Features
The New Practice of Public Problem Solving
By Tara Dawson McGuinness & Anne-Marie Slaughter
A new class of innovators is advancing the public good by figuring out what people actually need and then testing, improving, and scaling solutions that may already be out there. Here are the four elements of their method.

**Does your policy or solution work for the people it is intended to help or serve?** This is the fundamental question that today’s problem solvers and policy makers must ask themselves. It is remarkable how often the answer is no.

Even impactful national policies often do not comprehensively deliver for those who need them the most. According to the Brookings Institution, as many as one in seven students eligible for financial aid for college do not complete the federal form required to access that aid. More than half of the nine million children ages 2 to 4 who are eligible for the US Department of Agriculture’s supplemental food assistance program do not receive the immunizations and nutrition support and other benefits it offers, according to statistics from 2015.1 Six states and the District of Columbia have passed family leave policies, but California, despite having had this benefit for over a decade, has yet to reach a majority of those eligible.

Government officials across federal, state, and local levels are beginning to explore new ways to connect policies and people. Moreover, many activists, nongovernmental organizations, and social entrepreneurs have chosen to bypass the policy-making process altogether and experiment with direct-service solutions to tackle public problems such as homelessness, maternal and infant mortality, elementary and secondary education, and workforce devel-
Innovators in and out of government are using a combination of tools to change the way problems are identified and solved. They are responding to an urgent need to achieve dramatic impact, to eradicate social and economic ills, rather than just manage them, and to draw on a variety of new tools and approaches that were not available to their predecessors. Their many different efforts and approaches herald a new practice that can be distilled into four common elements, as follows:

- **People-centered**: puts people with needs and capabilities at the center of programs and policies (human-centered design)
- **Experimental**: starts small and scouts for local solutions, tests ideas and concepts, shifts to modular contracting, and experiments before national rollouts
- **Data-enabled**: leverages data (big and small) to assess problems, monitor progress, and evaluate what works
- **Designed to scale**: assesses and plans for how to expand impact and scale

Most of the examples of this new practice integrate many or all of these elements. Although these individual elements are not necessarily new, they are being combined in ways that add up to an observable practice, even if the participants in this practice are unaware of the ways in which their work reflects a bigger movement. This practice also unites public problem solvers of many different types: philanthropic, public, and civic.

No practice, however, can operate in a vacuum outside politics. Indeed, many on the left point to the ways in which government is deliberately starved of the resources it needs to deliver the services taxpayers demand and deserve, thereby requiring civic organizations to fill the gap. Small-government ideology can and does blind voters and legislators to evidence of successful government services. On the right, however, many point to failed policies as the reason for shrinking government services, and have plenty of examples to back up their claims.

Nor can a methodology of public problem solving determine the fundamental questions on the national agenda in a deeply broken national political system. No amount of success in designing or delivering services and support to those in need can counter the determination of moneyed special interests to pursue policies that widen, rather than reduce, the growing wealth gap in the United States. On the other hand, policies and solutions that demonstrably work can help reduce distrust of government at the local and even the state level, particularly when the public, private, and civic sectors find ways to collaborate. The next generation of ideas for tackling economic inequality must deliver for this trust gap to decrease. The work we describe transcends old debates about big government and small government. It is a different conversation about how problem solving gets done.

**PEOPLE-CENTERED FOCUS**

Not surprisingly, public problem solving has typically begun with the definition of the problem that policy makers seek to solve—a problem that then falls into an area of society to be regulated. Indeed, the departments of government are organized according
to this logic: health, education, housing, labor, and environment, to name a few. Homelessness, for instance, is framed as a problem of people’s not having a home, which researchers, analysts, and legislators have defined as a problem of not enough housing, when in fact the causes are diverse and complex, including mental illness, substance abuse, wage stagnation, and unemployment.

Moreover, the process of definition and diagnosis is grounded in research and data gathering typically carried out in places far from the people who are actually experiencing the problem. Data collection and economic and statistical modeling without field research engaging the people who generate that data very often lead to researchers’ defining problems in ways that do not match the issues actually perceived by the people who face them.

In contrast, problem solvers today begin with people who are in need in some way: the hungry, the homeless, the unemployed, the unsafe, the ill educated, the sick and infirm, the disconnected. While community organizers and campaigners have always worked to bring people’s voices into the process, tech-enabled methods have facilitated the inclusion of their views and habits earlier in the process and at an unprecedented scale and speed.

Engaging these people in real time and in a way that asks them for direct feedback about their needs often sheds new light on the factors contributing to social problems. For example, many rural residents can’t reach free health clinics because of lack of transportation, whether public or private. Addressing transportation access, however, is outside the scope and tool kit of most health officials and health departments.

This emphasis on human-centered design flows naturally from the increasing participation of public-interest technologists in government and civic organizations. Focusing on people in policy processes is the analog to focusing on “users” in the software design process. “UX” practices have been at the heart of the Government Digital Service in Britain and the US Digital Service, at Code for America, and in New America’s Public Interest Technology effort. Indeed, Mike Bracken, founder of the British Digital Service, has written about how the “old process” of “Policy, Process, Systems, User, Stasis,” contrasts with the “new process” of “User, Service (Re)design, System Development, Policy Check, Feedback.” That is another way of stating the new practice.

The relentless focus on what users need and how they experience services brings people into the process of providing feedback for services where they have not traditionally had a voice. For nonprofit leaders, it creates a place to review their rules, forms, and theories. For example, Marina Nitze, former CTO of the US Department of Veterans Affairs, assembled her colleagues and asked veterans to demonstrate what it’s like to try to access the department’s 62 benefits programs on a computer without high-speed Internet. What the experiment unequivocally revealed was that the problem was not only the Internet speed (phone and mail applications were also terrible experiences) or the 62 websites; it was the entire archaic and Byzantine process of accessing benefits.

This people-centered or people-first focus is also under way in local communities. Built for Zero, run by Community Solutions, is an initiative to tackle chronic and veteran homelessness that brings together key stakeholders to create a defined and shared list of homeless people in a community as a first step toward serving their needs. By helping various entities share real-time data through a dashboard available to stakeholders, Built for Zero puts the unhoused and their needs back at the center of the process. It knows by name—not statistics—who it is serving.

“You have to figure out what’s important to people,” Angie Walker, a housing advocate in Rockford, Illinois, explains. “Is it watching the Cubs on TV? Helping them call their family? All that information goes into the by-name list. That’s the big thing: making it personal.”

Making it personal is producing results. In less than four years, Built for Zero has assisted nine communities in the United States in ending chronic and veteran homelessness and is currently helping 36 others to reduce their numbers. It has codified its methodology to tackle the audacious goal of eradicating homelessness.

The heart of the Built for Zero approach is a combination of continuous quality improvement and a list of the unhoused by name in a community to drive action across providers, nonprofits, and governments. With a shared goal, the stakeholders use this common list to coordinate the work of many agencies and nonprofits; they all work down the list until it gets smaller. By putting people at the center of the work and using data to monitor progress, Built for Zero communities are shrinking the problem from the bottom up, in contrast with previous attempts to regulate from the top down.

Human-centered design is undergoing its own evolution. Behavioral scientists are challenging the proposition that human beings always know what they want or want what is good for them, and they are suggesting more rigorous ways to figure out what actually works. There are lightweight ways to keep people in focus, such as trying to fill out a government form yourself. But in the end, if serving people is critical to solving complex social problems, then people must also be engaged in the process.

At its core, starting with people counters the tendency to see people as the problem. People can be helped, invested in, connected to others, taught, empowered, and cared for. They cannot be “fixed” or “solved.”
THE NEW PRACTICE CONNECTS RESEARCHERS AND PRACTITIONERS IN A LOOP THAT ALLOWS PROBLEM SOLVERS TO BROADCAST, RECEIVE, REFINE, AND ADAPT SOLUTIONS ON AN ONGOING BASIS.

Philanthropies funds, helps 100 cities use data to tackle pressing challenges effectively. As cities take on issues and identify solutions and processes, they learn from each other’s experiments by sharing results across the network.9

All scholars or policy experts might assert that they do their own type of scouting—what else is research but searching for information in books and on the ground and then bringing it back for distillation and analysis? The answer lies in the compression of space and time. Traditional research assumes spatial and temporal distance between the researcher and the subject—hence the idea of the ivory tower. It assumes the 20th-century world, in which answers could be arrived at and fixed in place for at least a decade or two through the adoption of a policy or the enactment of a law or regulation. The new practice reports on solutions as they arise and connects researchers and practitioners in a living information loop that allows problem solvers to broadcast, receive, refine, and adapt solutions on an ongoing basis.

This more active scouting also connects directly to engaging people more than problems, as local problem solvers can work directly with people in need in their communities. Scouts remain side by side with their sources, seeing them not as data but as doers who can be connected in real time to other doers in a common enterprise.

While Silicon Valley analogies don’t always translate to the public sector, the technology practice of scouting for ideas, creating a minimum viable product, and then iterating to improve it applies directly to at least some areas of public problem solving. Indeed, technology innovation expert Ann Mei Chang has built an entire framework, one that includes many of the elements this article explores.10 The public and nonprofit sectors frequently develop and implement solutions through a single big bang of grant making or policy release that leaves little room for testing the effort with humans and limited chances for course correction. Even harder and rarer is learning the lessons of how other people’s experiments went, whether they succeeded or failed.

Public problem solvers who test small and experiment before going big come in a number of varieties. In Germany, the Stiftung Neue Verantwortung, a nonprofit think tank, is pioneering a new method of “collaborative policy development.” It brings together a group of stakeholders in an intensive series of meetings to test and refine the political and practical viability of technology policy options.11 The “product” they are trying to generate will be a federal policy, but they test different options with the various groups that will be affected by such a policy before even formulating it.

Testing and iterating a solution are also under way in an exper-
provides housing to the homeless. The city faces an acute housing crisis, which has prompted it to revisit how it spends its dollars on contracting services to provide shelter for the homeless. In 2015, authorities experimented small with procurement changes ($8.5 million), focusing bids on outcomes (Are fewer people homeless?) over outputs (How many beds do we need to provide?). As of early 2018, this experiment was showing promising results: The Human Services Department is now spending a larger share of its budget on procuring in this new way.\(^\text{13}\)

**DATA-ENABLED**

A hallmark of successful public problem solvers today is their ability to use data (big and small) to measure problems, to learn what works and what doesn’t, and to make improvements as soon as they are necessary. The founder and executive director of Code for America, Jennifer Pahlka, describes the shortcomings of how we currently use data in the public sector:

> It’s like asking a pilot to fly a transcontinental flight with only after-the-fact, unreliable estimates of her airspeed, heading, and altitude, instead of the panel of instruments with constantly updated data and tested checklists to reduce accidents and errors that modern pilots rely on.\(^\text{14}\)

But fixes are in place to correct this type of flying blind. Signs of a data revolution in solving public problems are appearing more frequently. Dozens of US cities have data intermediaries established through the National Neighborhood Indicators Partnership, sharing methods of best practices for aggregating data locally. The federal government minted the first-ever position of chief data scientist in 2015—although the current administration refuses to fill it.\(^\text{15}\) The mayor of Tulsa, Oklahoma, has even enlisted an army of citizens to collect statistics to inform how the city tackles public problems.\(^\text{16}\)

Smart, protected use of metadata to improve services is happening at the nonprofit Crisis Text Line (CTL). Developed in 2013, CTL has a nationwide network of trained professionals who offer free, around-the-clock services via text messages with people in need. According to The New Yorker, “The organization’s quantified approach, based on five million texts, has already produced a unique collection of mental-health data. CTL has found that depression peaks at 8 p.m., anxiety at 11 p.m., self-harm at 4 a.m., and substance abuse at 5 a.m.”\(^\text{17}\)

CTL founder and CEO Nancy Lublin also models the importance and limitations of smart data science, making clear that the best use of data science is to improve the efficacy of human counseling. Further work on predictive analysis “would allow counsellors to determine with a high degree of accuracy whether a texter from a particular area, writing in at a particular time, using particular words, was, say, high on methamphetamine or the victim of sex trafficking.”\(^\text{18}\)

The opportunity for data use in public problem solving is expansive and ranges in intensity and sophistication. That can take the form of analytics (as at CTL), or performance management dashboards (Baltimore City uses them to tackle cross-agency priorities), or low-cost evaluation methods (like those deployed by the Behavioral Insights Team to help the city of New Orleans convince more people to use their access to free health services). Those making the most transformational change across the United States have a culture of measurement and reassessment, with data as the central ingredient. It is not the data, per se, that add value, but their ability to tighten the feedback loop between people receiving services and those (in the transit agency, nonprofit, or county office) steering them. For example, agency leaders can see that days have gone by and not a single uninsured person has signed up for free services prompting them to take action, or counselors working with clients during a 4 a.m. shift know to be on alert, as this is a peak time of day for suicides.

Much has been written about the technical failures of HealthCare.gov, the federal government’s online portal to provide health insurance and tax credits to millions of Americans, part of the Affordable Care Act legislation. The turnaround of HealthCare.gov began with a simple fix: data to monitor the problem. One of the first actions of the team of tech experts who came to work alongside government officials and contractors to fix HealthCare.gov was to install “instrumentation” in the form of a dashboard.

The ability to monitor HealthCare.gov’s users—to know how many people were on the website in a day, week, and month, where they were stuck, and where they dropped off, or when they exited the site—was critical to understanding how the site was broken and to prioritizing the fixes. Initially, when White House staff, including Tara McGuinness (this article’s coauthor), were scrambling to understand the problems with HealthCare.gov, they had no way to know what consumers were experiencing, because Centers for Medicare & Medicaid Services officials had contracted different parts of the site construction to different companies, thereby precluding a holistic analysis of the website’s usage and analytics.

Data or instrumentation to see what is broken (or what is working) enables responsiveness to the people whom policies are designed to serve. *The US Digital Services Playbook* emphasizes the need for data to check usability:

> At every stage of a project, we should measure how well our service is working for our users. This includes measuring how well a system performs and how people are interacting with it in real time. Our teams and agency leadership should carefully watch these metrics to find issues and identify which bug fixes and improvements should be prioritized. Along with monitoring tools, a feedback mechanism should be in place for people to report issues directly.\(^\text{19}\)

Those working for the public good in the 21st century will be helpless in the face of the world’s toughest challenges, from adapting to climate change to tackling racial discrimination, without the tools for real-time integration of data. A word of caution is in order, however. This rapid testing and use of data drives the growth of many American tech companies today, including Amazon, Google, and Facebook. The speed of both testing and technological change has raised challenges of transparency and individual rights. New America fellow Virginia Eubanks writes in her book *Automating Inequality* of the pitfalls of welfare modernization, describing how more than one million applications for health care, food stamps, and cash benefits were denied as part of a flawed system of modernization by the state of Indiana. Her work, and that of
others, like CTL, demonstrates how data innovation must be paired with safeguards and engagement strategies to test how these innovations work for those they aim to serve.

**DESIGNED TO SCALE**

For all the romance of social entrepreneurship, platform solutions, and tech transformations, moving from small and local to big and federal, or indeed global, is fraught with difficulty. Strategic planning and testing to bring innovation to scale is thus the final element that is critical for transformative public problem solvers.

Small size offers speed, variety, adaptability, and a multiplicity of problem solvers bringing their diverse talents to bear. It also offers a valuable density of different organizations. In the social sector, unlike the private sector, efficiency and productivity compete with civic engagement and inclusion as public values. But, as John Kania and Mark Kramer, managing directors at the consulting firm FSG, have written, “There is scant evidence that isolated initiatives are the best way to solve many social problems in today’s complex and interdependent world. No single organization is responsible for any major social problem, nor can any single organization cure it.”

The core challenge for public problem solvers is thus to ensure, through deliberate and strategic design, that small ultimately translates to big. Pilot projects must become policies; solutions providers must connect with government and/or with one another in structured and managed networks, alliances, or partnerships.

Health Leads founder Rebecca Onie emphasized this point. Health Leads spent more than 20 years refining a successful approach of reducing health costs and improving outcomes by focusing on both social and medical conditions. But it began to achieve scale only when the federal government took notice and adopted Health Leads’ practice. And even then, the Centers for Medicare & Medicaid Services have allocated funds only for a pilot project, Health Leads’ practice. And even then, the Centers for Medicare and Medicaid Services have allocated funds only for a pilot project, Health Leads’ practice.

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The great advantage of the social sector is often that it can try things that policy and politics often simply shut down. But if more social entrepreneurs and civic organizations thought about their problem solving with the aim of piloting solutions for government to adopt, rather than tackling the challenge of scaling up themselves, they would be likely to involve experts in both policy and politics earlier in their problem-solving process. Figuring out a government adoption or replication strategy at the outset can ensure that a successful innovation does not languish and die in what Kriss Deiglmeier, the CEO of Tides, and Amanda Greco, a Tides advisor, refer to as the “stagnation chasm”: the place where a tested, proven pilot is unable to scale because of inadequate funding, a fragmented ecosystem (coordination across social, private, and public sectors), or a lack of talent (the correct skills and teams needed to scale and implement).

Connecting both up and down can be critical for impact at scale, but so too is connecting horizontally to peer organizations. Geoffrey Mulgan, chief executive of the National Endowment for Science, Technology, and the Arts in the United Kingdom, has joined with a team of coauthors to identify different pathways to scale; a Stanford Social Innovation Review piece summarizes these pathways as “advocacy, networks, programs, franchising, and direct control.”

StriveTogether, a network that builds communities’ capacity to tackle outcomes for children from cradle to career, has demonstrated real impact, as has Built for Zero. But for all the promising and indeed successful coalitions, alliances, and action networks that drive change by aligning and steering a flotilla of often diverse organizations and people toward the same end, practitioners can also cite many failed efforts at connecting that result, as one expert put it in a private discussion, in many “half-built bridges.”

In sum, piloting small is no panacea. Sometimes small, focused, and nimble organizations can inspire and instigate widespread change, but in a crowded space of many different actors operat-
their use of data, and designing and connecting for scale—have developed over the past several decades in different places and from different sources. But bringing these elements together and defining and labeling the resulting approach as an important addition to the public-problem-solving tool kit helps these pioneers to recognize and learn from each other.

The process of engaging, scouting, experimenting, measuring, and scaling stands the traditional policy process on its head. By figuring out what people actually need and want and then testing solutions that may already be out there or that seem promising according to clear metrics of impact, problem solvers can reduce unintended consequences and ideas that seem great in theory but fail in practice before advocating for a law or policy change. And by connecting up, down, and across, entrepreneurs throughout many sectors can be effective at scale.

Note, however, that not all public problems are equally suited to the new practice. Some proof of concept or testing is useful in almost every case, but issues such as the openness and security of the Internet, whether student loans should be dischargeable in bankruptcy, the emissions levels for cars and trucks, or the scope of campaign finance laws are really fights among contending political and economic interests in society.

Still, for problems closer to the ground that directly engage human flourishing of various kinds, a social version of the scientific method has come to Supreme Court Justice Louis Brandeis’s famed laboratories of democracy. Brandeis was referring to the states as incubators of solutions for the federal government; today those laboratories are just as likely to be found in cities and towns, whether in the mayor’s office or in a corner café. 27

Imagine if schools of public and international affairs taught the new practice—if social entrepreneurs, civic-minded corporations, policy experts in universities and think tanks, and government officials at the local, state, and federal levels all thought of themselves as public problem solvers and embraced the new practice, adapting and improving it in the process.

The hallmarks of the new practice are humility, utility, and adaptability. New practitioners start small and recognize what they don’t know. They believe in empiricism and are not afraid to change their minds. They prize results over ideology, align data with design for those they serve, and understand that solutions can come in many forms: law and policy, certainly, but also technology, norms, culture, and collaboration. 28

To these attributes, we might also add equality. The new practice transforms hierarchical decision making into more horizontal processes of consultation and iteration with the people whom government is trying to serve. While still recognizing the value of expertise, it engages citizens more deeply throughout the process. This is not a new tradition but a new form of an old tradition that today’s tools facilitate. Political philosopher Danielle Allen argues that America’s founders saw their fellow colonists as equals in “coming to understand their situation,” in “building a collective intelligence superior to what any individual or even a closed group of experts can achieve.” 29

Finally, the new practice is anchored in responsiveness to the public. Success is determined by whether or not a policy or program works for those for whom it was designed. A government of, by, and for the people must be measured by the results that it delivers to as many of the people as possible, either through direct service or by empowering and enabling the social sector. The core of the new practice of public problem solving is service to the public, by and with everyone who wants to serve.