# StanfordSOCIAL INNOVATION<sup>REVIEW</sup>

What's Next Trawling for Trash By Suzie Boss

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# Action What's Next

By Suzie Boss

#### ENVIRONMENT Trawling for Trash

► Visitors lingering over an alfresco 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 debriscollecting 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.

PHOTOGRAPH BY ENVIROMANTIC/I STOCKPHOTO

Using government subsidies to provide fishermen with an alternate income makes good eco-



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

nomic 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."

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. Usergenerated content, written by those who have direct experience with nonprofits, now ap-

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pears 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 Great-Nonprofits—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 povertyreduction 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.



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 sixyear 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.