Stanford Social Innovation Review

The Missing Link in School Reform | Finding Your Funding Model | Circles of Change | Sourcing Locally for Impact

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24-Page Supplement
INNOVATIONS IN HEALTH CARE

Stanford SOCIAL INNOVATION REVIEW

Fall 2011
Volume 9, Number 4

The Missing Link in School Reform

By Carrie R. Leana

+

Finding Your Funding Model

By Peter Kim, Gail Perreault, & William Foster

Circles of Change

By Tracy A. Thompson

Sourcing Locally for Impact

By Ethan B. Kapstein & René Kim

Too Good to Fail: The Collapse of ShoreBank

By James E. Post & Fiona S. Wilson

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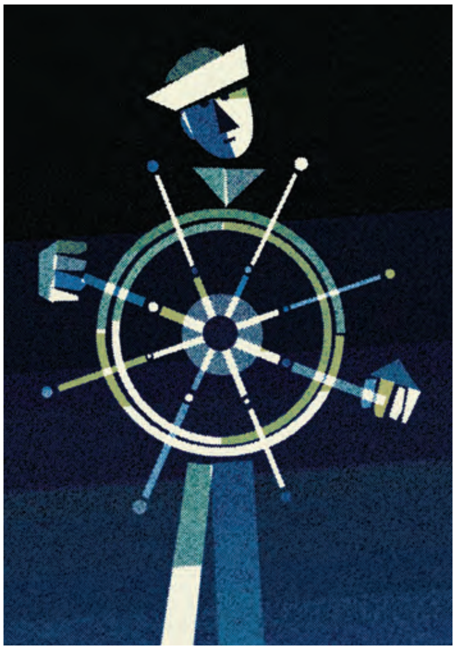

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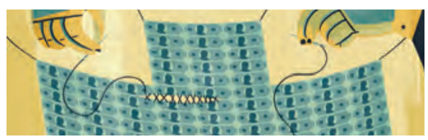


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Collapse of an Iconic Social Enterprise

In this issue of the *Stanford Social Innovation Review* we bring you an in-depth report—"Too Good to Fail"—on what had been one of America's oldest and most important social enterprises, ShoreBank Corp., and the events that led to its recent collapse. Long before anyone coined terms like *shared value*, *blended value*, or *double bottom line*, the people at ShoreBank were busy building a for-profit company that doggedly pursued a social mission.

Back in 1973 a group of Chicago social entrepreneurs created a bank holding company, believing they could use the bank's capital to improve the lives of disenfranchised people living on the city's South Side. Over the next 37 years the holding company grew, and so did the number of for-profit and nonprofit entities that it created. ShoreBank had an immense impact, channeling billions of dollars to poor communities in Chicago, Detroit, Cleveland, and other aging industrial cities, and improving the lives of tens of thousands of people.

Unfortunately, it all came to an end last year when ShoreBank was forced by the government to shut down. Although many of the entities it created live on in other forms, the power and symbolism of that single institution is gone.

The ShoreBank saga provides important lessons for people who believe that for-profit institutions can be used for social change. The first lesson is that managers running a for-profit business—even one with laudable social goals—need to pay close attention to the profit side of the equation. ShoreBank had the laudable goal of lending to homeowners and small-business people living in inner cities. But those people and businesses were also among the most economically vulnerable, and when the economy collapsed, so did many of those loans. To protect itself, ShoreBank needed to do a better job of diversifying its lending so that it was not so exposed to a bad economy.

But ShoreBank was not the only bank that made poor lending decisions in the last decade. Which brings us to the second lesson, that people engaged in social change—even those building socially responsible businesses—need to be involved in politics and advocacy. The federal government used hundreds of billions of dollars to rescue many of the same banks that caused the financial meltdown, but it refused to use any funds to rescue ShoreBank.

The reason the government didn't step in is that right-wing advocates put pressure on the federal government not to do so. It's difficult to know whether ShoreBank could have secured federal funding by building a broader base of political support for its work, but it is certain that without that support it didn't stand a chance.

On a final note, I want to point out that this issue of *SSIR* features our first special supplement—"Innovating for More Affordable Health Care"—a 24-page insert brought to you by the California HealthCare Foundation. The supplement has a terrific selection of articles written by some of the leading investors, academics, and thinkers in health care. I encourage you to read it. ■

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Unfair Criticism

Fair Trade USA is disappointed that the *Stanford Social Innovation Review* published the article "The Problem with Fair Trade Coffee" (*SSIR*, vol. 9, no. 3, p. 74). We welcome feedback and philosophical discussion about ways to improve and expand the Fair Trade system, but the unsubstantiated claims, dated research, and misinformation that author Colleen Haight presented in her article misrepresent our mission, our model, and our accomplishments to date. During our 12-year history, Fair Trade USA has helped improve the lives of more than 1.5 million farmers by cultivating a more equitable global trade model that alleviates poverty in coffee growing communities. As a mission-driven nonprofit organization, we continuously innovate our model to deliver greater impact back to farming communities.

Here, within the publication's required 1,000 words, we are able to address only some of author's claims. To learn more, please visit www.fairtradeusa.org.

The article says that "retailers explain" that Fair Trade USA does not have sufficient data showing positive impact on growers. Without citing sources for this broad testimonial, the author fails to share that during the course of her research she met with Fair Trade USA on two occasions. She was presented with a plethora of data proving the enormous impact we have made in alleviating poverty in countries where farmers are not getting adequate prices for their products and where they are isolated from international markets. In 2010, we certified nearly 9,000 products from 878 producer organizations in 70 countries. We work with more than 900 US companies to improve the sustainability of their sourcing practices and empower consumers with the assurance that products were grown and traded following strict social and environmental guidelines.

> Fair Trade standards guarantee a minimum price to producers, but unlike the article insinuates, this is a floor price, not a ceiling. The direct relationships that Fair Trade fosters between farmers and buyers have allowed cooperatives to negotiate far higher prices based on the quality of their beans. —Paul Rice

Since Fair Trade USA started in 1998, more than 555 million pounds of Fair Trade Certified coffee have been imported into the United States. As mentioned, this still represents a small percentage of the coffee industry. We agree—there is plenty of room for growth. This will happen with increased awareness, stronger commitments from the coffee industry, and further innovation of the Fair Trade model. We are inspired by the tremendous growth of certified imports. Imports of Fair Trade coffee, specifically, have more than doubled in the last five years, from 44 million pounds in 2005 to almost 109 million pounds in 2010. Fair Trade supporters have generated $45 million in community development premiums since 1998 in coffee alone, $56 million overall.

To understand the impact of Fair Trade, one must understand exactly how the pricing model works. Fair Trade USA ensures that in return for their commitment to social and environmental sustainability through the Fair Trade standards, farmers receive a price that is always higher than the market price. Fair Trade standards guarantee a minimum price to producers, but unlike the article insinuates, this is a floor price, not a ceiling. The direct relationships that Fair Trade fosters between farmers and buyers have allowed cooperatives to negotiate far higher prices based on the quality of their beans. In times of high market prices, as we are seeing today, the Fair Trade minimum is raised to meet the market price. In addition to the price paid for the coffee, buyers must pay an additional 20 cents for community development and another 30 cents for organic coffee.

The Fair Trade premium is unique because the cooperative is empowered to select and fund the projects that its members feel are most needed. These needs range from building schools and medical clinics to purchasing new equipment to improve quality, funding organic certification, or providing members with technical assistance to improve yields or business acumen. Greater business capacity and higher quality coffee support the empowerment and economic advancement of the entire community.

In addition, in the Fair Trade system, premiums for community development are paid to cooperatives that pool the resources to fund more substantial projects designed to improve the quality of life for all of its members and their families, contributing to poverty alleviation for the entire community. The premium has helped bring clean drinking water to farming communities in Africa, it has been invested in education programs for both children and adults, and it has funded cupping courses that have allowed farmers to better understand and influence the quality of their coffee.

Throughout the article, several accusations are levied about the quality of Fair Trade coffee that are simply unsubstantiated. In the subtitle, the author says that strict certification requirements result in lower quality coffee for consumers. However, there is no direct relationship between Fair Trade standards and quality. We do not audit for quality. Nor do we force buyers to purchase low-quality beans. The coffee industry encompasses a variety of quality levels, flavor profiles, and price points for Fair Trade coffee that reflect this paradigm.

The real relationship between Fair Trade and quality is actually quite positive, and one that has evolved over the last 12 years. As farmers start to receive better prices for their harvests, they are able to invest more money in improving the quality of their coffee. Cooperatives are hiring and training cuppers and agronomists to help members produce better coffee. As a result, nearly 250 producers attended the Specialty Coffee Association of America's annual conference, where they showcased their quality beans directly to US buyers. Fair Trade Certified coffees in Peru and Rwanda, among other regions, have been recognized with enviable cupping scores from the industry's purveyor of quality Ken Davids.

This investment in quality has allowed cooperatives to negotiate much higher prices for their members, allowing them to lift themselves out of poverty through trade, not aid.

After all, combating poverty requires a sustainable model that empowers farmers and workers to help themselves. Given its inclusive, participative approach and substantiated track record, Fair Trade is a viable vehicle for producers to strengthen their positions and take more control over their lives. As the market and the needs of our consumers, investors, and producers change over time, we find ourselves ready to meet the challenges and welcome the opportunity to improve the work that we do, so that we can continue to deliver more Fair Trade opportunities to more people around the world.

Paul Rice
President and CEO
Fair Trade USA
Oakland, Calif.

Great article! As with all environmental initiatives, they often start out well intended but get corrupted or at least watered down by the status quo along the way. These initiatives need to be challenged to evolve and grow, seeking to continuously improve their charter, mission, objectives, and effectiveness. It is too easy to hide behind a banner of "doing good." It may be time for a multilateral review team made up of interested parties and field experts, working in a transparent way, to review the Fair Trade model. This might help take fair trade to the next level.

David Podmayersky
Sustainability Director
EarthColor
Parsippany, N.J.

Sharing the Value

In both their most recent *Harvard Business Review* article, "The Big Idea: Creating Shared Value," and now in this forum ("Roundtable on Shared Value," *SSIR*, vol. 9, no. 3, p. 30), Michael Porter and Mark Kramer join a large, global community of business and thought leaders who have concluded both companies and nongovernmental organizations are best served by focusing on maximizing value—not just economic value for shareholders, but rather value as a natural blend of economic, social, and environmental performance.

Although certainly a "big idea," this vision of value is not a new one. The authors' ideas and experience working with some of the world's leading companies confirms, affirms, and extends research by a number of people, including C. K. Prahalad, Lynne Payne, and Stuart Hart, and, of course, my own work on "blended value" that was initiated in 2000 at the Harvard Business School, where I had the benefit of presenting it for feedback from a number of colleagues, including Porter and Kramer. The concept of blended value was then further developed through significant research at the Stanford Graduate School of Business in 2003, and subsequently at the Said Business School at the University of Oxford.

Porter and Kramer help advance this decade-long process of advocacy with their work as consultants to CEOs applying these ideas within their firms. And their well-written and thoughtfully framed article smoothly complements the large body of writing on blended value that already exists. After a decade of research, writing, and public speaking at countless gatherings, such as the World Economic Forum, I am delighted that such significant advisors to the business community have come to embrace these ideas. It demonstrates that the time has come for a "value vision" to take center stage in our discussions regarding not only the future of business, but also the nature of capitalism itself. In the wake of the recent business and financial crisis, perhaps more leaders are open to a new form of capitalism focused on a broader understanding of value maximization, whether called "blended value" or "shared value," that better benefits us all.

Jed Emerson
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Heidelberg, Germany

At our company we are seeing a significant surge in demand for effective information systems that plan for and measure long-term impact using structured data. We are encouraged by the willingness of NGOs, funders, government, and businesses alike to look at convergent solutions. It is this approach and attitude that are going to deliver innovation to solving complex problems and do so with scale.

Taylor Ohlsen
President
Newdea Inc.
Englewood, Colo.

By Jessica Ruvinsky

PHOTOGRAPH COURTESY OF KISII DISTRICT PUBLIC HEALTH OFFICE

A girl in Kenya's Kisii District draws water from a local spring that has been protected through concrete sealing.

ECONOMIC DEVELOPMENT

Spring Water Protection Improves Health

▶ Living near safe drinking water is not the same as drinking safe water. Some have argued that anything short of pumping it directly to the kitchen won't have any health benefits. "Even if the water is clean when you get it from the spring, it can become contaminated in storage at home," says Michael Kremer, Gates Professor of Developing Societies in the economics department at Harvard University. In the first randomized evaluation of the health effects of improving water sources alone, without any simultaneous sanitation changes, Kremer and colleagues found that "clean water does make a difference in terms of reducing diarrhea" despite recontamination on the way to the drinking glass.

Kremer followed a spring protection project in rural western Kenya in 2005. "A typical unprotected spring may be like a mud pit in the dry season and in the wet season, a small pond," says Karen Levy of Innovations for Poverty Action, the nonprofit that evaluated the project. "Because there's no clean edge, it's very easy for it to get contaminated when people and livestock come and wade in the water." Spring protection seals off the source and encases it in concrete, so that the water flows out through a pipe above ground, where people collect it in jerry cans.

Household surveys showed that this does have a health benefit: Spring protection reduces child diarrhea by a quarter. But it could do better. Although the new infrastructure improved water quality at the source by 66 percent on average, it improved water quality at home by only 24 percent. Levels of education and sanitation in the household seemed to make no difference to recontamination, but ongoing research into dispensing chlorine at the springs looks promising.

Protecting a spring costs about $1,000. Although most of the springs in this study were on private land, almost none of the landowners had invested in protection—in part because local custom (and sometimes law) does not permit charging for water. Would allowing landowners to profit from their springs get clean drinking water to more people? Or would neighbors just walk farther to get free dirty water? The researchers created a mathematical model of the trade-offs and found that at current income levels rural western Kenyans are better off with the existing social norm.

"We've collectively spent billions of dollars on development aid over many decades, and there's strikingly little evidence about what works and what doesn't," says Levy. This rigorous analysis of the benefits of spring protection show that "it's good, it gets people cleaner water, and it reduces diarrhea," says Kremer. "As long as enough people are using the water source, it's quite cost-effective. I think it's a good buy and I encourage NGOs to do it." ■

Michael Kremer, Jessica Leino, Edward Miguel, and Alix Peterson Zwane, "Spring Cleaning: Rural Water Impacts, Valuation, and Property Rights Institutions," *The Quarterly Journal of Economics* 126, 2011.

SOCIAL ENTERPRISES

Nonprofits Aren't More Commercial

▶ You may welcome the efficiency that market forces increasingly bring to the nonprofit sector. Or you may fear that growing commercialization threatens the sector's integrity. Either way, you're probably wrong. Amid impassioned debate over the implications of nonprofits' commercial turn, a fresh look at the data shows that perhaps there actually isn't one. The evidence "is kind of like a Rorschach blot—you can see in it what you want, but there's no clear trend," says Curtis Child, a doctoral candidate in sociology at Indiana University. "Nonprofits just aren't, as a whole, becoming more commercialized."

Child returned to the same data others cite when they make the case that nonprofits are relying more and more heavily on earned income over donations or grants. One incriminating indicator, "unrelated business income," is the money a museum makes from selling Empire State Building snow globes (which presumably don't bring fine art to the people) but not from reprints of Vincent van Gogh paintings (which do). Although unrelated business income did increase by more than 250 percent in the nonprofit sector between 1991 and 1997, so did total revenue; snow globe peddling as a proportion of aggregate total revenue has remained steady since the early 1990s at about one half of 1 percent.

The *Nonprofit Almanac*'s data go back farther, to the 1970s. It's true that nearly half the growth in total revenue from 1977 to 1997 came from fees and charges. But it's also exactly what we should expect, says Child: In 1977, fees and charges already accounted for nearly half the revenue in the sector. Looking at program service revenue or commercial revenue data from the Urban Institute's National Center for Charitable Statistics doesn't change this picture; the proportion remained constant from 1986 to 2004. If growing commercialization means increased reliance on earned income, it looks very much like commercialization is not growing.

Burton Weisbrod, professor of economics at Northwestern University and editor of *To Profit or Not to Profit: The Commercial Transformation of the Nonprofit Sector*, objects to defining it so narrowly. "To talk about the effect of commercial forces is not the same thing as to say what fraction of revenue is coming from user fees," he says. "Those are rather different questions." Commercial interests especially permeate higher education and hospitals in ways that don't show up in Child's statistics. When the pharmaceutical company Novartis gave the University of California, Berkeley, $25 million—and got two seats on the five-person committee that decided which research projects the money would support—that counted as a "donation." There is also a time horizon problem, Weisbrod says. The extremely high percentage of commercial revenue in hospitals began with the creation of Medicare, which predates the available data by a dozen years.

So to what extent do market forces enhance or corrupt nonprofits? Child, for his part, isn't taking sides yet. He recommends simply "tempering the debate about whether commercialization is good or bad for the sector, and just answering the empirical question first." ■

Curtis Child, "Whither the Turn? The Ambiguous Nature of Nonprofits' Commercial Revenue," *Social Forces* 89, 2010.

NONPROFIT MANAGEMENT

Improving Teamwork

PHOTOGRAPH BY YURI ARCURS/ISTOCKPHOTO

▶ To develop proposals for effective environmental policy, the Environmental Defense Fund (EDF) runs scenarios past lawyers, economists, scientists, and policy wonks, often multiple times. Each specialist's input informs the next, until the team comes up with an idea that seems both economically feasible and environmentally acceptable. "No one person could do that," says Lisa Moore, scientist at EDF, and that's why she likes her job: "I just want to be part of a good team." But Moore can be reluctant to rely on people, a mistrust she says is "kind of a strange characteristic to have as a through-and-through team player."

New research suggests that this mistrust is not strange at all. In fact, it can boost team performance, says Erich Dierdorff, an assistant professor in the department of management at DePaul University. Dierdorff wanted to see whether more collectivist, group-oriented teams in fact do better work. His answer is a resounding yes.

Psychological collectivism has many facets, from how much people like or prioritize teamwork to how comfortable they are with relinquishing control. Dierdorff and colleagues showed that these facets have different effects on team performance at different times. As groups of three to six students in a capstone business course competed at running simulated companies, Dierdorff assessed each member's collectivist tendencies and compared them to the team's performance at the beginning and end of a several-week stint in the widget business.

"Teams that had more members who were higher in preference for group work and higher in concern for other people had better early performance," says Dierdorff. When those teams cooperated well, high preference also increased final performance. Teams whose members tended to put group goals before their own performed better at the end, but no differently at the beginning. Whether people embraced group norms made little difference.

And reliance—the characteristic that Moore lacks—turned out to be bad for early performance. Whereas high-reliance people just figure the team will get it done, low-reliance people take more responsibility on themselves. As long as the members are cooperating well, low-reliance groups continue to succeed.

To the extent that the student simulation reflects real-world workplaces, practical lessons can be gleaned. Putting group objectives ahead of one's own makes a big difference to the team's success. And the quality of cooperation can make or break the performance boost that collectivism offers. Training in cooperative exchange could turn groups that enjoy each other into groups that succeed together, and would especially benefit those who are least comfortable relying on others—because "at some point, with a good team, you let go of that distrust," says Moore. ■

Erich C. Dierdorff, Suzanne T. Bell, and James A. Belohlav, "The Power of 'We': Effects of Psychological Collectivism on Team Performance Over Time," *Journal of Applied Psychology* 96, 2011.

HEALTH

Undisclosed Pharma Contributions

▶ In 2007, Eli Lilly and Company gave the National Alliance on Mental Illness (NAMI) $450,000 toward its Campaign for the Mind of America, which, if successful, could greatly expand the market for Lilly's newest and most expensive psychiatric drugs.

Potential conflict of interest in the funding of health advocacy organizations (HAOs) by pharmaceutical companies is hard to suss out, because those relationships are mostly not made public. After doing a systematic analysis of the disclosure practices of HAOs, "I was very surprised at the large number of organizations that did not disclose" industry contributions, says Sheila Rothman, a professor at Columbia University's Mailman School of Public Health.

Although there is no general legal requirement for companies to do so, as part of settlement agreements with the US Department of Justice, several drug and device companies now publish the exact amounts of gifts and grants they make to HAOs. Rothman used data from Lilly, the first to make its grant registry public, to evaluate grant transparency.

Only 25 percent of HAOs that received Lilly funding acknowledged it on their website. Eighteen percent did so in their 2007 annual report, and 10 percent listed Lilly as an event sponsor. None revealed the amount of the grant.

HAOs working in areas related to Lilly's highest sales—neuroscience, oncology, and endocrinology—got most of the grants. Sixty-six percent of the money went to organizations with an interest in Lilly's two best sellers, the psychiatric drugs Zyprexa and Cymbalta. The National Breast Cancer Coalition got $50,000, and lobbied for (among other things) expanded Medicare coverage for all oral cancer drugs. The American Diabetes Association received $250,000 with which to teach weight management and better drug use.

NAMI, for its part, did start publishing the amounts of all donations more than $5,000 in 2009, shortly after it came under scrutiny in congressional investigations. "The reason we didn't do it before is competitive self-interest," says Michael Fitzpatrick, NAMI's executive director. "We all fight to find funding year in and year out, so you're very protective of the people who write checks. It's not a matter of trying to hide anything; it's more trying to protect your donors."

When the Physician Payment Sunshine Provisions of the new Patient Protection and Affordable Care Act go into effect in 2013, they will require companies to publicly report their gifts to doctors, but not to HAOs. It will still be up to the health advocacy organizations themselves to embrace transparency so that regulators, legislators, and the patients whose interests HAOs represent can more easily follow the money. ■

Sheila M. Rothman, Victoria H. Raveis, Anne Friedman, and David J. Rothman, "Health Advocacy Organizations and the Pharmaceutical Industry: An Analysis of Disclosure Practices," *American Journal of Public Health* 101, 2011.

NONPROFIT MANAGEMENT

How Leaders Encourage Innovation

▶ What drives innovation at nonprofits? Is it the power structure, the rules and regulations, the size? How much money you can throw at a problem? Most past research has asked how these variables affect innovation within the business sector. "What I'm starting to see is that it's more about who works for the organization," says Kristina Jaskyte, who studies nonprofits from the School of Social Work at the University of Georgia. "That human factor is almost more important than the resources an organization has."

Her guinea pigs were affiliates of Communities in Schools, a nationwide network of nonprofit organizations that bring

community support to public school students. For two years, she visited locally controlled, independently programmed organizations in Florida, Georgia, North Carolina, and South Carolina. She left questionnaires with every employee and board member and interviewed 79 executive directors, many of whom couldn't wait to tell her what was new. She gathered enough data to distinguish different types of innovation: the administrative (a new organizational structure or administrative system) and the technological (a new program or service). Administrative innovation was associated with centralization and a new executive director. Transformational leadership was defined by both administrative and technological innovation.

Across widely different affiliates and programs—from turning a donated bus into a brightly colored mobile library in rural Georgia to providing mentoring and college scholarships to the children of fallen soldiers in metropolitan Florida—Jaskyte found similar leadership styles. Transformational leaders find ways to "capitalize on that creativity that employees have," says Jaskyte. They create trusting relationships by "challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart."

One such leader is Jon Heymann, CEO of Communities in Schools of Jacksonville, which runs the after-school programs that have become the standard in the city. "We have no canned programs," Heymann says. "Anything we have done we've invented and designed ourselves." He calls his direct reports "renegades" because "each one of them could run their own nonprofit. They are at times very hard to manage," he says, "but I would rather have that than rubber stamps, where all of the ideas have to come from me. "

Jaskyte hesitates to offer practical advice based on her findings. But to those executive directors who tell her they just don't have time to pioneer new programs and processes while they're busy trying to stay afloat, she counters that innovation would make everything else easier. Michael Austin, professor of nonprofit management in the School of Social Welfare at the University of California, Berkeley, agrees. "The most successful organizations, in terms of sustaining themselves, are the ones that are continuously innovating," Austin says. ■

Kristina Jaskyte, "Predictors of Administrative and Technological Innovations in Nonprofit Organizations," *Public Administration Review* 71, 2011.

SOCIAL ENTERPRISES

Cadaver Commerce

▶ A disembodied leg might help device manufacturers develop minimally invasive coronary bypass techniques. Brain tissue advances Alzheimer's research. Skin is the only body part a pharmaceutical company conducting research for a new topical drug might need. "We don't want anything to go to waste," says Brent Bardsley, executive vice president and chief operating officer of the Anatomic Gift Foundation, a nonprofit whole-body donation program in Hanover, Md.

Selling body parts is mostly illegal in the United States. The Anatomic Gift Foundation and the dozen or so other nonprofit and for-profit ventures that have sprung up in the last decades say they don't trade in

PHOTOGRAPH BY ISTOCKPHOTO

cadavers; they offer procurement services. If there's a whiff of the body snatcher in this, there is also the strangeness that comes with the creation of an industry. According to Michel Anteby, an associate professor at Harvard Business School, the moral legitimacy of a new market can come as much from *how* you sell something as from exactly what you're selling.

Other once-suspect trades have become mainstream—we now readily buy life insurance and sperm. Scholarly accounts of this kind of gradual market legitimization mostly have focused on conformity: New ventures conform to societal ideals, or prior models, or customer demands. Focusing on New York state's commerce in cadavers in 2007, Anteby found that cadaver entrepreneurs are attempting to create moral legitimacy in a vacuum. They follow no precedent, and their customers "are not vocal or strong enough, not to mention often alive, to defend the ventures."

Instead, the ventures try to deflect accusations of illegitimacy or immorality by emphasizing the moral approach to their practices. "In the same way that food can be deemed halal or kosher because it was prepared in a different way, the programs are trying to make arguments around the morality of their pursuit based on how they *treat* the deceased," says Anteby. "'How we operate makes us more moral than you.'"

At Research for Life, a for-profit company based in Chandler, Ariz., CEO Garland Shreves considers it his mission to raise the standard of service in the industry. Unlike the traditional whole-body donation programs at medical schools, Shreves says, his company answers the phone day or night, will never reject a donation his company promised to take, and offers free spiritual counseling to the family of the deceased.

Shreves's good practices, however, don't guarantee a moral cadaver industry. The flipside, Anteby says, is that "if I know how you operate and what makes something moral, I can import your practice and claim morality." After all, any pioneering social entrepreneur can anticipate the benefits of a new venture—be it fair trade or microcredit to the poor—but "there might be a danger in creating precedent in a market that's not yet completely legitimate and then opening it up to other players who might have very different goals and motives," says Anteby. "You're legitimizing not only your market, but the market more broadly." ■

Michel Anteby, "Markets, Morals, and Practices of Trade: Jurisdictional Disputes in the U.S. Commerce in Cadavers," *Administrative Science Quarterly* 55, 2010.

Ideas > Q&A

PHOTOGRAPHS BY STUART FREEDMAN

CHRIS WEST takes a businesslike approach to philanthropy, looking for ways to leverage the assets of the Shell Foundation and its corporate parent to improve the lives of low-income people in the developing world.

Chris West has been involved with the Shell Foundation since its beginning. He was active in the discussions about its creation, joining as deputy director soon after its 2000 launch. In 2008 he was named director of the London-based foundation.

The Shell Foundation gives away about $16 million a year. Although it isn't one of the larger foundations, it plays an outsized role in philanthropy, in part because of its ties to the world's fifth largest corporation—Royal Dutch Shell—but also because of its innovative approach to grantmaking.

West and the Shell Foundation are unabashed about taking a businesslike approach to social change. West describes one of his roles as that of an angel philanthropist—taking big risks to help unproven social ventures get on their feet—and another as providing growth capital to proven organizations to help them scale.

Instead of spreading its resources around to lots of organizations, the Shell Foundation has a small portfolio of for-profit and nonprofit social enterprises that it devotes the bulk of its time and money to. Like the foundation, these organizations all take a business approach to social change. They include GroFin, which provides advice and capital to small- and medium-size African businesses; and Envirofit, which helps develop and sell clean cooking stoves that reduce indoor air pollution.

In this interview with *Stanford Social Innovation Review* Academic Editor Johanna Mair, West explains why a business approach to philanthropy is effective, how the foundation partners with its grantees, and why, despite its many successes, Shell Foundation has been so candid about its failures.

Johanna Mair: Tell us about the Shell Foundation's approach to philanthropy. You have described it as providing enterprise-based solutions to development challenges. What does that mean?

Chris West: Our view is that many development challenges are a result of a market failure in one way or other. And that as a result, we need an approach that tries to find solutions that can scale globally and be financially sustainable. It could include some degree of subsidy dependence, but our goal is to get the market to pay for the service or product where appropriate.

Overall, we try to adopt a business-based approach. We have clear targets to judge performance and delivery, and we focus on only a few issues where we can provide more than money. We view the people we're ultimately trying to benefit as customers for a particular product or service rather than as victims or beneficiaries of a handout. As customers they have to value an offering and ultimately decide whether they want to pay to receive it. That customer focus is the key to our definition of an enterprise-based approach.

Have there been instances where you had to say, "We are not going to engage in this particular issue because this approach would not work"?

We haven't yet encountered a constraint to applying our approach. The challenge has been how deep into the market we can penetrate. For example, there are limits on the very poor's ability to pay for new products or services. Our response has not been that the approach is wrong; it just means that the target market that we are able to service is not necessarily the poorest of the poor.

Take cookstoves as an example. We have a partnership based on providing clean cookstoves to poor families who are affected by indoor air pollution because they cook food using wood or charcoal. Some of the earlier clean cookstoves were priced around $25 and were not immediately affordable for the poorest families. But the early adopters, who earned maybe $2 a day, are interested in buying these products. What you find is that once the early adopters buy this product or service, poorer people then start buying the product as well. So one doesn't necessarily start with the poorest, but over time we've found that we can reach many of the poorest people through an enterprise-based approach.

What is the limit of enterprise-based solutions? It's fair to say that without a conducive policy environment it is difficult to apply some of these approaches. There are some countries in Africa, for example, where the policy environment is not conducive to small businesses starting up and running. I've always taken the view that first I want to demonstrate potential solutions, and then I can join others in advocating for policy reform. That way I can present governments with proven, verifiable results.

Implicit in your approach is the idea that business thinking and business models—call it business DNA—are beneficial. Why do you believe that?

You need two DNA sets to tackle some of these big development challenges. You need a development DNA—an understanding of the particular needs and characteristics of your customers, the poor people that you're trying to reach. And you need business DNA—how do we structure solutions that are fit for purpose, scale, and sustainability?

That doesn't mean that all solutions have to be for-profit or sustained only through profitable ventures. In our definition of financial viability, we would include solutions that can be sustained through continued support from the public or otherwise. Although we still think the biggest opportunity lies in getting customers to see the value of a particular product or service and then pay for it themselves.

Adopting a business-based approach is deploying all one's resources, nonfinancial as much as financial, and coming up with solutions that are viable, performance based, customer driven, and therefore scalable. One needs to think about how to help the partner come up with a solution that is relevant to an ever-changing market demand.

You mentioned the need for partnerships. Was partnering always on your agenda?

The word partner is very easy to use, but it's often misused. And I would apply that to our own thinking and practice. In the early days of our foundation, we, like lots of others, put out requests for proposals to other organizations that were interested in doing things that were relevant to our agenda. We then essentially gave them money and support to do those things.

What we learned was that the majority of these relationships did not realize any significant impact. That forced us to reflect on our own strategy of partnering. What we found was that we were giving what can best be described as short-term, project-based support. By drip-feeding our support we constrained their ability to act, and as a result the solution wasn't really viable. That led us to fundamentally rethink our strategy.

Now we have deep-rooted joint venture partnerships with organizations that we've carefully selected. We know absolutely everything about these organizations. One of my team members will work almost as part of their organization in developing, testing, and scaling up their solutions. We keep performance indicators on our partner and on us to measure what's expected. It's much more of an open, long-term, patient relationship than we ever had before.

A lot of our early work that was branded as partnering was more of a contractual relationship. Those have a place, but our experience has been that that type of relationship is less likely to lead to the scale and sustainability of output that we're seeking.

You imply that partnering is based on trust. At the same time, you are clear with your partners about what you are trying to achieve in a project and that those things have to be measured. Do you see a discrepancy between the two, or are they complementary?

First of all, I've banned the word *project*. A project mentality is inevitably linked to a culture of short-term giving and relationship at a distance. There's a time and place for projects, but it isn't synonymous with partnerships for achieving long-term change and scale. Getting back to your question, trust is absolutely essential. But trust takes time to build and doesn't happen automatically.

Now when we look for partners it's essential that we find an organization or individuals who share our vision from the outset. That mindset is critical because it helps map out the journey. And it's not a journey for the fainthearted, project-mentality organizations because it does take a long time.

Our focus on disciplined implementation is a way to help our partners achieve their goals in the most viable and effective way. For example, getting people to do monthly or quarterly financial reporting is not something to satisfy our monitoring and evaluation requirements; it's essential to running any venture. If you don't understand cash flow management, you're not running an effective business.

I've always believed that the only things that people should monitor are ones that make sense to their venture. If I need information that exceeds their core reporting, I should pay for that.

Can you elaborate on what it means to be catalytic as a philanthropist and how it relates to your own endeavors?

Let me answer that by starting with an example. Back in 2002 we co-founded EMBARQ as our center for sustainable transport. (For a profile of EMBARQ, see "Networking for Sustainable Transport" on p. 59.) We took the view nearly 10 years ago that no amount of project support would ever have a significant impact on the problem. If we were to have a global impact, then we needed to operate in a different way. That led us to say: "Let's catalyze. Let's create a new center for sustainable transport that can offer advice to cities that will allow them to implement a range of sustainability mobility solutions."

It moved quite radically from a project approach to a knowledge and independent advisory center approach. Ten years later, EMBARQ has achieved huge, huge benefits in improved mobility solutions in cities around the world, iconic cities like Mexico City and Istanbul. We've invested large amounts of time and money over the last 10 years to get it to the point now where it is going to scale and is reaching multiple countries. But it's taken a long time. It happened because we catalyzed something new with a partner.

What we've learned is that our comparative value in this landscape is to play a very early-stage, high-risk role as an angel investor.

In the foundation's 10-year anniversary report you mention things that did not work. How transparent should organizations be?

If someone else can achieve the scale of impact that we're after in a far more cost-efficient way, then I should either be learning from them or giving them the money. But at the moment I have no ability to determine how other people are succeeding in their various efforts to achieve the same goals, because so few organizations are transparent about what worked and what didn't work.

For me, transparency is fundamentally related to learning. And learning is not helped by a lot of the reports that are published—from foundations in particular—that are more like marketing materials. That is why I wanted to produce a report to mark our first decade that was more introspective about what we've learned, both good and bad, in the hope that others can learn from it.

In our report we mention that 80 percent of what we did during our first three years failed our definition of achieving scale of impact. But through changing our strategy, we now find that 80 percent of our support meets these objectives. But I've still got no idea how our performance compares to others, because we cannot find many other organizations reporting in similar ways.

You share the brand with Shell corporation. You define that relationship as independent yet linked. Can you elaborate on that relationship?

During the conversations that led to the creation of the foundation we said that we wanted to do things a little bit differently. One of the ways we were going to be different was to approach development problems in a business way by deploying more than money on a focused set of issues. To be effective we needed to focus on issues that were aligned to the energy challenge of development, because that would allow us to leverage our links to our corporate parent. We focused on energy as opposed to doing something in education, for example, because all we'd have to offer would be money.

From a governance side we have a mixed board, which is, again, a little bit different from other corporate foundations. We have three Shell executives and three externals, so it's an equally balanced board. We've set principles down that enshrine what we do, where we do it, and who we do it with. That gives us the control of this relationship.

Ten years ago it was quite novel to have this alignment between the work of the foundation and the work of the corporation that spawned it. We genuinely didn't know how much value we could actually leverage from our link to our parent. But we have been successful in a number of instances in being able to leverage technical skills and support from our parent to the benefit of us and our partners at no cost. For example, some of the leading executives from Shell have advised us on setting up and managing distribution channels for products. That's been hugely beneficial to our partners involved in distributing solar lanterns and cookstoves. More recently, experts in Shell, who have huge knowledge about health and safety issues, have helped our partners address some of the health and safety risks associated with their approach and reduce those to much more acceptable levels.

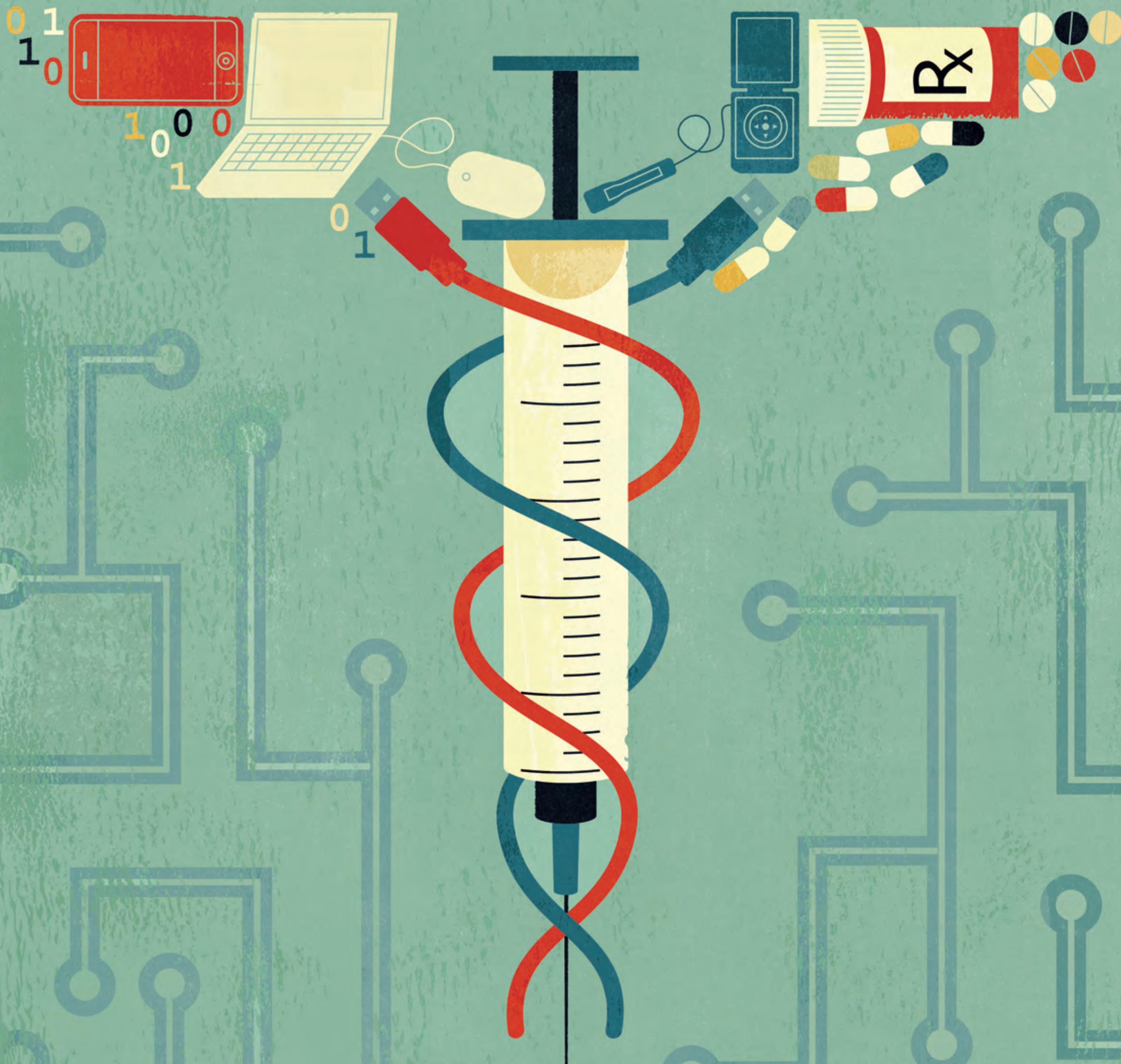
Overall, we haven't been able to leverage as much from Shell as we thought we would when we set up the foundation. That's for a number of reasons, but primarily because neither we nor the corporation had any experience doing this, so we had to learn. In the next decade I'm looking forward to being able to draw far more value from our links to Shell than we have done to date.

For the last question I want to ask you about impact investing. You are a charitable foundation, and yet you also label yourself as an angel philanthropist. Can you elaborate on what role you see the Shell Foundation playing in the emerging industry of impact investing?

Historically we've used grants to help organizations build up the capacity and the systems that would allow them to scale. For example, systems that allow you to operate across multiple geographies, which is quite complex, whether it's IT or other operating systems. I've now come to the view that there is a real need for early-stage grant funding to new organizations to help them test and do new things.

There are a growing number of impact investors out there who are providing either debt or equity finance. But these are still relatively risk-averse investors who will not back a complete startup. What we've learned is that our comparative value in this landscape is to play a very early-stage, high-risk role as an angel investor, providing a grant-like investment into an organization to help them test a solution or product, and obviously test our relationship. When those partners do succeed and have a track record, then we can present them to others who can help finance them for growth. ■

Innovating for More Affordable Health Care



Exploring new ways for social investors to spur innovations that create better, faster, and less expensive health care in the United States.

Sponsored by the California HealthCare Foundation
Published in *Stanford Social Innovation Review*

California HealthCare Foundation

This sponsored supplement, "Innovating for More Affordable Health Care," was produced by *Stanford Social Innovation Review* for the California HealthCare Foundation. The foundation works as a catalyst to fulfill the promise of better health care for all Californians.

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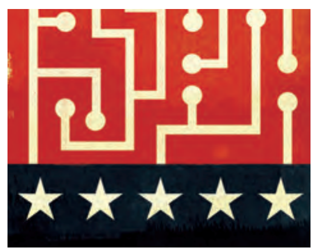

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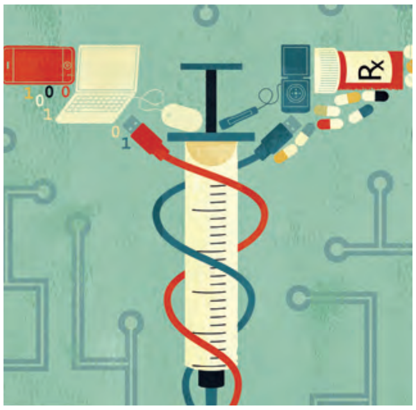
Framing the Issue

Innovations for better care at lower cost.

BY MARK SMITH AND BARBARA LUBASH

Health care in America has increasingly priced itself out of the reach of customers. Consumers and employers have long complained about the system's lack of affordability. And the payer of last resort—government—is now facing the same reality.

Indeed, the current debate over how to manage the country's deficit has produced a striking milestone in American politics: Bipartisan agreement essentially exists on the need to dramatically rein in government health spending. The argument is not about *whether* to cut costs, but *how*.



Some see innovation as the principal problem in health care, concluding that the hunger for the latest new technologies and devices, without regard to value, has brought the nation to this point. Although there is no question that high-cost, low-value products and services have been created in the name of innovation, we believe that bold new clinical and business models, often aided by technical breakthroughs, are instead a vital part of the answer.

At the California HealthCare Foundation (CHCF), we have collaborated with academics, philanthropists, investors, and entrepreneurs to support innovations that provide better care at a lower cost. And we have had some successes—such as a low-cost, technology-enabled program that screened more than 53,000 diabetics who otherwise wouldn't have access to eye specialists, and saved the sight of more than 1,400 Californians.

But too often we have seen the paradox of a "successful" pilot that has failed to gain wider traction. Numerous challenges face innovators during the early development of new care models, perhaps the greatest of which is bridging the gap from testing and early adoption to mass adoption. Crossing this chasm requires extraordinary leadership, entrepreneurship, and collaboration among creative talent of all kinds.

Our experiences in the field have led us to create the CHCF Health Innovation Fund. The initial $10 million fund is dedicated to identifying and investing in both nonprofit and for-profit companies developing technologies and services that have the potential to create a dramatic impact on the cost and accessibility of care. As we developed the fund, we paid close attention to the creative approaches of other health care foundations in this area. Although most "impact investing" in health care to date has been from foundations working internationally, we see a growing interest among social investors and entrepreneurs in tackling health care costs and inequities *inside* the United States.

This sponsored supplement to the *Stanford Social Innovation Review* explores the challenges of investing for lower-cost devices, services, and technologies in health care. The topic is ripe for inquiry, given the pace of innovation in health care and the significant funds that flow from traditional investors into the sector each year.

The report begins with an article by Stefanos Zenios and Lyn Denand at the Stanford Graduate School of Business that explores the challenge of funding innovations for the health care "safety net," or those providers who care for low-income populations. To follow this piece, we invited two investors and an entrepreneur to offer their perspectives on the challenges and opportunities in health care innovation.

In addition to new technologies, new models for service and care delivery also will have to be invented if the United States is to meet a growing need for health care within a shrinking budget. Arnold Milstein, MD, explains what he is hoping to achieve in this area through the work of the Stanford Clinical Excellence Research Center.

Because the government pays for nearly 50 percent of the nation's health care costs, we have included a piece from Carleen Hawn about how Todd Park of the US Department of Health and Human Services is trying to infuse the innovation culture of Silicon Valley into the largest of bureaucracies. And for a perspective on cost-lowering innovation in the developing world, we have Jaspal S. Sandhu's examination of how global initiatives in mobile health might inform care in the United States.

In the final article, John Goldstein, co-founder of Imprint Capital Advisors, and Margaret Laws, director of the Innovations for the Underserved program and the CHCF Health Innovation Fund, describe some of the ways that foundations are using their capital to support emerging market-based approaches to health care innovation.

We hope that this collection captures the creativity and excitement we see coming from innovators, investors, and providers who are joining together to take on the formidable challenge of innovating for high-quality, lower-cost care. ◆

MARK SMITH *is president and CEO of the California HealthCare Foundation.*

BARBARA LUBASH *is managing director of Versant Ventures and a board member of the California HealthCare Foundation.*

Investing for the Safety Net

Technologies that reduce costs and improve care for the underserved are often the most difficult to scale up. But a handful of strategies could turn things around.

BY STEFANOS ZENIOS & LYN DENEND

In 2010, BeWell Mobile faced a dilemma all too common among startups in the health care field: how to fund the growth of breakthrough innovations that both lower costs and improve the standard of care when the patients and providers who often benefit the most have the least ability to pay.

The San Francisco company develops customized disease management software that operates on devices like cell phones. In an eight-month pilot study with the San Mateo Medical Center, funded by the California HealthCare Foundation, 50 bilingual, uninsured teens with severe asthma recorded their symptoms by phone at least once a day using BeWell's technology. The real-time feedback, reminders, and other interventions they received in response caused the patients' drug compliance to more than double, their need for rescue medications to be cut in half, and their visits to the emergency room and their days of missed school to fall dramatically.[1]

In most fields, results like these would have had investors beating down the doors. But despite the promise of its technology, BeWell hasn't been able to demonstrate a business model that resonates with venture capitalists. In the current health care system, clinicians aren't reimbursed when poor patients on Medicaid avoid going to the hospital—only when they receive care. In effect, Medicaid accrued the benefits of keeping the pilot program's patients healthier and reducing the overall cost of their care, while the physicians at San Mateo Medical Center who did the work received little financial reward. In this scenario, it's no wonder that the hospital decided it couldn't justify a longer-term investment in BeWell's technology.

BeWell's story illustrates the challenges facing companies that try to enter underserved markets, defined as low-income people and the health care providers who serve them. In particular, this segment of the health care field has a significant need for new medical technologies that expand access to important diagnostics, treatments, and specialty services while reducing costs—all without sacrificing the quality of care. Think of remote monitoring technologies that check on the vital signs of the elderly, people with chronic health conditions, or those recovering from a serious illness so as to enable providers to intervene before a crisis occurs.

Many of these technologies have the potential to help underserved populations that receive care from so-called safety net providers. Such providers serve disproportionate numbers of the uninsured and those on Medicaid by offering free or discounted care. They include public hospitals, community health centers and clinics, and for-profit and nonprofit health care organizations.[2] Because of their mission and the socioeconomic status of the majority of patients they serve, safety net providers face severe resource constraints.

The problem is that traditional funders of health care innovations, such as venture capitalists and corporate investors, are seeking significant rewards to compensate for any risk they take. "Investors are looking for unbounded upside with the least amount of risk possible," said Josh Makower, founder and CEO of device incubator ExploraMed. But, he explains, "Most investors don't expect to find big, unbounded opportunities in low-resource environments."

Medical technologies with high social value—those with the potential to reduce costs, improve outcomes, and increase access for underserved populations—can play an important role in helping safety net providers use their resources more efficiently to better serve millions of patients. But these products and services may not necessarily generate the high financial returns that investors expect, particularly when the benefits are misaligned, as in the BeWell example. For this reason, many companies have struggled to secure capital to fund the development and commercialization of important innovations.

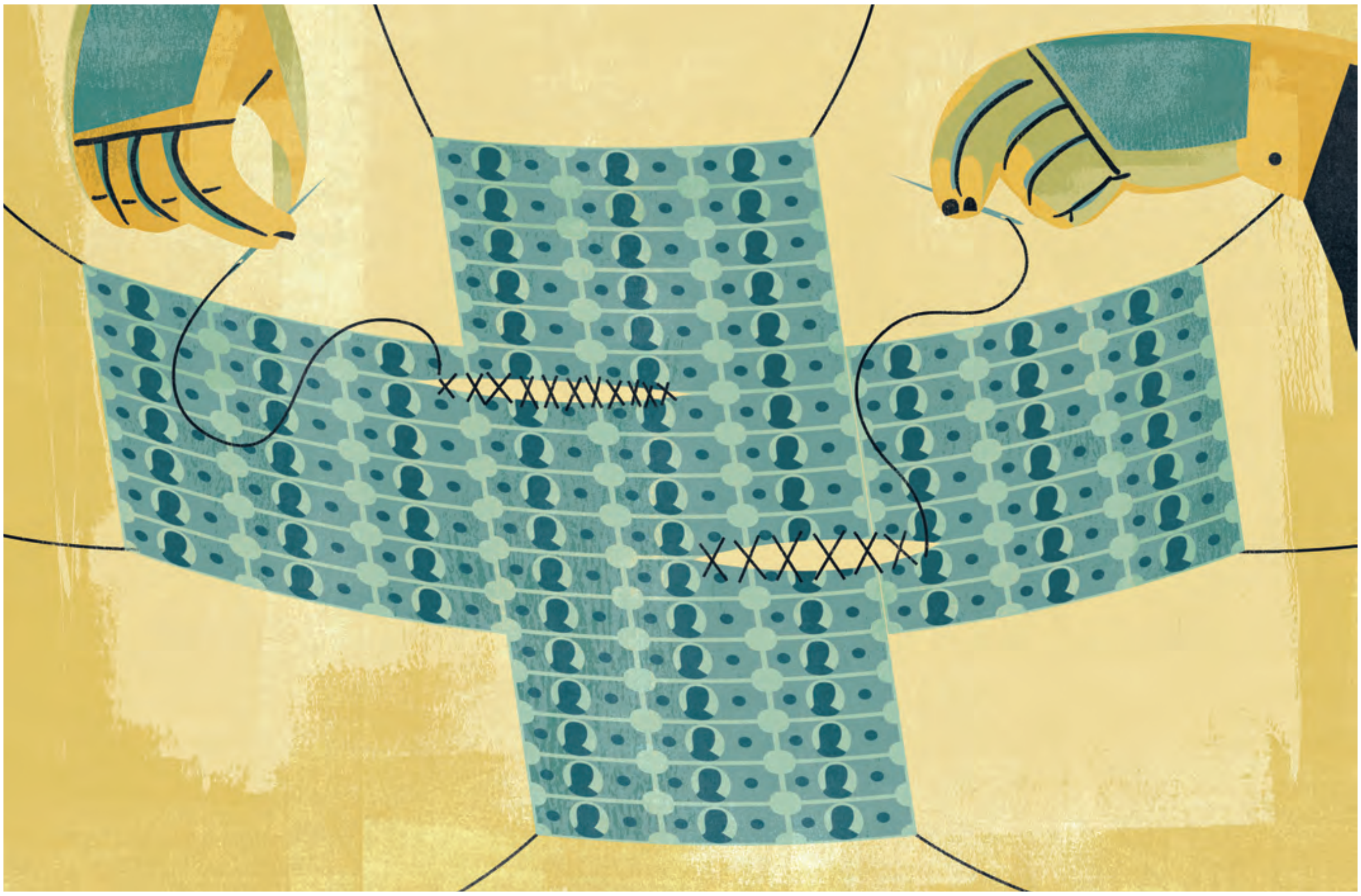
This misalignment between the risks and rewards associated with innovative new technologies must be overcome if the United States is to improve its health care system significantly over the coming decade.

HOW TECHNOLOGIES GET FUNDED

Medtech innovators typically have two choices when seeking the cash they need to achieve scale: venture capital and corporate investment. Venture capital is by far the largest source of funding in the medtech field. In 2010, for instance, US venture capitalists invested $2.3 billion in 324 medical device startups, according to PricewaterhouseCoopers.

STEFANOS ZENIOS *is the Charles A. Holloway Professor in the Stanford Graduate School of Business. His pioneering work on maximizing the benefits of medical technology to patients when resources are limited has influenced policies in the United States and Europe.*

LYN DENEND *is the director of the Program in Healthcare Innovation at the Stanford Graduate School of Business. She has written numerous case studies and papers on health care and biodesign innovation.*



Venture capital, also referred to as venture financing, typically helps startups establish or sustain a business with high growth potential. A venture capitalist (VC) makes an investment, and in exchange, the VC's firm receives equity in the company. The expectation is that the investors will be able to realize a substantial return on their money through an "exit event," such as selling the company to another firm, at some point in the future. This type of funding is especially helpful to startup companies that do not yet have an operating history, revenue, or significant collateral, and therefore lack access to other sources of capital, such as bank loans.

In the medical devices sector, VCs select their investment opportunities using specific criteria that help them balance the risk-reward equation. Although every VC takes a slightly different approach to evaluating new technologies, there are some common criteria that they all use, such as the strength of the management team, the technical feasibility of the product, and the size of the potential market. (See "What Venture Capitalists Look for in Medtech Investments" on page 6.)

In combination, these criteria assist VCs in placing their bets. The more risk they see as they evaluate the opportunity, the greater the market size and potential return on investment must be to get them interested. Because a large portion of venture capital deals fail to earn any return on investment, those that succeed must compensate for the losses. "If roughly 20 percent to 40 percent of companies succeed, you need these companies to make up for the capital invested across the portfolio and generate a return for investors," says Mudit Jain, a partner with venture capital firm Synergy Life Science Partners. Returns for VC-funded companies considered to have achieved a successful exit range from 300 percent to 1,000 percent, or three times to 10 times the total investment.

Another common funding source for medtech innovators is corporate investment. Large corporations, such as Johnson & Johnson and Medtronic, can help fund startups by underwriting a specific research and development effort through a development partnership or by investing in the company as a traditional VC would. Corporations have criteria similar to those that VCs use when evaluating opportunities. Unlike venture investors, however, corporate investors are looking for investments that will also create synergies with other products in their portfolios or new opportunities aligned with their growth strategy. If a new technology is strategically attractive, a company may be slightly more flexible than VCs when making an investment.

THE TWO SIDES OF THE SAFETY NET MARKET

Unfortunately for innovators who want to develop technologies that aid underserved populations, VCs and corporate investors use the same demanding criteria to evaluate these technologies as they use to assess mainstream commercial opportunities. What's more, VCs today face even greater pressure to produce results, and they may have less money to invest than in the past. In combination, these factors can make it difficult to get funding for technologies that could benefit the safety net but pose greater investment risk.

"The investors we represent don't look to us to do their humanitarian work," says Michael Goldberg, a partner with venture capital firm Mohr Davidow Ventures. "They look to our firm to generate a return on their investments in a way that's hopefully compatible with their humanitarian values. If we told them we were going to sacrifice investment returns in any material way in an effort to better serve the general welfare of the US or world population, I think they would move their money as soon as they had the opportunity."

When asked what advice he would give to innovators seeking funding to meet clinical needs in low-resource settings, William Starling, managing director of Synergy Life Science Partners, says bluntly: "Avoid venture capitalists. Venture capitalists are trying to survive. There's just no way they're going to put money into efforts that don't meet the minimum bar for return on investment in the current climate."

Despite the perception that low-resource environments can't generate big returns, the safety net shows some promise as a market opportunity for commercial investors—specifically, it can be used as a launchpad for cost-reducing technologies. As the entire health care system becomes more cost constrained, technologies that can reduce spending should become more broadly appealing. Proving the value associated with these products under the challenging conditions of the safety net could potentially help them cross over into mainstream commercial settings. In the process, it would help establish the safety net as a preliminary market from which companies could expand.

Innovators can also consider expanding from the safety net into low-resource environments abroad. "If you can actually find a solution that makes sense in [US-based] resource-constrained environments, you may be able to enter the true growth markets of tomorrow," says Ed Manicka, CEO of medical device maker Corventis. "Specifically, India and China are demanding low-cost solutions that are technologically on par with what is available in the United States. Now, clearly, the margins are going to be lower, but the pure scale is mind-boggling."

Finally, the size of the underserved population, although small compared with the total US market, is still substantial. Medicaid covers roughly 48 million low-income families and another 14 million elderly and people with disabilities. Total Medicaid spending for fiscal 2010 was approximately $365 billion, almost a 9 percent increase over the previous year, and the budget is expected to continue growing for the foreseeable future. Although there are significant challenges associated with reaching and serving these patients and their providers, the population represents a sizable opportunity for innovators who can figure out how to serve it profitably with high-value, lower-cost solutions.

What Venture Capitalists Look for in Medtech Investments

CRITERIA	VCS LOOK FOR
Business model	A clear, practical plan for making money
Technical feasibility	Technology that has been proven to work, at least in bench or animal tests
Management team	Experienced leadership with a proven ability to execute
Market	Technology that corresponds to a significant validated clinical need
	Target customers who are enthusiastic about the solution and relatively easily accessible through traditional sales channels
	Limited competition
	Total market opportunity greater than $400 million
Return on investment	Returns of three to five times the investment (10-times returns are the benchmark)
	Exit within three to seven years (the longer the exit horizon, the greater the expected return)
Intellectual property	Clear, uncontested patent protection
Regulatory	A straightforward regulatory pathway, preferably via a 510(k) in the United States rather than the FDA's more expensive, time-consuming, and risky pre-market approval process
Reimbursement	Established Medicare reimbursement codes and high payer receptivity to covering the technology

THE CASE OF REMOTE MONITORING

A specific class of products known as remote-monitoring and intervention technologies illustrates the challenges and opportunities that innovators face when they seek venture funding for innovations that have high social value. Although remote monitoring can potentially reduce costs, improve care, and increase underserved patients' access to specialty care, venture investment in this area has been slow and somewhat inconsistent.

Devices like blood pressure cuffs and glucose monitors enable physicians and other care providers to check and treat patients' conditions without being physically present. Costs can be lowered when care shifts to a less expensive setting, such as a clinic or a patient's home. By keeping people out of the hospital, these solutions can also significantly help improve people's quality of life.

When VCs and corporate investors evaluate remote-monitoring technologies using their standard investment criteria, many innovations receive high marks for technical feasibility. "Remote-monitoring technologies are relatively low-tech in some ways—I mean, it's not like we're putting devices inside the body that are going to shock a patient's heart," says Suneel Ratan, a marketing, reimbursement, and government relations executive at Robert Bosch Healthcare, a leading corporation in the telehealth field. Most of these products are based on fundamental technologies that have proved themselves in sensors, data communications, or other fields.

Moreover, because the devices are for external use, they pose few safety risks for patients. As a result, they often receive regulatory clearance through the FDA's faster 510(k) review process. Most investors favor 510(k) products over those that require pre-market approval, and thus they may be more attracted to remote-monitoring innovations.

Although the technical and regulatory risks are relatively low, several other investment criteria have proved to be problematic for many remote-monitoring solutions. Investors frequently decide not to fund the technologies because of a combination of market and adoption risks, as well as issues regarding business models and reimbursement. Investors are also hesitant to commit resources because they perceive a low potential return on investment. Each is a significant barrier that must be overcome in order for new technologies to move forward. (See "Remote-Monitoring Risk Factors" below.)

The story of Health Hero Network illustrates each of these barriers to funding, as well as the challenges traditional investment criteria create. At the time Health Hero Network was established in 1998, the Palo Alto, Calif.-based company's primary product was the Health Buddy System for monitoring and improving the health of high-risk, high-cost elderly and disabled patients with one or more chronic conditions.

Patients used a simple, four-button device that each day led them through interactive sessions of six to 10 questions customized for the person's condition. Primary care physicians and specialists prescribed Health Buddy to teach patients how to understand their conditions better, help them change their behavior, enable the early detection of health risks before they escalated to an acute stage, and provide reassurance to patients that their health was being monitored. Health Hero Network supplied the technology and training for users; the health care provider set up the basic infrastructure for receiving, interpreting, and acting upon data transmitted from patients' homes.

After Health Hero Network developed the technology, it conducted a series of demonstration studies to prove the system's value. A small early study with the health plan PacifiCare showed a 50 percent reduction in hospital readmissions for heart failure patients who used Health Buddy, according to Ratan. Despite these encouraging results, PacifiCare eventually decided to outsource its disease management services rather than adopt the technology.

In 2000, Health Hero Network launched a pilot with the Veterans Administration (VA) in Florida. The study of 900 patients using Health Buddy found a 63 percent reduction in hospital readmissions and an 88 percent decline in nursing home days.[3] Approximately four years later, Health Hero received its first national contract with the VA. The agency agreed to directly fund the purchase and use of Health Buddy technology and related services.

Health Hero Network then approached the Centers for Medicare & Medicaid Services (CMS) about securing reimbursement for its product. "The largest and most expensive group of patients you can go after globally is the folks on Medicare," Ratan says. "[Health Hero Network] had a desire to prove that health care management interventions with the Health Buddy would generate a similar result in a fee-for-service system." The company submitted a proposal to CMS and got approval to launch a three-year demonstration study in 2006. The results have not been officially released, although Ratan described them as "jaw-dropping." CMS extended the demonstration project in 2009, but as of this writing has not yet decided whether to grant reimbursement for the product.

Remote-Monitoring Risk Factors

CHALLENGE	RISK
Market/adoption	Physicians often resist technologies that disrupt the traditional approach to care.
	Fixed investment in facilities, staff, and equipment may amplify that resistance if the technology shifts care to other venues.
	A high burden of clinical proof is necessary to establish a new standard of care.
	Providers may not want to build and manage the service infrastructure necessary to support the technology.
	No incentives exist to help offset the additional liability physicians may face by using remote monitoring.
Business model/ reimbursement	Few proven business models can serve as precedents.
	The current reimbursement system creates disincentives for providers to adopt innovative approaches.
Return on investment	The size of the target market may not align with the capital necessary to overcome the risks.
	Risks may extend the time to exit.
	Exit options are limited.

Robert Bosch Healthcare acquired Health Hero Network in late 2007, when more than 20,000 people with chronic conditions were using Health Buddy. After receiving about $72 million in total known funding, the company was sold for $116 million, a return of roughly 1.6 times the investment.

In deciding to sell the company, Health Hero's board presumably determined that an exit at that point was financially more attractive for its investors than the alternative of raising more capital in order to drive reimbursement changes and increase market adoption. The funding environment in 2007, along with the company's progress to date, most likely made it difficult for Health Hero's investors to envision a compelling return on investment from putting in more money and extending the investment time horizon.

Other risk factors also played a role in preventing Health Hero from raising additional capital to commercialize the Health Buddy product on its own. The high burden of proof required to change physician behavior and drive widespread market adoption turned out to be time-consuming and costly to the company, causing it to burn through the funds it had already raised. Adoption was also limited primarily to integrated health care providers like the VA, which could benefit from the longer-term, system-level savings associated with such improvements as reduced hospital admissions. Fee-for-service providers remained unconvinced of its value, especially without reimbursement for activities or technologies that keep people out of the hospital. That reduced the size of the market in the near term. As Ratan explains: "The premise of the Health Buddy system is chronic care. It's continuous, supportive, and designed to build an individual's capability to take better care of himself. But the health care system is engineered for acute care—the incentives are structured largely to wait until someone's in crisis."

STRATEGIES TO ADVANCE THE FIELD

New technologies, such as the Health Buddy and dozens of others like it, have the potential to reduce costs, improve health outcomes, and increase access to the services patients most need. But the social benefits these innovations create are undervalued in the way traditional VC and corporate investors make funding decisions. Foundations, social venture funds, individual philanthropists, and other socially minded investors can play an important role in correcting this market failure by altering investor perceptions of the risk-reward equation associated with these technologies. They can do this in three primary ways.

Fund Meaningful Pilot Studies to Reduce Safety Net-Specific Risks After identifying the most promising technologies with high social value, social investors can help them succeed by underwriting and facilitating compelling pilot studies and clinical trials. This would directly reduce one of the most daunting costs of bringing promising innovations to market and could significantly reduce the time it takes to develop the clinical proof needed to catalyze provider adoption.

Such studies can also be designed to improve the attractiveness of the safety net as a market. There's a common perception that safety net patients are less likely than other populations to comply with their prescribed treatments—including the use of technology. Rigorous studies with results that stand up to peer review may be able to demonstrate that underserved populations are no less compliant than other market segments. If particular patient groups continue to show difficulties with compliance, social investors might support the piloting of innovations to minimize these issues—for example, by shifting the burden of treatment or testing from the patient to the provider or by making patient requirements more fail-safe.

To get good value from the studies they fund, social investors must think more strategically than they have in the past about what to test, how to test it, and what data should be generated. The majority of pilot studies should include controls, produce publishable results, and include a rigorous economic evaluation of the technology, so that decision makers who can influence adoption perceive the data as credible.

To accomplish these objectives, social investors can collaborate directly with payers to determine the kind of value proposition data—cost savings, improved care metrics, and so on—they would want to see before they would be willing to pay. Then they could design and fund a pilot to gather those data. In the BeWell example at the beginning of this article, the company might have generated greater interest from investors and health care providers if its pilot study had been specifically designed with the goal of demonstrating significant value for customers and determining the return on investment required for adoption. That, in turn, might have eliminated some of the risks for traditional venture investors and health care organizations. Translational work of this kind would help innovations get uptake in the market and attract investment.

Change Policy In parallel, social investors can help address business model and reimbursement-related risks, such as the ones Health Hero Network faced, by urging CMS and federal lawmakers to realign incentives in the current reimbursement system to support the use of technologies that reduce costs, improve care, and increase access, even if this means shifting the venue or disrupting the traditional model of care.

Existing incentives for "closed" health care providers, such as the VA, Kaiser Permanente, and other managed care organizations receiving fixed payments for services, may be adequate as long as sizable, long-term capital investments are not necessary. But direct reimbursement for innovative new technologies would certainly strengthen their motivation. It would also make the technologies more appealing to providers that still serve fee-for-service Medicaid and Medicare patients.

In 2011, a unique opportunity exists for social investors to interact with the new Center for Medicare and Medicaid Innovation, which Congress created under the Affordable Care Act. This division of CMS has a mandate to test innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care for Medicare and Medicaid recipients. It has been given $10 billion in funding to explore new payment models between 2011 and 2019, which means that social investors are perhaps better positioned than ever before to collaborate with the center and influence its policy recommendations.

Another aspect of the Affordable Care Act that may present opportunities for social investors to effect change is the introduction of accountable care organizations (ACOs). ACOs are virtual networks of doctors and hospitals that share responsibility for providing care to a defined population of patients over a specific period of time. The ACO concept is intended to make groups of previously disconnected providers jointly accountable for the health of their patients, giving them stronger incentives to cooperate and save money—for example, by avoiding unnecessary tests and procedures. With these new incentives, technologies that keep patients out of the hospital may become appealing to traditional fee-for-service providers that previously wouldn't have considered them.

The details of the ACO model still remain to be proven, but social investors can lend valuable insights as policymakers and providers figure out how to make the approach work. For instance, investors who are considering ACOs as potential buyers of medical technologies may be concerned that they will face long sales cycles that require approvals by the network's board of directors before new products can be adopted. Social investors can potentially anticipate such risks and, through the pilot studies they support, gather data aimed at shortening sales cycles for ACOs.

Establish Dual-Market Potential Because subsidized business models are rarely sustainable over the long run, social investors have a vested interest in increasing the crossover potential of cost-saving technologies that have been shown to serve safety net populations effectively. Reimbursement reform and the advent of ACOs will potentially increase the opportunity for technologies optimized for the safety net to penetrate commercial markets in the United States. Specifically, reimbursement reform will create incentives to encourage the adoption of new technologies among Medicare fee-for-service providers *beyond* the safety net (with private payers following Medicare's lead in granting reimbursement). Similarly, ACOs will involve not just Medicare and Medicaid beneficiaries, but patients with private insurance as well, thereby giving private payers another reason to think differently about preventive care. By supporting these policy changes, social investors will help establish dual US markets for safety net innovations.

Social investors can further support technology crossovers by coordinating networks of VCs with an interest in investing in overseas markets and introducing them to technologies that reduce costs while improving health outcomes. Outside the United States, large emerging markets in countries like India and China are attracting significant attention. Some of the technologies that have been shown to deliver value to safety net providers may be strong candidates for improving health care in the developing world for tens or hundreds of millions of customers.

FUNDING SOCIAL INNOVATIONS

When it comes to funding innovations with high social value, social investors can use several models. Targeted grantmaking is perhaps the most common form of support that foundations, philanthropists, and government agencies offer. Innovators receive financial support from these entities with no expectation that they will repay the money. With effective targeted grantmaking programs, such as the US Small Business Innovation Research (SBIR) program, funding is awarded for a specific purpose (for example, conducting a defined pilot study) and must be linked to a specific commercialization plan for moving the technology to market.

Program-related investment is another common form of funding. It has been around since 1969, but it has become increasingly popular over the last 10 years. Recognizing some of the inherent limitations of grantmaking, such as the dependence these subsidies can create, social investors like the Acumen Fund developed processes for providing "social capital" to bridge the gap between the efficiency and scale of commercial venture capital and the social impact of pure philanthropy.[4] With these models, capital is raised from donors (typically large foundations) and then invested in fledgling companies with products and services that have the potential to generate high social impact, achieve scale rapidly, and become self-sustaining within five to seven years.

The companies benefiting from program-related investments might be given loans, guarantees that allow them to access capital through other channels, or investments in exchange for equity. The social investor expects to earn a return on its money, but the rates, investment horizon, and other terms are less stringent than traditional venture requirements. Acumen Fund, for example, expects that approximately half of its investments will succeed and half will fail. For this reason, it hopes to realize a two-times return on its successful investments, so that 100 percent of all capital raised from Acumen donors can be reinvested multiple times.[5] Other entities recycling donor capital in this way within the health care field include the Bill & Melinda Gates Foundation, the Robert Wood Johnson Foundation, and the California HealthCare Foundation with its Innovations for the Underserved fund. (For more information about this strategy, see "Foundations as Investors" on page 21.)

Social venture funds are yet another source of capital. With this type of financing, no donors are involved; foundations, corporations, and high-net-worth individuals make debt or equity investments into a fund and become limited partners, as they would with any private equity or venture fund. The fund pursues a social mission, however, in addition to seeking to generate a financial return for its investors. "Investors take an outsized risk for the ability to have a social impact," explains Raj Kundra, director of capital markets at Acumen Fund. The Acumen Capital Market fund has attracted investments from such high-profile foundations as Rockefeller and Skoll. By offering returns, even though they might be below market rates, fund managers are able to raise and deploy significantly larger amounts of capital than they could by raising donations for grants or program-related investments.

Foundations, in turn, contribute to these funds to help technologies with high social value reach a point at which they are attractive to traditional investors. As Kundra says, the goal of impact investing is to provide a proof of concept for interesting technologies and then bring in new sources of capital once these innovations are far enough along to meet more traditional investment criteria.

A fourth funding option focuses on commercializing innovations developed in academic settings. From 2006 to 2011 the Wallace H. Coulter Foundation awarded grants of $5 million to nine universities. The schools used the money to provide seed funding to projects that had the potential to generate treatments and devices that improve human health. At Stanford University, one of the grant recipients, 25 such projects were funded during the five-year period. A panel of academics, entrepreneurs, and investors selected the projects, and each one followed a rigorous development process that included a detailed commercialization analysis. Almost half of these projects moved toward the marketplace as a result of the funding, and they have secured $43 million in follow-on funding, with 49 percent from nongovernment sources.

Following on the success of the program, the Coulter Foundation established a $20 million endowment at Stanford to support funding of such translational projects in perpetuity. By staging its investment, the foundation proved that a rigorous development process can work in an academic setting to increase the rate at which new technologies reach the market. It also demonstrated how such an approach can accelerate the translation of early-stage discoveries into marketable products. Other foundations with an interest in supporting the development and commercialization of products or services that can reduce the cost of health care in environments with limited resources—without sacrificing quality—could potentially pursue similar funding models.

CONCLUSION

Nearly all health care stakeholders now believe that the future of the entire system depends on gaining better control of rising costs. As a result, interest is growing in innovations that enable more efficient and cost-effective care. Traditional investors appear more open to funding such projects, as long as they can generate sufficient financial returns.

Social investors can play an important role in this movement. They can identify opportunities to reduce risks, change policy, and help establish dual markets for bold, potentially market-transforming ideas that otherwise could struggle to raise funding from traditional sources. They can also provide flexible, long-term capital in the form of targeted grants, program-related investments, social venture funds, or endowments. Through these mechanisms, donors, investors, funders, providers, and innovators can help ensure that high-impact innovations find their way to the patients who need them the most. ◆

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2 E.C. Saviano and M. Powers, "California's Safety-Net Clinics: A Primer," California HealthCare Foundation, November 2005.

3 Robert Bosch Healthcare, "Reducing Hospital Admissions: Lessons from the Health Buddy Project," Presentation at the National Medicare Readmissions Summit, Washington, D.C., June 1-2, 2009.

4 Acumen Fund, "What Is Patient Capital?," www.acumenfund.org/about-us/what-is-patient-capital.html.

5 Stanford Graduate School of Business, "Acumen Fund and Embrace: From the Leading Edge of Social Venture Investing," April 2011.

PERSPECTIVES FROM THE FIELD

Two investors and an entrepreneur take on the challenges facing innovators.

Innovation Is Only Half the Answer

BY LISA SUENNEN

With health care costs at an all-time high and quality of care under siege, more of the same isn't going to cut it. The United States needs innovation, not incremental change, to cure its ailing health care system.

Fortunately, public and private organizations have made it their mission to catalyze innovations that solve the thorny challenge of providing better health care services to more people with less money. Nearly every major US health care corporation and foundation seems to have a newly minted center for innovation. The nonprofit X PRIZE Foundation will award $10 million to those who "accelerate the real-world impact of science, technology, and information." The Center for Medicare and Medicaid Innovation, the Agency for Healthcare Research and Quality, and the Office of the National Coordinator for Health Information Technology have all launched high-profile innovation initiatives.

Although this quest is laudable, the arrow may well fall short of the bull's-eye. Most of the innovation efforts are designed to reward the creation of great ideas but not to deliver real systemic change. That's because they fail to take into account a last critical step: turning ideas into reality.

Too often, these programs disregard how innovations will be funded, commercialized, adopted, and spread into common use. The public sector in particular has demonstrated a worrisome reluctance to analyze leadership and operational capabilities as an intrinsic part of determining the quality of an innovation. Few require the winning ideas to be married with driven, strategic-thinking entrepreneurs who know how to turn lightbulb moments into broad-based reality.

The guiding principle of many innovation competitions has been "if you build it, they will come." Those who build businesses for a living know this is almost never the case. Social investors gloss over these issues at their peril.

The pursuit of "innovation" just isn't specific enough. The field needs a combination of innovation and entrepreneurship to move the needle.

Experience shows that an idea is only as good as the leader who figures out how to implement it. Too often innovators, focused on the needs of the underserved, shy away from traditional business ideas like marketing plans and capital formation. Because many solutions for the underserved will emanate from public-private partnerships, public innovation seekers must apply the same rigor that venture capitalists require when they vet new ideas. Any analysis of the quality of an innovation must be balanced with an analysis of the leadership behind it, the plans for scaling it, its ability to demonstrate measurable results, and its financial viability. Although these analytical criteria are often considered the purview of the business community rather than the public health sector, they are essential to transforming innovations into solutions.

In addition to prizes and public accolades, health care innovation initiatives would fare better if they actively partnered thoughtful innovators with entrepreneurs seeking to launch commercial enterprises and if they helped them attract the capital to bring ideas to market. Innovation itself is abundant, but innovation guided by a great leader with a strategic implementation plan is not.

A good idea with a great leader beats a great idea with a good leader any day of the week. When great ideas and great leadership come together, real innovation can happen. ◆

LISA SUENNEN *is a co-founder and managing member of Psilos Group, a health care-focused investment firm. She blogs about health care and investing at venturevalkyrie.com.*

Collaboratively Investing for the Future

BY WILLIAM ROSENZWEIG

Venture capitalists generally look for opportunities that can achieve rapid consumer adoption once they prove their worth to a test market. We look for early adopters who enthusiastically share a product with others and sometimes even pay a premium for it. Regretfully, underserved populations rarely have the means or access to be early adopters in these conventional terms.

Several years ago we funded a company with an innovative product that could prevent serious asthma attacks. The company's nutrition bar was particularly well suited to the unmet needs of at-risk children in polluted urban centers. The product had the potential to bring down the use of steroid drugs and costly inhalers. Most important, this nutritional product could reduce the number of costly emergency room visits that plague inner-city hospitals on the bad-air days that make asthma worse.

Although this market was vital from a public health perspective, it lacked the commercial characteristics that would have made it attractive to early-stage venture investors. The company instead chose to pursue an adult market in which it had to compete with established pharmaceutical companies, which proved difficult.

Had this company partnered with an impact investor who had expertise with underserved populations, it could have built a credible business case to pursue a niche market in the inner city. (Such an investor wasn't available at the time, unfortunately.) An innovative financing and partnership structure could have made use of the existing research and product development investments in a capital-efficient way that demonstrated broad application for the product. The company could also have enlisted a corporate partner with the deep expertise needed for commercial success.

But such innovative arrangements are far from easy when organizations with different definitions of success and vastly different cultures try to collaborate.

It doesn't have to be that way, however. Odd-bedfellows partnerships can actually succeed when the partners have a shared sense of vision, mission, and values.

Successful partners need to be clear about what success looks like to all the parties—including expectations around markets, business models, returns on investment, time frames, capital requirements, scale, and exit options. These expectations must be shared, specified, and agreed upon at the outset. If this initial process yields promising results, innovative limited partnership models can assign different parts of the risks and the rewards to appropriate stakeholders, who can build a venture with the potential for strong financial rewards and meaningful impact. Organizations then can create a governance structure that helps them navigate the stages of growth, stay on mission, and achieve the kind of performance that will satisfy expectations.

Partners collaboratively build a bridge from where an organization is today to a clearly defined vision for the future. Organizations *plan* to be successful. From the beginning, they gather and align all the resources they need to get to the desired outcome.

Unfortunately, many ventures are built phase to phase, without a coherent set of partners around the table at the outset. Because of this, many efforts go uncompleted or are unable to maintain the momentum or attract additional resources along the way.

Regardless of outward appearances, organizations would be wise to look for unlikely partners with whom they are aligned on vision and with whom they can plan for the long term. The United States faces daunting health care problems. Despite the challenges, the field can collaborate with potential investors who have the financial and social missions that can make a difference. ◆

WILLIAM ROSENZWEIG *is a managing director of Physic Ventures, a venture capital fund that invests in keeping people healthy.*

Lessons from an Innovator

BY CHAIM INDIG

Now is a great time to be in health care. The industry is changing and innovation is improving people's lives.

In 2005, we started Phreesia, which automates patient intake at doctors' offices. Our product replaces the traditional paper clipboard with a wireless, touch screen tablet, allowing patients to enter their demographic, insurance, and clinical information electronically, as well as to pay their co-payments and balances. Phreesia streamlines the check-in process for office staff and patients and facilitates better patient-doctor communication. It provides a foundation for lower-cost, higher-quality care as well.

Our technology is now in thousands of physician offices across the country. We are also providing a platform for a range of health improvements, from more effective management of asthma to early detection of autism to expedited treatment for acute care patients.

I have learned some important lessons in developing Phreesia, bringing the company to market, and overcoming a number of barriers to adoption. First, the biggest challenge to innovation in health care is fear of change. Providers and administrators are afraid of the repercussions that new technology will cause to their institutions and day-to-day workflows. These systems often require changes to behavior, staffing, and expectations that can be overwhelming.

Moreover, the bureaucracy at many health care institutions makes large-scale change difficult to implement. In the early stages of the business, one of the biggest hurdles we faced was finding customers who were open to modifying the ways they worked—even when they understood the benefits of engaging patients, maximizing efficiency, and increasing collections.

To get around these roadblocks, we made our product as high impact as possible, with minimal up-front costs for customers, and we built our business model around performance. Phreesia does not interrupt the normal ways that physician offices work, which helps ease the transition for staff. We are not trying to change an office's workflow; we are simply adding value and efficiency to their existing processes, and fitting in with the existing reimbursement model.

Another major obstacle to innovation has to do with the way the industry reimburses providers. In other industries, companies develop their product or service knowing exactly who will buy it. But in health care, the reimbursement model is much less straightforward: The people who use the new technology are different from those who benefit from it, and they are also different from those who pay for it. Because of this disconnect, health care innovators need to demonstrate value for each of their stakeholders, and they need to make their case in a compelling way.

Further adding to the challenge, the current reimbursement model does not directly benefit those who need innovation the most, so there is often little motivation for safety net organizations or health care systems to take on changes that could improve health and lower cost.

And finally, the most important lesson: Success in health care does not come from the idea, but from executing that idea within a sustainable business model. When we first started Phreesia, we did not raise any outside funds. In our opinion, the most important thing was not to raise money, but rather to assess the market and find a replicable solution to a common problem. Once we found customers who wanted our product, we began to commercialize it. We have always looked for, and have been lucky to find, partners who not only invested in our business, but also offered strategic guidance to help us grow and achieve ongoing levels of excellence.

Ultimately, our story shows that with a smart and motivated team of people who are always searching for new ways to improve the delivery of health care, innovators can make a real impact for both patients and providers. ◆

CHAIM INDIG *is the founder and CEO of Phreesia.*

Reinventing Health Care Services

A doctor describes his groundbreaking, transdisciplinary effort to design more cost-effective care models for conditions that drive a large proportion of US health spending.

BY ARNOLD MILSTEIN

My professional life has revolved around a single question: How can doctors and other health professionals catalyze big leaps in the quality and affordability of health care? In keeping with the Physician Charter, a modern version of the Hippocratic oath, many physicians are beginning to realize that they have an ethical imperative to promote "the wise and cost-effective management of limited clinical resources"—in addition to the health of patients.

This ethical imperative has now become a fiscal imperative if the United States is to avoid what has been described in *The New England Journal of Medicine* as the "specter of financial Armageddon" for federal and state governments. In addition, US workers face a slow strangulation of job and wage growth, and employers who compete in global markets can look forward to years of declining profits.

In my work across the United States, I have observed physician groups and other health care organizations that deliver high-quality care at a cost roughly 20 percent lower than average. Clinicians have the potential to push the value of the US health system to Americans far beyond today's benchmark. Evidence from the Institute of Medicine of the National Academy of Sciences suggests the possibility of even better care for at least one-third less than Americans are currently spending. But many clinicians are ambivalent about tackling this challenge.

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They are not alone. Insurance companies resist competition based on the value of their services. In many markets, insurers also lack the clout to provide incentives to health care providers who approach benchmark levels of quality and efficiency. And consumers are wary of any health system change that may limit their access to care or freedom to choose providers.

In the current climate, none of the players is willing to sufficiently strengthen either the market or the regulatory mechanisms required to improve the value of care. Physicians will be important players in helping to turn around the situation, because they enjoy high levels of public trust and unique power to affect the cost and quality of health care delivery.

A BREAKTHROUGH IN CARE

To help break the stalemate, I am launching the Stanford Clinical Excellence Research Center (CERC). CERC is devoted to accelerating the discovery, demonstration, and dissemination of innovative models of health care delivery that reduce annual per capita health spending while improving health. Harnessing the power of transdisciplinary innovation will be central to our success.

A historical example may be useful here to show the impact of inventions in care models. In the 1950s and early 1960s, an imaginative physician in Baltimore named Peter Safar realized that outcomes might improve if hospitals centralized the location of their sickest patients and increased the frequency of patient observation and treatment adjustments with a dedicated team. His innovation sparked the evolution of the intensive care unit (ICU). The basic concept then spread to many aspects of hospital care, giving rise to many successful variations on the theme, such as neonatal ICUs, burn units, and surgical ICUs. Hospital mortality for the sickest patients plunged.

The concept of tailoring the design of clinical work to the needs of distinct patient groups continues to inspire hospital improvements. In 2005, I noticed that a similar intensification of care had not been tested for medically unstable patients living at home, beyond nurses' infrequent case management and generally unsuccessful disease management over the telephone. Over the past several years, I worked with Boeing in Seattle and a union-managed health benefits fund for hotel workers in Atlantic City, N.J., to test a new care model. Funded by the California HealthCare and Robert Wood Johnson foundations and designed by a team of fresh thinkers from four disciplines, we called our model the "ambulatory ICU." Our A-ICU was designed to reduce markedly the need for emergency hospital care among medically fragile patients. Early results have been impressive, and we are now testing the scalability of A-ICUs in three additional states.

CERC aims to jump-start other new care models for hospitals, as well as for ambulatory care. Each model will target an inflection point in the progression of major health conditions associated with large jumps in future lifetime spending and patient suffering. An illustrative list of such inflection points includes the nine months before and the 24 months after delivery by mothers living in poverty; the transition from obesity to morbid obesity; the first 30 days after discharge from a hospital; and the last phase of life. For example, when an obese patient progresses into morbid obesity, the total future cost of lifetime disability and care increases dramatically.

Approximately one-third of the US population is obese, and approximately 5 percent—or about 15 million people in the United States—is morbidly obese. Morbidly obese adults have seven times the risk of diabetes, six times the risk of hypertension, four times the risk of arthritis, and three times the risk of asthma as patients who are not obese. Health care for both levels of obese patients in the United States costs an estimated $147 billion each year—or more than 5 percent of US health care spending. A more affordable intervention that is as effective as existing treatments and reaches a large proportion of obese people approaching morbid obesity would create enormous health and financial benefits.

Today's obesity treatments based on behavior change and medication have proven woefully insufficient. Bariatric surgery, on the other hand, is quite effective. A recent employer survey shows that nearly 60 percent of public and private employers now offer some type of bariatric benefit. About 220,000 bariatric surgeries were performed in 2008, and estimates are that the number is increasing at about 20 percent per year.

The problem: The procedure costs more than $30,000 on average. For this and other reasons, the rate of surgery is low relative to the number of people who are likely to benefit. If CERC selects this inflection point as a target, our goal would be a re-engineered form of bariatric surgery that lowers the cost below $15,000, without inventing a new technology or sacrificing clinical outcomes.

Our approach is to embrace such challenges through service-design teams of five or six postdoctoral fellows in residence at Stanford University who represent the disciplines of engineering, business, social science, and medicine. Our methods will borrow the Stanford Biodesign program, which Stanford Professor of Medicine Paul Yock devised with Stanford Graduate School of Business Professor Stefanos Zenios and others to adapt innovation insights from the Stanford School of Engineering's Design Program to design better medical devices.

The CERC service-design teams will initially train along with Stanford's Biodesign fellows. Training will focus on the science of innovation design. CERC will also expose the fellows to exceptionally efficient health care organizations so that the fellows design beyond today's best practices rather than rediscover what's already working. As they work, diverse faculty will mentor the fellows, subjecting their designs to rigorous review, encouragement, and intellectual challenge.

To ensure that our innovations have a ready test bed, I have recruited health care organizations eager to experiment with high-value service designs, such as Stanford-affiliated health systems, as well as five to six top-performing health systems outside of California. CERC will assist them in renegotiating payment methods if a new care model requires revised incentives from insurers to be financially sustainable. I have also recruited a national network of large, self-insured employers and large health insurers to offer incentives to test the center's care models. An active focus on "value-based" payment incentives is crucial to the spread of service-model innovations in which the cost savings and the work to attain them do not naturally accrue to the same party.

INVESTING IN SERVICE INNOVATION

Although Stanford is funding CERC's startup costs, the center will need to seek additional sources of research investment. A major reason for the lack of speed in improving service design is that service innovations are at a huge disadvantage relative to patentable devices and drugs when competing for investment capital. Unlike new molecules or devices, service models are easily copied public goods. Venture capitalists and other investors turn away societally promising service investments for this reason.

Although the center hopes its models will prove compelling to today's more cost-focused venture investors, we see an essential role for foundations and other social investors. Many of them are tightly aligned with CERC's mission to improve both the quality and affordability of US health care.

Just as fledgling companies benefit from their association with venture capital investors, health care design innovators need social investors. They can also play the essential role of polishing the rough edges of service innovations that designers might be too close to see. Staff from the California HealthCare and Robert Wood Johnson foundations played this role in the successful testing and spread of A-ICUs, which are now operating in dozens of US cities. Their involvement also builds interest in testing innovations among payers and providers.

Working together, CERC and social investors can ally with US health systems and payers to test and spread innovative care models. Bending the curve of per capita health-spending growth and improving clinical outcomes are a team sport. ◆

Opportunities in Mobile Health

The United States and other industrialized countries can learn from experiments in the developing world that use the humble cell phone as a platform for innovation.

BY JASPAL S. SANDHU

More than three-quarters of the world's 5.3 billion mobile phones are located in the developing world. These increasingly powerful devices are proving to be a lifeline for people who need improved access to health services. The trend of using mobile phones for health—known as mHealth—represents an unprecedented opportunity for improving public health.

Much of the innovative thinking in mHealth is coming from programs that target populations outside the United States, often in developing countries. Now in a twist of fate, the innovations emerging from the developing world could prove to be a significant springboard for innovation in the developed world.

IMPORTING INNOVATION

General Electric CEO Jeffrey Immelt and his colleagues coined the idea of "reverse innovation" in a 2009 *Harvard Business Review* article, proposing that big companies must innovate in developing countries like India and China to survive.[1] They argued that bringing innovations from the developing world to the developed world would both provide access to emerging markets and allow companies to pioneer new sources of profit in wealthy countries. The unique challenges of designing for low-resource environments in developing countries has fostered highly creative solutions.

One prominent example is GE's portable ultrasound device. Traditional ultrasound machines cost upwards of $100,000, but a GE team in China designed a device for the Chinese market that plugs into a laptop and costs as little as $15,000. The difference was not just in the product's price, but also in its target customers and uses. Instead of being designed for large hospital imaging centers and a range of uses, it was targeted to rural health clinics interested in spotting enlarged livers and gallstones. This drove further innovation in GE's imaging products, including a handheld ultrasound that retails for less than $8,000 and is available in India and the United States, among other countries.

The Tata Nano is another example of reverse innovation. Although Tata designed the super-low-cost automobile for the urban Indian market, where it currently retails for about $3,000, it expects to export the car to other developing countries in 2011, and it has ambitions to enter the European market by the following year.

Mobile health applications from developing countries have the same potential to penetrate developed markets. In developing countries, these applications span a wide range of activities, including data collection, disease surveillance, health promotion, diagnostic support, disaster response, and remote patient monitoring. Experts predict that much of the mHealth innovation in developing countries will center around financial incentives and payments, as mobile money services targeted at those without bank accounts expand—for example, Safaricom's M-PESA in Kenya and MTN's MobileMoney in various African countries.

Programs strengthening health care delivery and data reporting have so far made up the most publicized mHealth technologies and programs. Well-known examples include TRACnet (Rwanda), Medic Mobile, MoTeCH (Ghana), and EpiSurveyor (working around the world). A range of other services present promising opportunities for learning. (A selection of services is described on the map, "Innovative mHealth Services in Developing Countries," on page 16.)

Much of the innovative work in mobile health has emerged in South Asia and sub-Saharan Africa. The innovation in these places is a result of multiple factors, including targeted private and public funding, flourishing mobile markets, and significant health gaps. Several common themes have emerged from an analysis of the highlighted services: use of incentives or just-in-time information figures into each of these services; nearly all services involve some North-South connection between developed and developing countries; all involve mobile network operators, with roles ranging from passive communication network to active partner to service provider; and at least half have developed business models that suggest financial sustainability.

Among the applications most likely to have an impact in the United States are services that encourage positive behavior change and that remotely monitor patients. (Many of the other mHealth applications, such as those for data reporting and disaster response, do not map well to the United

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States context.) Phone-based solutions can potentially leapfrog existing approaches in the areas of behavior change and remote monitoring to lower the significant costs associated with unhealthy behaviors and with patient activity outside of clinical settings. Untapped opportunities exist to use financial or other forms of micro-incentives for behavior change, for instance. Although mobile money systems are unlikely to roll out in the United States as they have elsewhere, financial incentives do not require formal mobile money systems to function. Further, game-based approaches, such as those that Text to Change has developed, can be highly effective.

Although myriad mHealth programs are operating in developing-country markets, only a few prominent mHealth innovations in the United States have been imported from abroad. Among the most notable are Vitality GlowCaps and GreatCall Medication Reminder Service, both of which are working to improve medication adherence.

The stakes are high: Not following prescribed medication instructions adds an estimated $258 billion to $290 billion annually to US health care costs, or up to 13 percent of total health care expenditures.[2] In particular, medication adherence is a major problem for the elderly, contributing to one in five Medicare beneficiaries discharged from a hospital being readmitted within 30 days.[3]

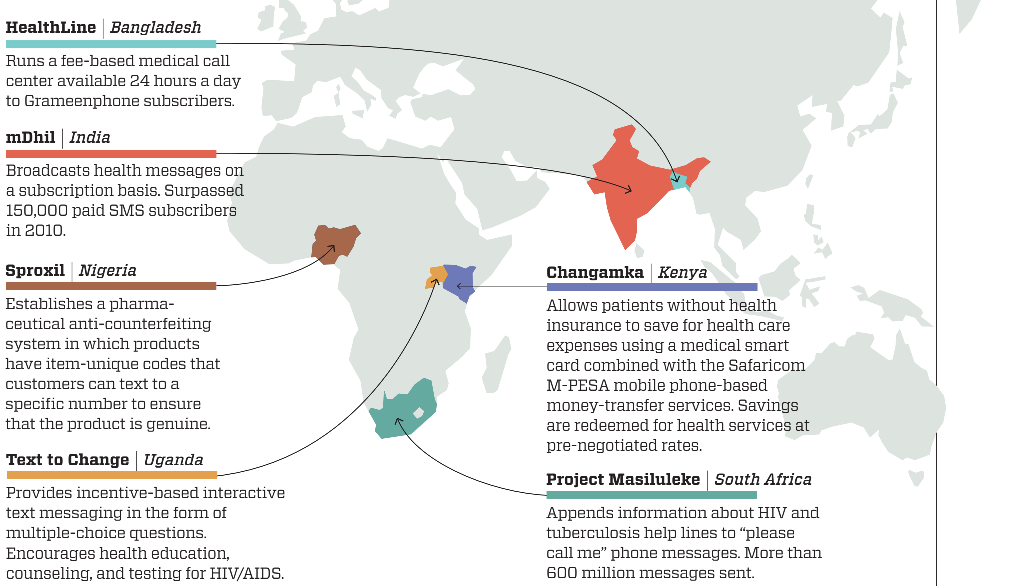
Vitality GlowCaps and GreatCall Medication Reminder Service do similar things, but work differently. The GlowCap device fits over commonly used prescription bottles, and it flashes and sounds when the time comes to take a pill. If the patient forgets, the product then uses an embedded wireless chip to offer a phone or text reminder, and the system can even alert a friend or family member, automatically call in a refill, and notify patients' doctors about how well they're taking their medicines. The device came several years after a similar product known as SIMpill was developed in South Africa.

A related service that works primarily through phone reminders and customer service is the GreatCall Medication Reminder Service, available as of 2010 on Jitterbug cell phones, which are designed to be particularly easy to use. The service helps the elderly remember to take all their medications at the right times. Mobile phone-based medication reminders have been used in various developing-world applications, including as early as 2001 in Cape Town, South Africa, as a cost-effective alternative to directly observed treatment, short-course (DOTS) for tuberculosis patients.

Another example is Text4baby, which provides free health tips to expecting mothers via text messages. Model programs such as VidaNet in Mexico and Mobile 4 Good Health Tips in Kenya provided the inspiration. With more than 190,000 users as of July 2011, Text4baby has been instrumental not only in highlighting the potential of mobile health to a broad population, but also in showing that it can operate at scale, something that has been done internationally in only a few cases. Text4baby used a public-private model to scale up its service, relying on a network of hundreds of partners, including financial sponsors, 18 mobile providers, government entities, and implementation partners in all 50 states to help ensure that the service can be offered free for everyone. The same approach can be seen among the mHealth programs that have scaled up globally. Many rely on complex public-private partnerships involving governments, international donors, and private entities.

None of these US programs is an exact

Innovative mHealth Services in Developing Countries



copy of the global models that inspired them. This provides a lesson for organizations thinking about importing mHealth innovations. The goal should not be to copy programs exactly, but rather to adapt global innovations for the developed-world market. For instance, GreatCall's US medication reminder service does not rely on text messaging, as tuberculosis programs do in South Africa, but rather on phone calls and a Web interface. As another example, Vitality offers several other services in the United States linked to the GlowCap product, besides the remote accountability feature that defined the SIMpill product in South Africa, including refill coordination with local pharmacies and support for alerts via social networks.

Models need to adapt to the wide differences between the United States and the developing world, not to mention between the United States and other developed nations. Aside from the variations in disease burdens and health systems, many countries have different cultures of mobile phone use. In the developing world, prepaid, or pay-as-you-go, models dominate; users commonly maintain active accounts with multiple providers; people often share phones; and users do not pay to receive phone calls or text messages. All of these factors affect the design of mHealth services.

LOST IN TRANSLATION

Although the United States has seen isolated cases in which global models have been adapted, overall imports of mHealth innovation have been limited. Quite simply, the various organizations that have an interest in mHealth—government, operators, health care providers, and others—too often have not adequately examined models outside the United States. Aside from this reason, several challenges have inhibited the spread of global initiatives to the United States, including a lack of evidence, unclear regulation, payment mechanisms, and market failures.

Lack of Evidence The field is missing evidence of improved health outcomes, both globally and domestically. Early mHealth programs rarely included strong measurement components. A lack of evidence of impact on health behaviors or outcomes will prevent policymakers and many decision makers from investing in new technologies and programs at a significant scale. The good news is that the evidence is beginning to appear. Late 2010 saw the publication of two notable randomized controlled trial studies of text and mobile phone programs, and both showed significant improvements in outcomes. The first, the WelTel system in Kenya of text messages to help HIV patients stick to their medications, showed significant improvements in drug adherence and rates of viral suppression among those who used the service.[4] The second study focused on WellDoc in the United States, and it examined a more comprehensive mobile phone-based diabetes management system for type 2 diabetics. It showed statistically significant improvements in blood glucose control levels among users of the WellDoc system.[5] In addition, the Text4baby program is undergoing six independent studies, but the earliest data are not expected to be available until the end of 2011. Moving forward, the field needs for evidence to be gathered quickly and for both positive and negative outcomes to be shared.

Unclear Regulation One thought leader interviewed during the course of this work suggested that strict domestic regulation is leading to the "export" of mHealth innovation. The framework for wireless health from the US Food and Drug Administration (FDA) is evolving, and it remains unclear how these advances will be regulated. The mHealth Regulatory Coalition (MRC) is advocating for greater clarity around regulatory issues so companies and investors can better plan for and fund innovation. The MRC is producing a guidance document to assist the FDA in formulating a reasonable approach to regulating mHealth technologies. It released the first part of this document in May 2011, with the final draft to be presented to the FDA in fall 2011. Many of the issues surrounding mHealth regulations are unlikely to be resolved before the end of 2011.

Payment Mechanisms Health programs in the United States often look to payers—generally employers and insurers, both public and private—to support new services. But US payers have not shown an interest in purchasing mHealth solutions. To be successful in the United States, mHealth applications might have to appeal to a new group of payers, including consumers, health care professionals, facilities, and industry players like pharmaceutical companies. Multiple stakeholder groups might also collaborate to pay for a single service.

Market Failures In most developing countries, governments sponsor mHealth programs and fund strong public health programs. In the United States, an employer-based system prevails, and so market failures frequently hamper the development of services that can deliver impact but for which private payers see no clear return on investment. Innovations in public health and prevention often stall out for these reasons.

LESSONS FOR THE FIELD

Based on extensive research of the existing literature and conversations with thought leaders and practitioners in the field, several lessons have emerged about how mobile health might become an area of successful reverse innovation.

Go Beyond Apps Much of the current focus on mHealth in the United States is on smartphone applications, with a rapidly increasing interest in embedded wireless devices, such as those for in-home patient monitoring.[6] But in the rest of the world, products and services rely heavily on text messaging and voice. The past five years in the United States have seen a rapid adoption of text messaging. According to Nielsen, people under the age of 18 send or receive an average of 2,779 texts per month. On the other end of the spectrum, those over age 65 exchange 32 texts per month, still many more messages than in past years. These numbers suggest an opportunity for text messaging solutions. In addition, voice communications have been used for large-scale health hotlines in Mexico and India, and interactive voice-recognition systems have supported community health workers in Pakistan.[7] Although smartphone applications might represent the bleeding edge, simple text and voice represent powerful tools with almost ubiquitous reach.

Target the Underserved In the United States, the underserved are described in various ways: the rural and urban poor, the uninsured, the underinsured, the Medicaid population, and the undocumented. Underserved US markets often provide opportunities for a more direct mapping of applications from developing countries, particularly those from Africa and South Asia, given that mHealth programs often target the poor or those who serve the poor. Like poor populations in developing countries, the underserved in the United States are more likely to use prepaid mobile phone plans, share technology, rely on voice and text over data, and own more basic handsets. Effective programs, particularly those that emphasize behavior change, understand the culture of their users.

Engage Smaller Operators The largest US network operators—AT&T, Verizon, and Sprint—have all indicated an interest in exploring their roles in mHealth over the coming years. These three operators support 250 million users, not including the pending merger of AT&T and T-Mobile. Nevertheless, they do not target specific markets of the underserved—urban youth, the elderly, and immigrant communities—like the providers that focus on prepaid services. Among the largest operators with the prepaid model in the United States are Cricket Communications, Boost Mobile (Sprint), MetroPCS, and TracFone. Smaller operators like these could provide mHealth services to their customers as something that adds value, and in the process they could attempt to increase usage of voice and data services. Developing countries have already seen this happen. Many operators have recognized that providing value-added services is one of the most effective ways to retain customers in a hypercompetitive business without service contracts. Examples of such services include mobile money services; HealthLine from Grameenphone, Bangladesh's largest mobile network operator; and life insurance with the purchase of a SIM card, a product that both Tigo and MTN have launched in Ghana. Just as in the developing world, mobile health services have the potential to build and retain customers among smaller providers in the United States.

Mix Digital with Tactile The next generation of innovations in mobile health will not rely just on the point-to-point communication capabilities of phones. Rather, they will integrate the digital with offline products and services as well. For example, the X Out TB service, from a team of developers at MIT, deploys a specially designed urinalysis test strip with embedded numbers that are revealed only when patients who have taken their tuberculosis medications take the test. The numbers in turn unlock secure mobile phone credits, a novel micro-incentive. Similarly, Sproxil works with pharmaceutical companies to print a unique physical code on the label of each product. Consumers can text the code to a specified number in order to ensure that the product is genuine before they make a purchase. A 2010 study found that 70 percent of Nigerian antimalarial and antituberculosis drugs were ineffective, either because they were counterfeit or because they did not have a high enough dose of the active ingredient. Both X Out TB and Sproxil offer inspiration for developed-world services that mix the digital and the tactile to create the next wave of mHealth innovation.

Completely Rethink Business Models Fundamental innovation requires new approaches to revenue generation. For example, many of the innovations coming online in developing countries will be linked to mobile money services. Changamka uses smart cards and the Safaricom M-PESA mobile money service to help Kenyan women save for safe pregnancy and delivery services. The United States does not have a strong culture of patients directly purchasing health services, as is common in the developing world, but the Changamka model has the potential to fuel any number of breakthroughs.

LOOKING FORWARD

International markets offer an important source of learning for developed countries. The technologies and business models emerging in developing countries have been introduced in low-resource settings to improve health care access and quality. These approaches have already begun to inspire mHealth innovation in the United States and other developed countries.

Some of this learning will be based on existing models, but much of it will borrow from innovations that have yet to be launched. Direct translation will remain elusive. Throughout the process, the adaptation of successful models to industrialized markets will require creativity, flexibility, and a deep understanding of the people who use emerging technologies. ◆

The following people were interviewed for this research, which was supported by the California HealthCare Foundation: Aman Bhandari, US Department of Health and Human Services; David Haddad, mHealth Alliance; Brad Houser and Larry Atwell, Cricket Communications; Don Jones and Ryan Gorostiza, Qualcomm; Ashok Kaul, Wireless-Life Sciences Alliance; Patricia Mechael, Columbia University; Paul Meyer, Voxiva; Douglas Naegele, Infield Health; Josh Nesbit, Medic Mobile; Mitul Shah, West Wireless Health Institute; Al Shar, Robert Wood Johnson Foundation; Rodrigo Saucedo, Carlos Slim Health Institute; and Dane Stout, mHealth Regulatory Coalition.

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Government 2.0

Thanks to Todd Park, a federal agency has discovered that health care organizations can think more like nimble startups than like lumbering giants.

BY CARLEEN HAWN

The great irony of the transformative health care reform legislation passed in 2010 is that although the law promises access to care for 30 million Americans, it relies on an outdated structure woefully ill prepared to serve them. Constrained resources, flawed economics, rising costs—how can a health care system under so much strain survive such an expansion? The answer will be found in creativity.

Over time, the most dynamic health care institutions have boosted their creative metabolisms, so to speak, with promising methods for vetting new ideas and technologies. More recently under Chief Technology Officer Todd Park, the US Department of Health and Human Services (HHS) has become known as a budding innovator, too—and none too soon, given the magnitude of the challenge it confronts.

Like all institutions in this era of reform, HHS is leveraging the entrepreneurial experience of people like Park to reinvent how it does business. But as Park explains, HHS is aiming for more: "We are trying to do things in government that will facilitate entrepreneurship and innovation in the private sector. Think of it as *meta-entrepreneurship*."

The department can be thought of as the largest, most important health care institution in the country. As the agency that administers Medicare and Medicaid, it in effect picks up more than 47 percent of the nation's health care tab. Private insurance companies also look to the HHS for benchmarks that help them establish their own pricing. And the department's newly created Centers for Medicare & Medicaid Innovation is now responsible for creating new payment models, such as systems to pay physicians' salaries instead of fees for service. HHS plays an equally significant role as a health care regulator, too.

What happens at HHS will therefore help shape the course of the entire industry. As they endeavor to create a culture of innovation inside and outside the government's bureaucracies, Park and his colleagues are learning important lessons for the field.

AN ELEPHANT LEARNS TO DANCE

When Silicon Valley entrepreneur Todd Park joined HHS as chief technology officer (CTO) in August 2009, the department was the least likely of government institutions to be described as nimble or creative. It certainly did not look innovative. As the health reform debate reached a crescendo, HHS was more often described as a bloated elephant.

Part of this perception owed to its size. HHS is a colossus, housing 10 of the nation's major domestic policy administrations, including three of its largest: the Centers for Medicare & Medicaid Services, the National Institutes of Health, and the Administration for Children and Families. HHS has 73,000 full-time staff, which is roughly equivalent to the payroll of Cisco Systems. It also has an authorized annual budget of $902 billion. Its spending authority is 50 percent larger than the 2011 general funds of all 50 states *combined*.

Big bureaucracy was foreign territory to Park. He had captured the Obama administration's attention as the co-founder of Athena Health, an early health information technology startup specializing in revenue cycle management for medical practices. When Athena Health debuted on the NASDAQ stock exchange in 2007, the then 34-year-old Park became a multimillionaire and an instant symbol of Silicon Valley success.

Back in fall 2009, it was far from certain that Congress would pass a health reform bill. But Park's move to HHS hinted that the department was about to undergo some radical change of its own. To start with, until Park agreed to become its CTO, the job had never existed at HHS. It turned out that Park's superiors, HHS Secretary Kathleen Sebelius and Deputy Secretary William Corr, had an unusual take on the new role.

> The modus operandi is to come up with an idea, find three to five people and form a virtual startup around them, and run it like a Silicon Valley operation.

"When I got here my boss told me, 'Todd, you're a change agent, and your job is to originate initiatives that will help HHS harness the power of data and technology in innovative ways to improve health,'" Park recounted in an interview. This was not the traditional CTO mandate. "The title is a bit of a red herring—I'm really an entrepreneur-in-residence," Park explains, slipping into his Silicon Valley dialect.

An entrepreneur-in-residence, or EIR, works under the tutelage of a venture capital firm and is typically expected to source new deals, form a new company, or help manage an existing company in the firm's portfolio.

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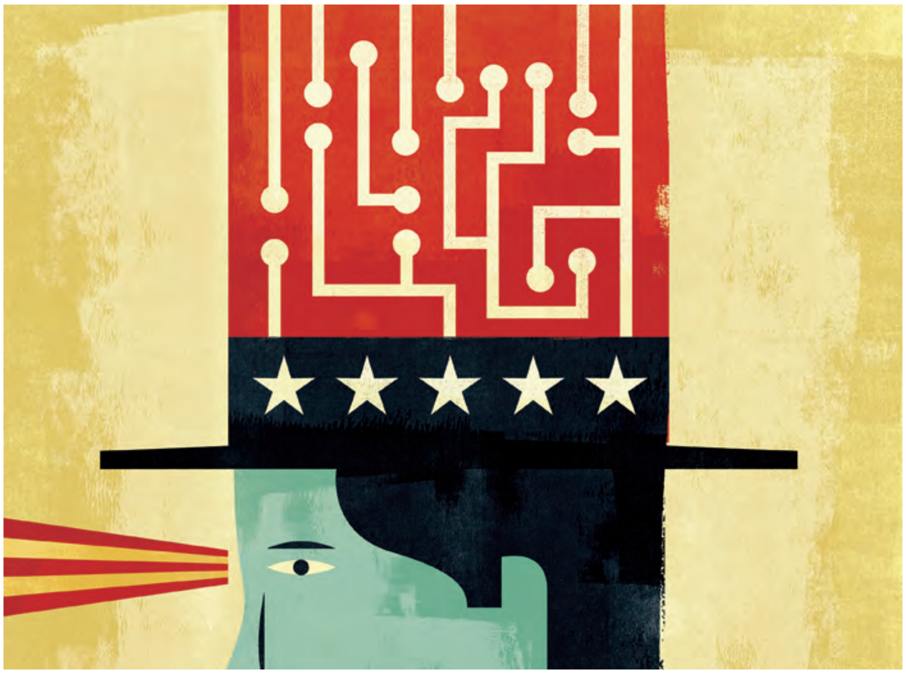
Inside a bureaucracy as complex as HHS, succeeding as its lonely EIR was prone to be even more difficult than managing its IT systems might have been. But Park had little time to dwell on this fact.

A lesser-known mandate of the health reform bill of 2010 was a requirement that HHS build a consumer service that could help consumers "take control of their health care." The goal was to make information more accessible to average Americans.

It was a vague but daunting objective. To put a finer point on it, the law *required* that a new Web portal provide details about prices



and coverage for every public or private insurance plan on the market. The portal should also explain confusing topics like tax credits and reinsurance programs to small businesses, and it should educate consumers about how the labyrinthine insurance industry works. Later it would add preventative care advice, too. To a technology entrepreneur, the product might have been described as a Yahoo! for health insurance.

Only days after Congress passed the Patient Protection and Affordable Care Act to reform the health care system, the task of building such an all-encompassing portal landed on Park's desk. Sebelius gave her new CTO just three months to build it. Even by Silicon Valley's adrenaline junkie standards, three months to get from concept to launch was extremely tight.

"No one thought we could do it," Park says. "It was like, 'There shall be this site and it shall allow any American who walks up to it to get all the information on every insurance company in America—and good luck!'" In perfect bureaucratic form, Park's HHS colleagues didn't actually expect him to deliver it. "They expected us to launch with a placeholder [site]," he says.

By the time they set to work, Park's team had just 75 days to launch the portal. On July 1, 2010, HHS debuted HealthCare.gov, and it was anything but a placeholder site. Consumers found an intelligent engine that, on the basis of responses to a few questions, could deliver a customized overview of insurance plans. They could toggle through Web pages to compare thousands of plans for their benefits, participating providers, and eligibility requirements. The portal was also interactive, regularly asking users how HHS might improve the site.

The response was a groundswell. Since it launched, 5.7 million people have visited HealthCare.gov. If simple when compared with inventing a faster microchip, the portal is nevertheless an innovation that has helped transform HHS from a remote bureaucracy into an accessible presence in the lives of millions of newly engaged health care consumers.

FIVE RULES FOR INNOVATORS

Building successful innovation projects like this inside such an unlikely institution, and in so short a time, wasn't an accident. Park has developed a tried-and-true set of rules that guide his work.

"I wouldn't say we have a system yet, but there are things we are doing that are meant to be systemic," Park says. He breaks down his method into the five standard operating procedures that follow. (See "Todd Park's Rules for Innovators" on page 20.)

RULE #1: *Downsize Your Idea* Step one is to decide on the right projects to pursue. Park uses an easy-to-remember, two-part filter: First, the project must have the potential to generate a significant impact that furthers the organization's mission. Second, the project must be small enough for just five people to tackle.

"Start with the institutional mission or the high-level goal," says Park, "and then ask yourself: What are the [individual] things most likely to produce a big 'delta' against that goal?" The smaller things with the largest mission impact are the projects you should take on.

At HHS, the high-level goal was to help consumers take control of their health care using technology and data—again, a mission both vague and grand. The information portal, however, was a comparatively small idea that had the potential to deliver a lot of bang for the buck in advancing the high-level goal. It was also much simpler to execute than, say, a full-scale software application, which would have required a more complicated information technology architecture, much more code, and many more people.

RULE #2: *Form Small Teams* Once you've downsized your grand mission into a realistic project, form a core team of no more than five people. Call it "The Rule of Five." Go larger than five, Park cautions, and the incremental costs of full-time employees outweigh the benefits of the teamwork. "You just cannot get more than five people to think like a single brain," Park says. Core teams of 10 or 20 are simply too big to think collectively or to track what's going on.

Now, Park doesn't think that groups of five can accomplish everything. Some projects need worker bees to get things done. For example, Park added 15 researchers to pull together the data about insurance plans for the portal. Park thought of them as contractors, but he confined ownership over the project to a core unit of five, including himself.

Projects also need the right mix of people. People outside the Beltway know that the best way to organize an innovative effort is to have the strategy people, the technology people, and the operations people all blended together on one team. "Employees one through five should be really hard to tell apart," Park says. "They are all like [Navy] SEALs—people who can be called upon to do any of the necessary tasks. They are always in the same room, and they are all focused on the same question: 'What does the customer want?'"

RULE #3: *Spend Time with Your Customers* When first asked to explain his methods at HHS, Park responded tartly: "I can tell you what we didn't do. We didn't do a focus group!" Instead Park and his team spent their time conducting "deep dive" conversations with real people.

Big organizations often hire consultants and market researchers to compile enormous research reports. Park believes that innovators are better served when they skip expensive, formalized research and instead spend lots of time asking customers questions like "Would you use this product?" and "Do you like it better this way, or that way?"

People cannot want what they do not yet know. "A focus group would never have come up with the Internet or e-mail," Park says. "All the focus groups in the world will not help you discover the customer's *inarticulable preference*." He says focus groups are great for assessing incremental improvements to existing products, but they are useless for identifying opportunities to create breakthrough innovations that people don't yet know they desperately need.

RULE #4: *Identify the Minimum Viable Product* Innovators commonly make the mistake of trying to do too much, too soon. They try to build a space shuttle instead of a glider. Finding your "minimum viable product" means building the smallest possible offering that will still deliver value to the customer.

"The probability that your first idea is the right idea is incredibly low," says Park. Athena Health's first business plan was to manage medical practices. But this wasn't the product that doctors needed. Doctors really wanted a smarter, easier way to collect payments from insurance companies, so Athena Health transformed itself into a provider of revenue cycle management services.

Knowing that the first product is likely to be insufficient, Park recommends instead going to market with a stripped-down offering that your customers can begin to use right away. Then collect feedback—and iterate, iterate, iterate to improve the product from there.

This approach also reinforces Rule #2. When you engage customers early in the process, you increase the odds of delivering what they need, which increases the odds of success.

RULE #5: *Impose Deadlines of 90 Days or Less* If inertia is the enemy of the incumbent, urgency is the innovator's friend. The best way to sustain a sense of urgency, Park says, is to impose deadlines on your project of 90 days or less.

Imposing short deadlines gets you to market sooner, which gives you an earlier chance to uncover and fix your product's shortcomings. Aggressive deadlines also have the added benefit of enforcing discipline. When a team has just 90 days to show results, it is less likely to let anything distract it from that goal. The team can achieve incremental progress as well, which keeps everyone motivated.

If you think your project requires more time to launch, you haven't thought small enough. Go back to Rule #1.

THINK SMALL, DEMAND SPEED

You may have noticed a pattern here. All of Park's five operating procedures are mutually reinforcing. In the end, they come down to achieving bite-size yet outsize results quickly. They have nothing to do with the physical environment your team works in, or with the technology tools they use. "Just putting [your staff] in a building with translucent walls and giving them iPads isn't going to make them innovative," says Park. But by following his guidelines, the process of innovation itself can be scaled.

Since building the health care portal, Park has gone on to lead even larger projects successfully. For instance, the Community Health Data Initiative (CHDI) is a public-private program to help local leaders and public health workers more clearly understand, and improve, the performance of their community health systems. Web tools mine HHS data on the regional use of resources, rates of avoidable hospitalizations and readmissions, the prevalence of diseases within communities, and the determinants of disease, such as access to healthy food.

Todd Park's Rules for Innovators

1. **Downsize your idea.**
2. **Form small teams.**
3. **Spend time with your customers.**
4. **Identify the minimum viable product.**
5. **Impose deadlines of 90 days or less.**

The project originated as a plan to build, in-house, the largest-ever health data map. Park and his team quickly realized their original goal was too big to be a glider, to borrow his catchphrase. HHS released the data to the public and let outside coders do the heavy lifting instead.

Next, Park expanded the CHDI project into a national Health Data Initiative (HDI). Another joint effort between HHS and the private sector, HDI aims to spur entrepreneurs to develop consumer software and smartphone applications that tap into government health care data. Once secreted away in hidden databases, these data troves are also now available to anyone at HHS affiliate websites like Health.Data.gov and HealthIndicators.gov, and through sites operated by private sector partners like Health 2.0.

In the last year, Park has sponsored HDI "code-a-thons" in San Francisco, Boston, and Bethesda, Md., working together with Health 2.0. Hundreds of developers have produced dozens of new tools, including 45 applications that Park claims "present real, viable business models."

As it both innovates internally and fosters public-private projects like these, HHS is setting its sights on a transformation of health care. Its work, in turn, demonstrates valuable lessons for entrepreneurs in all environments.

"It is absolutely possible to innovate in a way that is replicable," Park concludes. "The modus operandi is to come up with an idea, find three to five people to make it real, form a virtual startup around them, and run the thing like a Silicon Valley operation. This is the polar opposite of how large companies function. It is anathema to how government functions. But if HHS can do it, anyone can do it." ◆

Foundations as Investors

Social investors are experimenting with a profusion of creative funding mechanisms to help innovators sustain health-improving approaches and to achieve greater impact.

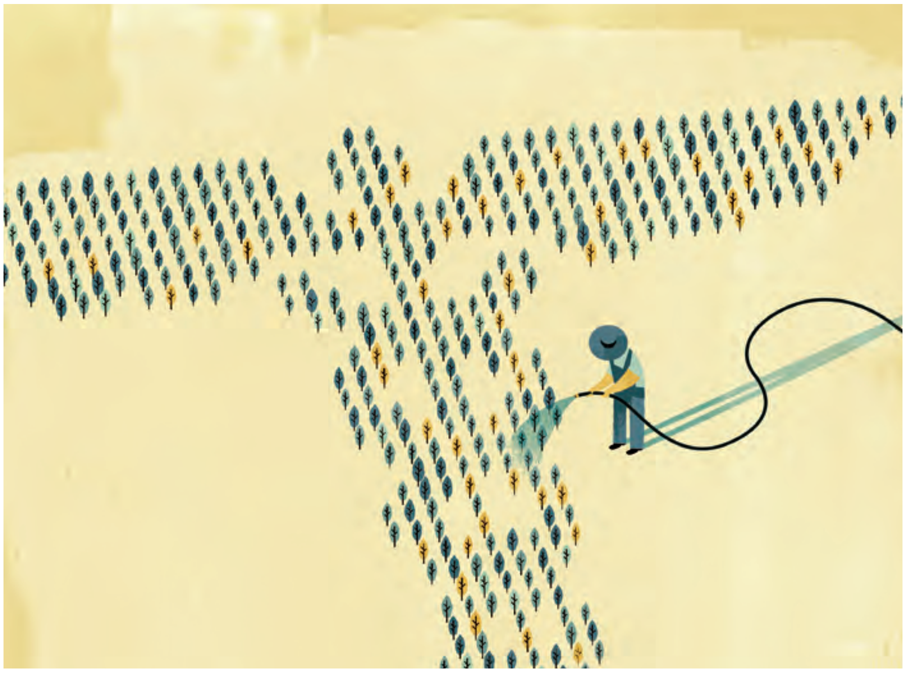
BY JOHN GOLDSTEIN AND MARGARET LAWS

Lifewave was facing an inflection point in late 2010. The early-stage company had a technology promising more accurate fetal monitoring in obese and overweight women, whose deliveries now account for 60 percent of all births in the United States. These women have pregnancies with high rates of complications and C-sections.

Early Lifewave clinical trials had produced promising results. Technology experts, investors, and clinicians also viewed the product favorably. But the company was having difficulty raising the necessary funds to get through the regulatory-approval process.

The California HealthCare Foundation (CHCF) was contemplating an investment through its Health Innovation Fund. If a CHCF investment were to be successful in moving the company to the commercialization stage, the Medicaid program in California, which pays for half of the pregnancies in the state, could reap significant savings.

Lifewave was the Innovation Fund's first for-profit investment proposal. The foundation team began with a review of the company and its "mission fit" with CHCF's charitable goals. The CHCF staff engaged in a spirited discussion about whether and how this investment could drive lower-cost care and improve access for underserved populations, its criteria for investment. Once the proposal passed the mission-fit screen, the team would finalize the terms of the investment, in consultation with legal and investment advisors experienced in both technology investment and foundation impact investing.



In order to secure an investment from CHCF that could help get it through regulatory approval, particularly given the challenges the company had faced seeking capital from traditional investors, Lifewave was prepared to adhere to the foundation's investment goals—to improve outcomes for obese and overweight pregnant women, the providers who care for them, and the publicly financed system that pays for much of the care they receive. After approximately four months of due diligence, CHCF invested just under $1 million in April 2010.

The foundation is among many organizations looking for ways to enhance traditional approaches to funding social innovation. What drives their entry into "impact" or "mission" investing varies, but it generally includes a desire to scale up and spread successful programs, align an investor's assets with its mission and goals, and work with innovative efforts across the spectrum of nonprofit and for-profit organizations. Several US health care foundations are following in the footsteps of their philanthropic counterparts in housing, economic development, and education. They are developing ways to find, make, and manage financial investments in private sector companies that can help fulfill their charitable missions.

This article focuses on foundation investments as a representative sample of the wider realm of social investments with a market orientation.

THE BASICS OF MISSION INVESTING

Mission investing, often referred to as

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impact investing, refers to investments in revenue-generating nonprofit and for-profit organizations whose work is consistent with an investor's charitable purpose and goals.[1] The emphasis is on *investments*, as opposed to grants. Unlike traditional grantmaking, mission investors expect that the funds will be paid back—recycled for their charitable purposes, so to speak. These investments offer investors a way to advance their philanthropic missions while supporting enterprises that may be more likely to achieve sustainability and scale than the typical grant-funded initiative.

Mission investments can include cash deposits, bonds, loans, or venture capital and private equity investments in companies, and they can be made directly, through funds, or via specialized intermediaries. Some mission-investing programs are market-oriented, generating financial returns that are comparable with typical investments in an organization's portfolio. Within the foundation world, these are typically referred to as mission-related investments (MRI). Other programs take more risk or accept lower returns than commercial investors would take, but they also have the potential to generate significant impacts and deep alignment with an organization's mission. These investments are a subset of mission investing referred to as program-related investments (PRIs). With all forms of mission investments, foundation social investors follow specific standards and regulations.

Social investors are exploring mission investing because they have experienced "successful" pilot projects that never made it beyond the initial site and often didn't continue once the grant period was over. Although grants are the right tool for much of the work of social investors, fundamental limitations and challenges exist to scaling and sustaining organizations whose primary "fuel" consists of grants.

Moreover, many of the innovations that social investors care about are in the for-profit sector. This dynamic is particularly true in health. Whereas government pays for about 47 percent of health care delivered in the United States, private sector institutions deliver the vast majority of health care using technologies, devices, and tools that for-profit companies develop. In part because of health care cost escalation, health reform, and other forces, experienced innovators and investors are increasingly focusing their energy, capital, and creativity on developing solutions that ensure high-quality, lower-cost health care, as the articles in this supplement have demonstrated.

This growing pool of innovation and capital creates an exciting opportunity for social investors to reach out to new partners who can help tackle important health care challenges. These investors now have the opportunity to align their own knowledge and assets with this emerging breed of entrepreneurs and investors. In addition, the long history of health foundation work with the Medicaid and Medicare programs and public hospitals offers a window into what it will take for innovative technologies and services to be successful as these public programs expand and evolve under health reform.

IMPACT INVESTING IN HEALTH CARE

What follows is a map of the emerging impact investment landscape among US health care foundations. The goals and approaches vary significantly, but the diversity among programs provides a sense of how those seeking to use investments to improve health have approached mission investing.

Interest areas extend beyond health care delivery to include the social factors that affect health (referred to as social determinants of health), such as poverty, education, air quality, and wellness issues like food and fitness. Opportunities for investment in both for-profit and revenue-generating nonprofit organizations exist in each of these areas, and each can offer social investors interesting opportunities to extend their traditional approaches to grantmaking and endowment management. (See "Areas of Mission Investment" at right.)

Although health care foundations are working across a wide range of topic areas, impact investment projects are beginning to emerge under several common themes.

Lowering Investment Risk Foundations can play an important role in lowering the risk for traditional financial investors, as the authors argued in the article that opened this supplement. (See "Funding the Safety Net" on page 4.) Their work can encourage investors—whose capital, expertise, and networks offer significant benefits—to support initiatives that might not otherwise meet the criteria for investment.

For example, The California Endowment (TCE), in collaboration with financial intermediary NCB Capital Impact and a diverse range of partners, established the California FreshWorks Fund, a public-private partnership loan fund created to increase access to healthy food in underserved communities, spur economic development that supports healthy communities, and inspire innovation in healthy food retailing.

In California, adults in neighborhoods with low access to healthy food options are 20 percent more likely to be obese than those with high access to healthy foods. The goal of the fund is to support supermarkets and other fresh food outlets in the "food deserts" of low-income communities. Through the fund, TCE and other social investors provide forms of debt and credit that remove some of the risk to commercial lenders and encourage them to provide major financing to projects.

Funding Specialized Financial Products Several intermediaries, including some that operate largely in traditional markets, have worked in conjunction with foundations to create specialized financial instruments with significant health impact goals.

Unlike traditional grantmaking, mission investors expect that the funds will be paid back—recycled for their charitable purposes, so to speak.

The W.K. Kellogg Foundation partnered with Community Capital Management, an experienced fixed-income manager, to find and purchase market-rate "community food bonds" that finance community facilities, schools, and community groceries. Inadequate access to healthy food in low-income communities and schools creates a critical impediment to good health, so the goal was to increase the supply of healthier, affordable food for vulnerable kids and their families.

Specific bonds supported a community garden where residents in an affordable eldercare center in Michigan could grow their own food; upgraded school lunch facilities to enable from-scratch meal preparation in a low-income school district in New Mexico; and an expanded facility for the Greater Boston Food Bank.

Establishing the Business Case
Recent advances in computing power, mobile technology, and networking have made possible an explosion of innovation that helps people track and manage chronic diseases more effectively. Although there is general agreement that these innovations can improve health, the business models necessary for them to reach sufficient scale have not been established. Social investors have an important role to play in developing the return on investment (ROI) cases—through studies, pilots, and business model development—that are necessary for new, cost-saving technologies to gain traction.

As one example, CHCF made a recoverable grant for a pilot with Asthmapolis, a company with a global positioning system that tracks where asthma episodes occur. The service allows asthma sufferers to manage their treatment more effectively, and public health workers to better understand the environmental triggers that exacerbate symptoms and contribute to health care costs. As part of this effort, CHCF and Catholic Healthcare West will be working with the company and its pilot partners to demonstrate cost reductions due to the technology and to explore business models with a range of payers and providers in the commercial, safety net, and government sectors.

Moving Innovation into New Markets
Traditional financial investors and their portfolio companies first seek to gain a foothold in the most profitable markets. This often leaves large but less lucrative markets, such as Medicaid patients or rural areas, without sufficient access to innovations. Social investors can create the financial cushion to test innovations and take them into traditionally underserved markets. Foundations in particular can play a crucial role in investment syndicates as strategic investors and intermediaries to help safety net providers and commercial companies work together more effectively.

Small and rural hospitals often cannot attract or afford qualified staff to supervise their pharmacies 24 hours a day. Avoidable medication errors are the result. Pipeline Healthcare (PHC) offers "tele-pharmacy" services that provide expert, remote supervision for these hospitals. The company is able to share a single pharmacist among several hospitals, increasing efficiency and improving compliance.

Areas of Mission Investment

Health Care	Health-care delivery
	IT and administration
	Drugs, devices, and diagnostics
	Organizing and optimizing care
Wellness	Food and nutrition
	Fitness
	Wellcare
Social Determinants of Health	Family economic security
	Community infrastructure and social supports
	Environmental health

CHCF is contemplating an investment in PHC as part of a syndicate that includes the foundation, an investment firm, and a technology company. Through the venture, CHCF would help hospitals that care for underserved Californians to lower costs and improve clinical outcomes, and PHC hopes to prove its cost-reduction case and value to safety net providers.

Facilitating Lending One of social investors' simplest tools is below-market-rate loans to help health care organizations fulfill their charitable missions. Foundations across the country have provided working capital and construction loans to clinics that serve low-income people, at rates below what they would have been eligible for from traditional lenders. The loans allow community health centers to devote more of their resources to serving people in need.

For example, the California Primary Care Association (CPCA), in partnership with financial intermediary NCB Capital Impact, created the Emergency Working Capital Loan Fund in 2008. CPCA launched the program when a state budget crisis resulted in payment delays to community health centers that serve people on the state's Medicaid program, Medi-Cal, which is the primary source of revenue for these clinics. California clinics were eligible to apply for up to $250,000 to cover working capital needs as they waited for payment. Clinics return the funds as soon as Medi-Cal pays, typically within two to three months.

Participants in the fund have included CPCA, Sutter Health Systems, Catholic Healthcare West, the Nonprofit Finance Fund, the Mercy Partnership Fund, and the California HealthCare Foundation. All the organizations have made funds available at rates ranging from 1 percent to 5 percent. When loans are blended together according to the proportion the funders have lent, the interest rate to the borrower becomes 3.25 percent, well below market rates. The fund has been renewed most years since 2008, and its total capital has ranged from $20 million to $30 million. The funding partnership will be expanded this year to include several new participants, including two foundations. NCB Capital Impact continues to do all the loan underwriting and servicing, and together with CPCA has created a loan guarantee fund to mitigate the risk of late repayment or default.

Another example is Playworks, a national nonprofit that has developed a program to bring recess back to public schools. As public school budgets are cut and recess is removed from the school day, safe and engaging play is disappearing from the lives of many children. With significant grant funding from the Robert Wood Johnson Foundation (RWJF), Playworks expanded from its original base in Oakland, Calif., to more than 250 schools in 15 cities. Even with the grant funding, Playworks still faced a significant working capital deficit, because its payments often came well after the organization had incurred expenses. RWJF partnered with OneCalifornia Bank to meet this working capital need through a deposit that the bank used as collateral against which to administer a loan to Playworks so that it could "keep recess going" while waiting for school funds to come in.

LOOKING FORWARD

These are just a few of the ways that the tools of impact investing can improve health care. They represent creative thinking and a willingness to cross long-established boundaries between sectors in the pursuit of common goals. As the United States seeks to reform its health care system to both lower costs and improve access, such collaboration is vital. Foundations and other social investors have an important opportunity to serve as strategic partners in supporting the brightest and most creative entrepreneurs in creating lower-cost and more accessible models of care. ◆

1 For a more extensive definition, taxonomy, body of examples, and discussion of regulatory requirements, see Grantmakers in Health, "Guide to Mission Investing," May 2011.

California HealthCare Foundation

The California HealthCare Foundation (CHCF) works as a catalyst to fulfill the promise of better health care for all Californians. We support the ideas and innovations that improve quality, increase efficiency, and lower the costs of care.

Through its Innovations for the Underserved Program, the foundation supports entrepreneurs pursuing new business models with the potential to significantly lower the costs of care or substantially improve access to care. Visit innovations.chcf.org to learn more about our grants and investments.

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Ideas > Reviews

Radically Small Thinking

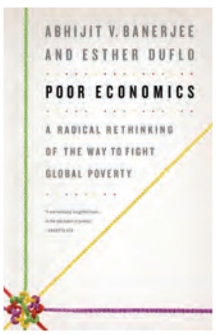
Review by Timothy Ogden

POOR ECONOMICS: A Radical Rethinking of the Way to Fight Global Poverty

Abhijit Banerjee & Esther Duflo
320 pages, PublicAffairs, 2011

The core of Abhijit Banerjee and Esther Duflo's new book, *Poor Economics*, can be summed up by a single sentence in the foreword: "[W]e have to abandon the habit of reducing the poor to cartoon characters and take the time to really understand their lives, in all their complexity and richness."

The next 250-plus pages do exactly that, describing and analyzing the choices that people living on less than $2 a day make. Those choices tend to make a great deal of sense after some illumination and contemplation. For instance, it's common for poor families to invest their entire education budget in just one child, usually a son, hoping that this child will make it through secondary school, while shortchanging the other children. Why? Many families think the value of schooling comes from getting the local equivalent of a high school diploma, not from attending another semester of school. It would be a waste of resources to spread the family's educational budget among all the children rather than trying to make sure that one child reaches the brass ring. Yet the value of education, it turns out, is linear—each additional week brings additional value. Helping parents understand this, the book explains, has far more impact than building schools; it rapidly changes their educational choices.



Or consider why it is so difficult to get peasant farmers to use improved agricultural methods—such as fertilizer, irrigation, and improved seeds—that can double or triple yields. Each of these methods requires an investment up front, but farmers often decline them even when they can afford them (through either subsidies or low-cost loans). Why? Because peasant farmers know how risky agriculture is. The cost of crop failure—whether by act of God or unfamiliarity with new practices—when you've committed all your resources or borrowed is more devastating than the cost of barely getting by with low yields.

In another startling insight, the authors explore how a program designed to reduce AIDS prevalence, which encouraged monogamous marriage among Kenyan teenagers, likely led to an increase in school dropout rates and exposure to sexually transmitted diseases, including HIV. The problem isn't that the program didn't work; it's that it worked quite well. The girls did marry, but the only men with the financial resources to marry were older and, as a result, more likely to be infected and to expect the girls to drop out of school and raise their children.

The book offers such insights on nearly every page, covering topics on finance, food, health, education, and family planning. Unfortunately, the authors' primary approach to finding such insights—the randomized controlled trial (RCT), the method used to test pharmaceuticals for safety and efficacy—often is given more attention than the insights themselves. Although methods are important—the unique insights would not have been possible without them—the debate over the pros and cons of RCTs obscures not only the insights but also the authors' underlying theory of change, which deserves far more consideration.

This theory of change mirrors the education example above. Social impact is often conceived as a step function, requiring big changes to reap rewards. Banerjee and Duflo conceive of it as far more linear. That means that a series of small adaptations and tweaks drives impact and its rewards.

Humans have a bias toward believing in big changes for big results. But the authors believe, as Banerjee told me a few years ago, that "there is no evidence that big changes are the result of big levers." That's a view that's taking hold in a wide variety of areas. It's on display in Malcolm Gladwell's recent writing about innovation and Tim Harford's new book *Adapt*. It's also evident in the background of Charles Kenny's *Getting Better*.

In other words, much of the whole enterprise of attacking poverty is built on the wrong foundations: the idea that big changes are necessary to create the world we want. This foundation is shared on both sides of the political spectrum. For want of better descriptors, the "interventionists" want to invest large sums to remake the context of the poor all at once; the "libertarians" want to drastically change the structure of poverty interventions and social safety nets; and the "social impact investors" are hell-bent on brand-new ideas that scale up rapidly. All advocate big change.

One of the common critiques of Banerjee and Duflo's work is that they don't appreciate how hard it is to alter policy to implement the kinds of changes their insights into the lives of the poor suggest. But they do appreciate exactly that—and therefore they disdain those big changes entirely. They believe that the path forward is not better "big thinking" but thinking small. Improving the lives of the poor measurably and consistently is primarily a matter of making a series of small changes in lots of different domains, changes that don't require major political battles or dramatically changing funding structures.

Banerjee and Duflo, then, are radically small thinkers. *Poor Economics* is perhaps the most thorough indictment of big thinking in social policy since Jane Jacobs's *The Death and Life of Great American Cities*. That's why *Poor Economics* is vital reading for anyone serious about confronting poverty. You may not agree with Banerjee and Duflo's conclusions, but the poor will be poorer if you don't wrestle with the logic that informs them. ■

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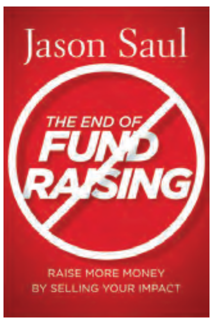
Supplicants No More

Review by David Simpson

THE END OF FUNDRAISING: Raise More Money by Selling Your Impact
Jason Saul
240 pages, Jossey-Bass, 2011

With a title like *The End of Fundraising*, Jason Saul's book is not intended to be a balanced, nuanced treatment of the economics that underpin today's nonprofit ecosystem. Rather, it's a quasi-polemical indictment of the current modus operandi among funding sources and nonprofit "supplicants." It's also a much needed, critical look at the inherent—and very significant—drawbacks to how nonprofits support their work. Any nonprofit executive seriously interested in extricating his organization, even if only partly, from the current unbalanced and inefficient system would be well served to read this textbook-like study and seek to apply some of its practical advice.

Under the current system, argues Saul, are donors who, largely motivated by emotion and the "pleasure associated with giving," write checks without any real understanding of the impact of their support. "Only 3 percent make donations based on relative performance," he writes, referencing the May 2010 *Money for Good* study, one of the many citations in the book. Donors—particularly larger institutions—are not subject to, nor terribly interested in, any serious and regular review of their performance. Without any consistent feedback, or a process that weeds out those making ineffective grants, the world of philanthropy enjoys a quasi-protected status. Hard questions are rarely posed or answered.



On the receiving end, Saul argues, are nonprofits caught up in the process of spending 20 percent of their funds on raising capital, a rate five times higher than in the private sector. Moreover, because of pressure from donors, nonprofits are too focused on traditional accountability.

Nonprofits, he urges, should act quickly to remove themselves from this unbalanced world of donors and supplicants and instead understand and measure the impact of what they do. They then should find stakeholders who not only attach economic value to these impacts, but also have the ability and desire to pay for them. Nonprofits must learn, he argues, to succeed in the huge and fast-growing "social capital market," which is approximately 20 times the size of the $300 billion philanthropic market. Shift your focus, he urges, from begging for funds from people and institutions that are donating on a purely volunteer basis, to engaging with stakeholders who want to pay for the socially beneficial impacts you are creating.

Saul's prescription is immediately followed by examples that reflect both his agile thinking and his desire to empower those willing to try to take advantage of the social capital market. The amount of money in play, Saul calculates, is in excess of $6 trillion for every US nonprofit—including nearly $3 trillion in socially responsible investment vehicles, $500 billion in government spending on education, and $2.5 trillion on health care.

Saul details four steps for nonprofits to follow. First, he advises them to get a deep understanding of the impact they have and express it in clear terms. Second, they should identify those who want and can pay for impact, pointing to a growing coterie of corporate partners, social and impact investors, and service providers. Third, he instructs nonprofits to understand their impact on buyers' specific needs. And fourth, he counsels nonprofits to ensure that their value proposition is clearly defined. (One interesting example comes from Minnesota, where a residential correction facility for adolescent boys is providing job training for the state's growing bicycle industry.) With these four steps accomplished, nonprofits must then package and sell this "bundle" to the appropriate impact buyers. Again, Saul's book lays out a step-by-step approach to the sales process and provides numerous examples.

Undoubtedly, *The End of Fundraising* will not appeal to all audiences, particularly those comfortably entrenched in the old donor-supplicant paradigm. And, given some of its bluntness and what could be considered oversimplification, the book is not above criticism. For example, Saul writes that the culture of nonprofits "doesn't value knowing about impact; people don't believe it's possible, so they don't even bother." But Saul has painted a compelling and troubling portrait of mainstream philanthropy and an engaging analysis of the new social market. Most important, he has provided a comprehensive and comprehensible road map for nonprofits that want to take advantage of the tectonic change in today's economy, where social benefits are increasingly understood to be an inherent part of all economic activity. ■

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Scaling Play

Review by Paul Connolly

KaBOOM! How One Man Built a Movement to Save Play
Darell Hammond
320 pages, Rodale Books, 2011

"We don't stop playing because we grow old, we grow old because we stop playing," observed George Bernard Shaw. But what happens when children themselves play less? Today, electronic media dominate kids' attention, helicopter parents curb exploratory free-range play, and space for outdoor play is diminishing. Darell Hammond founded KaBOOM!—a national nonprofit that provides communities with resources and guidance to build playgrounds—to reduce what he calls the "play deficit." His book tells an uplifting story about how he took the organization to scale and matured as a manager, advocate, and leader.

KaBOOM! connects dollars and volunteers from corporations, such as Target, Snapple, and Home Depot, with communities in need to rally around a single tangible goal: the building of a kid-designed playground in one day. Community members and volunteers get to see the fruits of their labor right away (hence, KaBOOM!), creating an "achievable win," as Hammond calls it, and a vivid sense of potential. During the past 15 years, KaBOOM! has been one of the fastest growing nonprofits in the United States. It now has an annual operating budget of more than $20 million. It has raised more

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than $200 million and harnessed a million volunteers to create more than 2,000 playgrounds primarily in low-income communities, a remarkable track record.

Hammond's account of his emergence as a passionate and visionary social entrepreneur is inspiring. After growing up in a group home and dropping out of college, he describes how he found his calling in the service movement. He developed KaBOOM!'s innovative program and business model, established an upbeat organizational culture, instituted quality control standards for program replication, and nurtured the organization's expansion. He reveals how he learned to delegate, and he refreshingly admits to just "winging it" at times and making some pretty big managerial mistakes. Hammond describes how he "turned a mission into a movement" by increasing advocacy efforts and freely sharing tools and expertise through online social networks to enable others to construct more than 1,600 do-it-yourself playgrounds.

Hammond identifies "cascading transformative change" in communities as KaBOOM!'s intended impact and writes that "we measure our success by looking at what happens after we leave." He notes that an impressive 86 percent of the sites are maintained and that the planning and building process helps foster stronger communities. His point is that it matters how children use the playground and how community members continue the momentum and join forces to organize other efforts. Yet most of the evidence in the book about KaBOOM!'s longer term social impact is anecdotal. The statistics on outputs and the stories about positive community change are compelling, but the book would be even richer with more thorough documentation.

Hammond writes that "no single individual or organization can do enough on its own" and praises his senior team, board chairs, and other groups. Nevertheless, the story would have benefited from more detail about and insights into how the board and executive staff shared leadership and worked to make tough decisions, set priorities, and allocate scarce resources. Likewise, Hammond says little about co-founder Dawn Hutchison, the unfolding of their respective roles, and her departure from the organization. More also could have been written about how KaBOOM! has participated in coalitions with other leading organizations in the field, such as Playworks, which sends trained play coaches to urban low-income schools. The book's subtitle—*How One Man Built a Movement to Save Play*—is individualistic, not collective.

Hammond makes a strong case that play is a necessity, not a luxury. While reading the book, I took a walk in a neighborhood outside of Detroit at sunrise, while children were still asleep. I noticed a nice playground that had a sandbox full of shovels, pails, and toy trucks. The kids in the community had not taken their playthings home, but left them there as a shared resource—the essence of social capital. Later that day, the playground was bustling with children who were exploring, sharing, refereeing, engaging, and inventing. Hammond explains how play teaches children how to practice adult roles. It enhances cognitive and physical development, creativity, and cooperation. And it helps prevent childhood obesity.

This book goes beyond children's play. By reading it, social entrepreneurs and nonprofit leaders, along with the funders, investors, and advisors who support them, will get some solid, practical advice about how to grow a social enterprise, adapt programs and operations along the way, and amplify impact. ■

Transformational Networks

Review by Patrick McNamara

GLOBAL ACTION NETWORKS: Creating Our Future Together
Steve Waddell
244 pages, Palgrave Macmillan, 2011

"The old ways of doing things are not up to the global challenges we are facing." So begins *Global Action Networks*, a book that provides an outstanding framework for addressing today's complex social and environmental issues. Author Steve Waddell cites globalization, system complexity, and the disruptive impact of new technology as factors that contribute to our inability to resolve today's issues with traditional strategies and our need to find new approaches. By using whole systems thinking—the process of understanding how things influence one another within a whole—and involving stakeholders from business, government, and the social sector, he argues that we can craft effective, locally applicable, and timely solutions to problems as diverse as climate change and community health.

What are global action networks? They are basically multi-stakeholder networks that span geographical, institutional, and sectoral boundaries to effect systemic change. Because they involve systems thinking and are designed to build connections and trust, Waddell argues that they lead to superior results. He says the networks help shift perspectives because they create a collective understanding of a problem, take into account impacts on multiple parties, and operate from a place of future possibilities. The solutions tend to be breakthroughs that change the rules of the game.

Examples of global action networks include the Global Fund to Fight AIDS, Tuberculosis, and Malaria, which has increased access to effective treatments, saving 3.5 million lives; the Forest Stewardship Council, which has certified 300 million acres of forests and engaged 16,000 businesses in 100 countries to sell certified products; and the Principles for Responsible Investment, which is changing the logic of the global finance system through a set of principles supported by 850 signatories representing $20 trillion in assets.

Waddell both articulates the phenomenon of these networks, surveying more than 80 of them, and helps us understand how they are formed and develop. He shows how networks that embrace diversity, build trust, and foster entrepreneurial action are able to take action to a global level while responding to a wide range of local conditions. These networks go beyond "scaling up" to "scaling across" geographies and reconceiving systems, so that change is both meaningful and transformational.

Waddell's focus is on the power of citizens to master collective change. He proposes four strategies that range from the individual to the collective and the interper-

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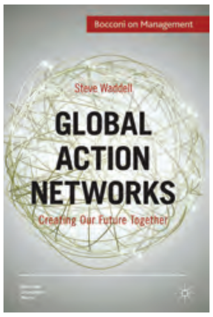
sonal to the systemic, underscoring that for change to be lasting it must include personal and structural transformations. Waddell draws on the ideas of many systems change thinkers, including Otto Scharmer, Peter Senge, Malcolm Gladwell, Margaret Wheatley, Ken Wilber, Barbara Bunker, David Bohm, and Bettye Pruitt, to demonstrate the power of a whole systems approach and what Scharmer calls "leading from the future as it emerges." One of the most helpful chapters outlines eight competencies required for the success not only of global action networks but also of any leader working with complex issues, uncertainty, and change. They include knowledge, skills, and behaviors in leadership; network development; measuring impact; conflict and change; communications; learning systems; policy and advocacy; and resource mobilization.



Waddell's model is part of a growing body of work that explores how social change can be implemented through networks that exist at the international, national, local, and individual levels. In the United States, the Interaction Institute for Social Change is probably the leading pioneer of this approach. Another is the United Nations Development Programme's Leadership for Results Programme, which builds on-the-ground, multi-stakeholder partnerships and transformational leaders to work on global problems like HIV and climate change. Waddell's book would have been even stronger had he shared his assessment of what these pioneers learned in the early stages of forging their networks. The book provides many remarkable success stories, but not enough analysis of the challenges that went into network creation.

Waddell asserts that global action networks represent a 21st-century global governance model that stems from two main sources: the positive impact of technology on how work and society are organized; and the weaknesses in post-World War II international institutions. Several authors have examined these issues. Anne-Marie Slaughter's *A New World Order* shows how networks of professionals are sharing practices across national boundaries. Parag Khanna's *How to Run the World* explores how to harness technological connectedness to create new multisectoral networks where "no one is in charge." Jeff Howe shows how work is shifting in *Crowdsourcing*. And Manuel Castells describes a new historical paradigm equal in magnitude to the industrial revolution in *The Rise of the Network Society*.

Global Action Networks contributes to this articulation of what's next in governance by showing how we can envision and work collaboratively to create a better future. With grounded examples and clear logic, Waddell presents a concise, effective, and useful model for local and global approaches to developing networks that are change agents. The book will help any social innovation practitioner assess her competencies, learn network approaches, and find new ways to discern and navigate our most complex problems. ■

Water Thinking

The Peer Water Exchange manages diverse solutions and resources to fight the global water crisis

BY RAJESH SHAH

THE FACTS ON WATER point to a universally acknowledged crisis: More than 1 billion people lack access to safe drinking water; 6,000 children under age 5 die every day from water-related diseases; half the world's hospital beds are filled because of water-related diseases; and 2.7 billion people lack access to hygienic sanitation facilities that prevent contamination and provide dignity.

There is no dearth of technological solutions to this tragedy. Yet successful projects to solve rural water problems require approaches other than technology—community organization, education, behavior change, ownership transfer, and long-term monitoring. These approaches, although necessary, create a complexity that has hampered our ability to take any solution to scale. Even with billions of dollars of funding over decades, we have not been able to reduce the size of the water crisis.

But the drinking water crisis can be solved. The Peer Water Exchange (PWX)—a technology platform I conceived and built for Blue Planet Network (BPN, formerly Blue Planet Run Foundation, or BPRF)—has used a network approach to manage diverse solutions to and resources for the global water crisis. PWX is a decentralized network and decision-making system that can effectively and transparently scale up the management of thousands of projects without a bureaucracy. Over the past six years, 73 small and large organizations around the world have proved that the PWX platform works.

We are small now, but our goal is ambitious: By 2027, we aim to provide safe drinking water to 200 million people. This will require $8.5 billion in funding and the management of 200,000 projects over 20 years.

TODAY'S FUNDING MODEL

To resolve the water crisis successfully, we need a healthy dose of criticism about current funding models and the disadvantages they create for solving social issues.

Management in the North: Foundations and NGOs are experts at raising money, but they find it hard to oversee small remote projects. BPRF was able to create a new global athletic event to build awareness of the water crisis, but managing projects in 14 countries was a challenge with no easy solution. Although I was a funder, was I really the right person to decide on projects? Wouldn't using existing field expertise result in better decisions?

Fundraising in the South: Implementers are experts in their fields, but they spend significant time on fundraising and managing donors and donor agencies. A large fraction of energy can be spent in beautifying an application or report instead of executing a project.

Reporting: Funding agencies spend time and resources on reporting, which often involves repackaging reports from the field. Raw data are hidden, and only a tiny fraction of activity is reported.

Failures and learning: The entire philanthropic chain reports only good things and is unwilling to share mistakes, so no one learns from them.

Monitoring: Site visits are often a photo op and usually expensive. At BPN, we constantly balance the cost of travel with the cost of funding another project. Monitoring can and should be a learning, sharing, and teaching experience.

Cooperation and sharing: Implementers do not cooperate or share enough. They compete for resources and funding, which results in North-South communication instead of South-South dialogue.

RAJESH SHAH is a founding member of the Blue Planet Network and the designer and leader of the Peer Water Exchange. He has more than 25 years of experience in strategy and technology consulting, finance, and operations, in nonprofits, startups, and for-profits.

ILLUSTRATION BY ANGUS GREIG

All the points above contribute to the main problem with today's practices: lack of scalability. Even if we increased investment in the water sector using the current model, not all the money can be absorbed and put to effective use. We need a new approach, one that is scalable, efficient, and collaborative, combining transparency with effectiveness—one that attracts the vast investment commitment that this crisis demands.

WATER THINKING

The core problem when we look at the water crisis is the lens through which we structure it, which I call Vaccine Thinking. This lens has developed over centuries as a result of a string of scientific and industrial successes. It has culminated in a mindset that is now deeply ingrained in our psyche and completely integrated with our educational, economic, and governmental systems. Vaccine Thinking seeks to find and deploy a single universal solution, a solution that can be mass-produced. It is used in projects to provide village-level electricity and in efforts like One Laptop per Child. But Vaccine Thinking has been unable to solve problems such as the water crisis, poverty, and climate change.

To address the water challenge we need to use a different lens—one that allows us to structure the problem differently, to examine many diverse and partial answers and processes, and to set up new expectations of results. The water crisis does not have a universal solution. There are many solutions, and they all involve a behavior change to deliver results. To deploy diverse solutions we need a new mindset, one I call Water Thinking.

Vaccine Thinking differs from Water Thinking as follows:

Dosage: Vaccine Thinking creates a one-time solution, a single dose, or projects involving a single set of transactions. Water Thinking creates a lifetime supply, requiring many different transactions, including preparatory and follow-up.

Point of impact: One cannot give water, unlike vaccines, to people. It has to be delivered to households or communities. Administering community-level solutions requires going to the site, bringing people together, and coordinating activities.

Solution type: Vaccines are universal—the same vaccine applies to all genders, ages, and races. Solutions to water supplies, especially in rural areas, are localized in climate, geography, culture, gender relations, and political structure.

Knowledge transfer: Vaccines involve no transfer of knowledge about how the vaccine works or how it was developed. Successful solutions for water in rural areas require knowledge transfer. Why water purity is important and how to establish a good source of water and keep it clean are questions whose answers need to be ingrained into a population as part of any water project.

Ownership transfer: Vaccines involve no transfer of ownership. Solutions to rural water problems need to be owned by the community for long-term success. In fact, if the community is not organized or does not desire to be self-sufficient, solutions are bound to fail.

Changes in behavior: Vaccine-based cures require no change in behavior. Social problems demand many changes in behavior. Water solutions need changes in water usage, hygiene, sanitation practices, and protection of the water supply.

Metrics: The metrics along the vaccination process can be captured easily. Solutions to water are very hard to quantify. For example, diarrhea rates are unlikely to go to zero immediately after the implementation of a project, but will produce good trends over time, often with spikes that may contradict progress.

Risks and failures: Our society accepts the risks and failures involved in creating a vaccine. We have the patience to keep funding cures for AIDS, cancers, and other diseases. Yet with small water projects we are very risk averse and respond negatively to failures. This drives behaviors that often misrepresent results, or focus on the successes only, both of which lead to the loss of much learning.

Funding and project size: For vaccines, we are able to centralize our funding. For social development projects in rural areas, the money has to be delivered in small chunks, something large institutions are not equipped to do. The management of thousands of small projects is one of the challenges of scale and requires us to think differently from our large funding mentality.

THE PEER WATER EXCHANGE

The Peer Water Exchange was deployed in 2006 to tackle today's unscalable funding approach and apply Water Thinking. We have been using the Internet, especially Web 2.0 technologies, to manage projects in a way that minimizes bureaucracy, increases transparency, enables collaboration, improves effectiveness, and delivers results efficiently. Just as eBay and Craigslist do not deliver the same products to all consumers, but allow millions of different transactions, we do not manage projects with one approach or template. We also manage and coordinate interactions before, during, and after project implementation.

In PWX, work is assigned to leverage core competencies. Investors are in charge of fundraising and can focus on systemic issues. They evaluate proposals, seek and study trends, and act on them. Implementers—experts in their field—review each other's standardized applications for funds, instead of spending time applying for funds. Reviewers, who are other applicants, funders, or third parties, can critique the approach, ask questions, and offer suggestions. We see this happen repeatedly: Reviewers want to share their experience and help others succeed. Collaboration and learning are part of the process. Independent third parties can participate to observe and monitor projects.

PWX has been using Web 2.0 models of social and collaborative knowledge development networks for six years now. The network has grown through referrals; as more organizations join PWX, more resources are added to manage more work, and collaboration increases along with the knowledge base. Last year we introduced a set of business intelligence software tools for the water sector.

PWX continues to evolve. It is currently the only scalable, map-driven, and completely transparent platform in the water sector, as well as the only participatory decision-making system where applicants weigh in on funding decisions. The next step is to build out the first social development exchange—where all transactions are tracked, knowledge is disseminated, and people come together to solve global crises.

Water Thinking and PWX can tackle and solve the water crisis. My hope is that it also will energize society by showing that collective action is a way to solve many of our social problems. ■

Partnering for a Cure

The Myelin Repair Foundation is creating a process for the rapid development of new treatments and cures BY SCOTT JOHNSON

IN 1976, DURING a backpacking trip through Europe with my girlfriend, I lost the vision in my right eye and soon after experienced a peculiar numbness from the waist down. A doctor there told me that I might have multiple sclerosis (MS). I'd never heard of it. I was 20 years old.

When I returned to the United States, a neurologist confirmed what the doctor in Germany suspected. I had a relapsing-remitting form of MS in which my immune system, without warning, would attack the insulating substance on the nerves in my brain and spinal cord, called myelin. These attacks would weaken or disrupt the electrical signals passing among my nerve cells, causing a wide range of possible symptoms, including paralysis, vision and hearing loss, focus and concentration problems, and incapacitating fatigue. Today, I am one of 2.5 million people living with these unpredictable, debilitating symptoms. There is no cure.

Like many people diagnosed with MS and other chronic diseases, I did my best to hide and ignore it. Though occasional attacks slowed me down, I completed my undergraduate civil engineering degree at the University of California at Davis and an MBA at the University of California, Berkeley's Haas School of Business. I married my girlfriend, launched a career in business with the Boston Consulting Group, and eventually led three startup companies. By MS standards I have been more fortunate than most. But the attacks have taken their toll. My right arm no longer works, and without a brace on my right leg I am unable to stand or walk.

Over the past 35 years, I have experimented with several available MS treatments on the market—treatments designed to tamp down a self-destructive immune system or to reduce inflammation during attacks—but the potential benefits have eluded me. MS has affected every day of my life. And with each year and each news story promising a cure, I have hoped that I would benefit from the millions of dollars spent on finding a cure.

In 2001, I read a brief article in *Businessweek* about discoveries made at Yale University, which suggested that myelin damage in MS could be reversed. Repairing the myelin had the potential to restore lost function in MS patients. This news was especially exciting because the proposed treatment did not rely on suppressing the immune system to slow the progress of the disease. Instead, it relied on repairing and restoring the myelin damage caused by the disease.

SCOTT JOHNSON is the president and founder of the Myelin Repair Foundation. His work on developing an accelerated model for medical research that turns basic biological discoveries into treatments or cures has been broadly recognized for its potential to bring new medicines to market.

Developing a myelin repair treatment was an irresistible problem to solve. I began to research what was known and not known about myelin biology, who the experts were, and the process of medical research. What I discovered was a large and complicated ecosystem with independent players who operated within their own cultures. Further, the incentives within these cultures were not always related to an outcome that would benefit patients. And most surprising from a business perspective, there was no plan to guide the players toward a cure. Soon it was clear why so much money was being spent on medical research with so little benefit to patients.

FREE AGENTS, COMPETING INCENTIVES

The US medical research ecosystem is a pipeline that depends heavily on the contributions of academic scientists, commercial biotech and pharmaceutical companies, and the Food and Drug

ILLUSTRATION BY ANGUS GREIG

Administration (FDA). Below is a snapshot of each of their worlds.

Academic scientists are funded largely by the National Institutes of Health (approximately $35 billion annually) and by universities, philanthropic foundations, and independent research institutes (approximately $15 billion annually). For the most part, each scientist pursues an area of personal interest and hides discoveries until her work is published in a peer-reviewed scientific journal or presented at a professional conference. It can take as long as four years from the time a scientist writes a proposal until successful results are considered publishable. There are no records of failed experiments.

Each academic laboratory is like a small business. The CEO is the principal investigator, and the staff members are postdoctoral and graduate students. Academic laboratories in the same discipline compete for funding and the best students. A successful laboratory is one that can produce proposals that are funded and results that are publishable. The result of this $50 billion annual investment? Some 800,000 published papers each year.

In 2009, commercial biopharma, whose strategy is based on increasing shareholder value, invested more than $75 billion in research. But today's biotech and pharmaceutical companies are facing some steep challenges: The cost of bringing a new drug to market now exceeds $1 billion. Venture capital investment in new biotech companies has fallen off. The patents on large numbers of blockbuster drugs worth billions of dollars are expiring, creating competition from generic drug manufacturers. Studies have estimated that to meet its commitment to shareholders, pharmaceutical companies spend nearly twice as much on marketing as they do on research and development. New drug targets in the pipeline are fewer and fewer. All this adds up to a bleak picture for a once flourishing industry whose projected price-earnings ratios today are approximately half those of consumer products companies.

And finally, the FDA, whose job it is to regulate drug development, is caught in an unending balancing act: to protect consumers from ineffective or unsafe products, and to get valuable new drugs to market that will save or improve lives. As few as 9 percent of all Phase III clinical trials succeed. This statistic alone should raise important questions about an ecosystem in which such stunningly negative outcomes are the norm.

ACCELERATED RESEARCH COLLABORATION

In 2002, I founded the Myelin Repair Foundation (MRF) to solve two problems: to unravel the scientific mysteries that trigger the formation of myelin, and to transform a scientific ecosystem fraught with barriers into a more adaptive process that could fast-track new treatments.

We set out to recruit the best scientists who had expertise in myelin biology and were willing to break the rules. The groundbreakers included Stephen H. Miller of Northwestern University, Brian Popko of the University of Chicago, Ben Barres of Stanford University, Robert H. Miller of Case Western Reserve University, and David Colman of the Montreal Neurological Institute.

In exchange for funding, these scientists committed to developing and executing a research plan and to sharing their results, both successes and failures. This created a highly collaborative environment in which multiple experiments were done in parallel across labs. The experiments were overseen by a scientific advisory board of senior neuroscientists who helped us ensure that the work remained within the scope of the research plan. We call this model Accelerated Research Collaboration, or ARC.

Now in 2011, it would be difficult to find a research consortium that does not tout collaboration. But in 2004, although conversations about speeding medical research were surfacing in forums hosted by organizations such as Michael Milken's FasterCures, MRF's approach was novel and ultimately would prove groundbreaking. What most collaborations still lack is external management oversight, which keeps scientists focused on patient treatment. Back in 2002, we also put in place contracts with the participating universities to ensure that all relevant discoveries would be protected and ready for commercial licensing.

Fast forward to 2011. MRF's scientists have produced 150 drug targets against which various compounds can be tested and measured for their effect on myelin repair. They also have produced 24 new research tools—animal models and assays—that can be used more broadly in neurological research. Four patents have been awarded.

CROSSING THE VALLEY OF DEATH

In 2008, with several discoveries in hand, we began approaching pharma. We quickly learned that our best work lacked the level of validation—a rich set of data from multiple tests and animal models—that industry required for licensing. Although we had succeeded in building an academic collaborative that more rapidly produced large numbers of drug targets, crossing the valley of death from academic science to pharma was going to require more infrastructure—infrastructure that could produce industry-standard data compelling enough to attract pharma's billion-dollar investment.

We needed to add a more sophisticated level of industry expertise to our own staff. Jay Tung, our first pharma veteran, came aboard as vice president of drug discovery. Within a year we put in place a drug discovery advisory board whose members had successfully brought drugs to market. The payback of establishing this advisory group was quick and powerful. With their guidance, we have been able to identify 40 targets that are in clinical development for MS and other diseases. And we have been able to attract more top-level scientists, such as Mike Gresser, our chief scientific officer, who headed neuroscience and inflammation research at Amgen.

Our story would not be complete if I did not mention the challenges we have faced in raising the necessary funds to accomplish this work. Although we benefited early on from the generosity of many foresighted Silicon Valley entrepreneurs, venture capitalists, and foundations, including the Robert Wood Johnson Foundation and the Donaghue Foundation, we also have faced the challenge of raising money during one of the worst economic downturns in US history. It has been a job no less difficult than understanding myelin biology or executing a plan to cross the valley of death.

Not all social innovations are fast. The ARC model is a work in progress. Getting a myelin repair treatment on the market will not be the end of our story. It will be the beginning of a process to scale and replicate the model for other diseases. This is a day I hope will come sooner rather than later. ■

Focusing on Advocacy

The time is now for foundations, large and small, to engage in public policy

BY SUSHMA RAMAN

ORGANIZATIONS AND INDIVIDUALS focused on social change understand the importance of influencing public policies for improved community outcomes. Karen Bass was no different. Focusing initially on health care as a physician assistant, Bass began organizing residents of South Los Angeles around the crack epidemic that was devastating families and communities. Two decades later, Bass's organization—Community Coalition—is a true community institution focused on creating, influencing, and shaping public policy issues affecting South Los Angeles. Bass herself is a US congresswoman who served previously in California's state capital as the first African-American woman speaker in the nation.

My first encounter with Bass and Community Coalition was in the early 1990s, while sitting on the funding board of Liberty Hill, a Los Angeles foundation that supports community leaders and community building initiatives. There I became keenly aware of the power of small grants to leverage big policy change, such as living wage ordinances for low-income workers and bills to reduce toxic waste dumping in low-income neighborhoods.

A more recent report issued by the National Committee for Responsive Philanthropy confirmed what many organizers and advocates know intuitively: One dollar invested by foundations in policy advocacy, community organizing, and civic engagement results in $91 in benefits for local communities. Despite the power of supporting community organizing and public policy, however, many foundations shy away from such work, preferring to support direct services. A recent Foundation Center survey indicated that 76 percent of foundations do not fund or engage in direct charitable activities that could be considered policy related.

Yet the current US budget crisis requires that foundations reassess their attitude toward public policy engagement. Increased scrutiny of the philanthropic sector and the expectation that foundations can fill the gap created by diminishing public resources have created a need for foundations to step up and participate in the public policy debate in an organized and strategic fashion.

STRENGTH IN NUMBERS

Perhaps the timing is fortunate. In the past two decades, we have witnessed tremendous growth in the number, scale, and impact of foundations. In fact, the nation's 76,000 foundations, nearly two thirds of which were established since 1990, possess more than $590 billion in assets. Many are small and unstaffed, focusing on local causes dear to their hearts—churches and synagogues, educational institutions, soup kitchens and shelters, and youth programs.

ILLUSTRATION BY ANGUS GREIG

Public policy and advocacy are often seen as the domain of large, private, national foundations and not usually perceived as relevant or appropriate strategies for many community-focused foundations and their governing boards. Foundation boards are often reluctant to engage in what they perceive as political activities. Furthermore, there is sometimes confusion about whether activities such as advocacy and lobbying are permissible and legal for foundations.

So how can foundations, especially community-oriented ones, influence public policy?

They can collaborate. Although foundations often require nonprofits to collaborate, their own track record is unimpressive. Yet public policy and advocacy are areas where collaboration is not only appropriate, but imperative. Collabora-tion also makes sense. For example, smaller foundations in a collaborative can benefit from institutions

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with in-house research and evaluation expertise. Ones with cautious boards can see that they are not the only ones engaged in risk. And smaller-asset foundations can leverage their dollars by partnering with others. Furthermore, legislators may be more apt to listen when messages are consistent and being delivered by more than one organization.

Fortunately, the recent growth in philanthropy has been accompanied by an increase in infrastructure organizations that support the sector. These include research and training organizations (for example, Alliance for Justice); associations of grantmakers (the Council on Foundations, Southern California Grantmakers, and the European Foundation Centre); affinity groups (the Association of Black Foundation Executives); and public policy organizations (the Center on Budget and Policy Priorities). This community of practice can help funders examine how their mission and grantmaking can better align with public policy opportunities, while also maximizing philanthropic impact and effectiveness.

FOCUS MISSION, LEVERAGE ASSETS

As the intersection between public policy and philanthropy can be vast, foundations may find that their work has greater impact if public policy efforts focus on the issues closest to their values and vision. Some already do that. The Rosenberg Foundation, for example, has a special focus on policy changes that can reduce California's high rates of incarceration and recidivism and increase former convicts' participation in the workforce and civic life.

The California Endowment is another example. It uses its assets to advance social change. In 2010, the foundation announced plans to reconsider more than $5 million in investments in Arizona-based companies in reaction to the state's harsh anti-immigration law. This was the first time the foundation had attempted to influence public policy through the investment side of its work. In addition, the foundation's headquarters at the Center for Healthy Communities in downtown Los Angeles leverages the endowment's physical assets to bring together policy and advocacy groups, government agencies, and community organizations in a shared conference space. In an era of limited budgets, the center has become a hub for social change agents in a vast geographic region without a core.

Another noteworthy example of collaborative systems is in the area of children's health insurance coverage. Several California health foundations, including the Alliance Healthcare Foundation, Blue Shield of California, the California HealthCare Foundation, Kaiser Permanente, the California Endowment, and the UniHealth Foundation, came together to help find a solution to the approximately 1 million uninsured children in the state. The results of this collaboration yielded impressive results, contributing to a reduction of uninsured children by more than 40 percent between 2000 and 2008. Although the economic downturn and the budget crisis may have affected the momentum gained, many lessons were learned.

Foundations also can play an important role in the public policy arena. When I worked with the Open Society Institute's Emma Lazarus Fund—a $50 million initiative to assist immigrant and refugee communities—grants often focused on supporting and connecting grassroots coalitions and networks with national policy organizations to impact immigration issues.

Bringing together diverse institutions, strong leaders, and varying theories of change can make collaboration messy and slow. Yet the long-term benefits can be worth it.

PRIORITIZE ACCOUNTABILITY

Foundations active in the public policy arena must be prepared to answer questions about their accountability—and for a possible backlash to their involvement. Whereas governments are accountable to voters, public companies to shareholders, and nonprofits to funders and communities served, foundations can operate in a less transparent manner. If they attempt to influence policies and programs that should be responding to democratic processes, they may be perceived as lacking legitimacy and accountability; the worst-case scenario is that they are seen as directed by the whims of the wealthy.

How best can foundations address the perceived and real challenges surrounding accountability? Foundations—with their long-term view on social change and relative independence—can bring together diverse stakeholders and communities to build a stronger, more vibrant, and democratic public sphere.

But foundations must be careful to strike a balance between being inclusive and moving the needle. After all, on any single public policy issue there are divergent perspectives on the best way forward. Do we strengthen public education or offer vouchers to private schools? Should health care be provided to undocumented immigrants or be restricted to citizens? Foundations can respond best by focusing on those most disenfranchised, those whose voice is most excluded from the public policy conversation.

In 2001, while serving as a program officer at the Ford Foundation's New Delhi office, I helped convene a group of Dalit activists and researchers to discuss the issue of caste discrimination, a human rights situation that affects more than 160 million Indians. Out of that consultative process was created the Dalit Foundation, the first grantmaking institution in South Asia working for the empowerment of Dalit communities.

Not all foundations are created in this manner, but they can incorporate the values of inclusion and equity in their public policy and grant strategies. The International Budget Partnership, funded by the Ford Foundation and the Open Society Institute, provides an example of foundations convening and supporting a network of civil society organizations around the world. The partnership uses budget analysis and advocacy as a tool to improve governance and reduce poverty. Based on the belief that people's participation is critical to the budgetary processes, the partnership's programs help to ensure that the public has timely and meaningful information on how governments manage public funds. In countries where governance reform can make or break the development prospects for society, budget analysis and advocacy are important strategies for funders to pursue in order to meet development goals.

Although the foundation community has historically preferred to work behind the scenes in regard to public policy issues, the current political and economic environment necessitates a shift in thought and action. Today, a stronger, more engaged philanthropic sector must understand and operate in the broader political environment to increase its impact and effectiveness. It can do that by focusing its efforts on collaboration and accountability. ■

Revitalizing Struggling American Cities

Living Cities is working with five US municipalities to develop an ecosystem for solving urban problems BY BEN HECHT

I HAVE SPENT MUCH of my professional life looking for the lever that would transform the lives of low-income people. In the 1980s, I believed it was housing. In the 1990s, I was certain it was strong community organizations. In the first part of this millennium, I thought the Internet was going to be the savior. Then in 2002, I sought financial support from Cisco Systems for an initiative we were developing at One Economy Corporation, an organization I co-founded in 2000. Cisco was a loyal supporter of our work and excited about this new idea. But the funders there said: "You can't solve this problem alone. You're rebuilding an ecosystem. Who are the other organizations that must be part of your solution if this is going to succeed?"

This question changed my life. I immediately understood that I would never find the magic lever because none existed. No matter how heroic the efforts of one person or how much "scale" one organization could achieve, it never would be enough. A new approach to social change had to be defined and nurtured—one that required three things: unprecedented *collaboration* among and between funders and local actors; a commitment to continuous measurement of impact and to *adapting* to changing conditions; and *resilience*, or the capacity to stay focused long enough to transform the problem. I've come to refer to this new approach as *dynamic collaboration*.

Four years ago, Living Cities, a 20-year-old funding collaborative of 22 leading foundations and financial institutions, shifted its focus, in part to build a blueprint for dynamic collaboration. We asked ourselves two fundamental questions: How can a national funder collaborative take full advantage of both the individual and collective expertise and influence of participating institutions to accelerate social progress? And how can local collaboration across sectors and issues produce enduring change for low-income people?

DYNAMIC FUNDER COLLABORATION

Living Cities was founded on the belief that real change could be achieved only through private and public collaboration. From its inception in 1991, it was unlike any other collaborative. It brought together national foundations and financial institutions. This not only enabled the commitment of significant funding, it also strengthened Living Cities' governance board. Today, board members include senior representatives from foundations such as Ford, Rockefeller, Bill & Melinda Gates, and Knight, as well as financial institutions such as Bank of America, JPMorgan Chase, Metropolitan Life Insurance, and Morgan Stanley.

ILLUSTRATION BY ANGUS GREIG

During its first 15 years, Living Cities' $1 billion of direct investment was leveraged 16 times over, moving neighborhood redevelopment efforts from isolated successes to greater scale, shaping federal funding programs, and helping to build homes, stores, schools, and community facilities.

In 2006, the Living Cities board set out to reinvigorate its collaborative model, both to respond to 21st-century realities and to heighten its effectiveness. The board challenged itself to be a change agent not just by combining money, but also by more intentionally deploying its members' collective knowledge and experience. Toward that end, the board established committees composed of more than 80 senior staff from member foundations and financial institutions to create a new programmatic agenda.

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At the same time, Living Cities heightened its ambitions—adding six new members and expanding its focus. Recognizing the organization's unique potential to blend assets and influence, the board committed to moving beyond the neighborhood scale and to focus on disrupting obsolete systems that have long kept innovations benefiting low-income people on the periphery. Substantial staff capacity was added so that the collaborative could build a network of relationships and an ecosystem equal to its ambitions. Staff were charged with measuring results and helping the collaborative respond to emerging opportunities or crises, such as the 2009 stimulus bill or the foreclosure epidemic.

Just as Living Cities' board saw a need to transform the way its members worked together, so too it saw the need to stimulate dynamic collaboration in communities. We needed to help cities build and sustain the right ecosystem of actors, public and private, who could combine resources, measure results, and adapt to changing conditions to solve their most pressing local problems. We developed the following principles, based on our experience, to guide our work:

Create a resilient civic infrastructure: Problems such as stunted economic growth are complex and require long-term solutions. Yet often cities' responses are technical and short-term, focused, for example, on supporting a better after-school program in one school or renovating buildings on one block. We need to require key decision makers from government, philanthropy, the nonprofit sector, and the business community to come together formally to drive long-term, more adaptive change processes.

Disrupt obsolete and fragmented approaches: Essential systems, such as education and transportation, were built decades ago and are based on now-outdated assumptions, such as the imperative of a nine-month school year to accommodate summer harvests. We need to give local leaders space to innovate and propose bold approaches that cut across traditional silos. We can't "nonprofit" our way out of our problems—nor can we fix them solely through government grants or market forces.

Engage private markets on behalf of low-income people: If we've learned anything in two decades, it is that engagement of private markets and capital is critical to sustainability and scale. We need to support solutions that combine grants with debt to attract private sector money and bring mainstream market goods and services, such as grocery stores and financial services, to underserved people.

Establish a new normal: We must establish a new way to mainstream successful innovation. We need government and business, in particular, to commit permanently to driving public and private sector funding streams away from obsolete approaches and applying them to proven solutions.

THE INTEGRATION INITIATIVE

Beginning in 2009, we designed an $85 million strategy, the Integration Initiative (TII), around these principles. We invited 19 cities to respond to a request for proposals that would result in a new definition of local collaboration. Rather than dictating the issues on which applicants should focus, we required that they explain how they would put our principles into practice for the benefit of low-income people.

After a lengthy selection process, Living Cities chose five cities—

Baltimore, Cleveland, Detroit, Newark, and Minneapolis/St. Paul—and committed to investing up to $20 million of loans, grants, and program-related investments into each. These cities face some of the nation's most important problems, from reimagining the reuse of land in Detroit to harnessing the billions of dollars of economic power controlled by Cleveland-area universities and hospitals for the benefit of low-income people and neighborhoods.

Although we announced the five winning cities only in October 2010, we already have learned an extraordinary amount:

The power of one table: Encouraging cities to create a single, multi-sector "table" for problem solving is yielding results. These tables are becoming engines for dynamic collaboration, encouraging leaders to stop working in parallel and begin deeper alignment to great effect. In Detroit, for example, the inclusion of lenders at the table has resulted in progress on $20 million of deal flow. In the Twin Cities, leaders are using the table to consolidate the governance of multiple transit-oriented developments and coordinate precious financial and human resources on solving problems.

Moving beyond the project: It is not easy for cities to focus on large systems change. For many reasons, including a hunger for short-term tangible results, city leaders default to the project, getting absorbed by the technical problems they are facing—those that have a solution and can be solved by experts. We have to keep cities focused on, in the words of Harvard University professor Ronald Heifetz, the adaptive challenges—the complex systems change—for which solutions must be invented and which take a longer time. We dedicated a substantial part of our February 2011 learning community with the five TII teams to this issue.

The paradox of the public sector: Our work has reinforced the challenge and necessity of working with the public sector. Only government can do what every city needs—combine local, state, and federal funds and redirect these resources from approaches that don't work to those that do. In places like Detroit and Newark, these efforts are helping the public sector re-engage, and in some cases, relearn how to collaborate.

The challenge of capital: Our TII selection process exposed how hard it is to match capital to community needs, especially for business expansion, commercial development, or health care facilities. Even when we made loans available, some cities had no institutions that could borrow and deploy it. Baltimore and Detroit brought in expertise and capacity; Newark created a new financial intermediary. We are working to understand the problem better and to find ways we might help cities innovate to overcome it.

The last 10 months have confirmed two fundamental assumptions we had at the outset of TII. First, leaders across sectors are hungry to come together, acknowledge that our systems for solving intractable problems don't work, and use their own financial and political capital to build a new type of adaptive collaboration that can bring about enduring change. Second, this collaboration must focus both on the means—how funders need to work differently—as well as the ends—how local actors need to change their behaviors. Living Cities is committed to supporting this dynamic collaboration in new, emergent, and responsive ways and to sharing lessons learned with the field. ■

The Missing LINK in School Reform

In trying to improve American public schools, educators, policymakers, and philanthropists are overselling the role of the highly skilled individual teacher and undervaluing the benefits that come from teacher collaborations that strengthen skills, competence, and a school's overall social capital.

By Carrie R. Leana

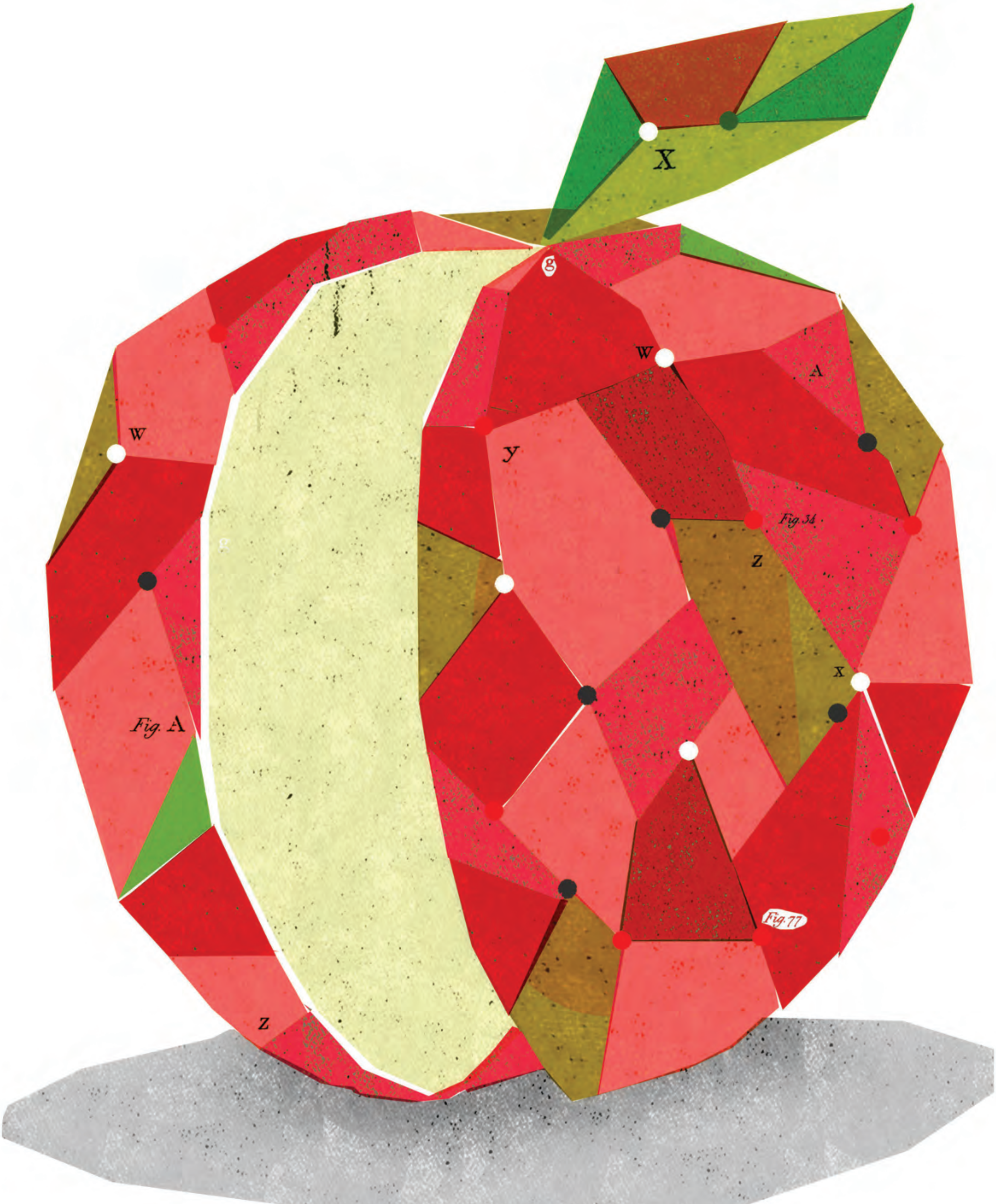
Illustration by Brian Stauffer

In *Waiting for Superman*, the 2010 documentary that describes the failure of American public education, several children and their families, along with educators like Geoffrey Canada and philanthropists like Bill Gates, drive home the argument that the key to school reform lies in improving the competence and skills of individual teachers. Making the case for a crisis in K-12 education is not difficult. Open any newspaper and you are likely to find an article reporting on the sorry state of US public education. Student competence in basic subjects like math and reading is alarmingly low and trails that of other nations. Three in 10 public school students fail to finish high school. Graduation rates for students in some minority groups are especially dismal, with just over half of Hispanics (55.5 percent) and African Americans (53.7 percent) graduating with their class.[1]

President Barack Obama and others have expressed concern about American students' deficiencies in math and science. In comparisons among OECD member countries, 15-year-olds in the United States markedly lag in mathematics, trailing their counterparts in 30 other countries, including China, France, and Estonia.[2] This should not be surprising, as a little more than a third of fourth-graders in US public schools were proficient in mathematics in 2009. Although this represents a considerable rise from 22 percent in 2000, gains have stalled in the last five years, and fourth-graders' math proficiency actually declined in the United States between 2007 and 2009.[3] Performance gets even worse as students move on to secondary school; only 26 percent of US high school students are proficient in math.

This disappointing performance has led educators, policymakers, and parents to search for ways to improve student achievement in schools. Foundations, too, are focusing on school reform, with the largest and most powerful, the Bill & Melinda Gates Foundation, providing hundreds of millions of dollars in funding to initiatives for improving teacher competence and accountability. The accountability models increasingly in fashion find their roots in the discipline of economics rather than education, and they are exemplified in the value-added metrics now gathered by large urban school districts. These metrics assess annual increments in each student's learning derived from standardized tests in subject areas like math and reading, which are then aggregated to arrive at a score for a teacher—her "value added" to students' learning. Anyone can go to the website of the *Los Angeles Times* and find a ranking based on these scores for every teacher in the Los Angeles Unified School District. Needless to say, many teachers and the unions that represent them are opposed to value-added models, arguing that they fail to capture the complex factors which go into teaching and learning.

Value-added modeling is one example of a larger approach to improving public schools that is aimed at enhancing what economists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label "human capital"—factors such as teacher experience, subject knowledge, and pedagogical skills. If a teacher's human capital can be increased, films like *Waiting for Superman* argue, the United States would be well on the way to solving its alarming educational problem. But the research my colleagues and I at the University of Pittsburgh have conducted over the past decade in several large urban school districts suggests that enhancing teacher human capital should not be the sole or even primary focus of school reform. Instead, if students are to show measurable and sustained improvement, schools must also foster what sociologists label "social capital"—the patterns of interactions among teachers.[4]

In addition to targeting teacher human capital, many believe that a key to improving public schools lies in bringing in people outside the school, or even the school district, to solve problems. These outsiders often take the form of curriculum consultants and pedagogy "experts" from university schools of education or of teacher-to-teacher "coaches" supplied by the district office. But they also include people with almost no experience in education or public schools. Here the examples are numerous, such as the Teach for America program, which seeks out recent graduates of elite colleges to temporarily join the teaching corps in the toughest schools; or the district-financed leadership academies, which select aspiring principals partly because they lack of experience in education; or the recent installation (and removal) of Cathleen Black, a magazine publisher with virtually no experience in education, as chancellor of the New York City public school system.

A natural extension of the belief in the power of outsiders is the notion that teacher tenure is the enemy of effective public education. Governors of Florida, Indiana, Nevada, New Jersey, and Tennessee all have introduced measures calling for the dismantling of teacher tenure in their states' public schools. Implicit in such arguments is the assumption that the ranks of senior teachers are plagued by incompetence and that the less experienced would do better in their place.

A third belief centers on the role of the principal. In many reform efforts, the principal is cast as the "instructional leader" who is responsible for developing and managing pedagogical practice. In many of the current principal training programs, principals are taught how to manage curriculum, monitor lesson plans, evaluate teachers, and hold them accountable for student progress. In the language of business, the principal is a line manager expected to be a visible presence in the classroom, ensuring that teachers are doing their jobs. The principal is likewise a hands-on "super teacher" whose primary job is to be involved in the day-to-day business of instructional practice.

These three beliefs—in the power of teacher human capital, the value of outsiders, and the centrality of the principal in instructional practice—form the implicit or explicit core of many reform efforts today. Unfortunately, all three beliefs are rooted more in conventional wisdom and political sloganeering than in strong empirical research. Together they constitute what I call the ideology of school reform. And although this, like all ideology, may bring us comfort in the face of uncertainty and failure, it is unhelpful and perhaps dangerous if it leads us to pursue policies that will not bring about sustained success. Our research suggests that there is some truth to the predominant ideology. Teacher competence *does* affect student learning. Outsiders *can* bring fresh ideas and enthusiasm to tired systems. And principals *do* have a role in reform efforts. At the same time, our findings strongly suggest that in trying to improve public schools we are overselling the role of human capital and innovation from the top, while greatly undervaluing the benefits of social capital and stability at the bottom.

To be clear: I am not opposed to recognizing the contributions of outstanding teachers or to holding bad teachers accountable for poor performance. But I believe in the power of objective data. The results of our research challenge the prevailing centrality of the individual teacher and principal leadership in models of effective public education. Instead, the results provide much support for the centrality of social capital—the relationships among teachers—for improving public schools. (See "How to Reform Public Schools" on opposite page.) Our results suggest that we need to broaden the focus on teacher human capital to an approach that supports both human *and* social capital development for teachers.

WHAT IS SOCIAL CAPITAL?

In the context of schools, human capital is a teacher's cumulative abilities, knowledge, and skills developed through formal education and on-the-job experience. For many years, teacher human capital was thought to be attained through a combination of formal education and certification both before entering the profession and throughout the course of a teacher's career. This has been a boon to the universities that provide such training, but several studies conducted largely by economists have shown little relationship between a teacher's accumulation of formal education and actual student learning. In our studies, teacher educational attainment similarly shows little effect on improving student achievement.

Due partly to the questions raised by these studies, recent approaches to developing teacher human capital have looked beyond formal educational requirements. Many approaches emphasize ongoing professional development. At a different end of the spectrum are the approaches of education economists, who use value-added modeling to tie teacher performance directly to student achievement with the effect of exposing underperforming teachers. A variant of this is merit pay, which monetarily rewards teachers whose students demonstrate high achievement and sometimes imposes a financial penalty on teachers whose students perform poorly.

Social capital, by comparison, is not a characteristic of the individual teacher but instead resides in the relationships among teachers. In response to the question "Why are some teachers better than others?" a human capital perspective would answer that some teachers are just better trained, more gifted, or more motivated. A social capital perspective would answer the same question by looking not just at what a teacher knows, but also where she gets that knowledge. If she has a problem with a particular student, where does the teacher go for information and advice,? Who does she use to sound out her own ideas or assumptions about teaching? Who does she confide in about the gaps in her understanding of her subject knowledge?

Social capital is a concept that gained traction in sociology with the publication of James Coleman's work comparing students in public and parochial schools. He found that parochial school students

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performed better and attributed this to the social links among parents and within neighborhoods, which strengthened student support systems. In business, social capital has received attention because of its role in creating intellectual resources within a firm.[5]

Our research shows that social capital is also at work in schools. When a teacher needs information or advice about how to do her job more effectively, she goes to other teachers. She turns far less frequently to the experts and is even less likely to talk to her principal. Further, when the relationships among teachers in a school are characterized by high trust and frequent interaction—that is, when social capital is strong—student achievement scores improve.

RESEARCH FINDINGS

Although we have conducted studies of teacher human and social capital in several school districts, I will focus here on a large-scale project conducted in the New York City public schools. Between 2005 and 2007, we followed more than 1,000 fourth- and fifth-grade teachers in a representative sample of 130 elementary schools across the city. We examined one-year changes in student achievement scores in mathematics. That is, we looked at how much each student's knowledge of mathematics advanced in the year he or she spent with a particular teacher. We also took into account the economic need, attendance, and special education status of a child, because these factors might affect not just the level of student learning but also the rate of learning growth.

We examined several facets of teacher human capital, including experience in the classroom and educational attainment, as predictors of student achievement gains. We also had all teachers respond to a series of classroom scenarios developed and validated at the University of Michigan, which measured each teacher's ability to instruct children in the logic of mathematics.[6] Thus our human capital indicators included teacher education, experience, and ability in the classroom.

In addition to these more objective indicators, we surveyed more than 1,200 kindergarten through fifth grade teachers in one New York City subdistrict and asked them to report how competent they felt teaching particular aspects of math. We found that many elementary school teachers reported that they did not like to teach math and did not feel particularly competent at it. Teachers in the early grades were particularly uncomfortable, but even in fifth grade, three in 10 teachers expressed little confidence in their preparation for teaching basic math concepts like ratios and fractions. As explained by one New York City math coach: "Elementary school teachers are math-phobes. They are scared of teaching math because they don't feel like they're very good at it themselves."

So we asked the teachers whom they talked to when they had questions or needed advice. Did they go to other teachers, to the school principal, or to the coaches hired by the district specifically to help them to be better math teachers? And how much did they trust the source of the advice they received? What we found is that in most instances teachers seek advice from one another. Teachers were almost twice as likely to turn to their peers as to the experts designated by the school district, and four times more likely to seek advice from one another than from the principal. As one New York City teacher explained, "It's dangerous to express vulnerability to experts or administrators because they will take your professional status away" and replace it with scripted textbooks.

Most striking, students showed higher gains in math achievement when their teachers reported frequent conversations with their peers that centered on math, and when there was a feeling of trust or closeness among teachers. In other words, teacher social capital was a significant predictor of student achievement gains above and beyond teacher experience or ability in the classroom. And the effects of teacher social capital on student performance were powerful. If a teacher's social capital was just one standard deviation higher than the average, her students' math scores increased by 5.7 percent.

One New York City teacher described how social capital works in her school: "Teaching is not an isolated activity. If it's going to be done well, it has to be done collaboratively over time. Each of us sets our own priorities in terms of student outcomes. For example, one teacher might emphasize students knowing all the facts and operational skills. Another might think that what's most important is to develop a love of learning in students. Still another teacher might want to develop students to be better critical thinkers and problem solvers, and they're not as concerned about students memorizing the facts. A good teacher needs to help students develop all of those things, but it's easy to get stuck in your own ideology if you are working alone. With collaboration, you are exposed to other teachers' priorities and are better able to incorporate them to broaden your own approach in the classroom."

What happens when you combine human and social capital? What if teachers are good at their jobs *and* also talk to one another frankly and on a regular basis about what they do in math class? If human capital is strong, individual teachers should have the knowledge and skills to do a good job in their own classrooms. But if social capital is also strong, teachers can continually learn from their conversations with one another and become even better at what they do.

Our results in New York City confirmed this expectation. We found that the students of high-ability teachers outperformed those of low-ability teachers, as proponents of human capital approaches to school improvement would predict. More significant were the interactions between human and social capital. Students whose teachers were more able (high human capital) and also had stronger ties with

How to Reform Public Schools

THE PREDOMINANT IDEOLOGY

Power of the Individual: Reform efforts are focused on improving the capabilities of the individual teacher.

Wisdom of the Outsider: Bring in outside experts—or even novices—to solve problems.

Principal as Instructional Leader: The principal is the leader of school instructional reform.

THE REALITY

The Power of the Collective: The teaching staff is engaged in school reform collectively.

Reform from Within: Trust and meaningful communication among teachers are the bases of true reform efforts.

Principal as Protector: The principal supports teacher reform efforts through building external relations.

their peers (strong social capital) showed the highest gains in math achievement. Conversely, students of teachers with lower teaching ability (low human capital) and weaker ties with their peers (weak social capital) showed the lowest achievement gains. We also found that even low-ability teachers can perform as well as teachers of average ability *if* they have strong social capital. Strong social capital can go a long way toward offsetting any disadvantages students face when their teachers have low human capital.

I interviewed a teacher from a California school district who provided a vivid example of how human and social capital can be mutually reinforcing: "In my school, we ask teachers to set up a schedule where they observe someone else's classroom at least twice a year. Teachers really see the benefit, and we get 80 to 90 percent voluntary participation. So not only does the teacher who is being observed get peer feedback, but the observing teachers learn new methods or approaches. With new teachers this is really important, and most are really grateful for the help. One year I had a brand-new teacher who had never really taught before. She spent every one of her prep periods just observing my class and what I taught, and then she would do the same thing in her class a few days later. This sort of modeling was really helpful to her in developing her own competence and confidence."

In presenting these results to education experts, I generally find that there are lots of questions and a great deal of interest. When I present them to teachers, the results immediately resonate and many express relief that their informal work networks are finally being recognized as a valuable resource. When presenting them to school administrators, however, I have faced more skepticism and some unwillingness to let go of long-held beliefs about the need to monitor teachers and set strict guidelines for practice in the classroom. Such skepticism is captured in the words of Michele Rhee, the ousted superintendent of the Washington, D.C., school district and an ardent supporter of reform efforts that stress scripted approaches to teaching. According to Ms. Rhee, "cooperation, collaboration, and consensus building are way overrated." [7]

VALUE OF TEACHER EXPERIENCE

Teacher tenure is a topic of intense debate among education policymakers. Opponents argue that tenure systems shelter the worst teachers from dismissal or even remedial action. As New Jersey Gov. Chris Christie said recently, teacher tenure is a system "where excellence is not rewarded and failure is not disciplined." [8] New York City Mayor Michael Bloomberg has long argued against the "last in, first out" protection that tenure provides, asserting that by allowing more senior teachers to keep their jobs in tough times and laying off less experienced teachers, the district as a whole suffers.

Proponents argue that tenure protects experienced teachers from bad administrators and allows teachers to use their own professional judgment to make decisions in the classroom. After all, who is better positioned to make pedagogical decisions than the teachers who have day-to-day responsibility for student learning? These views on teacher tenure are in stark opposition to each other, although both arguments center on the value of teacher experience to student success. Tenure proponents explicitly argue for the centrality of experience in the making of a good teacher, whereas opponents of tenure implicitly undervalue experience.

Although our research does not tackle the complex social and political aspects of the tenure debate, our results in New York City clearly come down on the side of teacher experience, showing that greater tenure in the classroom leads to higher student achievement gains. There is one caveat to this finding, however, and it concerns where that experience is gained. Students show stronger growth in math achievement when their teacher has spent more time teaching *at the same grade level.* The value of experience—and the growth in teacher knowledge that accompanies it—is found in what psychologists call contextualized learning or, in the case of elementary school teachers, learning how to teach children at a particular point in their chronological development.

To illustrate, let's compare two hypothetical teachers, both of whom have five years of experience teaching elementary school math. Susan Monroe has spent all five years teaching fourth-graders, while colleague Catherine Carpenter has spent two years teaching second-graders, two years teaching fourth-graders, and one year teaching fifth-graders. Our results show that Monroe's students are likely to outperform Carpenter's students. Why would this be? One could argue that Carpenter has had more diverse assignments and thus broader experience, and that her students should benefit from the breadth of human capital she's developed. But Monroe has stayed with fourth-graders and, although she hasn't had the breadth of Carpenter's experience, she has developed depth in her human capital. Learning mathematics—even at the elementary level—appears to be a sufficiently complex enterprise that the depth of teacher experience matters more than the breadth of experience.

Another factor might be the enhanced social capital that comes with tenure in one grade. Like most urban school districts, in New York City there is a significant movement of teachers from school to school and even outside of the district. We found that one-year teacher turnover rates averaged almost 20 percent in the 130 schools in our study. One cost to such high turnover is that when teachers leave, they take with them not just their human capital but their social capital as well. So if Monroe moves to a different school, not only does she take with her the knowledge gained from five years of experience teaching math to fourth-graders (a loss of human capital), but her absence also disrupts the network of relationships that the fourth-grade teachers in the school have built with one another (a loss of social capital). In some New York City schools, particularly those with a challenging student body, teacher turnover rates averaged 40 percent and more *each year.* With all the movement, many teachers felt that spending time on developing social capital was not a good investment: No one expected to be there very long.

At the same time, social capital can be a lifeline in chaos. I recently talked to a teacher who described her experience in a troubled San Francisco elementary school after being involuntarily transferred to teach in a new grade. "I taught fourth grade for two years, then, without asking, I got switched to third grade. I really wasn't sure what I was doing, and there were so many content areas that I had never taught before, so I wasn't sure what to emphasize and what the kids were likely to struggle with," says the teacher. "I was fortunate in that I signed up voluntarily for a program that was available called Peer Assistance and Review, where an experienced third-grade teacher was my mentor, available to be my sounding board, and give me guidance and new ideas that weren't in the textbook. We had a set time to work together every week, but I talked to her informally nearly every day. This was just invaluable to me and showed the power of peer-to-peer learning."

In our research we found social capital losses to be highly detrimental to student achievement. We compared the rates of turnover in each of the 130 schools in our New York City study and related those to student achievement. As we expected, the higher the teacher turnover rate at the school, the lower the student achievement gains the following year. But it also mattered which teachers left, in terms of their levels of human and social capital. When teacher turnover resulted in high losses of either human or social capital, student achievement declined. But when turnover resulted in high losses of *both* human and social capital, students were particularly disadvantaged. These results show that teacher tenure can have significant positive effects on student achievement.

PRINCIPALS AS EXTERNAL FACILITATORS

Teachers are not, of course, the only school professionals who have been the focus of reformers. Principals, too, have been in the spotlight with much of the recent activity centered on training them to serve as the school leader of pedagogical change. To address the role of the principal, I will draw on data we collected in the Pittsburgh public schools over the past decade. In this study we examined human and social capital among teachers, but here we also focused on what the principal did to enhance or hinder teachers' efforts. We used a time diary method, asking principals to record all their activities during a typical workweek. To ensure that principals were recording activities in real time, we had each principal carry a PDA and record activities when prompted by a beeper.

We found that principals, like most managers, multitask in their jobs and also do a significant amount of unplanned work each day. On average, principals recorded more than 60 distinct tasks in a five-day workweek. As expected, they spent the largest portion of their time—an average of 57 percent, or 28 hours per week—on administrative matters like facility management and paperwork. They spent a far smaller portion of their time—25 percent on average—on instructional activities like mentoring and monitoring teachers. Still less of their time—14 percent on average—was spent on external relations like meeting with parents, developing community relations, going to community meetings, and interacting with outsiders, such as foundations and publishers, to enhance the school's resources. But it is this latter class of activities—which can be conceived of as building *external* social capital—that made the difference both for teachers and for students.

When principals spent more time building external social capital, the quality of instruction in the school was higher and students' scores on standardized tests in both reading and math were higher. Conversely, principals spending more of their time mentoring and monitoring teachers had no effect on teacher social capital or student achievement. The more effective principals were those who defined their roles as *facilitators* of teacher success rather than instructional leaders. They provided teachers with the resources they needed to build social capital—time, space, and staffing—to make the informal and formal connections possible.

APPLYING RESEARCH TO PRACTICE

What do these findings tell us about effective education policy? First, they suggest that the current focus on building teacher human capital—and the paper credentials often associated with it—will not yield the qualified teaching staff so desperately needed in urban districts. Instead, policymakers must also invest in measures that enhance collaboration and information sharing among teachers. In many schools, such social capital is assumed to be an unaffordable luxury or, worse, a sign of teacher weakness or inefficiency. Yet our research suggests that talking to peers about the complex task of instructing students is an integral part of every teacher's job and results in rising student achievement.

Second, our findings suggest that there is not enough emphasis on the value of teacher stability. We found direct, positive relationships between student achievement gains in mathematics and teacher tenure at grade level and teacher social capital. This suggests that current political efforts to undercut teacher stability and experience may come at a very steep cost.

Third, our results question the conventional wisdom about the power of the principal as the internal leader of teachers in school reform efforts. Principals spending their time on instructional activities and teacher interaction had no effect on teacher social capital or student achievement. But principals who spent more of their time on collaborating with people and organizations outside the school delivered gains to teachers and students alike.

Building social capital in schools is not easy or inexpensive. It requires time and typically the infusion of additional teaching staff into the school. It requires a reorientation away from a Teacher of the Year model and toward a system that rewards mentoring and collaboration among teachers. It also asks school principals and district administrators to become more external in their focus—spending less time looking over teachers' shoulders and more time on collaboration with potential outside supporters of teachers' efforts. But after decades of failed programs aimed at improving student achievement through teacher human capital and principal leadership, such investments in social capital are cheap by comparison and offer far more promise of measurable gains for students. ■

Notes

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FINDING YOUR FUNDING MODEL

Many nonprofit leaders seek reliable funding but are not sure how best to pursue it. Four guidelines provide a road map for leaders to identify and develop the right funding model for their organization.

By Peter Kim, Gail Perreault, & William Foster

ILLUSTRATION BY GREG MABLY

Nonprofit leaders spend an enormous amount of time on fundraising, but many typically have little idea how to secure the money they will need over the next five years. At the same time, their vision for how the organization's programs will evolve over the next five years is often sharp and clear. The rub is that a well-thought-out approach to raising revenue is essential to sustaining those programs and increasing their impact.

When they're small, nonprofit organizations can often meet their budgets by inspiring a handful of donors, seizing unanticipated funding opportunities, or cobbling together a mixed bag of funding sources. Charismatic leaders are often the key to swaying prospective funders. But as nonprofits get bigger, personal relationships and catch-as-catch-can are rarely enough to sustain large-scale fundraising needs.

In the spring 2007 issue of the *Stanford Social Innovation Review,* we authored "How Nonprofits Get Really Big," based on the Bridgespan Group's research on nonprofits that had been founded since 1970 and reached $50 million in annual revenue. Only 144 nonprofits (excluding hospitals and universities) made the cut, reflecting the steep challenge of raising funds on a large scale. How those 144 did it defied conventional wisdom: The vast majority got big not by diversifying their funding sources but by raising most of their money from a single type of funding (such as corporations or government) that was a natural match for their mission. Moreover, they created professional organizations tailored to the needs of that type of funding.

In the spring 2009 issue of the *Stanford Social Innovation Review,* we followed up with "Ten Nonprofit Funding Models," which cataloged distinct types of funding strategies that exist among large nonprofits. We identified 10 nonprofit funding models, further confirming that the paths to growth are not idiosyncratic but strategic.

Since the publication of these two articles, Bridgespan and the *Stanford Social Innovation Review* have heard from a great many nonprofit leaders. The concept of the funding model—which we define as *a methodical and institutionalized approach to building a reliable revenue base to support an organization's core programs and services*—clearly struck a chord. But many of the leaders wanted to know what practical guidance we could offer on how to identify and develop the right funding model. It is one thing to read that Susan G. Komen for the Cure is an extraordinarily successful example of the Heartfelt Connector funding model, which draws on a large grassroots individual donor base with a strong emotional tie to the issue. It's quite another to figure out if the Heartfelt Connector is the right funding model for your own organization, and if so, how to pursue it.

This article is a response to those requests for the "how" of funding models—the basic principles through which organizations can understand and investigate their long-range funding options and then develop a realistic plan for choosing and implementing them. The principles are born out of our research as well as consulting experience with dozens of nonprofit clients that have sought pathways to growth and financial sustainability.

WHEN TO DEVELOP A FUNDING MODEL

Funding models aren't opportunities to get rich quick. They generally require considerable time and investment to take hold. Many nonprofits just aren't ready to take that plunge. A nonprofit is a good candidate if it is free of immediate financial distress and can focus on developing a long-term funding strategy. Its leadership team must be willing and able to invest in the staff and systems required to support the funding model—and not consumed by efforts to keep the doors open.

Size matters, too. Developing a funding model is generally most helpful for nonprofits that generate at least $3 million in annual revenues. Because smaller organizations often can get by with idiosyncratic fundraising methods, there's no need to get over-strategic until doing so is necessary. (See "What About Small Organizations?" on opposite page.)

An organization also needs to be clear about what it wants to achieve with a funding model, which requires clarity about its programmatic goals. Does it want to propel rapid growth? Become more financially secure while remaining at roughly the same scale? Expand into a new program area? Each of these objectives is likely to imply a different "right" funding model.

For Rare, an international conservation nonprofit that set out to develop a funding model in 2010, the primary reason for creating a funding model was to fuel growth. The $12 million organization had developed an effective program model for operating social marketing campaigns to support conservation efforts, which it had tested with encouraging results in numerous countries. Rare's senior management team was ready to scale up the organization's efforts and expand to new countries. We will follow Rare's journey throughout this article.

THE BENEFITS OF HAVING A FUNDING MODEL

Finding a funding model is indeed a journey—typically neither short nor linear. And there's no guarantee that even the best-fit model will meet the nonprofit's funding aspirations. Why, then, do we advise many organizations to develop a funding model?

Simply put, we believe that having clarity about how a nonprofit will fund its mission is as important as having clarity about how it will deliver its programmatic impact. Almost every nonprofit has two jobs, each with its own set of external stakeholders. One job is to identify beneficiaries and make a difference for them with programs. But beneficiaries rarely pay the tab—or at least not all of it. Hence the second job: cultivating a distinct set of funders. Building and scaling sustainable financial support is as complicated and important as figuring out the programmatic dimensions.

Identifying and developing a funding model is a long-term investment that requires patience, but we believe it's an investment that's well worth making. Instead of seeing every funding lead as a good lead, take a methodical approach to assess each opportunity. Instead of wondering where and how to invest in development capabilities (and generally investing too little into too many), take an intentional approach on which to build.

In our study of funding models over the last several years, and our work with a wide range of nonprofits, we have established guidelines to help nonprofits identify and develop the funding model that's right for them. First, get a sense of where you are. Second, take inspiration from your peers. Third, weigh revenue potential against associated costs. And fourth, pave the road.

1. Get a Sense of Where You Are

With funding models, the way forward starts with a look back. An organization needs to reflect on the relative strengths and weaknesses of its current and historical approach to funding. This knowledge will pave the way for implementing a funding model that builds on those strengths and navigates those weaknesses.

An organization is likely to think it already knows a great deal about how it has raised money, yet there's a danger that some of what it believes is wrong. Consider the experience of an education nonprofit that believed that tours of its diagnostic learning clinics were the key to getting individuals to fund the organization. The group was so convinced of the power of site visits that it spent a disproportionate amount of time arranging tours. And it planned to build more clinics, in part to enhance its ability to raise funds. When the group examined the percentage of total funding that came from donors who were motivated by clinic visits, however, it learned that it was a startlingly low percentage. With this knowledge, the group abandoned its plans to build more clinics and refocused fund development efforts on other areas.

We recommend that organizations in search of a funding model start their research by focusing on three areas: funding sources, funder motivation, and fundraising capabilities.

Funding sources: Analyzing historical data can help an organization articulate (to board, staff, and future funders) what the current revenue streams are and how it may want to change them in the future. We suggest going back five years to get a clear picture. Important questions to answer include "What percentage of ongoing costs is covered by renewable funding sources that are very likely to continue for at least the next three to five years?" and "Across how many funders are funding sources spread?" Ideally, an organization garners revenue from three or more funders, thereby giving it a good chance of weathering the loss of one. What percentage of funding is restricted to non-core operations and programs? As a general rule of thumb, we define an organization as being in a relatively strong position if no more than 30 percent of funds are restricted to non-core activities.

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When Rare undertook its analysis, it confirmed that funding was primarily driven by a few wealthy people who were either on the board or closely connected to board members. Securing or failing to secure a gift from any one of these people had the potential to swing Rare's financial picture quite a bit; in fact, the organization's revenues had been choppy for the past few years. Happily, these loyal funders had been consistent supporters for years and did not place significant restrictions on their donations. Most of Rare's other funding, including governments and foundations, had grown in recent years, but remained at relatively modest levels.

Funder motivation: Understanding why funders give can help a nonprofit better predict which types of funders are likely to give in the future. The goal is to see if there is a natural funding match between a particular program model and the existing motivations of potential donors. Important questions to answer include "Are the funders motivated by an organization's track record, the specific population it is working with, or the personal relationships with the top leaders?"

Rare's main source of funding was a small group of affluent environmentalists who were impressed by the organization's focus on community-level conservation and its track record of proven environmental outcomes. Although Rare believed there was an opportunity to increase the number of individual donors in the coming years, the leadership team worried that the organization might hit a ceiling with this donor segment.

Fundraising capabilities: An organization needs to be honest about what funding sources it can realistically hope to secure and what organizational investments would be necessary in order to do so. Important questions to answer include "Does a single individual (such as the CEO or a board member) generate most of the revenue, or is fundraising more institutionalized?" and "What are the development team's current capabilities?" Different funding sources may require different skill sets. Someone who is successful at cultivating major donors may not be able to write complicated government grant proposals.

When Rare reflected on how it actually secured funding, the leadership team realized that personal relationships with president and CEO Brett Jenks accounted for the vast majority of the organization's funding. Although the development team provided important support, Jenks was often the linchpin in securing funding commitments from individuals.

2. Take Inspiration from Your Peers

Savvy nonprofit leaders take insight and inspiration from their peers. Nevertheless, we've seen many nonprofit leaders resist this principle, reasoning that their organization is unique and thus requires a unique funding model. Although creating a never-seen-before funding model is possible, doing so is generally far more difficult and less certain.

What is a peer organization? It may be one that is similar in issue focus (such as disease eradication) and revenue size. But if growth is a goal, the funding approaches used by peers of the nonprofit's *target* size will likely be more informative. Choosing larger peers also helps reveal organizations that are more successful at fundraising.

Because of its growth ambitions, Rare started by examining the largest and best-known international conservation nonprofits, such as Conservation International. Rare then added peer organizations that were comparable in size, such as the African Wildlife Foundation. To round out the group, it included a few well-known environmental organizations that addressed issues beyond conservation, such as the Natural Resources Defense Council (NRDC).

A first pass at identifying a peer group will likely result in a list of familiar organizations, but looking beyond the usual suspects can often bring fresh ideas. These organizations should have sufficient similarities, but also some significant differences. One group to consider is organizations that focus on different issues but cultivate the same type of funding, focus on similar target beneficiaries, or serve a similar geography. Organizations that focus on unique program niches may have fewer natural peers to study. If that is the case, selecting more nontraditional peers can be particularly useful.

For Rare, branching out meant finding organizations that excelled in raising funds from wealthy individuals. In addition to its environmental peers, Rare also included Teach for America and Opportunity International. Both organizations were known to have developed exceptionally strong individual fundraising approaches.

Once the peer group has been selected, it is time to take a close look at each organization's funding model. Two elements are especially important to understand. The first is the overall funding mix. Here the focus is on understanding the individual streams of funding—how many discrete sources the peer organization taps, what those sources are, and what tactics it uses to cultivate them. This knowledge will provide insight into key characteristics of the organization's funding approach—who its main funding decision makers are and how reliable its funding base seems to be.

The second element to understand is the programmatic, financial, and governance differences between your organization and the peer. Adopting a new funding model will undoubtedly require new capabilities—in fundraising, performance measurement, reporting, and sometimes even program design and delivery. But if these new capabilities are too far afield from the organization's current ones, the odds of success may be lower. In researching peers, a nonprofit should identify the key differences with these organizations that may make it hard to follow in their footsteps. These may include organizational structure, age and brand recognition, magnitude of development resources, use of outcome data to demonstrate results, and the size and prominence of the board.

WHAT ABOUT SMALL ORGANIZATIONS?

Even though pursuing a funding model typically isn't warranted until an organization reaches $3 million in annual revenues, some of the associated concepts can provide helpful guidance to nonprofits below this size. Practices that are likely to pay off include focusing on types of funding that are natural matches for the nonprofit's work, clarifying who the main decision makers are behind those types of funding, and understanding why those decision makers choose to support the organizations they do. Keeping these practices in mind will make it easier to develop a funding model when the time is right.

Studying any group of peers is likely to turn up a variety of funding activities. But which peers have strong funding models? Here, understanding the three defining characteristics of a funding model—the primary type(s) of funding, the funding decision maker for each major type of funding, and the motivations of those decision makers—is important. (See "Funding Model Characteristics" on right.) It's helpful to see if those three attributes match up to the 10 nonprofit funding models that we documented in our earlier research and *SSIR* article. These 10 certainly are not the only models, and a wider array of funding models applies for smaller nonprofits, but they're a good place to start.

After studying its peers, Rare recognized that some did have clear funding models. For example, Conservation International's funding approach corresponded to the Big Bettor funding model (where the majority of support comes from a small number of individuals or family foundations). And the African Wildlife Foundation, which manages extensive U.S. Agency for International Development (USAID) contracts, matched the Public Provider funding model (providing services perceived as a core government responsibility). NRDC, with its sophisticated small gifts marketing program, fit the Heartfelt Connector funding model (the same one used by Susan G. Komen for the Cure which relies on donors who have a personal connection to the cause).

It's also possible that the attributes constitute a new funding model. The test is whether the approach seems sustainable and replicable. If the peer has been pursuing it for two years or less, or if its success seems tied to a unique asset such as a specific leader or unmatched capability, chances are that it's not a funding model.

Peer funding models, once identified, need to be considered relative to the organization's own characteristics and capabilities, or ones that might be reasonably acquired. There are three important aspects to consider:

Fit with the three defining features of a funding model—type of funding, funding decision makers, and their motivations: For the model's primary type(s) of funding, would the organization's own program model allow it to appeal successfully to the relevant funding decision makers, tapping into the same motivations that lay behind their funding of peer organizations? In order to do so, would it need to make any changes to the program model—adjusting existing programs, adding new ones, serving different beneficiaries, or expanding to new geographies? Would it be willing to make those changes?

Fund development capabilities: Does the organization have the capabilities required to access the relevant sources of funds? For example, could it cultivate wealthy individual donors, or manage the complexities of government contracting? If not, could it develop those capabilities? And does it have the appetite for doing so?

FUNDING MODEL CHARACTERISTICS

1. Type of funding: The model typically revolves around a single type of funding, such as government or individual, which constitutes the majority of the organization's revenue and which the organization invests disproportionately in developing. Other smaller sources often play complementary supporting roles, but are not the focus of investment.

2. Funding decision maker: Within that principal source of funding, the model focuses on a particular type of decision maker—perhaps a government administrator or a few wealthy individuals.

3. Funder motivation: A funding model takes advantage of the natural matches that exist between funder motivations and a nonprofit's mission and beneficiaries. These motivations range from altruism and collective interest to self-interest.

Goals: Will the funding model allow the organization to achieve the goals it set when embarking on this process? For example, can it get the organization to the size it aspires to achieve? (If all peers that use it are smaller than the target, the funding model may not be able to help an organization reach its desired size.)

Two funding models were particularly prevalent in Rare's peer group: the Public Provider funding model and another model (not one of our 10) that revolved around networks of wealthy individuals. Both clearly warranted further investigation. Two other funding models—Big Bettor and Heartfelt Connector—were also represented in Rare's peer group, but with less frequency. When a critical look revealed a weaker fit, Rare decided to cross both of these models off its list. "One of the most helpful exercises was eliminating models we didn't want to pursue," says Martha Piper, Rare's senior vice president of strategy and growth.

3. Weigh Revenue Potential Against Associated Costs

In assessing a funding model, weighing costs and benefits is essential. The revenue the nonprofit can reasonably expect to access through a given funding model must be sufficient to warrant the program, staff, and systems investments required to develop it. Assessing the revenue potential of a given funding model means digging into its leading types of funding, considering in particular the priority funding sources, the total dollars awarded annually through each of these sources, and the level of competition for those funds.

One of the government funding sources Rare's management team researched was USAID, having noted that several peer organizations received USAID contract funding. Canvassing the USAID web site gave them a detailed understanding of how much funding had gone to international conservation over the past several years in the countries where Rare had (or was planning to establish) programs. They then interviewed contacts at peer organizations and USAID to gauge how much funding an organization like Rare could reasonably expect to access. USAID emerged as a promising funding source that could help Rare achieve its growth goals.

Rare also sought to better understand the market of wealthy people who give to environmental issues. They referenced the Center on Philanthropy at Indiana University's "Million Dollar List," a list of individuals who have made gifts of more than $1 million. They complemented that data by interviewing contacts at peer organizations. Through this research, Rare identified promising pockets of wealthy individuals living in a handful of urban areas beyond the small geographic area where Rare's current donors clustered.

Accessing those funds, of course, comes at a cost. When a nonprofit commits to finding a funding model, it commits to change and often significant investments. The level of investment is an important consideration when deciding which model to pick, not least because things that are harder to do often bring a higher risk of failure.

In the organizations we have worked with, we have seen that investment in four areas may be required: programs, personnel, information technology (IT) systems, and communications.

Programs: It may be necessary to refine an existing program to meet the funding source's standards or to introduce an entirely new program or serve a different group of beneficiaries. That said, the strongest organizations tend to be the ones that remain focused on what they do best.

Personnel: New capabilities and more staff time are often required to develop and manage the funding associated with a new funding model. A nonprofit may need to create and fill new roles, adjust the way the CEO spends his time, replace existing staff who lack the skills the new funding model demands, add more staff in areas where it is capacity constrained, or provide more training.

IT systems: New funding models often place greater demands on IT systems, especially in performance measurement. Existing systems may not be sufficient to support the reporting requirements of new funders or to provide the information needed to manage a growing organization. And stepped-up efforts to cultivate individual donors may require a more robust online donor management system.

Communications: Depending on the funding model, top-notch communication materials may be required to support external relations and marketing. Perhaps a more compelling annual report will be important in cultivating individual donors, or more effort will be needed to garner press coverage.

Even with due diligence, there is no guarantee that a funding model will pay off, or, if it does, that it will happen quickly. A nonprofit that has identified state funding as its engine of growth and invested accordingly might still find itself coming to market in a time of state funding cutbacks. Risk assessment must be part of the calculus.

4. Pave the Road

Getting a deep understanding of one's own fundraising approach and history, learning from peers, tallying the likely costs of change and weighing them against expected benefits—are three critical steps on the road to a funding model. And when the time comes to pilot and implement the one or two most promising funding models, a well-developed plan is essential.

Note that we said one or two promising funding models. Moving forward with more than two carries a high risk of overtaxing management and development staff. Succeeding with a funding model hinges on getting really good at cultivating its characteristic funding sources, so splitting staff in too many directions is bound to undermine even the best efforts. Few of the 144 nonprofits identified in "How Nonprofits Get Really Big" built their organizations around more than one funding model. Almost none had more than two.

Then why not just settle on a single funding model right now? The issue is uncertainty. At this stage, it may still be difficult for a nonprofit to know which model will work best, and there could be benefits in trying out the two most promising options to see which has the best prospects.

When pursuing a new funding model one should not relinquish existing funding sources that don't fit with the new model. These proven secondary sources may go a long way toward complementing the primary funding source, and serve as a stabilizer if the primary source has ups and downs. For example, although Susan G. Komen for the Cure derives the bulk of its revenue from small donations, corporate sponsorships for its breast cancer walks constitute a healthy secondary source. The new sources will become the growth engines for the future, whereas revenues from current sources may remain roughly steady, and thus represent a declining share of the organization's growing funding base.

When it was time for Rare to pick a funding model, its management team remained confident that a funding strategy anchored around public funders had high potential. They also recognized that they did not have the right development staff in place to pursue this model effectively. Accordingly, Rare's leadership team and board decided that over the next three years the organization would strengthen its longtime individual giving strategy while also pursuing the Public Provider funding model. By investing in both its current capabilities and its long-term aspirations, Rare's leadership had a plan to strengthen the organization's short- and long-term outlook.

New funding models typically require two to three years to take hold. A good implementation plan is an invaluable resource as the organization paves its new road. The implementation plan will give staff and board a shared vision of where the organization is heading. It also will establish clear milestones and a learning agenda, making it easier to track progress and make course corrections.

CLARITY IS KING

We believe that a strong funding model provides the essential foundation for programmatic success, and the lack of an intentional funding model can undermine the success of even the most brilliant program model. Rare has succeeded in spreading fundraising efforts beyond Jenks by hiring three additional fundraisers. Each covers a specific region of the United States where individuals who support international conservation are clustered, and each has a team of existing major donors and board members providing support.

Rare has also made progress in pursuing public funding. It recently won a $2 million contract from the German development group Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and is working with U.S.-based government contractor Chemonics on a USAID project. Through its implementation efforts, Rare has learned a great deal, and the management team is adapting its plans accordingly. Most notably, the organization has shifted its public funding focus to cultivate the sources that showed the most promise during the first 12 months of piloting the Public Provider model.

Reflecting on this journey, Jenks noted, "Clarity is king when running a nonprofit. Picking a sensible revenue model was one of the most liberating and clarifying things we've done to date. I empathize with leaders who constantly wonder (or are constantly asked), why not membership, what about online giving, how about government grants, or fee for service? Taking 'maybe' out of the process has already boosted our bottom line." ■

TO LEARN MORE

An in-depth guide to developing a funding model, "Finding Your Funding Model: A Practical Approach to Nonprofit Sustainability," is available at **www.bridgespan.org**

Circles of Change

By Tracy A. Thompson
ILLUSTRATION BY EDA AKALTUN

Lending circles, self-help groups, and study circles are all examples of one of the oldest and most effective tools for creating personal and social change. Although Circles offer many benefits, employing them effectively is not easy. Leveraging the potential of Circles requires a clear understanding of what they are and how they work.

One of the oldest, most widespread, and effective tools for creating personal and social change is the Circle. This organizational form is used for an array of purposes and appears under different names in a variety of contexts and cultures in countries around the world. In Sweden and Norway, study circles are an institutionalized part of the adult education system, with millions of participants coming together in small groups to learn and engage with one another. In the United States, millions of people form self-organized literature circles, otherwise known as book clubs. In Japan, hundreds of companies like Toyota and Honda invite employees to join quality circles, a kind of self-managed work team, to develop employees' talents and contributions and improve organizational processes and products. And in India, NGOs and banks regularly create lending circles to deliver financial services to the poor and to encourage community development.

Why are Circles so widely embraced? Because their very structure creates the conditions for personal and group growth and empowerment. As an archetype the Circle represents an ancient form of meeting that encourages respectful conversation. It stands in contrast to the Triangle, an alternative archetype of social interaction that reflects hierarchy and reminds people of their place within a power structure.

In a well-functioning Circle, members experience a strong sense of belonging, a compelling commitment to shared goals, a high level of accountability to themselves and to the group, a robust climate of joint problem solving and learning among peers, an intense feeling of involvement, and high trust relationships. Everyone sees herself as an equal part of the whole. The nonhierarchical nature that is the foundation of Circle interaction encourages every member to be a facilitator and a leader by sharing her knowledge and skills.

Consider the dramatic changes that a group of 20 women have undergone through their participation in the Saranayalaya Group in Pasumathur Village, Tamil Nadu, India. The current leader of the group, Krishnaveni, remembers an earlier time when many of the group members were hesitant to become involved in community

action programs because by tradition women were generally not supposed to come out of their homes without the permission of their husbands or parents. Now, after participating in a Circle, all 20 women are enthusiastically engaged in community projects. They have successfully lobbied for a number of projects to improve the village's infrastructure, including installing a bore well that supplies drinking water, paving roads in and around the village, installing trash cans on every street, cleaning public drains, separating drainage and drinking water, and constructing concrete platforms under village taps to prevent water stagnation. And by networking with similar groups in their area, they have organized a day when more than 250 villagers in the district receive eye checkups and medical treatment.

Circles such as the Saranayalaya Group are an attractive social technology because they offer a potential solution to what political economist David Ellerman has called the fundamental conundrum of assistance, namely the problem of how helpers can help doers in a way that doesn't override or undercut the ability of the doers helping themselves. All too often, attempts to socially engineer development at an individual or a collective level fail because the methods used override doers' or recipients' will and motivation. Helpers supply an answer, a service, or a program and do everything possible to motivate doers to follow the prescribed process. By externalizing both the motivation and the knowledge, however, helpers end up engaging in Triangle-like group interaction that overrides, rather than develops, doers' individual and collective abilities.

In contrast, interventions that are built on the archetype of the Circle harness the power of intrinsic motivation and the power of a group to develop knowledge and skills, to solve problems, and to take action. Although Circles offer many benefits to both individuals and groups, employing them effectively is not easy. Leveraging the potential of Circles requires a clear understanding of what they are and how they work. This knowledge can help those interested in implementing Circle technologies avoid the most common pitfalls that lead to failure.

WHAT ARE CIRCLES?

There are many types of Circles, and in such a pervasive phenomenon, there is a great deal of variation in how they are structured and operated. Nonetheless, four characteristics describe the purest forms of Circle interactions and distinguish them from Triangle-like interactions: egalitarian participation, shared leadership, group-determined purposes and processes, and voluntary membership.

Egalitarian Participation. The horizontal and collegial interaction of a Circle stands in contrast to the vertical and authority-driven interaction of a Triangle. In a Circle, people literally form a circle when they interact. Standing or sitting in a circle encourages conversational, peer-oriented, and respectful group dialogue in which members engage as equals. Often, Circles employ additional practices that further foster and reinforce these egalitarian norms, such as formalized systems for taking turns talking, reminders to listen without judgment, and methods for handling interpersonal conflict. Such practices help members to feel safe and to contribute, and they create mutual expectations for broad-based participation.

Shared Leadership. In contrast to Triangle interactions that vest leadership in one person by virtue of her authority, unique skills, or social power, Circles treat leadership as a set of functions that can be divided and shared. Moreover, Circles assume that these functions and the skills to execute them can be nurtured in any member. How leadership is developed, decentralized, and shared varies, depending on the particular Circle methodology being employed. Some Circle manuals present formalized practices to explicitly divide and rotate leadership into distinct roles, whereas others encourage leadership roles to emerge and rotate in a more informal fashion. (See "Guides to Creating Circles" on opposite page.)

Group-Determined Purposes and Processes. The egalitarian principles that underpin Circles mean that all members are viewed as having the capability to contribute in meaningful ways. In the most extreme case, Circle members collectively articulate and develop shared goals or purposes, determine how the group operates, and set the ground rules for group interaction, including how problems and conflict are handled. In other Circles, particularly those employed in microfinance, the group's purposes and process rules might be suggested by a third party, such as an NGO facilitator or bank employee. Even in those contexts, however, members are encouraged to own and modify these purposes and processes, for example, deciding how much money to save, what the repayment rules are, what constitutes delinquency, who gets loans, what the interest rates are, and the expectations for member interaction.

Voluntary Membership. Participants join Circles based on their interests and desires rather than being obligated, required, or forced to join by an authority figure. In Tacoma, Wash., women responded to fliers posted in the community and self-selected into one of seven WE-CAN Circles offered through an alliance of several nonprofit organizations. When forming quality circles, employers typically ask for volunteers. In other types of Circles, such as self-help groups and village savings and loan associations, participants are often invited to join by an NGO representative, family member, friend, or neighbor.

THE BENEFITS OF CIRCLES

Circles help individuals and groups to develop and exercise autonomy, helping them to solve their own problems and take action. But autonomy can be a loaded term, especially when we look across cultures. Autonomy is often seen as a Western concept that highlights independence and individualism, and thus it has often been assumed to be irrelevant in more collectivist cultures. But as Cigdem Kagitcibasi, professor of psychology at Koc University in Istanbul, argues, such a view confounds autonomy with separateness or individuality.

Autonomy is better thought of as agency, the degree to which an individual is able to engage in intentional and noncoerced action toward a desired outcome. The opposite of autonomy is heteronomy, where action is ruled or controlled from the outside and not willingly undertaken. Autonomy and heteronomy should not be confused with relatedness, the degree to which an individual sees herself as a separate

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entity or, alternatively, as part of an undifferentiated whole, where the boundaries of separate selves are fused with others. Separating autonomy from relatedness allows for the possibility of autonomy in more collectivist cultures. Mila Tuli and Nandita Chaudhary, both at the University of Delhi, India, use the term "elective interdependence" to describe the intersection of agency and interdependence, and their work highlights the relevance and distinctive characteristics of autonomy as it occurs in more collectivist cultures.

Many Circles target the individual and her development. For example, in more individualistic, Western cultures, book clubs and study circles enable adults to take control of their own learning and education. Other kinds of Circles, such as Alcoholics Anonymous or Simplicity Circles, help individuals learn new ways of thinking, interacting, and making decisions by themselves. WE-CAN Circles focus on enhancing women's self-leadership, helping each to identify and overcome the barriers to her educational and personal goals.

In more collectivist cultures, Circles are used to empower women, but how women express and enact their autonomy may vary from their Western counterparts. For example, in the United Nations Development Programme's 2002 study of the impact of the South Asia Poverty Alleviation Program's interventions on women's empowerment in the southern states of India, women reported that through their experience in the self-help group they were able to exercise greater choice and control in a variety of areas of their lives—engaging in nontraditional employment-related tasks, visiting new places, traveling without male support, and having a greater say in reproductive choices such as the timing and spacing of children, use of contraceptives, and abortion decisions.

In addition to enhancing the autonomy of individuals, Circles also work to enhance the autonomy of groups. They encourage a group to identify and solve its own problems and in so doing, enable a group to produce better ideas, products, or programs. For example, many businesses leverage the intelligence of groups by employing quality circles, a kind of self-managed team whose focus is to work together to improve productivity and quality. Those interested in empowering disadvantaged groups and creating social change commonly employ Circles as a tool for community mobilization. NGOs and community organizers encourage the development of study circles as a means of helping groups develop novel solutions that address community-wide problems related to racism, the educational system, and health. Research on individual self-help groups like the Saranayalaya Group document how these Circles have overcome the constraints facing women to take action on social issues in their communities, for example starting a school, helping a community member in need, providing health care education, or closing down a local liquor outlet.

THE PSYCHOLOGICAL AND GROUP DYNAMICS OF CIRCLES

What happens inside a Circle that helps individual women such as Krishnaveni to change, or helps an entire group of women such as the Saranayalaya Group to take action in their community? Social psychological research on adult learning and group dynamics reveals two main mechanisms that lead to enhanced well being, development, and autonomy of both individuals and groups. First, Circles create the conditions where intrinsic motivation flourishes and offer individuals the support necessary for change, and second, they generate a group's collective capacity for action.

Two University of Rochester cognitive psychologists, Edward Deci and Richard Ryan, have long argued that all individuals have the potential to become more self-determined and that intrinsic, rather than extrinsic, motivation is a key ingredient to this process. Individuals are more likely to be intrinsically motivated to learn and change when they experience an environment that feeds three basic and universal human needs: relatedness (being connected to and experience caring for others), autonomy (voluntary, motivated action toward a desired outcome with a sense of efficacy), and competence (being effective in dealing with her environment). Circle processes help to meet each of these needs and in so doing foster both the motivation and ability to learn and change.

That is why the basic design of the Circle is so important. Having people stand (or sit) next to one another and treat each other as equals feeds universal needs for relatedness and connectedness to others. Moreover, a Circle's emphasis on conversational, respectful, peer-oriented dialogue enhances strong and trusting relationships among members. Building strong social connections and intimacy helps to sustain a person's engagement in the Circle, providing support for continued growth and development. In particular, the highly relational nature of Circle interaction explains why they are so effective with women.

Feminist adult education research shows that connectedness and relationship are central to women's learning. Methods that expand consciousness, encourage capacity for voice, and enhance self-esteem facilitate a woman's personal transformation to change her

Guides to Creating Circles

There are several resources available to help people create a Circle.

WOMEN'S LEADERSHIP: The WE-CAN Circles are based on the Berkana Institute's Women's Circle Starter Kit, an instructional resource that includes a how-to manual, discussion topics, inspirational videos, books, and articles on women's leadership. www.berkana.org

MICROFINANCE SELF-HELP GROUPS: India's National Bank for Agriculture and Rural Development provides a handbook for how to start and run a self-help group. http://www.nabard.org/pdf/publications/manuals/formingshgs.pdf

COMMUNITY CHANGE AND STUDY CIRCLES: Everyday Democracy (formerly the Study Circle Resource Center) offers a number of downloadable guides for forming Circles. http://www.everyday-democracy.org//en/HowTo.aspx

ORGANIZATION CHANGE AND DEVELOPMENT: *The Circle Way: A Leader in Every Chair,* by Christina Baldwin and Ann Linnea (Berrett-Koehler Publishers Inc., 2010), describes the basics of Circle processes in groups, illustrating how they can be used to flatten hierarchy and increase collaboration in formal organizations.

life. According to Elizabeth J. Tisdell, a professor of education at Pennsylvania State University, women learn best when their own learning is connected to the learning of others—that is, when they get the chance to understand other women's perspectives and build on one another's ideas rather than only being told what to do. When asked about her WE-CAN Circle experience at the Tacoma Urban League, Tina (one of the women in the WE-CAN Circle) stated she most appreciated "the support [I] felt, the ability to share with others who were willing to actually listen and not tell me what I should do or who would overwhelm me with their own problems. Everyone shared and everyone listened." Women, in particular, value and respond to learning contexts that not only offer opportunities for connected learning but also foster personal and meaningful relationships.

The relational dynamics of Circles transcend both gender and culture. In Egypt, Sekem, a complex organization composed of biodynamic farms, food trading companies, a medical center, and schools, regularly employs Circles where male and female employees discuss what happened the previous day or week and what the plans are for the current day or the next week. By transforming the economic, social, and cultural reality of people living in nearby communities, Sekem's ultimate goal is to change Egyptian society to be more sustainable, equal, and just. Sekem uses Circles as a subtle but powerful socialization tool for fostering new norms and beliefs around punctuality, planning, and equality.

Ibrahim Abouleish, Sekem's founder, explains the relational dynamics generated by employees standing side by side and holding hands, regardless of gender or position, and how that leads to greater respect for others, self-efficacy, and a sense of personal responsibility. "The Circle is a very social form," says Abouleish. "We form a circle and people can see each other. But the equality and the equal opportunity is something we have been missing for a long time in this culture. Not everyone here is having comparatively equal opportunities—girls and boys, women and men. Also there are all levels of workers standing together in a circle so that they can experience that they are equal. Equality is very, very important for everybody in order to feel their dignity as human beings. I see people in Egypt—they go to their offices and to their companies without having experienced that dignity."

Circle interventions not only create a strong sense of connection, they also foster autonomy and independent action, a second factor that leads to the intrinsic motivation necessary for lasting personal growth and change. Membership in a Circle is voluntary. Although a tacit, social obligation to participate may emerge as a result of the relational dynamics, no one forces, tells, or provides external incentives for an individual to join a Circle, to talk in the Circle, or to commit to a new action or behavior. Psychologists have long known that voluntary decisions and commitments are a much stronger means of changing behavior than are those that are imposed from the outside. In addition, it's a lot easier to learn from one's peers than from being told by an "expert" what to do, how to think, or what the solution is. By design, Circles employ autonomy in a way that allows members to learn how to take action in forms that are culturally relevant and meaningful to them.

Circle practices also foster intrinsic motivation to learn and change, by feeding the universal need for competence. In Circles, the members share a purpose, and together they work to achieve that purpose. For example, microfinance self-help groups almost always incorporate training to help women master rudimentary business skills and knowledge, including learning how to sign one's name, how to evaluate business ideas, and the concepts of savings, interest, and loans. As they discuss their work together, members discuss problems and, over time, they begin to experience success in their efforts.

Geeta Prajapati's experience in her self-help group in a village in Uttar Pradesh, India, illustrates these dynamics: "Before I joined the samooh, I had no idea about banks and paperwork. I was scared to go there. But I have learnt through the samooh. Now when I go to the bank, the manager tells me to sit down and asks what work I have. I have taught the other women how to handle the work. I went with them for the first few times and showed them what to do. Now they handle it themselves without problem."

In addition to generating the intrinsic motivation that leads to individual well being, growth, and change, Circle dynamics empower groups to take action. The strong interpersonal ties and the encouragement of self-determination foster a group's belief that it has the collective power to produce desired results. Circle practices enhance a group's capacity to act. Social movement theory argues that a group's capacity to act depends in large part on the group having shared interests, a strong social infrastructure, and effective processes for mobilizing and using needed resources. (A fourth factor, a supportive political and economic environment, is environmental in nature and not directly influenced by Circle interventions.) Through the dialogue of a Circle, members identify and discuss their common interests. As they work together to articulate issues and develop their intentions, the group develops social capital. Such strong, trusting ties between members enable the sharing and deployment of resources, knowledge, and effort needed to take action on social issues in the community. Developing and strengthening social capital, in particular by increasing the trust in horizontal networks that extend beyond the constraints of family, gender-based, and other institutionalized patronage ties is an important component of enhancing the collective power of disadvantaged groups.

LEVERAGING THE POWER OF CIRCLES

Circles offer a seductive promise. Who wouldn't want to employ a method that helps others to help themselves? As with any other highly attractive practice, however, Circles run the risk of falling prey to exaggerated expectations that fuel their unthinking adoption. Indiscriminate and incorrect application of Circle practices can lead only to disappointment. To avoid these problems, Circle design should be contingent on the nature of the desired objectives and the people involved. One should also be aware of the typical dysfunctional patterns that can destroy a Circle's effectiveness and be realistic about the resources needed to establish and sustain a Circle.

One of the most important issues to consider when designing a Circle is the composition of the Circle's membership. Although an individual's decision to participate is voluntary, the invitation to participate is determined by the person or entity sponsoring the

Circle. In combination with the cultural context, the composition of a group shapes how members are likely to interact and therefore influences the implementation of additional design elements needed to create healthy Circle interaction. In general, Circle behaviors are harder to create in cultural contexts characterized by hierarchy and authoritarianism, which are manifested by the presence of unequal gender relationships, rigid caste distinctions, and well-defined socio-economic status orderings. These sorts of dynamics are why many NGOs place great emphasis on forming women-only, single-caste, or equal income self-help groups in Southeast Asia and elsewhere. Even when some of these factors are considered, groups still run the risk of being "captured" by elite interests, where a member, often the group leader, is able to dominate the group.

The cultural and institutional context and the desired objectives are also important considerations in designing a Circle. Some Circle practices maximize the degree of egalitarian participation, shared leadership, and group-determined purposes and processes, whereas others mix in more Triangle-like design elements. For example, participation in Sekem Circles is voluntary, but the purposes and the processes are determined by management, and the most senior person present runs each Circle's discussion. Incorporation of Triangle-like design elements is appropriate given the goals of the Sekem Circles and their more subtle use as a socialization tool to encourage greater personal responsibility, punctuality, and respect for others in the workplace.

Creating effective Circle interventions takes time and dedication, particularly with populations that have few resources of their own to sustain them.

One also needs to pay attention to the process and group dynamics that emerge during the Circle's formation and development. Triangle dynamics are pervasive in human interactions, so the roles that Circle organizers and facilitators play need to be carefully monitored. Circle facilitators need to be acutely aware of how easily Triangle behaviors can slip in. The helper-doer relationship is rooted in Triangle logic. It implies that helpers have more knowledge and skills than the doers or are superior in some way. Because they are helpers, facilitators run the very real risk of becoming a needed expert or source of information. In such a situation, the knowledge and skills needed to run and sustain the Circle are externalized, and Circle members never develop the competence and skills to solve problems themselves.

Ford Foundation program officer Ajit Kanitkar's research on self-help groups in India provides a good example of the tendency for facilitators to become experts and the importance of training to overcome those tendencies. In an experimental effort to increase the speed and frequency of self-help group formation, the NGO Pradan selected eight "promoters," local members of the community who had one to two years of experience in successful self-help groups. The promoters, who were believed to be conversant in group dynamics and have good communication and organizing skills, were given one day of training. The promoters, however, had difficulty letting go of Triangle-like behaviors, which had negative consequences for the Circles. For example, the promoters would correct an accounting mistake themselves rather than explaining the mistake to the group's accountant and getting her to make the correction. Pradan ended up canceling the program, concluding that additional training and monitoring would be needed.

The detailed training manuals and handbooks that accompany Circle practice represent attempts to codify the skills and information necessary for ensuring that facilitators and internal leaders don't become the sole expert. They also attempt to help groups develop ways to discuss internal group dynamics so that problems can be openly discussed, even in the face of resistance by some members. Susan Johnson and Namrata Sharma's longitudinal research on the challenges faced by microfinance groups in Kenya reveals the power of participatory training materials that can be used by facilitators and even group members themselves.

In one mixed-gender group, the male chairman dominated meetings and the treasurer had misappropriated group funds. Initially, members reported being unhappy with the leaders, saying there was a misunderstanding between them, but they were clearly uncomfortable talking about the issues. Over time, more people began attending the meetings, and at the meetings members were questioning other office bearers on the status of accounts in the group. By the end of the study, the members were explicitly using one of the provided training tools for assessing leadership qualities, and they had their first election. After being taken to the local chief, the treasurer was made to sign a contract to repay the money he misappropriated. Group attendance and participation had dramatically increased, and the group had moved beyond borrowing from the NGO to develop new practices, such as mobilizing their own funds and lend them out and instituting a policy of pledging assets before giving out a loan. The participatory training materials clearly helped the group to evolve into a better functioning Circle, one that has a greater chance of thriving over time.

As these examples show, Circles are not a quick and easy way to create personal and social change. The inherent problems in helping others to help themselves and the degree to which many human interactions are guided by the Triangle make Circles difficult to engineer. The hallmark of a true Circle is that it is self-sustaining. Instilling Circle practices that truly generate—not override, deplete, or destroy—autonomy requires a great deal of sensitivity, support, and skill. Competent facilitators and participatory training manuals can help a group to embrace the egalitarian norms and behaviors of Circle interaction. But as the examples above illustrate, the explicit and tacit knowledge and behaviors required for effective Circle functioning do not necessarily come quickly. Creating effective Circle interventions takes time and dedication, particularly with populations that have few resources of their own to sustain them. Although challenging to design and implement, Circles remain a promising social intervention for creating personal and social change. ■

BY ETHAN B. KAPSTEIN & RENÉ KIM
ILLUSTRATION BY YAREK WASZUL

Sourcing Locally for Impact

By mapping a company's relationship to the economy in which it operates—and by leveraging the relationships it discovers in that process—businesses can do much to advance their strategic objectives and advance local economic growth.

In 2000, Ian Mackintosh, technical director of Nile Breweries in Uganda, a subsidiary of the global brewer SABMiller plc, faced a problem. Sales of the company's clear beers had stalled, and given the relatively high prices for its products, the brewery was having a hard time reaching out to new consumers, most of whom were in the lower income brackets.

But Mackintosh knew that the demand for a cheaper beer existed. Low-income consumers in Uganda weren't forgoing beer consumption; instead, they were drinking home brews, with potentially severe health consequences. Home brews are widely used in many African nations, despite the fact that they can cause serious ailments and even death.

Mackintosh realized that Nile Breweries had to reduce the price of its beer if it were to reach these consumers and offer them a better, safer product. The brewery faced major constraints, however, because many of its costs were determined exogenously, including the price of its imported inputs, chiefly barley, and because of the high excise taxes that the Ugandan government imposed on beer, which the Ministry of Finance, Planning, and Economic Development considered a luxury good. But if Nile Breweries could substitute for imported barley with a local crop, it could dramatically lower its costs and then, because of its choice to source locally, be in a position to make a reasonable case to government officials for a reduction in the excise tax.

Working with Ugandan farmers, Mackintosh—a South African by birth with extensive experience in the beer industry—discovered that domestic sorghum could serve as a reliable substitute for imported barley. At first, Uganda's family farmers were skeptical about his promise to buy their crop. But once Nile Breweries bought their sorghum harvest, Mackintosh recalled, skepticism turned to enthusiasm, because the arrangement offered good prices and stable demand. And once Nile Breweries was buying produce from thousands of local farmers, Mackintosh found himself in a position to make a compelling case to the government—with the farmers' support—for a lower excise tax on the new beer.

As a consequence, Eagle Lager was born. Today it is Nile Breweries' largest selling brand. But Eagle Lager's success does not rest solely on its low-income customers. To the surprise of Nile Breweries' managers, it has also become a hit among high-income consumers, who have discovered that its taste marries well with the local barbecue.

The case of Eagle Lager exemplifies how a company can leverage its relationships with local suppliers and, in turn, with the government, to build the foundation for a successful product. In this case, Ugandan farmers provided not just inputs to the brewery, but also political support for Nile Breweries' quest for lower excise taxes. Indeed, the farmers were the hinge on which the corporate strategy of introducing a lower-priced brand turned, and they ended up benefiting greatly from a steady market for their sorghum.

Hope Ruhindi Mwesigye, Uganda's former minister of agriculture, said of the arrangement: "We have all gained from Nile Breweries' commitment to working with us to develop value-added agriculture through local sourcing from thousands of Ugandan farmers. I encourage other leading global companies to see this as a model for how to partner locally to advance economic growth."

Still, Eagle Lager has not become a well-known business model. Most managers have a long way to go when it comes to leveraging their local relationships and using them to support corporate strategy. Currently managers—especially those at corporate headquarters—tout the benefits of global sourcing because they believe it's a cheaper method of acquiring needed inputs; and they don't think deeply about the long-term benefits of establishing relationships with local stakeholders. In fact, in our experience, managers view their interactions with domestic stakeholders primarily through the lens of corporate social responsibility or public affairs rather than as a core element of their company's strategy.

In this article we argue that a careful, quantitative analysis of stakeholder relationships can provide a useful complement to the strategy-building exercise happening at most multinational corporations. Drawing from the experience of different companies in banking, mining, and fast-moving consumer goods, and operating in countries across the industrial and developing worlds, we show how a deep knowledge of local markets has opened up new business opportunities.

Leveraging corporate relationships, however, requires that managers reconsider how they acquire the goods and services that their firms need. In particular, they must ask themselves whether cost alone is the appropriate metric for making their sourcing decisions. We argue that rather than focus narrowly on cost, managers would do better from a competitive standpoint if they considered the social and economic impacts of their decisions. In short, they should contemplate the following hypothesis: *The greater the impact of a firm's sourcing decisions on local economies, the more constituents the firm will develop in support of its strategic goals.*

Why Source Locally?

Since at least the 1980s, multinational corporations have turned increasingly to global sourcing as an approach to supply chain management. Business analysts often see this trend as the result of two forces: an internal force that is coming from shareholders and the board for companies to focus on core competencies or be penalized by the stock market; and an external force that stems from the widespread belief that globalization of any and all parts of the production process will lead to higher profits. Taken together, these trends have driven managers to seek suppliers globally who have a cost advantage in providing goods, services, and labor. Because external suppliers of goods and services can account for a large fraction of a company's expenditures—significantly more, for example, than direct employment—reducing that outlay can be crucial to a company's competitive advantage and cash flow.

This tendency toward global sourcing is premised on the assumption that needed inputs can be provided at lower cost and with greater reliability, because firms with multiple suppliers won't face holdups from their dependence on a single local supplier or capricious government regulation. In many cases, global sourcing also can lead to higher quality products. Global sourcing allows companies to adopt just-in-time production more readily as supplier relationships become transactional rather than based on long-term commitments. This, in turn, reduces the need to maintain inventories and tie up costly capital. Stephen Rogers and Lisa Cooley, two executives from Procter & Gamble Co., argued in a 2004 International Supply Chain Management Conference paper that global sourcing "sounds like a no-brainer."[1]

But the Procter & Gamble executives quickly note that it's "not that simple." Problems can include rapid changes in exchange rates, which make foreign suppliers less competitive than they were yesterday; higher monitoring costs, especially when suppliers speak a language different from employees at corporate headquarters; different legal systems; and political risk. Simply put, although the benefits of global sourcing may be easy to quantify, the costs and risks are often harder to calculate and, as a result, they may be overlooked or understated by corporate decision makers.

Some scholars have sought to devise simulation models of global vs. local sourcing as a proxy for such measurements. In one particularly innovative study, Woo-Tsong Lin of the Department of Management Information Systems at National Chengchi University in Taipei, Taiwan, and his colleagues conducted simulations of several different approaches to corporate supply chains, based on different types of enterprises, goods, and services. They found that global sourcing is hardly a no-brainer, and that the reliability of global supply chains varies greatly across the goods and services provided.[2]

Our objective, however, is not to rehash these now familiar debates about global vs. local supply chains. Instead, we wish to dig deeper into sourcing decisions by examining the strategic role of local stakeholders, including not just suppliers but also consumers, governments, and representatives of civil society. These stakeholders should not simply be conceptualized as generators of goodwill or public relations for a firm in the places where it operates, but as key players in determining the success or failure of the company's market entry and market development decisions—and even of its continuing ability to secure a license to operate.

We have observed through our consulting work for leading multinational corporations that very few headquarters managers pay sufficient attention to the externalities, both positive and negative, associated with local sourcing decisions. To give just one example, we were working at the African subsidiary of a multinational corporation

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that, due to a decision made in its distant headquarters, stopped using a very competent local training company. Headquarters wanted consistency in all its training programs and signed a global contract with a large international consultancy. What the managers at headquarters failed to recognize was that the local firm had deep ties to its community and to the government, and that it was helpful to the firm in ways that went far beyond the provision of staff training. By outsourcing the training, the company reduced the number of locals it was employing and turned to expatriate expertise. The possible consequences of this type of decision in bad publicity are rarely computed at headquarters. Conversely, the possible benefits or externalities of going local are seldom analyzed.

The problem is not just one of measurement—although that's crucial and we will discuss it in greater detail below—but also one of incentives. Managers usually are rewarded for short-term improvements to a company's competitive position, as reflected, say, in its stock price. This makes transactions based on directly observable costs a tempting proposition; if a widget from a global supplier costs less to buy than a widget from a local supplier, then why not acquire it overseas? Managers have little incentive to map out all the positive externalities that local purchases may create.

But what if managers had a method for assessing the social, political, and economic impact of their business decisions? What if they could chart or map all the ripple effects of how they produce and sell goods and services? If they had such a tool, they might see the broader consequences of their sourcing decisions. That, in turn, might lead them to re-examine the costs and benefits of global vs. local sourcing, and to see these calculations in a different light. Let's consider a few cases where managers have done just that.

Mapping Relationships

We believe there are several reasons managers should map out their local relationships, including discovering market development opportunities and fostering political and civil society support for corporate strategy, as Nile Breweries found when it developed Eagle Lager. By examining relationships with workers, suppliers, nongovernmental organizations, and public agencies, managers become anthropologists, developing local knowledge that can provide insights into consumer behavior and a network of constituents who can support a company's objectives. After all, domestic actors are likely to have more influence within their communities than any multinational enterprise can muster on its own. Without broad community support, firms may even struggle to sustain their licenses to operate.

Mining companies often find themselves in that category, with local stakeholders opposing licenses to operate on the grounds that mining leaves communities worse off environmentally and economically. Indeed, mining creates so much strife that some governments choose to nationalize the industry, as happened recently in Bolivia and Ecuador. In May 2010, the Australian Parliament passed a "super tax" on all mining operations, which was transformed into a lower "resources rent tax" on only iron ore and coal after considerable industry opposition.

Most mining companies do little to improve their local relationships, often turning their backs on local communities and operating as enclaves removed from public scrutiny. By thinking strategically about their real or potential relationships with the communities and countries in which they operate, however, they can avoid these pitfalls and be viewed as valued partners in economic growth and development goals.

To provide one example of strategic thinking about local relationships, Newmont Mining Corp., the world's largest gold producer, in cooperation with the International Finance Corp., developed a comprehensive "linkages" program with suppliers based in the Ahafo region of Ghana beginning in 2006. This program focuses on developing local entrepreneurs who can provide goods and services not just to the mine but to the district that surrounds it as well. Within the last five years, the company has supported the development of local construction and catering companies, which are engaged in a variety of governmental and nongovernmental projects. Newmont Mining also has created a foundation with revenues from the mine that serves as a funding agency for local projects; the board of directors is drawn from the Ahafo region, which reviews proposals submitted by community organizations. As a result, Newmont Mining has won public support in the community for its operations. That support is vital as Newmont Mining counters perceptions that it is taking Ghanaian gold without providing much benefit to the nation and its people. (See "Newmont's Impact on Jobs in Ghana, 2009" on p. 52.)

Another example of local stakeholder building, also from Ghana, is the Standard Chartered Bank, which has operated in that country for more than 100 years. Despite this long-standing relationship, many in Ghana view Standard Chartered as a foreign enclave that finances only global corporations and big projects, such as the country's new offshore oil fields. It has come under attack from the business press and representatives of civil society for not being more active in promoting the local economy.

A detailed mapping of the bank's lending practices, however, reveals that it provides substantial support to Ghana's booming small and medium enterprise (SME) sector, which in turn generates thousands of jobs and millions of dollars in local household income and tax revenue. This evidence of impact on the Ghanaian economy, which Standard Chartered reported to the press in 2010, has come as a welcome surprise to government officials and citizens, and even to the bank's senior management. As a result, the bank's managers plan to increase lending to the SME and agricultural sectors.

For a final example, consider Heineken International. Dutch in name and origin, few people realize that the company mostly operates as a brewer that produces for local markets, often using local inputs. Heineken's "domestic flavor" has given it a competitive edge in many places, because the beer is often viewed as homegrown. By mapping out its local impact on employment, incomes, and tax revenues in countries such as Sierra Leone, Rwanda, and Nigeria, Heineken can argue to communities and governments that they are the biggest beneficiaries of the company's presence and thereby promote brand loyalty. And because of Heineken's guaranteed demand for crops, farmers have improved access to capital, which enables them to buy better seeds and fertilizer to produce higher and more reliable yields. That, in turn, means higher incomes. The benefits of going local are shared by local farmers, the local Heineken brewery, and governments that rely heavily on beer sales for tax revenue generation. In the words of Door Plantenga, former managing director of Bralirwa (Heineken Rwanda): "The economic impact assessment showed that there was much more to say about our company than what you would get from its profit and loss statement and balance sheet. An important part of the value chain, Bralirwa generates an income for thousands of Rwandans."

Newmont's Impact on Jobs in Ghana, 2009

	Jobs created by Newmont	Jobs created by direct suppliers	Jobs created by indirect suppliers	Jobs created by household consumption	Total jobs created
Newmont Gold Ghana Ltd.	1,700	N/A	N/A	N/A	1,700
Agriculture	0	200	8,000	1,900	10,100
Financial Services	0	1,000	1,800	3,300	6,100
Manufacturing	0	2,300	4,600	3,700	10,600
Trade	0	1,100	11,900	2,800	15,800
Transport and Communication	0	200	1,800	600	2,600
Utilities and Construction	0	300	700	100	1,100
Total	**1,700**	**5,100**	**28,200**	**12,400**	**48,000**

In 2009, Newmont Gold Ghana Ltd. employed 1,700 people, but the company's impact on the Ghanaian economy was much greater. As the table shows, Newmont's operations were ultimately responsible for creating 48,000 jobs in Ghana. Companies that directly supplied Newmont employed 5,100 people. Companies that supplied Newmont's direct suppliers employed an additional 28,200 people. And another 12,400 jobs were created at restaurants, retailers, and other companies by the spending of these 35,000 workers.

True, the strategy of local sourcing can easily fall victim to any number of exogenous shocks, whether in the form of tax hikes and other government policy changes, activism from nongovernmental organizations and unions, or the mobilization of the local business community against the multinational's proposed operations. But many of these shocks can be headed off in advance if managers have mapped out and are in a position to leverage local relationships. By doing so, managers and their firms might discover that they have many supporters who can help them reach their objectives.

Input-Output Tables

For managers to gain a deeper understanding of how consequential local relationships really are, they must find a way to measure them. One method for doing this is fairly well established, although few firms make active and strategic use of it. It consists of driving the company's financial statements through the national accounts of the countries where they do business. Let's call this an exercise in economic mapping, or mapping the economy from the firm's perspective. The national accounts—and, in particular, the accompanying input-output tables that almost every country produces—basically reconcile what goes into an economy with what goes out from it.

The purpose of input-output tables, created by Nobel Prize-winning economist Wassily Leontief in the first part of the 20th century, is to depict the relationship between production and consumption, or between inputs and final demand, within an economy. Input-output tables show how the output of industry A is an input to industry B. For example, glass, rubber, computer chips, and skilled labor are all inputs to automobiles, which represent a final output. Input-output tables take a matrix form, with inputs shown in the columns and outputs in the rows. The relationship between the industries is usually shown in terms of monetary values. Thus the automobile industry will consume X millions of dollars of glass, Y millions of dollars of rubber, and Z millions of dollars of computer chips. Again, managers can use input-output tables to gain a deeper understanding of how their operations relate to the economies in which they operate.

Beyond this, and no less important, input-output tables also can give managers a good idea of the multiplier effects associated with production. When the procurement managers of auto manufacturers buy goods and services, they also generate employment in these supporting industries. The firm and its suppliers pay workers who go out and spend money in the economy. All of these economic agents also pay taxes to the government. By putting the company's financial data in the input-output tables, these myriad economic relationships can be mapped and their overall impacts on employment, household incomes, and tax revenues estimated. You can be sure that the administration of President Barack Obama took these multipliers into account when it decided to save the Big Three automakers from going under. Indeed, firms most often make use of input-output tables to illustrate their effects on the economy—their so-called multiplier effects—when they are seeking government subsidies or policy changes, for example, in the context of major investment decisions.

When we ask senior managers to guess what their company's overall impact is on the economy in which it operates, they usually don't have the slightest idea. It's just not a number that's relevant to their daily concerns or to the firm's market share or stock price. And they generally don't have the foggiest notion of how much employment and household income their operations support among their suppliers and their suppliers' suppliers. They are quite literally flying blind in the countries where they operate. As a consequence, they are depriving themselves of a potentially valuable management tool for advancing their objectives.

Managers can take the economic road map provided by input-output tables and overlay it on top of their corporate strategy, discovering in the process which domestic actors are most likely to support and promote their firm's goals based on their interdependencies—as

SABMiller did when it started to work with Ugandan farmers.

This approach may seem like nothing more than common sense until one considers how most companies engage with local communities. All too often, local relationships are handled by staff in a company's public affairs division and fall into the bucket of corporate social responsibility (CSR). These public affairs executives often develop a multitude of philanthropic programs—for example, support for the local symphony and youth sports teams—designed to shape public attitude toward the firm. But these programs are rarely judged on their effectiveness, whether they rely on the firm's core competencies, or whether they are scalable and sustainable.

Further, although CSR spending typically constitutes considerably less than 1 percent of a firm's revenues and has relatively localized impacts at most, a substantially higher percentage—up to 90 percent—may be spent up and down a firm's supply chain, with influences that are felt throughout an entire economy. These suppliers provide all the necessary inputs to an industry, often including distribution and retail services and, in doing so, they create income, jobs, and, not to be overlooked, political influence.

Companies in the fast-moving consumer goods sector find that most of their multiplier effects will be felt in their distribution network. A multinational corporation like Coca-Cola Co., whose direct employment within local plants might be small, nonetheless can provide many thousands of jobs because so much of its business relies on distribution and retail sales. It is those distributors and retailers that can provide critical support to Coca-Cola when it comes time to negotiate with governments about tax and labor policies, because they will feel the pinch of any policy change that results—particularly if it reduces consumption. One way to think of local suppliers is as a political constituency.

Interestingly, some companies have used national input-output tables as a way to estimate their economic impact. But they usually have done so in the context of winning concessions from governments over, for example, tax breaks. Corporate investors like Honda Motor Co. will prepare economic impact studies when seeking incentives from American states that they are considering as a destination for a new car factory. Rarely, however, are economic impact studies used as a way to assess the multiplier effects of the company up and down the supply chain.

Why don't more firms use the input-output tables and map their domestic relationships in the way we suggest? There are several reasons. First, managers view the creation of input-output tables as data-intensive and time-consuming. The process requires the collection of information—about suppliers, for example—not generally required by investors or regulators. Second, it is difficult for managers to spin the data that comes out of this analysis. Stakeholders who see the results may always demand that the firm do more for employment and income generation. As many senior executives have told us, "Why should I put my head above the parapet?" And these studies don't tug at the heartstrings the way CSR reports tend to.

But taking the CSR approach to a firm's domestic stakeholders—including its suppliers—misses the strategic boat in three ways. First, it overlooks the obvious fact that the most important thing companies do for the communities where they operate is contribute to prosperity, employment, and economic growth. Second, it fails to map and quantify the economic links between companies and their communities. And third, the CSR approach is incapable of unifying corporate strategy with supply chain management. The result is that the firm's local relationships are left underutilized—really, they remain a wasted asset—and corporate strategy is made unnecessarily bereft of potentially crucial constituent support. In other words, all too often CSR is viewed as a means to reduce tensions between businesses and local communities. We believe this approach should be turned on its head. Companies should stress their interdependence with the places they operate and do business.

Going the (Local) Distance

In our discussions with senior managers of multinational corporations, we have been surprised that relatively few of them have analyzed their local relationships, despite the fact that the supply chain might be where they make their biggest financial outlays. By running corporate financials through input-output tables, managers can estimate how much employment they are creating and in which supporting industries, how much income they are helping to generate economy-wide, and how much tax revenue their operations are providing to government.

That type of quantitative information, it must be stressed, can be invaluable in discussions with governments and other stakeholders. Indeed, even government officials themselves can learn from this analysis. Mwesigye said of our economic impact study of the Nile Breweries operation: "The report shows the unmistakable benefits that SABMiller's investment in Uganda has brought both to the company and to our country, with 44,000 jobs supported and $92 million added to Uganda's economy."[3]

Furthermore, this method permits firms to work with stakeholders on various scenarios and on what the effects of government policy changes would be not just to the company's operations but also to the economy generally. Using this method, one could trace a government's proposed tax hike through the input-output tables to gain a better understanding of, say, the trade-offs between incremental revenue generation and employment. This is often the starting point for much more meaningful interaction with government and a focus on achieving mutually beneficial outcomes.

In short, by mapping the company's relationship to the economy in which it operates, and by leveraging the relationships it discovers in that process, businesses can do much to advance their strategic objectives in particular markets. Looking back at the experience of creating Eagle Lager, Graham Mackay, SABMiller's CEO, said, "A better understanding of your company's socioeconomic impact can help maximize its ability to make a difference through stimulating economic development." ■

Notes

1 Stephen Rogers and Lisa Cooley, "Deciding Where to Source: Local, National, Regional, or Global," International Supply Chain Management Conference, 2004.

2 Woo-Tsong Lin and Guang-Feng Deng, "Global Versus Local Sourcing for Different Supply Chain Networks: An Analysis of Order Unfulfillment Rates," *International Journal of Services Technology and Management* 7(5/6), 2006: 420-438.

3 Ethan B. Kapstein and René Kim, *The Socio-Economic Impact of Nile Breweries in Uganda*, London: SABMiller, 2009.

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By Suzie Boss

ENVIRONMENT

Trawling for Trash

▶ Visitors lingering over an al-fresco meal in the French Riviera fishing village of Saint-Jean-Cap-Ferrat might be surprised to discover that the catch of the day is plastic trash. Since May, this scenic harbor has been the pilot site for a European Union Fisheries Commission project designed to protect declining fish stock in the Mediterranean Sea while also removing tons of plastic debris from the sea.

The French government, supported by the European Union Fisheries Fund, pays for the fishermen's time. Europe's plastics industry provides special debris-collecting trawl nets (which cost from $23,000 to $57,000 apiece), and also picks up the tab for recycling and other costs.

Maria Damanaki, European commissioner for maritime affairs and fisheries, says the novel effort is one of several action steps needed to reduce pollution and restore fish stocks in the Mediterranean. The sea has become "an open wound for biodiversity, ecosystems, and our civilization," she warns. "The situation of marine litter and especially plastic litter has taken threatening dimensions."

When fishermen are trawling for plastic debris, they aren't depleting already dwindling fish stocks. Nor are they throwing back dead fish that bring low prices at market, a practice known as "discarding" that's common in these waters.

Using government subsidies to provide fishermen with an alternate income makes good economic sense, according to Rashid Sumaila, economist and director of the Fisheries Centre at the University of British Columbia. By his analysis, nearly 30 percent of the global fishing industry's $80 billion annual revenue comes from government subsidies. "Subsidies lead to overfishing. This (fishing for trash) approach leaves money in the fishing community and uses subsidies to do good work," he says. Potential benefits are threefold. "It helps the fish, cleans the oceans, and provides livelihood for fishers," Sumaila says. "It's a beautiful solution, if implemented well."

The European Union is paying fishermen to trawl for trash, to clean up littered beaches like this one.

PHOTOGRAPH BY ENVIROMANTIC/I STOCKPHOTO

Fishing for trash may be a novel solution, but it represents a mere drop in the ocean compared to the size of the problem. Once plastic bags reach the sea, they start to break down into tiny pieces of aquatic trash. These bits can get into the food chain, creating potential health risks for a variety of species, including humans. Researchers estimate that there are 250 billion plastic pieces submerged in the Mediterranean, according to Damanaki, and another 500 tons of plastic floating on the surface of the sea. Some 80 percent of ocean pollution originates on land, Sumaila adds.

Because the Mediterranean is a closed sea, it's especially vulnerable to pollution. Cleanup efforts will require a variety of measures. Italy recently banned plastic bags, and other efforts to reduce pollution at the source are under way. Meanwhile, Damanaki remains hopeful that the "visible result" of French fishermen hauling out tons of plastic will encourage other coastal communities to get in on the act.

Her willingness to pilot new ideas is drawing praise from ocean researchers. "She's doing wonders," says Sumaila, who cautions that there's much more work to be done. "But this is a good beginning."

If trawling for trash proves to be workable in the Mediterranean—which represents just 1 percent of the planet's ocean surface—the idea could set off a wave of similar activity around the globe. ■

PHILANTHROPY

Sharing Evaluations

▶ At DC Central Kitchen, a social enterprise in Washington, D.C., a fresh wave of volunteers arrives daily to help turn restaurant leftovers into meals for the hungry. "In three hours," says founder Robert Egger, "I want volunteers to go from nervous amateurs to enthusiastic believers." One clue that they've had a great experience: They post an online review of the nonprofit with the passion of someone who has just discovered a gem of a restaurant.

A better picture of the work that nonprofits do is coming into focus, thanks to increased collaboration by organizations that report on charities. User-generated content, written by those who have direct experience with nonprofits, now appears alongside more formal evaluations of charities on a variety of websites. For potential donors and volunteers, it adds up to "a 360 view of nonprofit effectiveness," says Perla Ni, who founded GreatNonprofits in 2007 with this goal in mind.

Ni (founder and former publisher of the *Stanford Social Innovation Review*) launched GreatNonprofits in the wake of Hurricane Katrina. She recalls being frustrated by not knowing which organizations were doing a good job of responding to the disaster. As survivors' stories emerged, she realized that some of the best response came from small organizations unknown outside New Orleans. Technology offered a solution to gather this scattered wisdom, leading Ni to create a Zagat-style charity review site.

It wasn't long before GreatNonprofits—an upstart in the field—caught the attention of GuideStar, established in 1994 to create more transparency in the nonprofit sector. By partnering, the organizations have enabled user reviews to flow across both sites. Content sharing extends the reach of GreatNonprofits and adds another dimension to the information that GuideStar publishes about nearly 2 million tax-exempt organizations.

User reviews offer authentic insight "into the inner workings of a nonprofit and show real-time feedback that begins to paint the picture of effectiveness," says Bob Ottenhoff, GuideStar president and CEO. His organization has invested time and resources in the partnership, he says, because "we believe that user reviews can ultimately be an important tool in measuring the impact and effectiveness of nonprofit organizations."

User reviews are just one of several tools donors and nonprofits need, Ottenhoff cautions. GuideStar recently acquired Philanthropedia, which surveys social cause experts to identify nonprofits that are having the greatest impact in specific areas. Bringing together multiple perspectives fits GuideStar's goal to "facilitate innovation and thought leadership in the marketplace," Ottenhoff says. "We consider our partnership with GreatNonprofits as part of our test laboratory, for us and for the sector."

The sector is responding. Two more organizations, Charity Navigator and GlobalGiving, have now joined the content syndication effort, which is managed on the back end by GreatNonprofits. Charity Navigator rates the financial health of more than 5,500 of the largest nonprofits using a star system. GlobalGiving is an online marketplace for nonprofits around the world.

User reviews posted on any of these sites now appear on all of them. "All our partners have their unique ways of reviewing charities and thinking of what their audience wants," says Ni. By getting more organizations on board, she hopes to build a critical mass of reviewers. The number of reviews has increased threefold in the past year, with partner sites generating 35 percent of content. "Working together makes this information credible," she says.

For nonprofits like DC Central Kitchen, there's value in "empowering our volunteers," says Egger, and inviting them to be critical. They can offer feedback that nonprofits need to hear. But, he adds, "it needs to go beyond 'I (heart) this nonprofit.'"

As the charity evaluation field continues to evolve, Egger sees nonprofits searching for right-sized tools. "Everybody's asking: What can the average nonprofit afford? What can the average volunteer (or donor) understand?" A platform that gives users a voice "has the potential to be a revolutionary tool in the sector," Egger predicts. ■

ECONOMIC DEVELOPMENT

It Takes a General Contractor

▶ Jake Harriman's story reads like a screenplay: Decorated military officer has epiphany during combat and devotes life to humanitarian work. It's all true, except that there's no script for Harriman to follow as he fights a war on extreme poverty.

After serving seven years in the United States Marine Corps, Harriman became "hell-bent on the mission" of eradicating the roots of poverty. In Iraq and elsewhere, he saw poor people driven to desperate measures—including terrorism—because they were "stripped of choices." Realizing that one-sixth of the world's population lives under dire economic conditions, he says, "I just got really angry and wanted to try something different."

Nuru Founder Jake Harriman identifies proven poverty-reduction programs and aims to take them to scale.

That something became Nuru International, the nonprofit Harriman founded while earning an MBA at the Stanford Graduate School of Business. With $450,000 in startup funds that he raised from classmates, professors, and Silicon Valley backers, he headed to rural Kenya in 2008 to bring a holistic approach to development.

Nuru doesn't aim to be the biggest innovator in the developing world. Instead, the young organization implements good ideas others have designed and are ready to scale up. "We act as general contractor," Harriman explains, by rolling out proven programs in five core areas: agriculture, water and sanitation, health care, education, and community economic development.

These areas echo the approach of the Millennium Villages project, a multimillion-dollar antipoverty initiative under way in 10 African nations. Nuru, starting with one pilot site in Kuria, Kenya, hopes to make its impact with a minimum of Western aid. The plan calls for Nuru to exit a community after five years, leaving behind "a completely self-sustaining model that's continuing to grow to have national impact," Harriman says. By his projections, one successful site should generate enough revenue to start two more.

PHOTOGRAPH COURTESY OF NURU INTERNATIONAL

By operating as general contractor, Nuru also hopes to integrate programs that often wind up in silos. "Together, these programs can achieve even greater impact than they could in isolation," Harriman says.

To boost crop production, for example, Nuru uses the model developed by One Acre Fund. Harriman interned with One Acre Fund during business school and saw African families grow their way out of poverty by using better farming methods. By borrowing that model, Nuru gets a faster start on improving agriculture at its pilot site and One Acre Fund scales up more quickly without adding staff or investing new resources.

This approach earns praise from Kevin Starr, managing director of the Mulago Foundation, which invests in scalable solutions across several sectors. "I had long hoped to see a viable, holistic solution to development that would capitalize on synergies," Starr says. One Acre Fund and Living Goods, two of the programs that Nuru is implementing in Kenya, are also in Mulago's portfolio. In June, the foundation decided to fund Nuru as well.

That vote of confidence doesn't mean Nuru has figured out all the answers. Finding solutions that are ready to scale is challenging, Starr admits, and implementing another organization's model adds unexpected complexities. "They may have underestimated the difficulty," he says, "but they're innovative enough to keep us interested."

Leadership development is one area where Nuru has forged its own model, drawing on Harriman's battle-tested insights plus theories from other fields. "We scoured sectors to find out how people lead in the developing world, at Goldman Sachs, on the football field, as heads of state," he says. The result is a training program for service-minded leaders who are carefully recruited from their communities.

The ultimate goal is to bring Nuru to the world's most troubled spots. "Failed states, conflict zones, volatile environments—we want to go there to reach the last, the least, the forgotten," Harriman says. Where others see despair, he smells opportunity. When it comes to seeding hope in volatile places like Afghanistan or the Democratic Republic of the Congo, he adds, "there's a real gap in the market." ■

EDUCATION

Student Retention App

▶ For an incoming college student, the first days of school can be daunting. You're scrambling for answers about everything from financial aid to course selection while navigating an unfamiliar social scene. It's enough to make you vent on Facebook. Trouble is, your old friends aren't much help in your new world.

It's a different story for students arriving at one of 35 colleges with a Schools App for Facebook. Even before setting foot on campus, students can use this customized social network to start meeting new classmates, find campus groups to join, and connect to staff and alumni. Because updates focus on their college, they don't have to filter all the social media noise to get the information they need.

"We want to make sure that by the time every student lands freshman year, they already have created this personal network around them that will help them get through school," explains Michael Staton, former high school teacher and now CEO of Inigral. The San Francisco-based company that developed the Schools App for higher education is attracting customers and investors with its plan to leverage social networking to increase college graduation rates.

One of the ugly secrets of higher education is that a substantial number of students who start college never graduate. This problem is particularly acute among students who grew up in disadvantaged communities, such as African-Americans and families living below the poverty line. For example, only 40 percent of African-American students and 41 percent of Hispanic students enrolled in a four-year college graduated within a six-year period, compared with 62 percent for white students.

Earlier this year, the Bill & Melinda Gates Foundation invested $2 million in the startup. This is the foundation's first equity investment and reflects its goal to help more students reach graduation, especially those who are the first in their family to go to college. The investment is also a sign that the foundation sees "significant demand for the product and services and the opportunity to build out a scalable platform for their delivery," says Greg Ratliff, senior program officer for the Gates Foundation.

The infusion of philanthropic dollars is helping bring the Schools App to community colleges serving large numbers of Pell Grant recipients. Many of these students are commuters on slim budgets who may not feel a strong link to campus. "They don't engage effectively with faculty, staff, and peers, and they do not access available support services," observes Ratliff. "The Schools App will leverage technology to test whether student engagement and retention can be increased using social media."

The top reasons students drop out of college have to do with financial challenges and academic readiness. "After that, there can be a lot of reasons—they don't feel like they fit in, aren't engaged with a broader community, or don't have a supportive social environment," Staton says.

The Schools App helps new students connect but within a closed, private universe. That makes it more palatable to admissions officers who may be wary of social media's wilder side. Early adopters range from Arizona State University, with 70,000 students, to Columbia College Chicago, serving 12,000. Cost to the college ranges from $10,000 to $70,000 annually.

"What students seem to want is a place to talk to their peers and a convenient way to connect to college staff. We give them a place to do both things," Staton says. Making friends seems to be students' driving interest, especially for incoming freshmen. The software suggests friends based on common interests, which might be a mutual love of the outdoors or something more specific, such as returning to college as a single parent or military veteran. "It's not about finding someone to date," Staton adds.

Many colleges are recognizing that they need new ways to connect with digital-age students who want information delivered on their terms. E-mail and snail mail tend to get ignored by this generation. Instead, Staton says, "they want an on-demand, peer-supported, student support system."

In the long run, Staton sees the need for "a new core piece of technology" to help colleges meet these evolving student support needs. For now, Inigral's staff of 15 is busy improving its killer app for freshmen. A mobile version of Schools App is due for release this fall. ■

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Networking for Sustainable Transport

EMBARQ, a network of sustainable transportation experts, has grown quickly, thanks to impressive fundraising and the design of a model program BY BRANDON KEIM

Most brand-new organizations start with small projects and then work their way up. But EMBARQ, a network of sustainable transportation experts founded in 2002 by energy and transportation maven Lee Schipper, went right to the top. Its debut project was in Mexico City, megalopolis home to 18 million people and a flagship example of urbanization's problems.

As of 1992, Mexico City had the world's dirtiest air—and that was before its automobile boom. Between 1996 and 2006, the nation's vehicle fleet nearly tripled to 21 million. Nearly a third of those cars could be found in Mexico City, leading to debilitating gridlock and even worse pollution. Those problems are not fully fixed, but a significant solution is on the road: two modern bus lines, running down what had been the city's most congested traffic corridors.

Designed and implemented with EMBARQ's help, the Metrobus system currently serves 440,000 passengers a day. The buses occupy dedicated lanes, cutting travel times in half. The result: The number of cars on Mexico City's streets has dropped by 6 percent, and the system has become a model for other cities around the world.

EMBARQ has grown as well, now employing more than 100 people—civil and transport engineers, sociologists, scientists, and architects—in five Centers for Sustainable Transport in Mexico, Brazil, India, Turkey, and Peru. They've helped design transportation programs in each country—but their success isn't rooted only in technical recommendations and traffic flow models, or even in the organization's considerable funding. It's as much about process: building relationships, catalyzing connections among multiple stakeholders, and helping develop the baselines of raw information necessary to make informed decisions.

"My belief is there's no shortage of money to do transportation right. There's a shortage of will, and a shortage of glue—something to make the shareholders stick together," says Schipper.

RISK ASSESSMENT AND DATA

Of course, any discussion of EMBARQ's lessons necessarily starts with the group's unusually fortunate funding circumstances. Schipper worked at petroleum giant Shell during the 1980s, followed by positions at Lawrence Berkeley National Laboratory and then the International Energy Agency. He parlayed those connections and his vision into a $7.5 million Shell Foundation startup grant, with EMBARQ operating as the sustainable transport arm of the World Resources Institute, the Washington, D.C.-based high-profile environmental think tank. Mexico City became EMBARQ's pilot project because Mexico's secretary of the environment had been a student of Schipper's at Berkeley. It was easy to get a seat at the table, though a seat didn't guarantee success. "You can't just pop in and say, 'What's the story?'" says Schipper. "You need to make long-term relationships." EMBARQ established a headquarters in Mexico City, its staff on hand at a moment's notice.

After devising a transportation plan—inspired in great part by the bus rapid transit of Curitiba, Brazil—the EMBARQ team mapped out the anticipated permitting process. They used an in-house risk analysis tool to evaluate the potential fallouts faced by the project's various stakeholders: politicians, bus drivers, businesses on existing routes, all the people who would be affected by a massive project in a megalopolis.

Metrobus's dedicated lanes cut travel times in half on Mexico City's longest and most crowded street.

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"The engineering part is in some ways easier" than navigating competing social interests, says Luis Gutiérrez, EMBARQ's Latin America director. "You have to create a bridge of information." The team helped arrange meetings among stakeholders and managed delicate negotiations and compromises, especially with transport providers that no longer would be allowed to work the Metrobus corridor.

DESIGNING FOR MULTIPLE SHAREHOLDERS

Create a bridge of information

Evaluate potential fallout and processes

Measure project impact

When the dust settled around the initial 20-kilometer line down the Avenue of the Insurgents, Mexico City's longest and most crowded street, Metrobus ownership was divvied up in an unusual public-private partnership. The city-operated Passenger Transport Network would be responsible for one quarter of all runs. The rest went to Corridor Insurgentes SA, an independent cooperative formed by microbus owners who had run the buses displaced by Metrobus.

It's precisely these factors that often impede well-designed transport development plans, said Ralph Wahnschafft, a sustainable transport officer at the United Nations. "The participatory decision-making process is often overlooked," he says.

Three years after EMBARQ arrived, the first Metrobus ran. A second line started in 2009. Similar projects are planned in 18 other Mexican cities—not necessarily with EMBARQ's guidance, but with Mexico City as inspiration. "It took a lot of bargaining. All the concessionaires, the informal sector, the bus companies, they hated that. But now they have a model," says World Bank energy specialist Todd Johnson. "The Metrobus is the best bus system I've seen in Latin America. The hard part was getting everyone to agree on it."

Aside from Schipper's personal connections, EMBARQ's choice of Mexico City was fortunate in another way. Thanks to the city's struggle with air pollution, solid data existed on pollutants, vehicle use, and other information needed to evaluate various Metrobus scenarios.

EMBARQ doesn't have the institutional resources to perform these measurements itself, but it defines the parameters: investment leveraged, people served, travel time saved, carbon dioxide emissions avoided, air pollution reduced, road fatalities avoided, and increased physical activity. Sometimes the data are collected but scattered among institutions or private consultancies, in which case EMBARQ encourages sharing. Sometimes the capacity to gather data exists, but it isn't used. "It's not just about getting data; it's also getting institutions to care about it and collect it," says Schipper.

Being able to measure one's own impact is a strategy "that can be applied to any organization regardless of resources," says EMBARQ information director Rhys Thom. "It seems simple and even obvious, but it's amazing how many organizations don't have indicators to help them evaluate whether or not they are successful."

In addition to its 440,000-person daily ridership and halved travel times, Mexico City's EMBARQ-designed Metrobus lines have reduced accidents on its main thoroughfare by 30 percent. Air inside the Metrobuses contains 30 percent fewer pollutants than the buses before; outside the buses, 80,000 fewer tons of carbon dioxide are avoided each year, along with 690 tons of nitric oxide, 144 tons of hydrocarbons, and 2.8 tons of fine particulates. In absolute terms, those numbers represent a tiny proportion of all transportation pollution in Mexico City—but extrapolated to the anticipated 10-line service, the Metrobus "would have a huge impact on pollution savings," Gutiérrez says.

NO SHORTAGE OF FUNDERS

Thom noted that EMBARQ's ability to measure project impact is a selling point to donors, of which there has been no shortage. The Shell Foundation has renewed its initial $7.5 million grant, a figure matched in 2006 by the Caterpillar Foundation. Other sources provide about $2 million per year, and in 2009 Bloomberg Philanthropies pledged $30 million over five years.

As its means and experience have increased, so has EMBARQ's scope. The nonprofit is working beyond transportation—on, for example, a housing program in Aguascalientes, Mexico, where EMBARQ helped design a low-income housing development for 40,000 people; that project shaped an ongoing slum-upgrading project in Rio de Janeiro. EMBARQ is also active at national policy levels, helping governments develop white papers, action plans, and other technical minutiae that help vague development intentions become concrete plans. In India, EMBARQ helped India's Ministry of Urban Development write the National Urban Transport Policy, which established bus-promoting guidelines for cities applying for federal sustainable transportation funds.

India's per capita rates of private automobile usage are growing fast; in the next two decades, India's urban population will rise from 28 percent to 40 percent. Cities like Indore, population 1.5 million, where EMBARQ started working in 2008, will absorb most of that growth, likely doubling in size. Indore represents an opportunity to solve transportation problems before they start. When EMBARQ arrived, the city's public transport demand was met mostly by a loose mix of minibuses and taxis with no fixed schedules. EMBARQ started by launching a study, to learn residents' transportation patterns and demands. As in Mexico, the network helped bring public and private stakeholders together, a crucial task given India's entrenched bureaucracy. An EMBARQ-designed bus rapid transit system is expected to start operating this year.

In the absence of transport solutions, the transportation needs of what Prabhu calls India's "exploding cities" will be met with gas-guzzling cars and sprawl. But in the United States, the home of gas-guzzling sprawl, there's generally little hope for the sort of progressive, large-scale sustainable transportation projects being built in Indore and Mexico City. Private enterprise alone can't provide the necessary investment; city and state budgets are tight; and at the federal level, the notion of sustainable transportation—with its implicit critique of pollution and wastefulness and explicit monetary investment—is anathema to many Republicans.

Perhaps most important, fossil fuel prices in the United States are still relatively low. It's unlikely that new taxes or tariffs, or an end to oil subsidies, will raise prices enough to make green transportation a US requirement in the near future. So long as oil is cheap, says Schipper, "it's really easy to do nothing." And no amount of insider contacts, good intentions, and better planning is likely to change that. ■

Rapid Response for Education

The National Math and Science Initiative aims to avert the crisis in secondary school education by replicating proven programs BY SUZIE BOSS

At North Laurel High School in southern Kentucky, teacher Bridgette Napier has created a hall of fame at the entrance to her math classroom. This spring, she "inducted" 14 seniors who earned passing scores on the Advanced Placement calculus exam. Although Napier has been encouraging students to take higher level math courses throughout her 15-year teaching career, few attempted the rigorous AP tests in the past. What's changed? Since 2008, North Laurel High, which typically sends less than half its graduates on to college, has become part of a comprehensive program that offers everything from professional development and mentoring for AP teachers to cash incentives for students. "I've become a better teacher," Napier says, "and our students realize you don't have to come from somewhere else to be successful."

Preparing students from all kinds of communities to thrive in the fields known collectively as STEM (science, technology, engineering, and math) has become a national obsession. President Barack Obama, *New York Times* columnist Thomas Friedman, members of the National Academy of Sciences, and corporate CEOs all offer a similarly urgent message: If we don't act fast to fill the STEM pipeline with qualified and capable students, we risk a stalled economic engine and a future of missed opportunities.

The National Math and Science Initiative (NMSI), launched in 2007 with corporate and philanthropic dollars and an all-star board, aims to avert the STEM crisis through a rapid-response approach. CEO Tom Luce, former assistant secretary of education, says what sets NMSI apart from other education reform efforts is its focus on replicating proven programs. Instead of waiting for a moon shot to improve math and science education, NMSI is betting on ready-made strategies that can be rolled out immediately. "We're not a startup. We're not a garage innovator," he says. "We go find existing programs that have proven results and figure out how to get them replicated."

For starters, NMSI has invested $126 million to scale up two signature programs "and show communities that success is possible quickly," Luce says. He has been working to improve public education since 1983, when *A Nation at Risk* sounded an alarm about the declining quality of American schooling. "Back then, we had to convince people there was a problem," Luce says. "Today, we have to convince them there's a solution."

Recent years have brought a spate of bad news, with US students faring poorly on international comparisons of achievement in

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George Johnson, a mechanical engineering professor at UC Berkeley, trains math and science teachers for CalTeach.

PHOTOGRAPH BY RICHARD SCHULTZ

math and science. Interest in STEM subjects is lagging along with achievement. The President's Council of Advisors on Science and Technology cautions that many of the country's most proficient students are choosing other professions over science and engineering. Qualified math and science teachers are in short supply, prompting the president to set a goal of recruiting 10,000 new teachers in these fields within five years.

Luce insists there's no shortage of good strategies to change the picture. He's seen them rolled out in one pilot program after another—but seldom replicated.

A Texan prone to folksy phrases ("It's time to stop stewing and start doing"), Luce has built NMSI's two-pronged approach on programs piloted in the Lone Star State. The larger effort is the Advanced Placement Training and Incentive Program. APTIP, developed in Dallas, focuses on improving the ability of current teachers to teach AP courses, touted as a gateway to college success. The second program, UTeach, was developed at the University of Texas at Austin and builds the preservice teacher ranks with candidates who have strong foundations in math and science.

EXPANDING AP OPPORTUNITIES

Once the domain of only the most talented and privileged, AP courses are now standard fare for college-bound students. Yet minority, inner-city, and rural students have long been underrepresented in AP. For many, prior educational experiences don't prepare them for the pace and rigor of AP. Even if they are ready, there aren't enough qualified teachers to go around.

STRATEGIZE FOR EDUCATIONAL OUTCOMES

Replicate proven programs

Improve current teacher corps while recruiting new educators

Grow via public-private partnerships

APTIP offers professional development and incentives to bring AP courses in math, science, and English to more students, especially to minority and low-income teens. The program goes beyond access and aims to increase the pass rate on AP exams. Research cited by NMSI shows a correlation between students who pass AP tests in high school and those who go on to earn college degrees. Now offered at 229 high schools in six states selected for the first round of competitive, five-year funding, APTIP is already producing measurable results. Luce cites a 97 percent increase in the number of students taking *and passing* the national test. The average annual cost of $120,000 per site makes the program a bargain, he adds, when it comes to changing the culture of a school to emphasize academic achievement.

Teachers say they appreciate the peer-led, practical approach to professional development. Anthony Palombella, a high school science teacher with a doctorate in molecular and cellular biology, entered teaching with a mastery of his content area. Attending the summer institutes with his colleagues "adds more tools to my tool belt as a teacher," he says.

Having a range of teaching strategies available—from technology-assisted labs to hands-on activities using duct tape and Velcro—helps diverse learners understand challenging concepts. At Cosby High School in Midlothian, Va., where Palombella teaches, enrollment in AP biology has swelled from 20 students per year to more than 100, and similar gains are occurring in AP math, English, and other science courses. "Students who might not have thought of themselves as AP material are taking these classes," he says.

Teachers also learn pre-AP strategies to introduce as early as middle school. That gets students ready for tougher high school classes, says Trevor Packer, vice president of College Board, which administers the AP program. He credits APTIP for "helping overcome the two greatest barriers to student participation and success [in AP]": improving access to qualified teachers and student readiness to succeed.

UTeach, currently offered on 22 college campuses and enrolling nearly 4,000 undergraduates, focuses on another critical piece of the STEM puzzle: recruiting and retaining the next wave of STEM teachers. Participants in the four-year program fulfill requirements for a math or science major, while also taking education courses that prepare them to teach high school. Graduates are not only entering the teaching profession with deep understanding of math and science, but they're also sticking around. Some 92 percent of UTeach graduates immediately start teaching math and science. Five years later, 82 percent are still in the classroom, compared with a national retention rate of about 50 percent.

University of Texas at Austin education professor Anthony Petrosino played a key role in developing the UTeach curriculum. New teachers' knowledge of math and science is a hallmark of the program, he says, along with "faculty who are active researchers." It's no accident that UTeach courses incorporate research about learning science. And coursework reinforces best practices in assessment, equity, and technology integration.

The most popular aspect of UTeach may be the fieldwork. Undergraduates are assigned to master teachers' classrooms "early and often," Petrosino says. That gives them real-world context for what they are learning, plus a chance to find out fast whether they're cut out for teaching. Andreea Popa, graduate of UTeach-University of North Texas, arrived at her first teaching job in the Dallas area "so well prepared," she says. Classroom management issues that plague many first-year teachers haven't been a worry in her algebra classes. She can concentrate on convincing a new generation to love math as much as she does.

QUESTIONING GOALS AND REWARDS

Despite support for NMSI from corporate, philanthropic, and government sectors, not everyone is convinced that a national expansion of rigorous AP courses is the best solution to the STEM crisis. Alfie Kohn, author of *Punished by Rewards*, says AP courses "typically offer an accelerated version of the worst sort of traditional teaching: lecture driven, textbook based, and test focused. People confuse harder with better."

Luce has heard that argument, but counters that AP offers the best available combination of curriculum and assessment. "Right now, it's the highest standard we have. If there's a better program in the future, we'll consider it," he says. "Meanwhile, we're giving opportunities to kids who have never been given the opportunity to stretch themselves."

The offer of cash incentives—$100 to students who pass AP tests plus a per pupil bonus for their teachers—also has rankled critics. Robert Schaeffer, public education director of FairTest, calls such rewards "bribes for the kids, bounties for the teacher." Tying teacher bonuses to student achievement "is further incentive to teach to the test," he says. Pay for performance "is not positive and may have negative consequences long term."

Kohn points to a research base of 75 studies showing that external rewards can get in the way of internal motivation to learn. "What rewards can never do is help kids to become more effective or enthusiastic learners," he says.

Healthy critique is important as these programs expand. An iterative design process has improved UTeach over the years, Petrosino says, and he hopes replication allows for ongoing fine-tuning. "It's easy to fall into PR mode," he admits. "We need to keep reflecting, refining, responding to research, and addressing new challenges."

From Luce's vantage point, the biggest challenge is securing public and private resources to fund expansion so that NMSI lives up to its name and achieves national impact. There's no time to waste, he adds. "We need to move the needle in all 50 states." ■

Action › What Didn't Work

When the Big Bet Fails

The Northwest Area Foundation learns—and shares—hard lessons from a 10-year initiative BY SUZIE BOSS

WHEN KARL STAUBER interviewed for the president's job of the Northwest Area Foundation (NWAF), he didn't equivocate about his views on philanthropy. "Feel good" grantmaking, he cautioned, may make for friendly chatter at cocktail parties but creates little lasting change. "If the foundation were genuinely interested in making a difference, I told the board members that they would need to know—and be comfortable with the fact—that they were going to make people angry," he recounts in *Wit and Wisdom: Unleashing the Philanthropic Imagination*.

Under Stauber's direction, the St. Paul, Minn.-based foundation pursued a 10-year $200 million plan to reduce poverty across eight states. By partnering with those most affected by poverty—on tribal reservations, in struggling rural areas, and among the urban poor—the foundation hoped to generate high-impact solutions.

Before the decade was up, NWAF would be threatened with a lawsuit in one community, suffer stinging public criticism from a Native American organization, and endure staff churn and board dissension. Although there were some notable successes, by 2008 the foundation was ready for a new course and president.

Today the NWAF "has returned to its roots as a more traditional grantmaking organization," says President Kevin Walker. It no longer invests in getting new organizations off the ground, focusing instead on grantees with proven track records. Ten-year investments have been replaced with more traditional three-year grant cycles. Yet despite these and other changes in board governance, the foundation has not given up on its long-term vision.

"They haven't thrown the baby out with the bathwater," says Carol Lewis, CEO of Philanthropy Northwest. "They are sticking with their commitment to poverty reduction, even when it's hard."

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Nichole Maher, executive director of a Native American nonprofit, called NWAF's grant proposal process "disastrous."

PHOTOGRAPH COURTESY OF NORTHWEST AREA FOUNDATION

Instead of quietly closing this chapter, the foundation has bravely gone public with lessons learned. "If you're trying to blaze a new trail, you have an obligation to turn to your peers and say, 'Here's what we think we found,'" says Walker. *Gaining Perspective: Lessons Learned from One Foundation's Exploratory Decade,* a report prepared by FSG Social Impact Consultants, delivers a frank assessment: risky investments in untested programs, bold vision but fuzzy strategies, and a board often unaware of what was happening in the field.

The foundation's willingness to learn from missteps has earned it the respect of fellow philanthropists and former critics. "What's amazing about this story is that they totally addressed the issues," says Nichole Maher, director of an urban Native American organization whose protracted relationship with the foundation proved "catastrophic." She adds: "I've seen philanthropic institutions make mistakes and not hold themselves accountable. What they've done, in such a short time, is truly admirable."

PARTNERSHIPS AND PITFALLS

The farm crisis of the late 1970s hit hard in Miner County, S.D. High school teacher Randy Parry watched bright young people exit in droves, leaving behind an elderly population and dwindling revenues. "We knew we had a problem," Parry says with Midwestern understatement. By the mid-1990s, concerned citizens began meeting. Youth were put in charge of visioning sessions that attracted business owners, farmers, ministers, and others. "We knocked down the walls of the school and brought people together to identify issues and possible solutions," Parry says.

Those conversations caught the attention of NWAF, which was looking for communities for its new Ventures program. The foundation's cornerstone antipoverty program would eventually award $150 million in 10-year partnerships. Stauber describes the approach as "single outcome, not single focus. Communities were given great latitude in deciding how they wanted to reduce poverty."

In 2001, Miner County became the first NWAF Venture site. Securing $5.8 million for a decade meant going through a lengthy strategic planning process and establishing a new regional nonprofit, which Parry left a 30-year teaching career to direct. "We were the guinea pig," he says, but their initiative proved catalytic for the region. Foundation dollars attracted millions more for industry, housing, and community improvements such as a landmark Rural Learning Center and clean-energy demonstration site.

AVOID BOLD VISIONS WITH FUZZY STRATEGIES

Don't invest in untested programs

Build knowledgeable staff and strong partnerships

Listen to constituents

That first success proved hard to repeat. Some factors are clear in hindsight, says Parry, such as having a consistent program officer "who became like an adopted daughter here." More critical, Parry suspects, was the community engagement that preceded the foundation's involvement. "We were already on a path to change. This was truly our plan." Elsewhere, outside consultants were brought in to help communities through the exploration phase with NWAF. "They'd call us and ask, 'Who did your plan?'" Parry recalls. "I'd say: 'We did. It took 341 meetings.' Well, they didn't want to hear that."

Stauber, now president of Danville Regional Foundation in Virginia, sums up the key to success as "readiness. Ten years is a very short time for communities to become ready and to reduce poverty. You can't buy readiness."

FROM COLLABORATION TO CONFLICT

Portland, Ore., with a Native American population of 50,000, was one of four cities that collaborated on a proposal for an Urban Indian Community (UIC) Venture. Maher, executive director of the Native American Youth & Family Center (NAYA), recalls steady turnover and shifting messages from the foundation during the exploration phase. "We went through six staff in the first six months, a dozen in two years, tons of consultants. There were no templates or guidelines." Instead, she recalls submitting drafts that her team had labored over "and being told no, that's wrong. You're not following best practice. We felt belittled." Agreeing on a definition of "poverty"—a word that Native Americans don't limit to dollars-and-cents metrics—revealed the cultural gap between funder and grantees.

The planning team persisted for two years, Maher says, "because it was such an opportunity to do something significant for our community." But the tantalizing pot of gold remained out of reach—exactly as elders had warned might happen. An initial proposal of $20 million for four cities shrank to $14 million for 30-plus cities. Then in 2006, the foundation denied the UIC's plan altogether.

Maher went public with her frustration, speaking out on behalf of all four cities. In a lengthy point-counterpoint with Stauber in *Responsive Philanthropy*, she called the proposal process "disastrous," accusing the foundation of cultural incompetence bordering on institutional racism.

More conflict erupted in Yakima, Wash., where a local resident threatened a lawsuit (eventually withdrawn) when two years of exploration ended in a turndown from NWAF.

Clearly, launching new partnerships proved harder than the foundation expected. Looking back, Stauber can see that each site needed "a backbone organization, a competent local partnership with adequate capacity and sufficient standing in the community to play a critical leadership role. NWAF had few of these partners."

Power dynamics between funder and grantees also proved tricky. "We helped to stand up new organizations in hopes that they would bring all voices to the table. But did they have community credibility or were they the creation of an out-of-town funder? There was ambiguity at best," Walker says.

Gaining Perspective blames implementation challenges on a combination of ambitious goals and ill-defined strategies: "Foundation board and staff agreed on a broad definition of the 'what' (the foundation's mission of reducing poverty), but did not come to agreement on the 'how.'" Unclear expectations left staff in a position of "shooting darts at a moving target."

BRIGHT SPOTS, FRESH STARTS

When Walker arrived as NWAF president in 2008, he found a board "ready to do things differently." The board changed its governance structure, for example, to keep members better informed about programs and more engaged with staff.

What didn't change was the goal of reducing poverty. To that end, NWAF has adopted three key programming strategies: expand assets and wealth for low-income people; build leadership and organizational capacity; and seek better public policy solutions. The foundation that once took a go-it-alone approach to funding novel programs is now open to public and private collaboration, Walker adds.

NWAF also has committed itself to becoming "a better listener," says Walker. "We want to organize our work around questions rather than around answers. We're trying to listen carefully to people in low-income communities and help them figure out their agenda for making change." The foundation is working especially hard to do better with Native American communities, who receive a third of NWAF grants. Nationally, less than a fraction of 1 percent of philanthropic dollars reach Native Americans.

Cheyenne River Sioux Tribal Ventures in South Dakota was the last site awarded funding under the NWAF Ventures program. The reservation has benefited from lessons the foundation learned in other communities, says Eileen Briggs, the project's executive director. "Indian country is a small world," she says. "We'd heard the stories." Briggs credits NWAF support for empowering her tribe "to try out our most creative ideas and do the best work we could do." When she read the criticism of NWAF in *Gaining Perspective*, she thought: "Is this the same organization we've been dealing with? It doesn't describe our experience."

Last year, Walker and others from NWAF attended a powwow at the new 10-acre site of NAYA in Portland. It was purchased with help from NWAF, which eventually granted $10 million to the four urban Native American programs it previously had turned down. "Everyone in our community knew what had happened and totally embraced them," Maher says. "Our relationship has been transformed. One of the hardest challenges we ever faced has turned into one of the most positive for our community. This process helped us gain our voice." ■

Too Good to Fail

In August 2010 the US government closed ShoreBank, one of the country's leading social enterprises. Why did ShoreBank fail? And what lessons can be learned from its 37-year record of innovation?

BY JAMES E. POST & FIONA S. WILSON

ON AUG. 20, 2010, the Illinois Department of Financial & Professional Regulation closed ShoreBank, the nation's first and leading community bank, and appointed the Federal Deposit Insurance Corporation (FDIC) as receiver. The closure was not unexpected. Reports of the bank's problems—and a potential rescue—had been circulating for months. But the closure brought to a bitter end an iconic example of progressive social enterprise.

During its 37 years, ShoreBank Corporation became the United States' leading social enterprise of its kind: its for-profit bank subsidiary was the largest certified Community Development Financial Institution (CDFI) in the nation. Its social impact was significant: more than $4.1 billion in mission investments and more than 59,000 units of affordable housing financed. In 2008, ShoreBank had more than $2.4 billion in assets and earned more than $4.2 million in net income. It had inspired a national movement of community development financial institutions, shaped federal community investment legislation, and served as a role model for dozens of progressive banks. The company also had influence abroad, overseeing social and economic development projects in more than 60 countries and working with Muhammad Yunus to capitalize Grameen Bank and administer microloans to the poor.

So why did ShoreBank fail? What lessons can the social enterprise community learn from its record of success? And what can be learned from its closure?

The full answers to these questions will take years to answer, as the legal and regulatory process of winding up the bank's affairs continues and the FDIC will not complete its study of the bank until August 2013. This has limited the freedom of participants to speak fully about their experience. But we have had the privilege to speak with two of ShoreBank's founders and others who are familiar with the bank's history and activities.[1]

To extract lessons from ShoreBank's failure one must understand its remarkable history. ShoreBank innovated at every turn—economically, socially, and organizationally. For almost four decades, it stood for the proposition that neither race nor wealth nor geographic location should bar an individual from access to capital to buy a home, build a business, or develop a community. The bank's motto, "Let's Change the World," served as a marketing device and a rallying cry for progressive community activism. In time, however, it also became a political red flag, stirring to action opponents of the causes ShoreBank advocated.

Various explanations have been offered about why ShoreBank failed. One view holds that the bank was capsized by the financial tsunami brought on by the subprime mortgage crisis. Another view holds that it was management errors and misjudgments by regulators that made the bank vulnerable. And still another view holds that it was the highly partisan politics of Washington, D.C., that prevented the needed capital infusion. Although there is some evidence for each theory, none is complete in itself.

Part of the challenge of extracting lessons from ShoreBank's failure is to disentangle various economic, governance, and political factors and understand how each contributed to the bank's demise. In his famous study of the Cuban Missile Crisis, *The Essence of Decision*, Graham Allison examined the actors, events, and conditions of the 1962 confrontation through three conceptual lenses: rational decision making, bureaucratic decision making, and political decision making. No single lens provided an adequate perspective to understand all that took place, but the three perspectives complemented one another and shed light on the considerations facing President John F. Kennedy and his administration. We employ a comparable approach, looking at ShoreBank's operating environment, culture, and decision making to illuminate what is known—and not known—about the organization.

A DIFFERENT BANK

ShoreBank was founded in 1973 in Chicago by a small group of colleagues from the Hyde Park Bank. In the late 1960s, Ronald Grzywinski, Hyde Park Bank's president, and his colleagues Milton Davis, Jim Fletcher, and Mary Houghton had launched a successful urban development division focused on a minority-owned small business loan program. They were community activists as well as bankers, with a passion for changing the economic future of inner-city neighborhoods. These were the days of redlining, a banking practice that systematically denied credit to people in urban, low-income, minority neighborhoods. Nonprofit economic development organizations, although strongly mission driven, were limited

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ShoreBank's Kenwood Branch on Chicago's South Side, three months before the bank was closed by the FDIC.

PHOTOGRAPH BY CARLOS JAVIER ORTIZ

by their ability to attract philanthropic support. As professional bankers, the colleagues envisioned a different approach to address the twin problems of access to capital and urban decay.

The vision was simple and radical: The bank would become an "agent of change," promoting economic redevelopment by supporting viable inner-city businesses that would provide goods, services, jobs, and housing. A commercial bank could leverage capital from deposits and make loans to amplify the impact of its shareholder equity.

A 1970 amendment to the Bank Holding Company Act placed all bank holding companies under the supervision of the Federal Reserve Board. Two years later, the board issued a list of permissible activities, which included allowing bank holding companies to invest in community development corporations *if* the primary purpose was community development for low- and middle-income people. "That led us to expand our idea—from using a bank to using a bank *holding* company," remembered Mary Houghton, a ShoreBank co-founder. Luckily, the Federal Reserve Board then issued a favorable interpretation of its own regulation that reinforced the belief that the bank could *be* a community development organization.

In August 1973, the founders acquired a small bank, the South Shore National Bank, with $800,000 of equity capital from a small group of private investors and a $2.25 million loan from American National Bank. After the Federal Reserve Board approved the creation of ShoreBank Corporation in December of the same year, the new bank began operating under the auspices of the holding company. This structure enabled the founders to join regulated banking activities with economic development activities. Grzywinski and his co-founders believed that access to credit was only one of the keys to successful community development. Affiliated for-profit and nonprofit organizations were needed to support local entrepreneurs with higher risk lending and to provide technical assistance services. As a bank holding company, ShoreBank could offer a more potent mix of financial products and tools to boost economic development. In 1973, this dual mission approach was a radical idea.

The intention, explained Grzywinski in a 2008 interview, was to "use all of the bank's resources to bring about redevelopment" in an "almost totally minority neighborhood with all of the symptoms of deterioration." Said Houghton: "Our goal was to actually reverse the deterioration in the housing market [in Chicago] and be a catalyst for appreciation in a specific local market. If we hadn't concentrated our efforts but had ... dispersed our lending in a larger catchment area, we wouldn't have really changed the nature of a market."

ShoreBank differed from traditional banks in both what it did and how it did it. These differences created social value for the community, but they presented challenges because they often came at a financial cost. According to the bank's founders, it took a decade to achieve breakeven for banking operations. On the deposit side, lower deposit minimums—designed to make the bank available to all regardless of socioeconomic level—meant smaller account balances than the industry average. Time and creativity were needed to create a sustainable model for serving these accounts profitably. Moreover, ShoreBank's loan business had smaller average transaction sizes than traditional banks, which meant that fees collected as a percentage of administering the loan were less than larger loans typical in upper income markets, although they required the same administrative time. And, as Houghton explained, loan officers were asked to make assessments of community improvement a priority: If it was good for the community long-term, then they were asked "to go to extra lengths to find a way to structure the deal so that it was bankable."

Mission mattered. The ethos of moderate financial returns and strong social returns was made possible, in part, by the expectations of ShoreBank's investors. ShoreBank stock was privately held by a small group of shareholders (which ultimately grew to 75), including religious organizations, nonprofits, and community organizations, as well as insurance companies, banks, and trusted corporations and individuals. As Grzywinski explained, this composition meant that all the investors in ShoreBank "invested with the understanding that the primary purpose of their investment is to do development and not maximize return on capital."

CASE STUDY QUESTIONS

What lessons does ShoreBank's sustained success—and its ultimate failure—offer to social entrepreneurs?

How should one measure the impact of social enterprises?

Are some social enterprises too good to fail?

At the same time, ShoreBank needed ongoing access to growth capital, in part because of the bank's modest profitability and the limited pool of socially inclined capital available in the United States. The closely held nature of ShoreBank by a small number of mission-aligned investors created some long-term structural issues. Grzywinski explained that none of the shareholders, including the founders, had any liquidity for their shares. "That's a real problem," he said, "and it's a real limitation on growth."

THE GROWTH YEARS

For the first decade ShoreBank focused almost entirely on the South Shore area of Chicago because the bank founders wanted to work with local decision makers who had a deep understanding of the markets in which they were working. In the early 1980s ShoreBank began lending to a growing number of people and businesses in adjacent neighborhoods, and in 1986 it opened a new branch in another Chicago neighborhood with similar needs.

This expansion was tied to the founders' goal of creating a replicable model. That belief was realized in 1987 when an invitation came from the Winthrop Rockefeller Foundation for ShoreBank to help start a banking operation in rural Arkansas, called Southern Development Bancorporation. ShoreBank helped raise the capital and managed the bank for a number of years until Southern Development Bancorporation's board took over. Not long after the Arkansas project, ShoreBank initiated a program in Michigan, and then in Cleveland and later in Detroit.

In 1997, ShoreBank became the first banking corporation in the United States to address environmental issues. Through a partnership with Ecotrust, an environmental organization in Portland, Ore., ShoreBank Pacific was created as a federally regulated bank focused on the underbanked area of environmental business development. The mission was timely and the founders viewed it as an opportunity to expand ShoreBank's deposits and operations.

In each market where ShoreBank created a federally regulated bank, it also created an associated nonprofit—such as ShoreBank Enterprise Cleveland, ShoreBank Enterprise Detroit, and ShoreBank Enterprise Pacific (later renamed ShoreBank Enterprise Cascadia)—which predominantly focused on higher risk business lending. The founders saw these additional activities as critical to their theory of change. Incorporated as nonprofits, the organizations were largely self-financing through their operations, supplemented by grants, and were not financed by the ShoreBank holding company.

ShoreBank also started other nonprofits and for-profits to further its social mission. For example, the Center for Financial Services Innovation grew out of an opportunity to deliver asset-building services to the underbanked. ShoreBank executives often were asked to speak in the United States and abroad about their mission-driven approach to banking and to partner with other social entrepreneurs. In 1988, ShoreBank organized a for-profit consulting company to manage all of this activity professionally.

By 2008, the ShoreBank Corporation was a complex organization consisting of three circles of activity. (See "The ShoreBank Corporation Network, 2008" on page 69.) The center circle—ShoreBank, the for-profit, federally regulated banking business—accounted for the bulk of its $2.4 billion of assets, making a variety of community-focused loans. The second circle included the nonprofit organizations that provided complementary services to banking and nonbanking clients. A third circle was composed of the contractual and consulting services, which enabled ShoreBank Corporation to assist other mission-driven organizations. It is important to note that the FDIC's closing of ShoreBank affected the Midwest bank, but not the other components of the holding company, which now operate as independent organizations.

ShoreBank's growth brought problems, however. In *Community Capitalism*, Richard P. Taub described internal challenges created by ShoreBank's rapid expansion. He noted the heavy travel schedule of ShoreBank's founders, and a management structure that required much direct supervision. He also noted that ShoreBank had difficulty hiring future leaders who had top banking skills and a commitment to social values. ShoreBank's Cleveland and Detroit banks were never as robust as the original Chicago bank, and Taub pointed to the challenges of operating in neighborhoods that suffered even greater levels of deterioration than Chicago's South Shore.[2] In our interviews, the ShoreBank founders discussed how they realized that markets such as Cleveland and Detroit required more management oversight than the bank was sometimes able to deploy as well as banking tools that were matched to cities with failing manufacturing industries and less homogeneous economic conditions.

These challenges were seen as part of the learning process; they never forced a rethinking of ShoreBank's mission or its business model. Over time, the ShoreBank Corporation was "modestly profitable," to use Grzywinski's words. From 1998 to 2008, the bank achieved about an 8 percent return on equity with net loan losses only slightly higher than those of commercial banks. By the end of 2009 ShoreBank Corporation was the nation's leading entity of its kind. The for-profit bank was the largest certified CDFI in the United States. And the holding company's subsidiaries and affiliates had made $4.1 billion in mission-driven loans. Through its international activities, ShoreBank provided consulting services in more than 60 countries and trained almost 4,000 bankers who provided approximately $1 billion a year in international community development loans.

This catalytic role was one of the most satisfying outcomes for the bank's surviving founders, Grzywinski and Houghton. "We have made it legitimate for ourselves and others to use the nation's banking system to advance the cause of development," said Grzywinski. More broadly, we have contributed ... to democratizing the availability of private nongovernment credit to low-income and otherwise disadvantaged people. And we have done that in many parts of the world."

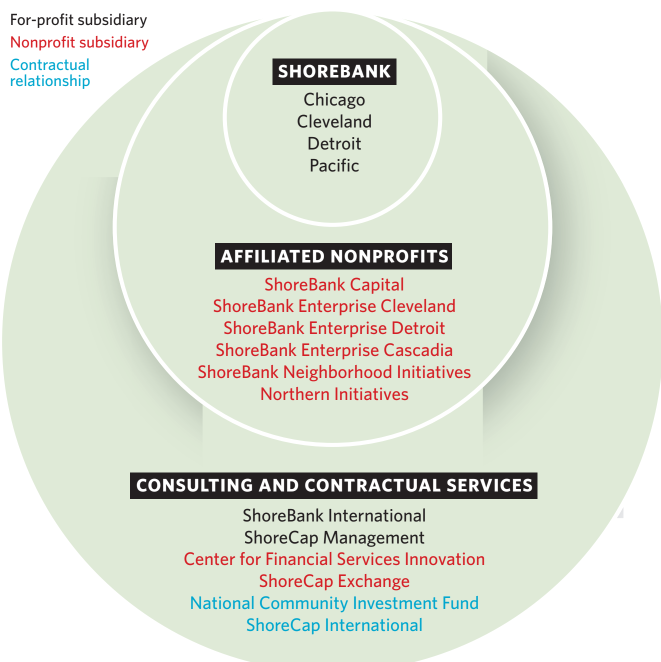
Unfortunately, the world was about to change.

FINANCIAL MELTDOWN HITS CHICAGO

ShoreBank's social enterprise accomplishments ran headlong into the 2008 financial crisis. The impact was most severe on the bank's risk management and capital requirements. Management felt strongly that lending money, particularly to lower income people disproportionately affected by the economic crash, was imperative. It focused on customers who had been the victims of subprime lenders, and started a 2008 Rescue Loan Program to help refinance mortgages. But as the financial crises deepened, loan losses accelerated. Precise data are not publicly available, but by the end of 2008 ShoreBank had increased its loan loss estimate to $42 million (vs. $6 million in 2007) and recorded a net loss of $13 million (vs. net income of $4 million in 2007).

The FDIC and Illinois Department of Financial & Professional Regulation took formal action to address ShoreBank's deteriorating financial condition in 2009. In April, the regulators rated ShoreBank as a "problem bank." (Their January 2008 ranking was "fundamentally sound.") This led to a visit from state and regional FDIC officials and, at ShoreBank's request, a meeting with FDIC officials in Washington, D.C. The parties entered into a consent decree—known as a "cease and desist" order—that was formalized on July 20. Loans were revalued downward, and the need for new capital grew.

The ShoreBank Corporation Network, 2008



Capital is to a bank what water is to a person in the desert—the key to survival. ShoreBank began raising capital by issuing shares of common stock to private investors in the first quarter of 2009. The bank initially needed $20 million, but as its situation worsened throughout 2009, capital needs were reassessed. By July 2009, the bank was seeking $50 million to $60 million; this was revised to $80 million, and then $100 million by the end of 2009.[3]

The capital campaign was by turns difficult and exciting. The challenge of raising money during the nation's most severe financial crisis since the Great Depression was daunting. But progress was made. By May 2010, ShoreBank had raised $146.3 million from 53 investors. But private capital alone wasn't sufficient in the nation's new banking environment. The private funds were placed in escrow, contingent upon ShoreBank's receipt of $72 million from the Treasury Department's Community Development Capital Initiative (CDCI), part of the wider Troubled Asset Relief Program (TARP) initiative. In late 2009, President Obama approved extending TARP to cover CDFI banks, thrifts, and credit unions certified as targeting more than 60 percent of their activities to underserved communities.

As ShoreBank's fundraising continued, a new management team was installed. On April 30, 2010, George Surgeon, longtime senior ShoreBank executive and CEO of ShoreBank's banking operations since 2009, assumed the role of CEO of the entire holding company. At the same time, David Vitale, a highly regarded Chicago banking executive and civic leader, came on board to raise capital. The new leadership submitted ShoreBank's CDCI application on March 1, a full month before the deadline, and on May 19 the FDIC's Chicago Regional Office recommended that ShoreBank receive CDCI funds and forwarded the bank's application to the FDIC's Division of Supervision and Consumer Protection for further action. On May 26, ShoreBank Corporation announced further changes, bringing in a new executive leadership team to support Surgeon. Vitale became executive chair and a new president, chief operating officer, and CFO were announced—all of whom had successful track records in the mainstream banking industry. Grzywinski and Houghton officially retired.

ShoreBank's situation was in public view, and a number of Illinois supporters, notably Rep. Jan Schakowsky (D-Ill.) urged the Treasury Department's acceptance of the CDCI request. Rumors circulated that ShoreBank had "friends in high places," particularly at the Obama White House.[4] On May 21, television personality Glenn Beck set out to "expose" ShoreBank as something other than a "really good local bank." He asked why Wall Street heavyweights such as Goldman Sachs were pledging millions to assist ShoreBank, insinuating political motives. Republican legislators openly questioned the administration's support for ShoreBank at the same time new rules were being drawn for the financial services industry.[5] The political temperature of the rescue escalated.

ShoreBank's funding request required a review and vote by an interagency group representing the FDIC and other federal banking agencies. This CDCI Interagency Council considered ShoreBank's request on May 26 and again on June 2—and, according to FDIC Inspector General Jon T. Rymer, deferred a vote both times because of concerns about asset losses and the bank's ability to raise capital. Each time, the bank renewed efforts to reassure regulators. In early June a rumor surfaced that unnamed Federal Reserve Board staffers believed ShoreBank would need $300 million of additional capital to survive. Finally, on June 15, ShoreBank's application was considered for a third time. The council remained divided: The FDIC recommended that ShoreBank receive CDCI funds, but representatives from the Office of the Comptroller of the Currency, Federal Reserve Board, and Office of Thrift Supervision voted no. As a result, the application was not forwarded to the Treasury Department for further consideration. Without CDCI funds, the assembled private capital could not be released from escrow, leaving the bank severely undercapitalized. That settled ShoreBank's fate—it would have to be closed.

From June to August, negotiations took place as to how ShoreBank would be closed. There were few bidders. Negotiations among FDIC officials, ShoreBank's new officers, state regulators, and potential investors gave rise to the idea of creating a newly chartered institution to purchase the assets of ShoreBank—including banking operations in the Midwest, but not the other assets of the holding company. This became reality with the creation of Urban Partnership Bank, which was granted an application for deposit insurance and a state charter by Illinois on Aug. 16, 2010. Four days later, ShoreBank was closed by order of the state of Illinois and Urban Partnership purchased its assets.

Urban Partnership Bank currently operates as an FDIC-insured bank whose mission includes promoting economic sustainability and serving the needs of low- and moderate-income groups in Chicago, Cleveland, and Detroit. It is owned by the financial institutions, foundations, companies, and individuals that sought to continue ShoreBank. Twenty-two of the 53 investors, representing $139 million of the $146 million pledged to save ShoreBank, transferred their investments to Urban Partnership Bank. Three of Urban Partnership Bank's current senior leaders were executives who had joined ShoreBank during the period of FDIC supervision and resolution.

LESSONS LEARNED

The closing of ShoreBank presents a fascinating set of puzzles for analysts. Conventional wisdom suggests that ShoreBank was a victim of simple economic realities: too little capital in the face of an unexpectedly deep recession. Some might argue that this shortage was caused, in turn, by ineffective risk management and a history of operating decisions that settled for a below-market return on investments. But we believe these arguments are flawed or, at best, incomplete. The bank needed capital, true, but so did hundreds of other US banks during the financial meltdown. The bank's operating policies and risk management had succeeded for 35 years, through recessions and industry crises, and it was rated highly by regulators until the 2008 financial crisis. It responded well to the crisis, and the regional FDIC office recommended it receive CDCI funds.

Another possible analysis is that ShoreBank suffered because it was *not* seen as "too big to fail." Had it been much larger, the federal government might have saved it from collapse. But the federal government was not concerned about smaller banks or banks that were socially beneficial, in other words, "too good to fail." Had ShoreBank's catalytic role in the communities it served been more broadly understood and accepted, it might have mustered the necessary political support for a rescue package.

A third possibility is that the interagency vote against CDCI funding for ShoreBank was a politicized vote. On May 14, Fox Business Network commentator Charlie Gasparino reported that Wall Street bankers "personally" told him there was "political pressure put on them to bail out ShoreBank." No details were offered. The support of Democratic legislators and past contacts between ShoreBank executives with members of the Obama administration, including Senior Advisor Valerie Jarrett and President Obama himself, prompted Republicans to challenge the ShoreBank bailout. John D. McKinnon and Elizabeth Williamson reported in *The Wall Street Journal* on May 20, 2010—before the interagency votes—that questions raised by members of Congress about ShoreBank's alleged use of political influence were greatly complicating its efforts to raise private capital from large banks and CDCI funds.

"Republican lawmakers began two inquiries into the rescue of a pioneering Chicago community bank by some of Wall Street's biggest financial firms, saying political considerations appear to be at work," McKinnon and Williamson wrote. "Goldman Sachs Group Inc. Chief Executive Lloyd Blankfein was personally making fundraising calls to other banking executives, seeking private sector pledges totaling $125 million for the failing community development lender, Chicago's ShoreBank Corp. After initially declining to invest, Goldman itself promised at least $20 million in recent days."

According to McKinnon and Williamson, on May 19, Rep. Darrell Issa of California, ranking Republican on the House Committee on Oversight and Government Reform, wrote a letter to the White House to complain. "It is important to avoid even the mere appearance that Mr. Blankfein is attempting to curry favor with the administration by contributing money to save the White House's favorite community bank," Issa wrote. In a second letter to President Obama, Republican lawmakers cited assertions by some bank representatives that the White House pressed them to contribute to the ShoreBank fundraising. Rep. Spencer Bachus of Alabama, the top Republican on the House Committee on Financial Services (a long-standing critic of community development banks), and Rep. Judy Biggert (R-Ill.) said the allegations "raised questions as to whether the government was rescuing a politically connected bank while letting hundreds of others fail." [6]

The ShoreBank story virtually defines the toxic politics of Washington today. Rather than spend $72 million, with the potential of repayment, to support a bank with a multi-decade track record of adequate liquidity and positive economic development impact—objectives favored by both Democratic and Republican administrations—the Deposit Insurance Fund has been saddled with a loss of more than $330 million. The reason? After ShoreBank was closed, the FDIC entered into a loss-sharing agreement with Urban Partnership Bank in which FDIC absorbed a large share of $329 million of losses to provide the new bank with a healthy balance sheet. (This estimate was revised to $452 million in January 2011.) Meanwhile, the investigation by Rymer, prompted by Republican members of Congress, concluded there was no wrongdoing by either ShoreBank or the FDIC. According to Rymer, the large investors in ShoreBank and Urban Partnership Bank invested "primarily because they believed in ShoreBank's mission and they did not feel pressure to invest as a result of the FDIC chairman's calls." [7]

ShoreBank Co-founders Mary Houghton and Ronald Grzywinski say the bank democratized the availability of credit.

PHOTOGRAPH BY STACIE FREUDENBERG/ AP

Beyond this lesson in toxic politics, there are several big-picture lessons to be gleaned from the closing of ShoreBank. First, an organization's social mission must be balanced with financial realities. A social mission should serve as a powerful incentive to strengthen an organization's operating systems from the harsh consequences of the economy, competition, or a hostile environment. Clearly adequate for normal times, ShoreBank's credit and risk management processes were not sufficient to withstand the full force of the financial meltdown. Concentrating most of its loans among low- and moderate-income people and businesses in inner-city Chicago, Cleveland, and Detroit fulfilled the bank's social mission, but it also exposed it to significant risk during an economic downturn. The rapid deterioration of the bank's assets and loan portfolios was magnified by regulatory resets, as loan portfolios had to be revalued downward with the deepening recession. This damaged the bank's balance sheet and exacerbated the need for new capital. The lesson here is clear: For market-based social ventures, mission should be highly integrated with and responsive to the changing realities of the market.

ShoreBank also provides a cautionary lesson about new organizational models and resource limitations. There was genius in the idea of using a bank holding company to own and operate for-profit and nonprofit entities focused on the same social mission. And the founders' passion for replicating the model and assisting others to learn from it was admirable. Like all experimental ventures, there were failures and successes and demands for ongoing learning and refinement. At the same time, legitimate questions remain about whether the resources of the holding company were sufficient for the breadth of its activities. Could ShoreBank have achieved the same results through partnerships with independent nonprofits rather than by housing them within the holding company structure? There is an argument for coordination and control through a holding company structure, but particularly in the new economy, there is a counterargument for more flexible, less burdened organizational models.

Lastly, did ShoreBank succeed in hiring enough new leaders—both strong in banking knowledge and passionate about the social mission—who could run the many pieces of the holding company? Operations in Cleveland and Detroit were disappointing, but the operations were not shut down. Should they have been? Could resources have been more effectively used elsewhere, in some of the more specialized lines of business that produced healthier financial and social impact? Experimentation is necessary and expected, but learning—and making changes, including some that are painful—is vital.

In the end, ShoreBank leaves an almost four-decade legacy of innovative ideas: It demonstrated that careful re-engineering of the market-based banking system can achieve adequate profitability and deliver strong social impact. ShoreBank also proved to be a catalytic presence in its community, in the banking industry, and throughout the world. We believe this is a dual legacy that matters and endures.

ShoreBank's commitment to progressive banking lives on in the community development banks it inspired and, more directly, in the Urban Partnership Bank, whose mission is closely aligned with what ShoreBank's once was.[8] ShoreBank Pacific lives on through OneCalifornia Bank (now One PacificCoast Bank) and ShoreBank International is now a leading financial advisory firm. Last, many of the nonprofit entities now operate as independent nonprofits (mostly under revised names) and continue their original missions of aiding economic development through investment, research, and consulting services.

Taken together, ShoreBank provides an important lesson about value creation that is social in nature. In late 2008, Grzywinski said that although ShoreBank had failed to prove that a broader social usage of capital was an idea whose time had arrived, "certainly it was an idea we think is on the right side of history." Indeed, the world needs radical, more effective, scalable approaches to address social problems. These will come only from those who are willing to operate in uncharted territory. Innovative organizations like ShoreBank, which harness the capitalist system to produce positive social outcomes, continue to offer promise for the future.

ShoreBank was never perfect, but it was too good to fail. ■

Notes

1 Interviews with ShoreBank founders Ron Grzywinski and Mary Houghton were conducted in 2008 and 2009.

2 Richard P. Taub, *Community Capitalism: The South Shore Bank's Strategy for Neighborhood Revitalization*, Harvard Business School Press, 1988.

3 In the first quarter of 2010, the bank reset its target at $125 million and later concluded that it would apply for federal funding through the CDCI Program (a program related to TARP), which it did in March 2010. This chronology is documented in FDIC Office of the Inspector General Report No. EVAL-11-001 (www.fdicig.gov).

4 Becky Yerak, "'Friends in High Places' Help ShoreBank Raise Capital," *Chicago Tribune*, May 10, 2010.

5 Glenn Beck Show, Fox Network, "Shore Bank Exposure," May 21, 2010. http://www.youtube.com/watch?v=ulfKtrepHVU

6 John D. McKinnon and Elizabeth Williamson, "GOP Lawmakers Probe Chicago Bank Bailout," *The Wall Street Journal*, May 20, 2010.

7 FDIC Office of the Inspector General, *Recapitalization and Resolution Efforts Associated with ShoreBank, Chicago, Illinois*, Report No. EVAL-11-001, March 2011.

8 See www.upbnk.com.

Plant Power

THIS SUMMER, the first two transatlantic flights powered partly by biofuels arrived at Paris's Le Bourget Airport. That was reason for celebration at the Paris Air Show, which may be the premier event of the aviation industry but is not exactly known for green triumphs. Air travel is among our most environmentally harmful activities. Not only do planes emit carbon dioxide at a greater volume per passenger mile than other forms of travel, they also release nitrous oxide, which traps atmospheric heat more intensely than CO_2.

Among the airplane industry executives focused on green travel is Richard Branson, who announced in 2006 that all future profits of Virgin's transportation business, an estimated $3 billion, would go toward research into cleaner fuels. Two years later, a Virgin Atlantic Boeing 747-400 flew from London to Amsterdam on a blend of jet fuel and oils derived from Brazilian babassu nuts and coconuts. Although some critics described the flight as a gimmick—the plane was predominantly powered by gas and required the oil of 150,000 coconuts—Greenpeace chief scientist Doug Parr described it as an attempt "to divert attention from an irresponsible, business-as-usual attitude to climate change." It also was the first commercial airline flight to use biofuel.

This summer's biofuel flights have higher green credentials. According to Honeywell, which produced a biofuel blend made from the camelina plant to power a Gulfstream G450, 5.5 metric tons of CO_2 were saved over the course of the flight from New York City to Paris. Pure biofuel commercial flights are not expected for 30 years. But KLM has scheduled 200 flights between Amsterdam and Paris using 50 percent bio-kerosene this fall, and the European Commission has set a target for the production of 2 million tons of aviation biofuel by 2020. —**TAMARA STRAUS**

PHOTOGRAPHY BY BEN STANSALL/GETTY IMAGES

Divya, in India, is a graduate of Goldman Sachs' *10,000 Women* program, a five-year worldwide campaign to drive economic growth by giving 10,000 women a business and management education as well as access to capital, networks and mentors. Now in its third year, the program is in more than 20 countries and showing promising early results — 70% of graduates surveyed have increased their revenues, and 50% have added new jobs. To date, more than 3,000 women have been reached through a network of more than 70 academic and non-profit partners.

Divya took over a label manufacturing business from her father. To get the skills she needed to optimize her business she applied to the *10,000 Women* program. Since graduating, her revenues have grown by over 100% and her workforce by 25%.

Her success has enabled Divya to hire and promote more and more women, and become one of the few employers in India to offer paid maternity leave. Today, she's transforming her business into a modern enterprise, and her employee's futures.

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