



We are living in the middle of a remarkable increase in our ability to share, to cooperate with one another, and to take collective action.... Most of the barriers to group action have collapsed, and without those barriers, we are free to explore new ways of gathering together and getting things done.... These changes will transform the world everywhere groups of people come together to accomplish something, which is to say everywhere.

– Clay Shirky, *Here Comes Everybody: The Power of Organizing Without Organizations*

Networks—collections of people connected to each other through relationships—aren’t new. They’re as old as human society. We are all part of networks: our families, our schools, our workplaces, our social circles.

But new tools and technologies—from free conference calls and emails to blogs, wikis, tags, texts, and twitters—are changing the way we communicate and connect. And tools for social network analysis and mapping now allow us to see and understand networks of relationships that were previously invisible to us.

The changes can be seen in the way people are working together to create and disseminate knowledge through platforms like Wikipedia; in how people solve complex mathematical problems or write very stable software, as with Linux; and even in purely social activities, like sharing photos on Flickr and meeting new friends on MySpace.

But the shift is not just in the new “Web 2.0” technologies. It’s in the way that increasingly widespread access to these tools is driving a fundamental change in how groups are formed and work gets done. Wikis and other social media are engendering new, networked ways of behaving—ways of *working wikily*—that are characterized by principles of openness, transparency, decentralized decision-making, and distributed action. These new approaches to connecting people and organizing work are now allowing us to do old things in new ways, and to try completely new things that weren’t possible before.

It’s happening all over the globe, in places like Burma and Serbia, where bloggers are letting the world know their personal perspectives on what is happening in public protests in their countries, and it’s happening in projects like NASA Clickworkers, which is mobilizing tens of thousands of public volunteers, each working just for a few minutes here and there, to replicate the sustained effort of expert scientists to create accurate maps of Mars and other planets.

By Gabriel Kasper and Diana Searce
Monitor Institute and the David and Lucile Packard Foundation

This work is licensed under the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License.

People are beginning to use these same tools and approaches for creating social change too—organizing new forms of political expression, social action, and community building. Whether it's using blogs to organize flash mobs to protest the government in Belarus,¹ cell phones to send text and email messages to influence legislators in Kuwait to promote women's suffrage,² or social network maps to help Boston-area public health and environmental advocates realize that they could be more coordinated in lobbying city officials for changes in building standards,³ the new tools and principles present an important opportunity for increasing social impact. It's a moment of great experimentation and creativity, as people and organizations try to figure out what is now possible.⁴ Our colleague Katherine Fulton calls it a “steam engine” moment: we now have the engine, but we're only just starting to invent the trains and steamships in which we would use it.

Given the complexity and promise of this steam engine moment, it is hard to know what all of this might mean for philanthropy and social change. This is why the David and Lucile Packard Foundation and the Monitor Institute began the Philanthropy and Networks Exploration (PNE) in 2007: to help the foundation make sense of what's happening with networks, to experiment with some of the new tools, and to consider the implications of all of these changes for philanthropy, social activism, and public problem solving.

This paper shares some of the findings of our investigation thus far, in an effort to help people begin to understand the changes taking place now occurring around us, to see how our peers are experimenting with the new tools and ways of working, to identify what questions we should be asking, and to consider what all of the changes might mean for our work and our ability to create social impact. It draws heavily from the proceedings of the “Future of Network Impact” workshop held in Palo Alto in late January 2008 that highlighted ideas from technologist Clay Shirky's new book, *Here Comes Everybody*, and brought together funders, activists, writers, academics, and consultants for two days to discuss how networks are changing social change.

What is different today?

The invention of tools that facilitate group formation is less like ordinary technological change, and more like an event, something that has already happened. As a result, the important questions aren't about whether these tools will spread, or re-shape society, but rather how they will do so.

– Clay Shirky

The new tools and technologies that are now emerging go by many different names: Web 2.0, social software, social technology, social media. Regardless of what you call them, the tools are characterized by several key features: they are “social,” in the sense that they facilitate interaction between people; they allow “many-to-many” connections, between and among virtually any number of people, however small or large; and they allow both simultaneous and asynchronous interaction—people can communicate in real time, or over long periods.

These features now allow more people to easily engage and connect, irrespective of geographic distance; they provide us with the opportunity to access a greater diversity of perspectives and expertise; and they can facilitate accelerated learning and on-demand access to information—all while reducing the costs of participation and coordination.

The tools are allowing us to re-imagine many of the social acts we already do—activities such as learning, organizing people, generating ideas, sharing knowledge, and allocating resources—but with the potential to do them bigger, better, faster, and cheaper than ever before.

As the technologies continue to spread and advance, nonprofits and foundations will increasingly benefit from an improved understanding of the social media tools and how they can be used.

The changes in technology are also adding up to create a transformative moment that has the potential to fundamentally alter the way we connect with others and do our work, both online and offline. It is not just the things that the tools allow us to do, but the new possibilities that emerge when we change our behaviors and ways of thinking to incorporate the new approaches enabled by the tools.

It is a challenge we've faced with "revolutionary" innovations throughout human history. The printing press, for example, was invented in the mid-15th century, but its full potential for creating changes in productivity wasn't reached for many decades. Bibles were being printed using the new press, but monks were still producing all of the pictures by hand, so they could still only produce as many bibles as monks could create pictures. At a certain point, thinking shifted, and they came up with the idea of using plates to reproduce illustrations more quickly. But it was only after the "printed" facts of life were internalized that someone was able to develop this new way of quickly creating illustrations using a press, at which point there was a radical change in production.

There is often a long period during which new technologies are used, but their full potential isn't yet realized, because people are still thinking about things in the old ways. As Clay Shirky explains, "only once the new tools become commonplace and boring do they have the potential to become socially transformative."

So as we begin to take for granted the new "networked" facts of life, how is the world beginning to look? We believe that there are a few givens—conditions that are unquestionably true—about the new, networked way of operating:

- **Efforts can be decentralized.** In a net-centric model, the new technologies allow people to self-organize quickly and easily, without burdensome centralized infrastructure. The tools allow many people to connect with one another, with little increase in the marginal costs of bringing in even very large numbers of additional participants. Perhaps the most vivid examples of this new reality are the emergence of "smart mobs"—large groups of people linked by cell phones, text messages, emails, or other technologies who assemble suddenly in a public place to perform some collective action. Since text messages brought people together in a smart mob in the Philippines in 2001 to protest government corruption and help oust then-President Joseph Estrada, these types of impromptu gatherings have empowered people to come together to achieve social goals ranging from war protests to group purchasing discounts.
- **Connecting people and ideas is fast and getting faster.** The emerging social media tools allow ideas to spread and groups to form faster than ever before. The grassroots religious network Voice of the Faithful (VOTF), for example, formed in response to a series of articles in the *Boston Globe* about sexual abuse scandals in the Catholic Church. In the past, a person would have needed to make photocopies of the articles and hand them out or mail them to people. Instead, organizers were able to send online links to the articles, which could then easily be passed on virally to even more people. Blogs and websites for aggregating information allowed people to spread the word and to accurately track incidences of abuse. Using these types of advances, VOTF was able to grow exponentially from an initial meeting of just 25 people in a church in Massachusetts to a

powerful, global online network of more than 25,000 members in less than a year. The new tools allowed people to organize across parish lines in a way never before possible—and at a pace never before possible—to share information about the issue and to make a coordinated call for institutional changes in the Church.⁵

- **Coordination and collaboration are easier.** The speed and low cost of forming groups today is dramatically reducing traditional barriers to coordination and collaboration. The costs of coordinating groups have dropped, and the costs of participation have plummeted as well. On many online platforms like Flickr or del.icio.us, public sharing is now the default, and people are able to participate in groups with little or no effort. This relative ease of use now allows people to form groups, large and small, that would never have existed before. People can now collaboratively do “big things for love”⁶ (like the Katrina People Finder Project, where volunteer programmers developed a single site that allowed people to search dozens of separate databases and message forums to find lost relatives after Hurricane Katrina) or find like-minded people who share narrow passions (from local Pug-lovers groups at Meetup.com to the “I Yell at Inanimate Objects” group on Facebook).
- **Networks are open and transparent.** The new social tools are making the sharing of information routine and making more resources and knowledge available to more people, which allows users to freely build on the ideas and work of others. Blogs, for example, are rooted in the practice of openly sharing perspectives, ideas, and experiences, and they often borrow from, link to, and build on one another. Online “mash-ups” combine data from more than one source into a single integrated tool (for example, people have combined satellite topographic data with maps from Google to show how coastlines would look if sea levels change). The openness of these tools is similar to the model that has driven the development of the open source programming movement since the late 1990s. With open source, the core program code is made accessible to programmers around the world, who refine and add to the product, improving the overall result.
- **Our ability to tap expertise and share knowledge is expanded.** Social technologies like blogs and video-sharing allow people of all backgrounds to contribute information and ideas. While most people are familiar just with Wikipedia, wiki platforms can now be used to develop and share knowledge of almost any sort. As part of the Philanthropy and Networks Exploration, the David and Lucile Packard Foundation experimented with a wiki to solicit the “wisdom of the crowd” for input on its new strategy for addressing nitrogen pollution. The wiki provided a public forum for scientists, activists, academics, and the general public to share their ideas about the best way to develop effective strategies for addressing pressing problems.
- **Effectiveness is equated with mobilization.** In an organizational context, permanence and longevity are often equated with effectiveness. The best organizations are proven by their ability to last. But with the barriers to forming groups dropping away, networks can be formed and disassembled as needed to mobilize people and stimulate action. Groups don’t need to last for a long time to have a lasting impact. MoveOn.org, for example, creates short-term campaigns that organize people to come together for a limited time to achieve specific goals. In August of 2005, MoveOn was able to organize more than 100,000 people to attend 1,300 candlelight vigils across the country in honor of soldiers killed in the war in Iraq. And the MediaVolunteer project has mobilized more than 20,000 volunteers to contribute a few minutes each making a call and confirming,

correcting, or updating the contact information of a single reporter, to cumulatively build an up-to-date national media database for nonprofits.

- **Organizations are no longer the only way to organize effort.** In the past, if you wanted to get something done, you created an organization. But the changing realities of a networked world mean that important achievements can be attained without an institutional base. We can now “organize without an organization.”⁷ This is not to say that organizations will cease to exist. Organizations will without question continue, but they will increasingly be just one way, among many, of organizing work and accomplishing goals.

Figure 1: How network-centric models are changing the way we connect and work together

Organization-centric model	Network-centric model	Implications for the ways we work and connect
Centralized	Decentralized	People and groups use new technologies to self-organize without centralized planning and infrastructure
Connecting ideas and people takes time	The pace of connection is fast and getting faster	Ideas can spread and groups can form more quickly than ever before as the new tools allow people to connect with others instantaneously and virally
Coordination and collaboration are difficult	Coordination and collaboration are easier	Barriers to collaborative effort are low enough that people can now do “big things for love” or find partners in narrow passions
Closed and proprietary	Open and transparent	Sharing is routine, resources and knowledge are available to many, and multiple efforts and ideas can build on one another
Our ability to tap expertise and share knowledge is constrained	Our ability to tap expertise and share knowledge is expanded	When we look for knowledge, leadership, and expertise, we will increasingly be able to access it in places that were once beyond our reach
Effectiveness is equated with longevity	Effectiveness is equated with mobilization	Groups do not need to last; they can come together and disassemble as needed to achieve goals; people are not necessarily looking for long-term membership
Organizations are the <i>primary</i> way to organize effort	Organizations are <i>one</i> way to organize effort	Organizations will continue, but they are no longer the only way to get things done; work can be done without reference to traditional institutions

How are people trying to use the new tools for social change?

The future is still taking shape, but these givens are beginning to give us a sense of the networked environment in which we are all now operating. How they combine and compound one another will create numerous intriguing opportunities for increasing social impact. Many nonprofits and foundations are already experimenting with using networks and Web 2.0 tools to address social and environmental issues. Groups are capitalizing on the new technologies and strategies to achieve a variety of different goals, such as:

- **Understanding and improving networks of relationships.** The development of affordable and user-friendly tools for data capture and social network analysis now allows us to visualize the previously invisible web of relationships between people and

organizations. Social network maps can help to shift our mental models—seeing social networks allows us to understand our connections to others in new ways and to act broadly using that knowledge. The maps allow us to identify key leverage points for helping a network produce better outcomes, to build a sense of connection and shared purpose across a network, and to assess change in relationships and collaboration over time.

The Boston Green and Healthy Building Network represents a vivid example of the power of social network mapping in action. The Boston-based Barr Foundation had spent several years funding two groups of local organizations that advocated for changes in building codes and standards: public health organizations that saw unhealthy buildings as a root cause of many illnesses, and environmental groups that were focused on the energy efficiency and ecological impact of buildings. In 2005, a senior program officer at Barr recognized that while their “causes” were different, the two groups shared a common goal of setting higher performance standards for buildings, and were often approaching the same government officials asking for similar things. So Barr brought together the two groups of organizations in April 2005 to explore whether they could align their efforts, share information, and develop a more unified message for policymakers. Using information collected at the gathering, the foundation developed a real-time social network map of the people in the room. The map clearly showed two clusters of dots, one representing people in health organizations and the other people in environmental organizations, and that the groups were not well connected. Seeing the map, the groups agreed to begin meeting together and eventually formed the Boston Green and Healthy Building Network, which has

Packard Philanthropy & Networks Pilots

Rooted in the notion that the best way to understand network-centric approaches is to actually try them, the Packard Foundation and Monitor Institute have launched a series of pilots exploring how social media and social network analysis tools can be used to improve Foundation grantmaking. The initial pilots include:

The Nitrogen Wiki

In the spring of 2007, the Packard Foundation created an online forum to invite input from the public for a potential new grantmaking program in reducing nitrogen pollution and improving agricultural practices. The centerpiece of the forum was a wiki seeded with a draft program strategy. The collaboration lasted six weeks at the end of which the ideas generated in the threaded discussions and captured on the wiki were used to shape an initial program strategy. The site is archived at <http://nitrogen.packard.org>.

Mapping Youth Development Networks in Salinas

As part of its local grantmaking efforts, the Foundation is partnering with the Community Foundation of Monterey County to map the youth development network in the city of Salinas. By helping the community visualize and understand the network of relationships among youth development providers, the maps aim to identify central players in the area, to measure the resilience of the network and pinpoint opportunities for strengthening it, and to help participants begin a dialogue and see themselves as part of a larger system working toward common goals.

Farm Bill Reform Networks

As a result of the nitrogen wiki and ongoing strategy development work, the Packard Foundation is taking a close look at how it might invest in supporting farm bill reform as part of its agriculture and environment grantmaking. The landscape of farm bill reform is extremely complex and how a foundation might most effectively support reform networks is similarly complex. So, we have been doing research and outreach to better understand the systems and networks of U.S. farm bill stakeholders.

West Coast Ecosystem-Based Management Networks

As part of an effort to build a stronger network of individuals along the American West Coast that are implementing ecosystem-based management (EBM) principles in their decision-making processes about land use, fish, conservation, water, and other coastal issues, we are working with the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center to use social network mapping tools to gather and share information about the existing network of relationships between local decision-makers. The maps were used to guide discussion about, and to serve as a baseline of information about, the potential network of West Coast EBM implementers, which was convened for the first time by NOAA in late February.

Network Effectiveness Support

Packard has long managed an organizational effectiveness (OE) program to build the capacity of its grantees to accomplish their goals. But an increasing number of the foundation's grant recipients now function as networks or use network strategies. Working with the Packard OE team, we are exploring how Packard can support and increase the capacity of networks, as well as organizations. The pilot is investigating the needs of network-centered grantees to develop a menu of tools and offerings for supporting networks.

increased the connections and collaboration across the different groups and has improved access to, and relationships with, many key policymakers in the city.⁸

- **Organizing distributed labor.** Many organizations are beginning to experiment with an approach called crowdsourcing—the act of taking a task traditionally performed by one individual and outsourcing it to a large, undefined group of people.⁹ The notion of using distributed labor in this way has been around for more than a decade, since the Search For Extra-Terrestrial Intelligence (SETI) project began marshalling unused capacity on personal computers to help scan for alien life. Today, the World Community Grid is using a similar “collaborative computing” approach to support large-scale humanitarian and social research, and crowdsourcing is growing in popularity in arenas far beyond the scientific community. The online news site *Muckraker*, for example, asked its readers to parse the 3,000 emails released by the Department of Justice related to the firing of federal prosecutors in 2007. Within hours, readers were identifying questionable passages, some of which led to new story leads for the site.¹⁰

On a larger scale, the web-based company InnoCentive acts as a broker for crowdsourcing solutions to difficult research and development challenges. The organization has outsourced traditionally in-house R&D functions to create an “innovation marketplace” that connects companies and academic institutions seeking breakthroughs with a global network of more than 125,000 scientists, inventors, and entrepreneurs interested in developing creative solutions. A recent partnership with the Rockefeller Foundation is now allowing select nonprofits to use the InnoCentive process to post problems related to addressing the needs of poor and vulnerable populations and offering rewards to innovators who solve them.

- **Decentralizing decision-making.** Many grantmakers are now experimenting with strategies for decentralizing the authority to make grants, bringing grant decisions closer to those working on the ground and in communities. The Global Greengrants Fund, for example, makes small grants to grassroots environmental groups working around the world. To find grantees and make grant decisions, the Fund uses a network of regional and global advisory boards made up of local scientists and activists, leaders of small networks and coalitions, teachers, journalists, engineers, physicians, and international environmental leaders. These advisory boards are responsible for the grantmaking decisions in each of their regions, leveraging local expertise and creating a system that puts grant decisions in the hands of the people closest to the action.

Ashoka’s Changemakers initiative attempts to open the decision-making process even further. Changemakers builds online communities of peers, experts, investors, and interested members of the public that compete to surface solutions to different social problems, and then the community collaborates to refine, enrich, and vet those solutions. Changemakers posts applications transparently online, so they are available for anyone to view and contribute to by offering new ideas, asking questions, and providing connections to new resources. And after a set of expert judges selects a set of finalists, the final winner is chosen through a vote of the online Changemakers community.

- **Developing and sharing knowledge.** New tools for collaboration and knowledge sharing are significantly changing the way that people are able to work together to build knowledge. In an effort to help its grant recipients and other strategic partners work together, for example, Open Society Institute (OSI) is now using Plone, an open-source content management platform, to provide a customized online knowledge sharing system

for its staff, grantees, and other strategic partners. Through the Plone system, OSI aims to create a virtual collaboration space where communities of invited grant recipients and partners can share information and ideas, thereby creating more informed decisions, alliances, and leveraging of resources for greater impact. The system allows the community members to share documents, as well as blogs, wikis, and other tools for collaborative activity. The Plone platform is also being used as a way to coordinate the multiple free-standing organizations that make up OSI and the Soros philanthropies.

Another, extremely practical example of the potential of collaborative knowledge development can be seen in the website Safe2Pee.org, which allows individuals to enter information about the location of accessible and tolerable public bathrooms in their hometowns. The many contributions are compiled into citywide Google mash-up maps that offer critical, and often timely, information for those in need of a restroom. In this way, the knowledge of each individual, when aggregated, becomes part of an even more powerful base of knowledge that everyone can use.

- **Tapping excess capacity.** One byproduct of the new technologies is that they can make it easier to see and tap excess capacity that exists within a system. The Freecycle Network, for example, uses the internet to connect individuals with something to give away—an item that would otherwise just be thrown out—with those who would like to acquire it. This recycling system helps reallocate resources that would have been excess or wasted assets. A similar effort to tap excess capacity is being explored by the Barr Foundation to address transportation problems faced by local after-school programs by identifying underutilized buses, vans, and cars in the Boston area. Where a funder once might have simply bought new buses for all of the youth programs, Barr is now able to “think” networks to identify and reallocate underused resources.

What are we learning from early experiments?

It is too early to know how all of these different network experiments will turn out. We are still learning how to use the tools well, and to match them effectively with specific needs and purposes. As with any set of new endeavors, many of the efforts may fail. But the price of failure may not be as high as it once was, because the net-centric tools typically don't require expensive infrastructure or high coordination costs. As a result, it's now easier and less risky than ever to try new things. Our ability to learn from our successes, and from our mistakes, as we try these new approaches will provide the base of knowledge for future breakthroughs.

In *Here Comes Everybody*, Clay Shirky explains that there is no simple recipe for success with social media. But he notes that many of the most promising enterprises appear to follow three basic rules for operating in a more networked way: they have a promise, a tool, and a bargain. He writes, “The promise is the basic ‘why’ for anyone to join or contribute to a group. The tool helps with the ‘how’—how will the difficulties of coordination be overcome, or at least be held to manageable levels? And the bargain sets the rules of the road: if you are interested in the promise and adopt the tools, what can you expect, and what will be expected of you?”¹¹ This framework can help nonprofits and foundations avoid the trap of focusing too much on the flash of the new technologies. People should first think about the things they want to do (though with an awareness of what is newly possible) before choosing the specific tools that are appropriate for the job.

We have also learned that much of what we know about building relationships in person remains true online. Human elements, like trust and fun, matter. Even as networks and online social tools

are fundamentally changing many of the ways we connect and work together, the new behaviors are still undergirded by many of the same human drivers as offline activity. At their core, networks are about relationships, which are built on a platform of trust, whether online or offline. Networks will only succeed if they allow time and space for individuals to build authentic working relationships. As youth activist James Toney explains, “People aren’t just coldly linking to you online, they’re ‘friending’ you.” Networks are a social activity. And as with any social activity, people join groups to be rewarded, and need to enjoy what they are doing. Law professor and designer of collaborative technologies Beth Noveck notes, “Fun matters. It’s about harnessing the enthusiasm of the crowd, not just its wisdom. And you do that by making things fun.”

We are also discovering a great deal about appropriate expectations for the time and effort required to try new social media tools. We began the Packard Philanthropy and Networks Exploration pilots with an assumption that the tools would automatically be faster and more efficient than traditional approaches. But our experience suggests that, as with using any tool for the first time, social media experiments often require a steep learning curve that can be quite time consuming. The first Packard pilot, the nitrogen wiki, took an amount of time and effort that was relatively comparable to what it might have taken if the foundation used a more traditional approach, such as convening a set of subject-matter experts. And the initial Packard social network mapping experiments were considerably more labor intensive than expected. But we also found that the time and effort required for the mapping pilots decreased dramatically with each subsequent application.

The experiments are also teaching us important lessons about how to think about networks and organizations. The networks we are used to talking about in the social sector—more conventional collaborations between organizations and associations of funders—are only one part of today’s networked landscape. The term “networks” no longer describes just one thing; it encompasses many different types of groups. The social technologies allow traditional *networks of organizations* to work together in new ways, and they also connect *networks of people within organizations*, and *peer-to-peer networks of individuals working outside of organizations*. These different types of networks offer the social sector a wide array of new options for accomplishing their goals.

At the Future of Network Impact workshop, Charlotte Brody, a founder and executive director of Health Care Without Harm (HCWH), began to reconsider many deeply held assumptions that forming an informal coalition into an organization was an inevitable evolution of her work. “I always believed that as a group matures, it becomes more important to act organizational,” she explained, “but maybe that is wrong. Maybe HCWH didn’t need to grow up and be an organization. Now that I’m thinking more about what is possible with networks, I wonder if the modest organizational structures that we originally created really aren’t the right way to go.”

Regardless of what happens with HCWH, it is clear that formal organizations are no longer the only option for getting work done. Yet it also doesn’t make sense to see organizations and networks as mutually exclusive options. In many cases, organizations will act as networks, and at times networks will act more like organizations. A core competency will be learning to navigate the interface between networks and organizations, and to identify when one form is more appropriate than another.

What new questions should we be asking about networks?

These early lessons provide us with a glimpse of the many exciting possibilities and challenging questions that are emerging with the spread of social media. But we are only just beginning to learn about the meaning and implications of networks and Web 2.0. Below are a few of the key issues and questions that we believe will be important to watch and think about in the coming months and years. The list is by no means comprehensive, but provides a flavor of the ideas that emerged from the Future of Network Impact workshop and that we have been grappling with over the last year of the Philanthropy and Networks Exploration.

- **How do we know whether networks really work?** We are only just beginning to understand the impact of networked approaches. Many people are excited about their potential to produce outcomes that rival or even surpass traditional strategies. Several studies have shown that Wikipedia, for example, contains no more errors than an expert-based alternative such as the Encyclopedia Britannica. Our work in the PNE found that the Packard nitrogen wiki generated important input into the foundation's strategy, advice cited by foundation staff as being comparable to the inputs they might expect from a more traditional process involving a multi-day in-person convening with content experts. And the inclusiveness of the wiki's open approach to strategy development had the added advantage of bringing many additional individuals and organizations into the process. As people continue to experiment with networked strategies for doing their work, it will be important to keep asking what the quality of the results—including any added benefit from increased civic participation and engagement—might mean for when and how people use the new tools and approaches.

The challenge of understanding whether networks create better outcomes is complicated by limits in our ability to assess impact. Traditional evaluation methods have focused on proving direct causality and measuring outcomes after-the-fact, and don't fit well with the pace and collaborative nature of networks. Networks may require us to develop a new language for thinking about accountability and impact assessment, potentially drawing on recent research on innovation about the use of prototyping and rapid-cycle feedback.

Our ability to see and understand networks also offers new opportunities for assessing social change. Social network mapping, for example, allows us to create comparative, time-sequenced maps of relationships between people and groups that let us monitor the growth and development of networks over time. It is less clear, though, how these changes in the strength of networks then translate into real social impact in communities.

- **How do you balance the need for control with the productivity of networks?** The emergent, bottom-up creativity and decentralized decision-making of networked approaches often seem incongruous with the traditional command and control approaches of many private foundations. Funders, like NGOs and most organizations of any sort, are typically goal-directed, while many networks are largely self-directed. Once networks are set in motion, you can't necessarily stop them or change their direction. As a funder, you can stay involved, but you can't necessarily stay in charge in the same way, and self-determination may result in unintended consequences that stray from the goals that a foundation intends to achieve. According to *Wired* magazine founder Kevin Kelley, what is needed is a balance between top-down and bottom-up. Citing the presence of high-level "editors" who helped to identify and control persistent vandalism within the bottom-up network that built Wikipedia, Kelley explains, "The exhilarating frontier today is the myriad ways in which we can mix out-of-control creation with various levels of top-down control."¹²

The Case Foundation, for example, launched the Make-It-Your-Own Awards to promote civic engagement and to test a citizen-centered approach to philanthropy that gives real people an opportunity to submit ideas for improving their communities, to serve as reviewers, and then to vote on the best ideas for Case to fund. It was a largely unprecedented step for a private foundation, as people could easily end up submitting and selecting grant ideas that didn't match the foundation's goals and principles. But the foundation also built in a slight control. While an open group of public judges selected the top 100 ideas, a set of advisors selected by Case culled the list down to 20 grant recipients, from which the public then selected four grantees to receive significantly larger grants. This mid-level culling allowed the foundation to balance the creativity and emergent decision-making of the group with the professional advice of experts.

- **How do online networks translate into action in the real world?** Social networks make it easier than ever to join and form groups. But what remains unclear in many cases is how to get the groups to go beyond affiliation to create actual change in the world. Arron Jiron, a program officer at the Packard Foundation observed, "Online affiliation is now so easy—you go to a Facebook cause and join and you're 'part of the solution.' But to truly solve problems in the real world, we need to act, not just to identify." It will be important to watch new social tools like Second Life and Facebook to see whether they are able to translate "online" enthusiasm into "in-life" change in the real world. At the same time, it will also be critical to watch how established NGOs like Planned Parenthood or the Sierra Club are tapping into the energy of social media tools to build new types of easily-joined and time-limited networks.
- **Are social media tools shifting the balance of power between experts and amateurs?** Many social media tools, from blogs to image- and video-sharing collections like iStockphoto and YouTube, allow amateurs to post their voices (or images) alongside those of professionals and experts. Where publishing once required access to a printing press, today, anyone with internet access can publish their opinions and content. This ease of expression has begun to blur the line between amateurs and experts. Are you better off getting your movie recommendations from professional reviewers, or from a range of user-generated assessments on a site like Rotten Tomatoes? While some hail the civic benefit of greater inclusiveness and participation ushered in by this trend toward mass amateurization, others are concerned that it represents a downgrading of expertise, as it allows lower quality and less informed voices to share the stage with the offerings of experts. As we continue to experiment with social media tools, it will become increasingly important to recognize when expert knowledge is essential, when collective wisdom and action are more effective, and when a blend of the two might produce the greatest impact.
- **What do the new tools mean for privacy and security?** The ease of sharing information for public consumption (rapidly and virally) using social media has raised new questions about what "the givens" of the networked world will mean for privacy. Each act of posting pictures or profiles provides a great deal of information about a user. The online medical site PatientsLikeMe, for example, has users share confidential data about medical dosages, treatments, and outcomes so that people with similar conditions can get an aggregated picture of what is working or not working for other patients. Users of the site opt-in to the idea of sharing very personal—sometimes potentially embarrassing—details about their symptoms, although there are no limitations on who can register and see that information.¹³ Social media tools like this are redefining our

expectations for privacy, as users participate and exchange information without thinking much about the consequences of public exposure of their information. As social technologies continue to spread, people will need to think carefully about the trade-offs between the benefits of openness and transparency and the security risks of broadly sharing their information.

- **What does the new, networked way of working mean for membership organizations?**

As people's attitudes toward joining groups change, there are tremendous implications for membership-based organizations. Many of these nonprofits are struggling to keep members and to appeal to younger, more diverse participants, who often come with different expectations than in the past. As Chris DeCardy of the Packard Foundation explains, "People now seem to be less interested in joining an organization by sending in \$25 and then passively waiting to be told what to do." Organizations like the Ocean Conservancy, a 35-year old membership organization focused on promoting healthy ocean ecosystems, are beginning to explore whether they can develop new ways of thinking about membership using network strategies. In the past, the Ocean Conservancy saw events like its annual International Coastal Cleanup Day as ways to directly recruit new, dues-paying members. But it found that Cleanup participants weren't joining, so the organization has begun to rethink the purpose of the event. According to executive director Vikki Spruill, the Conservancy is now looking at the Cleanup Day as a vehicle for getting people excited about the ocean, regardless of whether they join the Ocean Conservancy. "It's a tool that could attract hundreds of thousands more people to ocean conservation. But it required us to let go in order to get more." The organization's reframing of the event illustrates a new way of approaching leadership: seeking out opportunities to first strengthen the network and the movement, with the idea that this increased interest will also ultimately benefit the organization and its mission. One of the most significant challenges for the Ocean Conservancy and others over the coming decade will be to figure out how to balance the benefits of the leveraged impact possible through using networks with an organization's long-term need to achieve financial sustainability.

What might the future look like?

We are now riding a wave of change created by social media tools and new networked approaches. They have the potential to transform almost every aspect of our lives, including the way we solve public problems and create social change. And emerging trends suggest that this shift is only going to accelerate in the coming years, with the worldwide spread of new technologies and impending generational shifts.

Cell phones, in particular, appear to be a key vehicle for the global spread of the new social tools as they become more and more ubiquitous around the world. Phones can now be used to send text messages, to send communications to groups, and to connect to the internet. But as Clay Shirky explains, "the huge difference is not between 14,000 bits per second and 128,000. It's between zero bits per second and one. The moment people get in touch—a cheap cell phone plugs into the network—things change. Technological connectivity is the key. And there are far more phones than there are computers." Mobile phones now connect more than 3.3 billion people around the globe—over half of the world's population. The growth is especially pronounced in the developing world, where far more people have cell phones than land-lines and internet connections. In Africa, almost 90 percent of all telephone subscribers have mobile phones, and the number of cell phone subscribers is growing by more than 50 percent each year. In China, more than 35 percent of the population now uses cell phones, and the rate of usage in India is

growing more than 90 percent a year.¹⁴ While high-bandwidth tools like Second Life are generating great excitement in technology-rich environments like the US, the newfound ability for half of the world to use their phones to send and receive text messages has the potential to even more drastically change the way people interrelate *everywhere*.

As cell phones and other technologies spread, the faces of their users are shifting as well. Many experts believe that we are only now seeing the leading edge of change when it comes to the new social tools, and that there may be an even greater shift once today's young people begin to enter the workforce. The emerging "millennial" generation—young people born after 1980—represent the first generation to grow up with the internet and the reality of instant and easy access to information and people. Their younger siblings do not even remember a time without Facebook and Web 2.0.

Some 93 percent of teens in the US report using the internet; 64 percent report sharing or creating content (pictures, stories, video, blogs, and web pages) online; and 55 percent say they have created profiles on social networking sites like Facebook or MySpace.¹⁵ As a result, they come to the table with an innate comfort with new technologies and different expectations for connectivity, sharing, and openness.

According to Roberto Cremonini of the Barr Foundation, "The next generation will intuitively understand networks and these new tools. We [older people] are trying to make sense of all of this, but it's hard for us to leave behind our old mindsets.... Real change will come from people who have already internalized the new ways of behaving. For them, networks are natural."

The new tools and approaches are already showing great promise. And the emerging new context will only increase their potential for transforming the ways we organize and do our work. What we don't know yet is whether or how the promise will be fulfilled. The only way to find out is by trying and learning together.

Additional resources on networks and social change

Here are few resources that we found particularly helpful as we tried to understand networks and the possibilities they present for social change. For a more extensive list, check out the “Resources” section of the Philanthropy and Networks Exploration website (www.philanthropyandnetworks.net).

Allison Fine, *Momentum: Igniting Social Change in the Connected Age* (2006). Fine chronicles the ways that social media are facilitating more connected and effective activism. Fine also provides activists with advice and guidelines for the use of these new tools to promote social change.

<http://www.momentumthebook.com>.

Marty Kearns, *Changing Advocacy* (2008). Kearns outlines the changing landscape for activism and, in this context, presents his network-centric advocacy model: the adaptation of advocacy and traditional grassroots organizing to the age of connectivity.

http://www.advocacy2.org/index.php/Changing_Advocacy

Valdis Krebs and June Holley, *Building Smart Communities through Network Weaving* (2006). An introduction to the basics on networks, how they evolve, and how they can be shaped for social impact—illustrated through a case study of the Appalachian Center for Economic Networks (ACEnet).

<http://www.orgnet.com/BuildingNetworks.pdf>

Stephanie Lowell, *Building the Field of Dreams: Social Networks as a Source of Sector-Level Capacity in the After-School World* (2007). An insightful overview of the “network weaving” activities supported by the Boston-based Barr Foundation, and an analysis of what they have learned from their efforts.

http://www.barrfoundation.org/resources/resources_show.htm?doc_id=506208

Peter Plastrik and Madeleine Taylor, *Net Gains: A Handbook for Network Builders Seeking Social Change* (2006). A great starting place for understanding networks, their common attributes, and how to leverage them for social impact. The report includes sections on evaluating networks and social network analysis.

http://www.in4c.net/index.asp?lt=net_gains_download

Clay Shirky, *Here Comes Everybody: The Power of Organizing Without Organizations* (2008). Shirky demonstrates how communications technologies are enabling people to coordinate and collaborate with increasing ease. He makes sense of the social transformation underway and sheds light why some networked efforts take off and others do not.

<http://www.herecomeseverybody.org>

About the Philanthropy and Networks Exploration

The Philanthropy and Networks Exploration, a partnership of the Packard Foundation and Monitor Institute, is an inquiry into how networks and social media tools can facilitate greater philanthropic effectiveness.

Our working hypothesis is that engaging networks and using the new tools can help philanthropies become more transparent, share information and ideas with greater immediacy, and create opportunities for leadership to emerge in new places. We hope to test and introduce network tools, concepts and technologies within the Packard Foundation; to openly share what we learn in the process; and by doing so, inform other institutional and individual philanthropists.

We began this learning journey in early 2007, motivated by the belief that networks offer a source of decentralized power, creativity, and wisdom that the Packard Foundation should better tap into. We started by reaching out to leading academics and practitioners to understand the current landscape; we got a flavor of the accelerating innovation and activity in the world of networks, and quickly became aware of how much there was to learn. When we started experimenting with using collaborative technologies, we really began to gain traction. We're now focusing our work on running pilot projects, and learning from these experiments and from the much broader set of developments and new knowledge about networks being created outside of our work. More information about the project can be found at: www.philanthropyandnetworks.net.

The Philanthropy and Networks Exploration team includes Katherine Fulton, Diana Scearce, Gabriel Kasper, Aron Kirschner, and Athena Mak from the Monitor Institute; Andrew Blau from Global Business Network (a partner organization of the Institute); Angus Parker (an independent consultant); and Chris DeCardy, Stephanie McAuliffe, Gale Berkowitz, and Matt Sharp from the Packard Foundation. This report was developed from the tremendous thinking and contributions of all of the members of the team.

In January of 2007, the Philanthropy and Networks Exploration hosted a convening activists, funders, and thought leaders pioneering the networks ideas and applications. This paper draws heavily on the contributions of all who participated. In addition to above mentioned members of the PNE team, participants included: Joan Blades, Charlotte Brody, Arthur Coulston, Roberto Cremonini, Toby Ewing, Marlene Fried, Cynthia Gibson, Jacob Harold, Paul Hawken, Brett Jenks, Arron Jiron, Marty Kearns, Eamonn Kelly, Eugene Kim, Thomas Kriese, Carol Larson, Sophia Liang, Kai Lee, Jerry Michalski, Beth Noveck, Stephanie Poggi, Clay Shirky, Vikki Spruill, Kathy Toner, James Toney, and Cole Wilbur.

The project also owes a special thanks to Lucy Bernholz, who—through a short suggestion in her blog—helped us make the title of this report more alliterative and catchy.

About the Monitor Institute

Monitor Institute helps innovative leaders and their organizations grow their impact and transform systems for addressing the world's most challenging social and environmental problems. The Institute leverages the resources of the Monitor Group, a global professional services firm, through a combination of consulting, initiatives, research, and long-term partnerships. It works with philanthropists, social entrepreneurs, businesses, and government agencies worldwide to surface and spread best practices and to pioneer *next practices*—breakthrough approaches to public problem solving.

About the Packard Foundation

The David & Lucile Packard Foundation is a private family foundation created in 1964 by David Packard, co-founder of the Hewlett-Packard Company, and Lucile Salter Packard. The Foundation provides grants to nonprofit organizations in three core program areas: Conservation and Science; Population; and Children, Families, and Communities. The Foundation makes grants at every level—local, state, national, and international. As of December 31, 2007, the Foundation's investment portfolio, including donor stock, totaled approximately \$6.6 billion. The Foundation will make approximately \$300 million in grants this year. A Board of Trustees, which includes members of the founders' family, provides direction and sets the priorities for the Foundation. A staff of 85 conducts the day-to-day operations in a way that seeks to honor David and Lucile Packard's core values: integrity, respect for all people, belief in individual leadership, commitment to effectiveness, and the capacity to think big.

Endnotes

¹ Clay Shirky, *Here Comes Everybody: The Power of Organizing Without Organizations*, The Penguin Press (New York, 2008).

² Allison Fine, *Momentum: Igniting Social Change in the Connected Age*, Jossey-Bass (San Francisco, 2006).

³ Beth Tener and Al Nierenberg, *Boston Green and Healthy Building Network: A Case Study*, Barr Foundation, January 2008.

⁴ To learn more about the work of a few of the pioneers of using network approaches that we've found especially insightful, check out: Netcentric Campaigns (www.netcentriccampaigns.org), an online hub for connecting activists with the "innovation, tools, and strategy needed to be successful in the age of connectivity," run by Marty Kearns and his firm Green Media Toolshed (www.greenmediatoolshed.org); Network Weaving (www.networkweaving.com), which shares the ideas and work of June Holley, Valdis Krebs, and Jack Ricchiuto; and Blue Oxen Associates (www.blueoxen.com), which highlights the research and consulting of Eugene Eric Kim and Chris Dent.

⁵ Shirky, *Here Comes Everybody*.

⁶ Interview with Clay Shirky, December 2007.

⁷ Shirky, *Here Comes Everybody*.

⁸ Tener and Nierenberg, *Boston Green and Healthy Building Network: A Case Study*.

⁹ Jeff Howe, "The Rise of Crowdsourcing," *Wired*, June 2006.

¹⁰ Jeff Howe, *Crowdsourcing* blog, <http://crowdsourcing.typepad.com>.

¹¹ Shirky, *Here Comes Everybody*.

¹² Kevin Kelley, "The Bottom Is Not Enough," *The Technium*, www.kk.org/thetechnium.

¹³ Thomas Goetz, "Practicing Patients," *New York Times Magazine*, March 23, 2008.

¹⁴ International Telecommunication Union, *ICT Statistics*, www.itu.int/ITU-D/ict/statistics.

¹⁵ *Teens and Social Media*, Pew Internet and American Life Project, December 2007.