to keep those as consistent as possible year to year.

We also need to streamline the lengthy interview process. We may need to begin with a quick conversation, then ask people to fill out the survey and capture most of the stories there.

**NTEN: Do you have data that will help inform your next moves?**

**EE:** We wanted to better understand our members’ policy priorities for 2014, so we sent personal emails to 50+ policy directors with a request to fill out another survey. We’ve seen a response rate of over 80% so far, and are integrating these responses into the existing policy map. As legislative sessions start in 2014, we also plan to make updates and even share resources in real time so that the map becomes more of a legislative tracking tool.

This is all in the name of not reinventing the wheel and sharing resources among our membership. It also helps us to reflection and plan.

**NTEN:** Any advice you’d offer to someone who wanted to tackle a big project like this?
**EE:** Make sure there’s demand from your members. And as you design it, put yourself in their shoes. We asked ourselves:

- What goals do our state advocates have?
- What tools do they currently use?
- How do they get the information they need?
- Can we share mock-ups and beta versions of the tool?

Overall, the way we conducted the 2013 survey was much more labor intensive, but yielded something much more useful.
CASE STUDY: Improving Internal Communications with Sharepoint

MARK MATHYER, MUSEUM OF SCIENCE AND INDUSTRY, CHICAGO (MSI)

NTEN: Mark, tell us about your organization.

Mark Mathyer (MM): MSI is the largest science center in the Western Hemisphere, and is home to more than 35,000 artifacts and nearly 14 acres of hands-on experiences designed to spark scientific inquiry and creativity. The size of our staff varies seasonally from about 400 to 500, plus about 500 volunteers.

I’ve been at the museum ten and a half years now, and there are six of us on my team. I work in business development but I also have a background in IT, so I often serve as a sounding board and a liaison between External Affairs, and other divisions within MSI.

NTEN: What’s a specific data-related challenge you’ve had to overcome?

MM: During the spring of 2013, I was called in by the Directors of the Corporate Giving and Government Relations teams, who were frustrated by the process of putting together reports for funders. These stewardship reports need to include both financial data about our spending and program data about the activities of our Education and Guest Services teams.

We realized that there were a lot of crisscrossing emails between the different stakeholders: in a given week, someone from the Corporate team might email someone from the Education team requesting a piece of data. The Education team might have just emailed someone from the Government team the same piece of data. And members of the Finance team were getting requests for the same data from different teams, not knowing whether those folks were communicating with each other.

NTEN: Did you have data that helped you name the problem? If so, what did the data show?

MM: We don’t have an exact number of how many emails were sent between all of these teams or the time spent on the requests, but after speaking with stakeholders from all of the teams, we had enough evidence that people found the process frustrating, and we knew we needed to act.
**NTEN: What did you do to fix or improve the situation?**

**MM:** Ultimately, I got our IT Department to set up a Sharepoint site. We assigned one person from the External Affairs Services team to be the traffic cop, and together we developed an outline for how the different teams would share their data.

**NTEN: Who at your organization was involved, and how long did it take?**

**MM:** The External Affairs team were the ones who initially came to me for help. It didn’t take too long for me to move forward after that. I spent about 20 minutes in conversation with the Education department, who agreed that this was a problem; another half hour in conversation with the finance guy, who was also on board; and then I met with the different teams to be sure they were asking the finance guy for exactly what they needed. It only took about 15 minutes to convince the IT Department to set up the Sharepoint site, since they had experience creating these, and it was done within just a couple of weeks. In the long run, it didn’t take a lot of time to set this thing up. The first conversation was in May, and we launched in July.

**NTEN: Are there pieces of the process that didn’t go so well? What do you still need to work on?**

**MM:** The Finance department is still struggling to get into the regular rhythm of providing reports. They are understaffed, and easily distracted by more urgent tasks. Providing the data needed for stewardship reports just isn’t a high priority for them. So, for now we are reminding our contact there when he needs to load data, and following up when he doesn’t.

**NTEN: What did go well? Do you have data that will help inform your next move?**

**MM:** Now we have a straightforward system with clear roles. The overall process is stewarded by someone in Corporate Giving. Every month, finance puts certain standardized reports up on the site, as do the program folks. Everyone can go to the site and find that on a predictable, regular basis they can find what you need.

Since the solution didn’t exist, we don’t have data to compare this to. We can’t look at how people were communicating one year ago, and compare it to how many times the different stakeholders visit the Sharepoint site. But anecdotally and overall, everyone seems happy.
CASE STUDY: Cultivating Data-Driven Initiatives with Peers

JASON SHIM, PATHWAYS TO EDUCATION CANADA

When I joined the Communities of Impact (COI) program, I had been in my role of Digital Media Manager at Pathways to Education Canada for just a few months. Previously, I had served in a role as a front line youth worker, so the shift to a marketing department meant that I had a lot to learn along the way. This was evident as one of my very first questions was, “What’s a KPI?”

Specifically, one of the challenges I was trying to overcome was how to make better use of our web analytics. We had a lot of data, but for the most part, we weren’t looking beyond page visits and unique visitors. Other metrics, like goals and conversions, were not being tracked.

I have been told that one of the best ways to learn and improve is to surround yourself with people smarter than yourself. This was evident in the COI program as many of my peers came from strong backgrounds in managing data for their organizations of all sizes, and they helped paint a picture of what was possible when taking a data-driven approach.

A “lightbulb moment” occurred during a webinar with Amelia Showalter who detailed her experience as Director of Digital Analytics for President Obama’s re-election campaign. What particularly resonated was her mention of “vanity metrics” and how it was more important to focus on conversions and goal completions rather than the number of visitors. This changed the way that I looked at our web analytics.

There are a ton of resources available online on how to better use web analytics, but I never really looked into them because I wasn’t aware of the kind of insights you could glean from them. A lot of information is available online to help make better sense of analytics and as well as search advertising and I also discovered free in-person training workshops that were being offered out of Google’s Toronto office.

After setting up goals in our web analytics, we now had a much clearer picture of how people were navigating our website. We could identify the paths that people were taking on our site; tracking our goals and also tagging our URLs helped us better assess which platforms were performing the most effectively to engage our supporters.

Beyond this, the COI program sparked an interest in learning more and I found myself spending much of my spare time reading on how to better track web metrics and how to set up advertising campaigns. I connected with Data Analysts for Social Good, headed up by fellow COI participant Andrew Means, and had the opportunity to share a lot of my learning in webinars with other nonprofits. This past year, I have had the opportunity to teach a Digital Marketing class at a local college where I take a very data-driven approach.
At Pathways to Education, a renewed focus on web data also sparked a project to implement a tracking system to detail all of the general inquiries that are received via email and telephone. This project is now in progress and this will allow us to better track and categorize incoming requests to help better identify frequently asked questions and will help guide the redesign of our website to make information more easily accessible.

Looking back on the year, we’ve come a long way and we are taking a much more data-focused approach to all our digital initiatives. As we move ahead, focusing more on the data has helped us develop a clear framework and allowed us to make decisions more confidently.

For people who are looking to make their department or organization more KPI-savvy, I would suggest seeking out similar organizations who are doing great work with their data and connecting with them. This may take various forms, such as groups like COI, or LinkedIn groups, but it’s important to keep regularly communicating with others to receive feedback and coaching along the way. Finally, when you’ve learned a few things along the way, don’t forget to pay it forward and help others who are just starting out!
CASE STUDY: Engagement-Oriented Organizing, Enabled by Data

WENDEE PARKER AND MICHAEL SILBERMAN, MOBILISATION LAB AT GREENPEACE (MOBLAB)

NTEN: Tell us about how the MobLab fits into Greenpeace overall.

Michael Silberman (MS) and Wendee Parker (WP): We exist to help the global Greenpeace organization transition to a new era of people-powered campaigning – shifting from Greenpeace-centric to supporter-centric campaigns. We’re working with staff in nearly 50 countries to design campaigns that enable the full power and potential of over 25 million supporters and activists to help us build stronger campaigns that win bigger. Our team has an independent budget to focus 100% on building capacity, challenging norms, sharing knowledge, and introducing new practices and tactics.

NTEN: Who are the Arctic 30, and how and why did MobLab get involved?

MS / WP: In September 2013, Russian security agents illegally boarded the Arctic Sunrise in international waters, seizing the ship and detaining all those on board at gunpoint. The ship was towed to Murmansk, and all those on board were locked up in cold, filthy cells, some of them in solitary confinement. They were charged with piracy and then hooliganism, crimes that carried lengthy prison sentences, because they dared to peacefully take action against destructive Arctic oil drilling and the onslaught of climate change, protesting at state-owned Gazprom’s Arctic drill platform in the Barents Sea. After 71 days in detention, the last of the Arctic 30 have been granted bail release, but severe piracy charges are still pending. Here is a timeline.

We got involved because there was a critical need to ensure that we were doing everything possible as an organization to help free these activists and leverage the global media spotlight to grow the campaign to save the Arctic. We added capacity to test new messages and tactics, and enable a global strategy brainstorm across offices and teams. Understanding how to effectively spread the messages by mobilizing new and existing supporters who connect with this cause through digital channels: that’s what it’s all about.

NTEN: This has been a highly charged international incident. How have you baked principles of measurement and transparency into the campaign?
**MS:** We had to determine what could and should be measured. This campaign has been an opportunity to think about some of our limitations to measurement and tracking, and to have everyone really consider what’s working and what’s not.

**WP:** An informal group from several offices assembled for a week to take a look at our tools and platforms. It illuminated something many of us already knew: that consistency within digital engagement data was lacking. Trying to develop, implement, and execute a standard way to collect, track, and report on those digital efforts is an enormous challenge. The meetings gave us a good sense of our “universe” – both the great effort our colleagues were already making in these areas, as well as opportunities to improve towards a complete, holistic point of view.

**NTEN:** Aside from this campaign, are there other wins you can pinpoint in these areas?

**MS:** There are over 100 active Greenpeace social accounts online. We’re now seeing organizers include data analysis in their campaign planning. We at MobLab are still pushing, but it wouldn’t get completely lost if we weren’t. I’m also heartened by the fact that there’s a lot of independent testing happening. People are using Optimize.ly for A/B testing, for example, and then reporting the results to everyone else.

**WP:** The focus and culture has definitely shifted, but the job is not done. Success would be having digital analysis (starting at defining digital analytic goals, implementing digital tracking and analytic tools for ongoing reporting, testing and optimization, ending with a complete campaign wrap up analysis) fully adopted as part of the overall campaign planning process.

**NTEN:** You mentioned Optimize.ly. Are there other tools that stand out as particularly helpful (or that you wish were more helpful)?

**MS:** We have issues with our bulk email tool, which doesn’t make A/B testing as easy as it could be. On the upside, we’re making good progress with Google Analytics and Optimize.ly. On social analytics, we’re using Radian6, Topsy Pro, and Facebook insights.

**WP:** Greenpeace’s situation is so complex. In every office you may find a different setup for supporter data, a different set of digital engagement tools, etc. Even within offices, data can be fragmented among departments. I’m not sure there’s a “one size fits all” solution, but as we work towards a common framework and toolset, it lessens the challenges towards complete supporter data integration – a place where all departments view the same data and can have shared goals and metrics.

**NTEN:** Where would you like to see your campaign leaders a year from today with regard to systems and culture?

**MS:** We always want to see the four essentials of a people-powered campaign. The end is not putting data at the center of our campaigns; the end is more engagement-oriented organizing. We put people at the center of our campaigns, but data is an enabling tool. If we can use data to more effectively move people along and support our journey more deeply, that’s a success point.
CASE STUDY: Career Reflections: My Biggest Data Fail

PETER CAMPBELL, LEGAL SERVICES CORPORATION (LSC)

Note: names and dates have been omitted to protect the innocent.

Years ago, I was hired at an organization that had a major database that everyone hated. My research revealed a case study in itself: how not to roll out a data management system. Long story short, they had bought a system designed to support a different business model, and then paid integrators to customize it beyond recognition. The lofty goal was to have a system that would replace people talking to each other. And the project was championed by a department that would not have to do the data entry; the department identified to do all of the work clearly didn’t desire the system.

The system suffered from a number of problems. It was designed to be the kitchen sink, with case info, board updates, contact management, calendaring, web content management, and other functions. The backend was terrible: a SQL database with tables named after the tabs in the user interface. The application itself had miserable search functionality, no dupe checking, and little in the way of data quality control. Finally, there were no organizational standards for data entry. Some people regularly updated information; others only went near it when nagged before reporting deadlines. One person’s idea of an update was three to five paragraphs; another’s two words.

I set out to replace it with something better. I believed (and will always believe) that we needed to build a custom application, not buy a commercial one and tweak it. What we did was not the same thing that the commercial systems were designed to track. But I did think we’d do better building it with consultants on a high-level platform than doing it by ourselves from scratch, so I proposed that we build a solution on Salesforce. The system had over 150 users, so this would be relatively expensive.

Timing is everything: I made my pitch the same week that financial news indicated that we were diving into a recession. Budgets were cut. Spending was frozen. And I was asked if I could build the system in Access, instead? And this is when I...

...explained to my boss that we should table the project until we had the budget to support it.
Or so I wish. Instead, I dusted off my amateur programming skills and set out to build the system from scratch. I worked with a committee of people who knew the business needs, and I developed about 90% of a system that wasn’t attractive, but did what needed to be done reasonably well. The goals for the system were dramatically scaled back to simply what was required.

Then I requested time with the department manager to discuss data stewardship. I explained to the critical VP that my system, like the last one, would only be as good as the data put into it, so we needed to agree on the requirements for an update and the timeliness of the data entry. We needed buy-in that the system was needed, and that it would be properly maintained. Sadly, the VP didn’t believe that this was necessary, and refused to set aside time in any meeting to address it. Their take was that the new system would be better than the old one, so we should just start using it.

This was where I had failed. My next decision was probably a good one: I abandoned the project. While my system would have been easier to manage (due to the scaled back functionality, a simple, logical database structure and a UI that included auto-complete and dupe-checking), it was going to fail, too, because, as every techie knows, garbage in equals garbage out. I wanted my system to be a success. We went on with the flawed original system, and eventually started talking about a new replacement project, and that might have happened, but I left the company.

Lessons learned:

1. **If I’m the IT Director, I can’t be the developer.** There was a lot of fallout from my neglected duties.

2. **Get the organizational commitment** to the project and data quality standards confirmed before you start development.

3. **Don’t compromise on a vision for expediency’s sake.** There are plenty of times when it’s okay to put in a quick fix for a problem, but major system development should be done right. Timing is everything, and it wasn’t time to put in a data management system at this company.
CASE STUDY: Effective Modern Technology is Always a Work in Progress

RICHARD WOLLENBERGER, PARENTS AS TEACHERS (PAT)

In January 2013, the Communities of Impact kicked off with a retreat at Microsoft Headquarters in Redmond, WA. While there, we held a Failfaire-style conversation about times when our best-laid plans went awry. (For more on how to lead conversations about failure at your organization, see the Resources section on page 65.)

For one participant, this was a chance to reflect on how a massive project taught him that “there really is no such thing as an end result.”

NTEN: Richard, tell us about PAT, your role there, and the data management system.

Richard Wollenberger (RW): PAT helps organizations and professionals work with parents during the critical early years of their children’s lives, from conception to kindergarten. I’m the IT Director. We have 65 staff and an annual budget of about $11 million.

When I came on board in 2006 PAT had been using a homemade database to track trainings and certifications. The tool was well-built to immediately handle whatever needs someone came up with, but ill-conceived in terms of long-range scalability and expandability. (One example: Every year, we train 5,000–7,000 people across the country. Every trainee had to fill out a registration form of two to 10 pages by hand and fax it in, and then someone on our end had to do data entry.) Then we hit a physical limit in the system that there was no way around.

I suggested that the CEO, my boss, meet with the business managers to tell her why the existing system didn’t meet their needs. I wanted it to be clear that this wasn’t a case of “IT needs something to do and needs a budget for it.” Each department got to outline their needs as business priorities. And in 2007, we brought a vendor in to meet the board, explain the project, do a needs analysis, and build a customized CRM system based on the Microsoft Dynamics CRM and Sharepoint.

NTEN: Then things went wrong. What happened?

RW: In fall 2007, a change in financial leadership revealed that mistakes had been made that led us to think we were in a better financial position than we were. Our budget fell apart, 15% of staff was let go, and the project was postponed. Months went by; we focused on other things and made do with our old system.

However, in 2008, PAT was able to hire a consultant to help us with an organization-wide SWOT analysis and a study of the early childhood education environment. I talked to the consultant about how technology could be a solution in different areas. Normally IT isn’t in a strategic plan; it’s a
means to achieve your strategic plan. But in this case, “using modern technology effectively” became a pillar in our 2009-2012 strategic plan.

Then one day my boss said, “I know you think I’ve forgotten about this, but I want to show you something.” She picked up a folder where she’d kept her notes regarding a new data management system. Our organization’s 25 year anniversary was coming up in 2009, and I was able to work with our fundraising team to secure grants as well as a commitment from the board for a capital campaign to finance the project. In 2011, we finally went live with the new online system.

NTEN: And what have been the results?

RW: On the plus side: We’ve reduced the number of systems we use from 13 to four. We moved all technical communication between those systems to automated processes, reduced our carbon footprint by eliminating faxed/printed forms, cut the time it takes to register for a training (from three to four weeks to instant!), and we’ve freed our staff from simple data entry. They’re now knowledge workers who can work with data entered by our customers.

But there are drawbacks. Any system like this is feature-laden and complex. It was beyond our ability to properly comprehend. We’ve set up so many rules and regulations that some departments hit snafus if others take certain actions in the system.

NTEN: What advice would you offer someone who is considering implementing a data management system like yours?

RW: When you’re trying to automate business processes, you must have them documented. And if you don’t have them written, create them before you try to automate them. Documentation and communication are more critical than ever. The best thing about collaborating has been meeting with different departments to create our flowcharts. When we talk about these little nuances of the process, we realize that a step might mean different things in four other departments. To hear a topic discussed from all of those perspectives was eye-opening. In our old world they weren’t connected.

NTEN: What happened after you reflected on this in our session about failure?

RW: I remembered that everyone in our field can relate to “not having the success they wanted at something.” And I realized that this is a process, and there really is no such thing as an end result. A project has an end, but most nonprofits (hopefully) won’t. The real result is continuous improvement. And you have to celebrate whatever successes you do have.
Resources
Compiled by Jordan Michelson, Julia Smith, and NTEN's Communities of Impact

INTERNAL MEASUREMENT AND REPORTING

➤ Nonprofits: State the Goal, Set a Deadline, Get it Done
Resource type: Blog post
Author: Bill Shore, founder/CEO Share Our Strength and the No Kid Hungry Campaign
Publish date: Feb. 4, 2013
Key quote: “Nonprofit organizations would be well served to step back from the day-to-day operations and ask themselves what success means, how will they know when they have accomplished their mission, and how will they measure it along the way.”

➤ Why We’re So Bad at Measuring Impact, and How to Fix It
Resource type: Blog post
Author: Andrew Zolli, Curator and Executive Director, PopTech
Publish date: Feb. 14, 2013
Key quote: “What we need now is a revolution in both the practice and culture of social innovation, one that recognizes that meaningful measurement is every bit as essential—and artful—as the interventions themselves, and bakes it in as a core component of the work.”

➤ Show Me Your Nonprofit Dashboard!
Resource type: Blog post
Author: Jacob Smith, Director, PlaceMatters Institute
Publish date: Apr. 21, 2011
Key quote: “[dashboards] can very quickly get a sense of how well the organization is functioning and if any problems are emerging. In short, they can make decisions that improve results.”

➤ Linking Results to Key Performance Indicators is Like Hooking Up a Big TV
Resource type: Blog post
Author: Beth Kanter
Publish date: Feb. 26, 2013
Key quote: “KPIs are simply data points for charting progress towards results. It is important to define and get broad agreement on what handful of data points will be most informative.”

➤ Best Practices for Data Visualization
Resource type: Webinar
Presenter: Jake Garcia, Foundation Center
Event date: Jan. 24, 2013
Description: “Data visualization is a hot topic, but how can you put it to its best use?”
SHARING DATA ACROSS THE SECTOR AND BEYOND

▶ Markets for Good
Resource type: Website
Authors: Multiple
Good for: “Let’s find better ways to use information to change lives.”

▶ Liberating 990 Data
Resource type: Blog post
Author: Beth Simone Noveck, co-author, Information for Impact: Liberating Nonprofit Sector Data
Publish date: Feb. 4, 2013
Key quote: “The sector deserves comprehensive and computable data that can be openly aggregated, searched, checked, and analyzed.”

▶ Nonprofits Should Share Their Data, Too
Resource type: Blog post
Author: David Eaves, for TechPresident
Publish date: Jan. 24, 2013
Key quote: “And yet, despite these examples of data literacy in the non-profit sector, organizations rarely seem to know that there is open government data they could use. And they are even more conservative than governments about publishing their own data so that other organizations can leverage it or insights gained that might advance their mission.”

▶ Nonprofit-Centric Data Sharing Sites
Resource type: Blog post
Author: Annaliese Hoehling
Publish date: Jan. 8, 2013
Key quote: “There are many sites that allow you to upload data, as well as download other data, for free. These are just a handful of nonprofit-focused data sharing sites to get you started.”

▶ Avoiding a House of Cards: Three Lessons from a Multiple-Organization Data Collaboration Project
Resource type: Blog post
Author: Holly Ross
Publish date: March 25, 2013
Key quote: “Building a collaboration in name, is easy, but a gust of disarray, and it topples like a house of cards. We aimed to build a better collaboration, with a strong foundation, and sturdy frame. Something that would stand the test of time while our relationships and collaborations evolved. Did we succeed?”
RESOURCES FROM NTEN

You can find NTEN’s most up-to-date resources about data on our site. Here are a few recent items that may be of interest:

► **How Do We Measure Nonprofit Effectiveness?**
  Resource type: Blog post
  Author: Nell Edgington, President, Social Velocity
  Publish date: Oct. 21, 2013
  Key quote: “If each nonprofit organization is now creating their own theory of change, and their own outcome and impact measurements, how do we compare those to another nonprofit’s outcome and impact measures?”

► **If a Metric Changes on a Spreadsheet and No One Notices, Does it Show Impact?**
  Resource type: Blog post
  Author: Amy Sample Ward, CEO, NTEN
  Publish date: Sept. 20, 2013
  Key quote: “We have a lot of data coming at us from a lot of sources. It makes sense to pay attention to the numbers that can help demonstrate the impact that we’re having, but we also need to make sure that we’re reporting the right kind of data.”

► **How Can I Love You if You Don’t Know My Name?**
  Resource type: Blog post
  Author: Steve Birnbaum, Vice President, Client Solutions, SofTrek Corporation
  Publish date: Sept. 20, 2013
  Key quote: “When your nonprofit fails to use data to determine how to treat donors, problems creep in. Constituents begin to feel your organization doesn’t know them, and they’re infinitely less likely to respond with support.”

CONTINUE THE CONVERSATION

Looking to meet others who are interested in using data to build a better world? Build your community through groups like these.

- DataKind’s DataDive meetups: [http://www.datakind.org/howitworks/dataevents/](http://www.datakind.org/howitworks/dataevents/)
- The organizations and people on the 2013 Communities of Impact Guest Speaker list: [http://www.nten.org/coi/guestspeakers](http://www.nten.org/coi/guestspeakers)
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