Platforms for Collaboration

By Satish Nambisan

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Some of the brightest ideas for social change grow in the spaces between organizations and sectors. Yet few organizations have systems that make collaboration happen. To foster innovation, organizations need to develop places where they can come together and work creatively—that is, platforms for collaboration. In this article, a management expert identifies three kinds of collaboration platforms—exploration, experimentation, and execution—and then outlines what organizations can do to put these platforms to work for them.
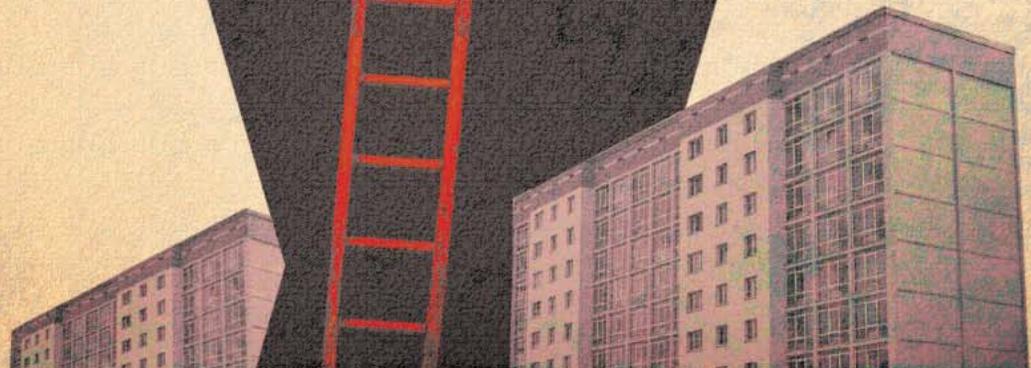
The Rockefeller Foundation had a simple question: How can you turn a solar-powered flashlight into an all-purpose room light? For parts of the world that lack access to regular electricity, the answer to this question could save lives in hospitals, educate children after dusk, and power cottage industries after the crops are harvested.

Yet no one knew the answer. And so the Rockefeller Foundation paired up with InnoCentive to ask 160,000 independent inventors worldwide how they might transform the flashlight. The inventors were part of a Web-based network of "solvers" that InnoCentive, a privately held company, has established. InnoCentive is an innovation intermediary—an organization that brokers relationships between those with questions and those who might have the answers.[1] Organizations with specific technical problems pose their problems on the InnoCentive Web site and offer the solvers large financial rewards for the best solutions. An electrical engineer in New Zealand named Russell McMahon ultimately came up with a flashlight that enhanced the solar battery and LEDs to create a much stronger light.

Meanwhile, north of the border, the Toronto Transit Commission (TTC) was struggling with an overtaxed infrastructure and highly dissatisfied customers. Its 1997-vintage Web site had not been updated for 10 years and had become too cluttered and too corporate-looking for riders to plan trips or find schedules. And its subway cars were not designed to carry their current loads of riders.

Like the Rockefeller Foundation, TTC took its problems to the people. It organized a unique one-day event called Toronto Transit Camp, to which it invited ordinary riders, transit activists, and technology geeks. Attendees then enumerated TTC's problems and suggested creative solutions to them. At the end of the camp, TTC walked away with plans to overhaul its operations—from simplifying the Web site to streamline trip planning, to redesigning subway cars to offer more standing room during rush hour, as well as poles that short people can reach, storage for backpacks, and outlets for computers. The event was so successful that TTC has expanded the collaborative problem-solving exercise into a full-fledged program called Metronauts, which works with several nonprofits and agencies to improve all forms of transportation in the Greater Toronto and Hamilton area.

As these two examples show, social innovation increasingly requires collaboration among diverse networks of nonprofits, government agencies, corporations, and private citizens. These networks promise a wider range of ideas, better use of resources, and faster solutions than do traditional, monolithic entities. (For more on networks for innovation, see "The Networked Nonprofit" in the spring 2008 issue of the *Stanford Social Innovation Review*.) Moreover, in areas such as energy, environment, disaster management, health care, and education, the issues often cross sectoral and organizational boundaries. In the future, much social innovation is likely to happen not within individual sectors, but in the spaces between the different sectors. (For more on cross-sector solutions to social and environmental problems, see "Rediscovering Social Innovation" in the fall 2008 issue of the *Stanford Social Innovation Review*.)

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Yet collaboration demands particular sets of practices and systems—what I call *platforms*. My research over the past few years has revealed three different kinds of collaboration platforms that organizations need for social innovation: *exploration platforms, experimentation platforms,* and *execution platforms.* (See "Three Types of Collaboration Platforms" on page 47 for descriptions of the different platforms.) Partners use exploration platforms to define what the problem is; they use experimentation platforms to test possible solutions to the problem; and they use execution platforms to disseminate the solutions.

As is evident, these platforms support different phases of problem solving. Moreover, establishing and participating in each type of platform requires different types of organizational resources and capabilities. To be effective partners in social innovation, organizations need a deeper understanding of these three platforms so that they may develop the necessary skills and resources. This is especially true for nonprofits and government agencies, which are usually the lead partners in most social innovation collaborations.

Exploration: What's the Problem?

Most social issues or problems are multipart puzzles. But when pieces of the puzzle—however minor those pieces may be—are missing, partners may not understand what, exactly, the problem is. Exploration platforms bring together diverse stakeholders so that they may frame problems fully and accurately. Once the partners develop a shared definition of the problem, they can start working on solutions.

For example, the Maryland-based All Hazards Consortium (AHC) is a nonprofit organization that was formed in 2003 to help coordinate the region's disaster management efforts. It organizes an annual event, the All Hazards Forum (AHF), to bring together Mid-Atlantic government agencies, private corporations, nonprofits, universities, and research institutions to identify problems and solutions in the broad areas of disaster management and emergency preparedness. Over the past three years, this exploration platform has helped AHC's members develop shared definitions of problems in several areas, including evacuation planning, infrastructure protection, food security coordination, and regional cyber security.

Consider the evacuation of special-needs populations, a critical issue in emergency management. People with special needs composed about 25 percent to 30 percent of those affected by hurricanes Katrina and Rita. In both instances, government and nonprofit aid agencies had difficulty serving this population.

To coordinate their own efforts, attendees of the 2007 AHF explored their protocols and practices for evacuating people with special needs. Their discussions uncovered two problems. First, the attendees had different notions of what counts as a disability or special need—a disagreement that leads to much confusion during disasters.

For example, although government entities such as the Federal Emergency Management Agency consider people who do not own cars and people with limited English proficiency as having special needs, the American Red Cross does not. AHC partners agreed to develop a common definition of special-needs populations for all aid agencies, both public and private.

Three Types of Collaboration Platforms

	EXPLORATION	EXPERIMENTATION	EXECUTION
Objective	■ Define core problems ■ Connect with problem solvers	■ Develop solution prototypes ■ Test prototypes in near-real-world contexts	■ Build and disseminate solution templates ■ Help adopters adapt to system-wide changes
Role of Lead Organization	■ Build a diverse coalition of stakeholders ■ Give stakeholders numerous and varied forums to air their concerns ■ Identify potential problem solvers	■ Integrate ideas from diverse stakeholders ■ Offer neutral environments for deep testing of solutions	■ Facilitate the collaborative development and diffusion of solution templates ■ Provide resources that adopters can use to manage the "ripple effects" that follow implementation
Desired Outcomes	■ Shared definition of the problem ■ List of potential solutions	■ Assessments of possible solutions ■ Solution recommendations	■ Solution templates ■ Implementation standards ■ Rapid adoption of the social innovation

The forum's attendees also discovered that they had different ideas about what kind of emergency shelter people with special needs should have. After extensive discussion, they agreed that these populations need a shelter with slightly more services, monitoring, and medical care than a general-population shelter, but fewer services than a hospital. The attendees also developed standard procedures for locating and transporting people with special needs.

At this AHF, as at all forums, AHC did not set the agenda. Instead, forum members first attended panel sessions that were dedicated to various topics. At these sessions, members identified which problems they would tackle. Once members identified a problem, they explored it in more detail at separate technical sessions and workshops, which involved only the relevant stakeholders. AHC then distributed these workshops' outputs—white papers and detailed problem statements—through online and offline channels.

Minnesota's Citizens League has likewise developed a powerful exploration platform. In early 2007, the St. Paul-based nonprofit launched its Students Speak Out (SSO) project to find out more about students' day-to-day issues. The project was part of a larger initiative called Minnesota's 150th Anniversary Project (MAP 150), which encourages all citizens to be coproducers of the public good. The MAP 150 initiative offers a set of Web-based tools that allow citizens to collaborate in solving problems in several policy areas, including property tax, senior services, and public school education.

The users of SSO quickly zeroed in on one student problem: bullying. What had started out as a simple Web-based forum for students turned into a venue for parents, journalists, education researchers, school board members, legislators, and city government officials—including the mayor of Minneapolis—to discuss the growing problem of bullying in schools. The conversations occurred both online and offline. For example, on the Web site students swapped stories about bullying and debated what allows bullying to happen, and educators at a teacher training program met with students to discuss strategies for reducing bullying. The Minnesota legislative committee on education likewise invited SSO participants to present findings from their online discussions.

Gradually, a much clearer picture of the bullying problem emerged—one to which all the different stakeholders could relate. For instance, students' discussions revealed a broader range of bullying acts, including teasing, insults, physical bullying, cyber bullying, and even bullying by teachers. The students also uncovered that behavior considered to be bullying in one school or grade level is sometimes perceived as acceptable behavior in another school or grade level. Meanwhile, teachers noted that there are many factors that lead to bullying, and many of them are well beyond their (or the school's) jurisdiction. The exploration platform also revealed that contrary to teachers' widespread beliefs, students who are bullied often do not want their teachers to do anything about it. Instead, they just want someone to listen to them and be present when needed.

The Citizens League captured this formulation of the problem in an issue brief and a white paper. These served as the foundation for discussions on potential solutions, including school reforms and legislative actions. The early success of the Minnesota SSO project led to the launch of a similar initiative in Milwaukee in 2008.

Both AHC and the Citizens League followed the same general guidelines in creating their exploration platforms. Neither nonprofit controlled the discussion agenda. Instead, both offered neutral environments for diverse stakeholders to explore each other's perspectives and to develop a common definition of their main problems.

Also, both organizations gave their partners many forums for discussion. People often need to talk many times to reach a consensus about the nature of their shared challenges. In the case of AHC, participants first identified problems during the annual AHF, and then refined their conception of the problems during technical workshops and regional forums. The Citizens League likewise combined the SSO Web site with offline events such as student workshops, student video contests, and an annual convention. The number and variety of venues allow participants to build on each other's ideas.

Finally, both organizations connected their partners to solutions. AHC did so indirectly by inviting private companies to its workshops and annual trade shows, because these companies produce the technologies (wireless telecommunication networks, software, hazardous materials removal systems, etc.) on which disaster management organizations rely. The SSO more directly involved problem solvers by involving the Minneapolis city government, which subsequently incorporated the students' feedback in its policies, including those to reduce youth violence.

Experimentation: What's the Solution?

Businesses routinely put their innovations through a rigorous process of technical and market testing before they introduce them to the market.[2] Yet most nonprofits and government agencies skip experimentation. Consequently, many social innovations go more or less directly from idea to implementation. Yet as social innovations cross boundaries and increase in complexity, experimentation will become the cornerstone of effective problem solving.

Experimentation platforms give organizations a neutral environment for building and testing solutions in simulated or "near-real-world" contexts. A good example of such an experimentation platform is the Experience Labs, run by the Providence, R.I.-based nonprofit Business Innovation Factory (BIF). BIF's purpose is to serve as "an R&D center for transformative social innovations," according to the organization's mission statement. To this end, Experience Labs offer nonprofit and public organizations access to a safer, more manageable environment to test new ideas before implementation.

In a recent project, for example, several nonprofits, private corporations, and other partners are working with BIF to design the trauma bay of the future. Trauma bays are that part of hospital emergency rooms where the most seriously injured people receive treatment. Unfortunately, many trauma bays suffer from incoherent physical design, leading to delays and inefficiencies.

Over the summer of 2007, the Experience Labs team first observed and interviewed people who use trauma bays. The team then generated a number of ideas to reconfigure and optimize the space. For example, the storage systems in trauma bays are rather disorganized. Medical supplies are often stacked on shelves or stored in drawers without regard to how they are used in a typical day. In the new design, the shelving and patient gurneys are color-coded to make it easier for doctors and nurses to find supplies. Further, the gurneys are designed to carry medical information along with patients, preventing dangerous mix-ups.

The Experience Labs team then developed full-scale mock-ups of its design ideas using borrowed furnishings from Rhode Island Hospital, shaped foam, poster-sized photos, and hand sketches. Team members role-played different scenarios in the trauma bay prototype, analyzing the business case for the different design ideas from the standpoints of equipment suppliers, hospital administrators, architects, and medical practitioners. Through this process of repeated prototyping and testing, the team plans to develop a national standard for trauma bay design.

Similar experimentation platforms are evolving in other domains. For example, Philadelphia-based University City Science Center is a nonprofit that helps area universities and public research institutes turn their findings into profitable companies. Providing office space and fully equipped laboratories for life science and technology entrepreneurs, the research park has incubated more than 400 companies. It has also helped other multi-sector groups develop similar facilities in Bangkok; Kyoto, Japan; Oxford, England; and Sydney, Australia.

BIF and the Science Center share features that other experimentation platforms should emulate. Both combine input from diverse partners to create prototype solutions. For example, BIF brings together design ideas from researchers at Brown University, industrial designers at the Item Group (a private company), and practicing physicians at the Rhode Island Hospital and the University Emergency Medicine Foundation. Likewise, the Science Center convenes entrepreneurs from the greater Philadelphia region, academic scientists from area universities such as the University of Pennsylvania and Temple University, emerging life science companies, and established businesses.

Both platforms also define a common set of success metrics that help different partners rapidly generate and test new solutions. For instance, in BIF's trauma bay project, a common metric is the time it takes doctors to find medical supplies in the trauma bay. Likewise, entrepreneurs at the Science Center work to develop metrics that appeal to scientists, businesspeople, local and regional economic development agencies, and investors.

Finally, experimentation platforms should provide neutral environments for deep tests of alternative solutions. Neutral environments are not biased in favor of any particular stakeholders, so the data that they generate are valid and informative for all potential adopters. For example, BIF is a nonprofit entity with no direct ties to either the supply side (hospital equipment manufacturers, industrial designers, etc.) or the demand side (physicians, hospitals, etc.) of the innovations it is developing.

Deep tests, meanwhile, are comprehensive enough to unearth all the implementation challenges that each solution poses. In the case of the BIF trauma bay project, mock-ups of the design ideas are detailed enough to clarify the ideas' value to physicians and nurses in the trauma bay as well as to validate their economic viability to hospital administrators and medical suppliers. The Science Center likewise supports extensive testing of the ideas it incubates.

Execution: Giving the Solution Away

Once collaborators have defined their problems and identified their solutions, they can use execution platforms to roll out their findings. The most effective execution platforms build and distribute solution templates. Templates capture the core elements of a solution, but can be easily customized to fit different contexts. They also help partners coordinate their efforts. (For an example of an execution template, see "Art Mimics Art" on page 61 of this issue.)

Consider the School Support Organizations that the New York City Department of Education recently launched. This initiative created several networks of schools, businesses, and nonprofits, which schools can join to learn about innovative curricula and operations strategies. For example, the nonprofit Academy for Educational Development (AED) leads a network that disseminates proven-effective educational practices for young adolescents. The City University of New York (CUNY) heads another network that specializes in college preparation. Yet another School Support Organization convenes networks of 15 to 20 schools of all age levels to share best practices in evidence-based arts and technology programs.

Basic Ingredients for Collaboration Platforms

INGREDIENTS	ORGANIZATIONS MUST BE ABLE TO:
A Network-centric perspective	■ Play supporting roles, rather than controlling the innovation processes ■ Adapt to the potentially conflicting goals of other partners ■ Embrace nontraditional partners ■ Leverage network resources and facilitate two-way flow of ideas and solutions
Modular or plug-and-play expertise	■ Deploy specialized expertise in diverse contexts both quickly and cost-effectively ■ Integrate expertise with that of partners
A portfolio of success metrics	■ Agree on measures that reflect all stakeholders' concerns ■ Define project goals in ways that subsume organization-specific goals

Other public sector agencies are likewise launching execution platforms. For example, the London-based Technology Strategy Board, a quasi-governmental organization, recently launched a public-private collaboration to implement technology-based social innovations such as efficient transport systems, environmentally sustainable buildings, and assisted living for chronically ill people. The initiative plans to bring together business organizations, government procurement agencies, university researchers, and scientists.

Successful execution platforms diffuse both well-researched solution templates and the knowledge needed to apply them. Many of the School Support Organizations, for instance, offer call centers, learning communities, on-site visits, and retreats. As part of its Middle Start program targeted at middle schools, for instance, AED conducts workshops and study sessions for schools, as well as school site coaching for principals and other school officials. Such forums help network members learn from one another, promoting faster adoption and adaptation of the solution templates.

Adopting new solutions often creates ripple effects within and outside organizations. And so a final task for execution platforms is to help their members manage these system-wide changes. For example, schools that join School Support Organizations in New York must often overhaul their operations so that they can make continuous, data-driven improvements. These changes include redefining performance goals, measuring gaps in student learning, and redesigning curricula. Organizations such as AED help individual schools identify and execute these changes, as well as coordinate their efforts with external stakeholders.

Sharing the Platform

The three types of collaboration platforms—exploration, experimentation, and execution—are important vehicles for social innovation, particularly in areas where the agendas of public agencies, nonprofits, and businesses overlap. To participate in these platforms, however, organizations must cultivate the following three sets of capabilities. (See "Basic Ingredients for Collaborative Platforms" on page 48.)

A network perspective. Organizations must look beyond their own boundaries to leverage external resources for ideas. Adopting this network perspective forces them not only to consider how their agendas fit with broader social problems, but also to develop the skills for collaborating with diverse partners.

To be good network members, partners should play a championing role, rather than seeking to control the activities in the collaboration platform. For example, AHC did not direct its partners toward any particular problem. Rather, it supported dialogue that would lead to the discovery of relevant problems. This ability to "let go" and allow the innovation process to unfold organically is important for the long-term success of the collaboration platform.

Part of that letting go is embracing nontraditional partners, who often harbor unique perspectives and therefore can offer creative solutions. The Toronto Transit Camp, for instance, reaches out to commuters with no technical expertise. Likewise, the nonprofit Rockefeller Foundation readily employs the for-profit InnoCentive. Forging alliances between these strange bedfellows requires all partners to understand each other's incentives and business models.

At the same time, however, platform partners must subsume their individual agendas to the larger goals of the platform. For example, in the AHC case, private companies such as IBM Corp., Lockheed Martin Corp., and Northrop Grumman Corp. are allowed to weigh in on specific problems. Yet many of these companies also possess technologies and services that could potentially address some of these problems. Because these corporations have a vested interest in shaping the problem definitions, AHC has established norms and procedures to check these corporate interests. Meanwhile, the companies have to adapt their private goals to participate in the collaboration platform.

To leverage network resources, partners may also need to adapt some of their existing practices. For example, the schools participating in the School Support Organization network had to build more flexibility in their internal structures and decision-making processes to adopt the best practices offered in their networks.

Plug-and-play capabilities. As organizations and sectors collaborate to solve social problems, they must become both more specialized and more flexible—in other words, more modular. Platform partners will have to package their expertise so that they can quickly and cost-effectively deploy it in very different contexts. They must also know how their expertise can complement that of their partners.

For instance, InnoCentive has honed its ability to conduct idea contests to generate ideas across a wide variety of problems. At the same time, the company has also learned to consider the domain knowledge, funding, and intellectual property policies of its partners. With these parameters in mind, it tailors its contests to the problem and partners in play. Similarly, BIF can apply its design expertise to develop, test, and evaluate a wide range of innovations, using the unique strengths of its project partners.

A portfolio of success metrics. Rather than focusing on narrow organization- or sector-specific indicators, platform members must measure success in ways that appeal to all partners. One way to do this is for the project to develop larger goals that subsume the goals of its individual partners.

In the trauma bay project, for instance, BIF must weigh hospital administrators' concerns about cost and regulatory considerations, medical suppliers' concerns about market size, and doctors' concerns about patients' survival. At the same time, though, BIF set a broader, longer-range goal: to set the national standards for trauma bay design. This far-reaching goal not only reflects the organization-specific goals of its partners, but also gives the group a target to pursue together.

Collaboration platforms can help dismantle the long-held barriers between government, business, and nonprofit sectors. They can also speed the cross-fertilization of innovative ideas and solutions throughout the sectors. The ability of nonprofits and government agencies to establish and participate in such collaboration platforms will likely decide their success in solving the complex social problems that we currently face. ■

Notes

1 For more on the different types of innovation intermediaries, see Satish Nambisan and Mohanbir Sawhney, "A Buyer's Guide to the Innovation Bazaar," *Harvard Business Review*, June 2007.

2 For more on experimentation, see Thomas H. Davenport, "How to Design Smart Business Experiments," *Harvard Business Review*, February 2009.