

GOVERNMENT TECHNOLOGY

SOLUTIONS FOR STATE AND LOCAL GOVERNMENT

VOL 27 ISSUE 9 | NOVEMBER 2014

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INTO THE
MARKET

STEP 2:
CHANGE
THE WORLD

GOV TECH ENTREPRENEURS
TALK ABOUT WORKING
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DAVID KIDD



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Honoring the Best of the Web

In October, *Government Technology* and e.Republic's Center for Digital Government released the results of our 19th annual Best of the Web contest. And it's gratifying to see just how far public-sector websites have come over that time.

Our first Best of the Web winners in 1996 talked up quaint features like downloadable forms and maps, along with faxable permit applications. The sites were downright ugly, too, by today's standards — jammed with text and links, and largely devoid of images thanks to slow connection speeds.

But even then, the seeds of e-government were being sown. The top-ranked Florida Communities Network let citizens apply for jobs online, and Virginia's home page offered live traffic information. In addition, state and local officials were gearing up to offer a variety of permits and licenses through their sites.

Today's Best of the Web winners fully realize many of these early aspirations. They offer hundreds of online services and process transactions worth millions of dollars — improving convenience while often cutting administrative expenses dramatically. Contextual searches and location-based technology help users find what they need faster than ever. And visually, many of them are stunning.

These portals also are mobile friendly, with most employing responsive design to ensure they're optimized for citizens using smartphones and tablets. As a result, government sites are serving

CITY

- 1 District of Columbia dc.gov
- 2 Los Angeles www.lacity.org
- 3 Boulder, Colo. <https://bouldercolorado.gov>
- 4 Santa Barbara, Calif. www.santabarbaraca.gov
- 5 Riverside, Calif. <http://riversideca.gov>

COUNTY

- 1 Oakland County, Mich. www.oakgov.com
- 2 Sacramento County, Calif. www.saccounty.net
- 3 King County, Wash. www.kingcounty.gov
- 4 Wake County, N.C. www.wakegov.com
- 5 Grand County, Colo. www.co.grand.co.us

STATE

- 1 Hawaii hawaii.gov
- 2 Utah www.utah.gov
- 3 Arkansas www.arkansas.gov
- 4 Texas www.texas.gov
- 5 Maryland www.maryland.gov

a broader audience. For instance, King County, Wash., says unique visits to its portal are up 17 percent since a mobile-responsive redesign late last year.

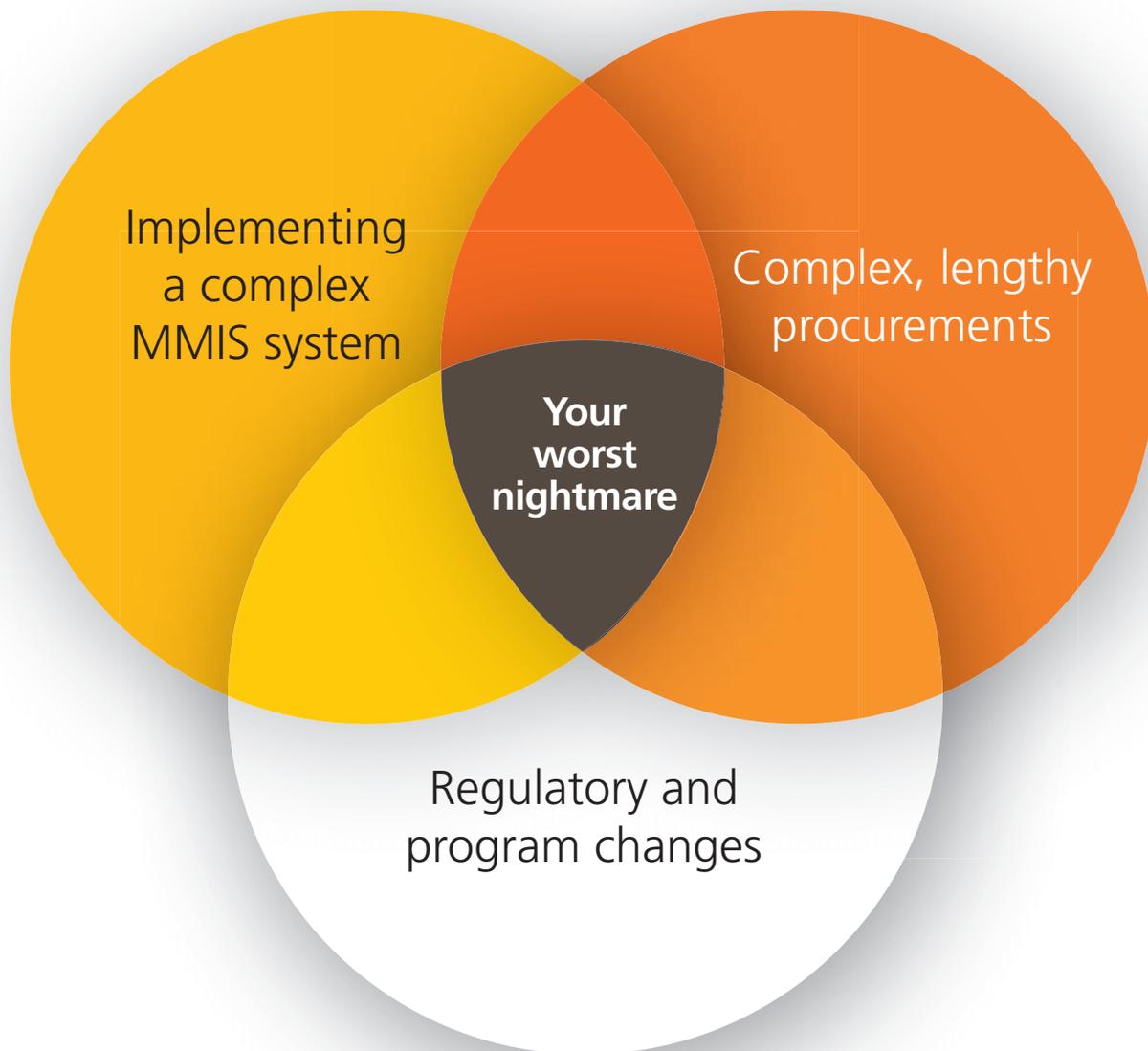
This year's Best of the Web winners show e-government continuing to evolve in useful and innovative ways. Congratulations to Washington, D.C.; Oakland County, Mich.; and the state of Hawaii for topping their categories. You can read more about these sites along with the rest of the winners and finalists at govtech.com. 

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AN AWARD-WINNING PUBLICATION



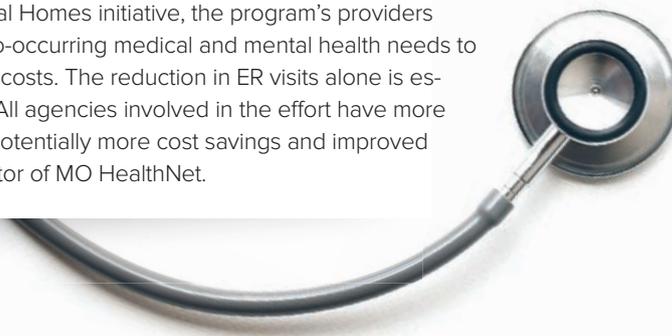


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Healthy Results

Missouri is saving money and **improving health care** by sharing data. Through a multiagency effort built over the past 10 years, the state's Information Technology Services Division has added new functionality that has reduced hospital use by 20 percent and emergency room visits by 12 percent among enrollees in Missouri's Medicaid program, known as Health Homes.

Modeled after Medicaid's Medical Homes initiative, the program's providers coordinate and treat patients with co-occurring medical and mental health needs to improve outcomes while containing costs. The reduction in ER visits alone is estimated to save \$8 million annually. All agencies involved in the effort have more data to share, opening the door to potentially more cost savings and improved quality of care, said Joe Parks, director of MO HealthNet.



Civic Funding

New research from Stanford University indicates crowdsourcing may be the next big funding tool for small-scale civic tech projects. Rodrigo Davies, a civic technologist and Stanford doctoral researcher, said online crowdfunding platforms are a growing source of alternative funding for civic works. Statistics from Kickstarter show that 81 percent of civic projects met their funding goals, with campaigns typically seeking \$26,000 or less. "The first thing we know about civic crowdsourcing is that it's small scale, but there are big ambitions," Davies said. The most popular projects were connected to highly visible and less controversial initiatives like city parks and green spaces, as well as event funding.



WHO SAYS?

"Don't discount yourself and your phone as part of the Internet of Things network."

www.govtech.com/quote-nov14

32 The number of public spaces where people can access **free Wi-Fi** in San Francisco, a project chiefly funded by a \$608,000 donation from Google.

“The progress in intergovernmental cybersecurity collaboration and integrated risk management, is an invaluable step forward. If this renewed vigor of federal, NASCIO/ CISOs along with tribal and local governments can create synergy with K-12 and higher education peers, it will enhance the overall proactive posture necessary. DHS cybersecurity education, training and outreach resources would also be invaluable. Ongoing and enhanced cybersecurity education (integrated into the classrooms), training and awareness in our communities is still greatly needed.

CMM in response to MS-ISAC: Cybersecurity Collaboration is Needed Now More than Ever

“Having worked in local government (county level) IT and specifically infosec, I can tell you that the biggest challenge facing these bodies is the ability to compensate skilled professionals. I get calls from recruiters daily looking to fill government infosec positions at 20 percent below the market salary. The other big challenge is that government is about as nimble as an aircraft carrier. Tasks [that] should take days in private enterprise will take months in the halls of government.

Andy in response to State and Local Governments Hustle to Fill the Cybersecurity Workforce Gap

“The baby boomers will demand their mobility long after they can drive safely, which is to say, they will demand driverless cars. It makes so much sense on so many levels. Drunk drivers no longer driving. Inexperienced drivers no longer driving. Truck drivers no longer driving beyond what is safe. Safer and more readily available taxis. The list goes on and on. I suggest the politicians, policymakers and lawyers oppose this technology at their peril.

wjk40 in response to Driverless Cars: Lawmakers Shouldn't Stymie Innovation

MOST SHARED STORIES

The Best Government Websites for 2014 **609 SHARES**

12 Startups Poised to Take on the Latest Cybersecurity Threats **341 SHARES**

The Importance of Cybersecurity in the Age of the Cloud and Internet of Things **246 SHARES**

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- | | |
|--|---|
| <p>Fairfax County, Va., Provides Real-Time Access to Police Data
6,102 VIEWS</p> <p>Austin Turns to Crowdsourcing to Improve Traffic Congestion
2,732 VIEWS</p> <p>Breaking Government's Cloud Procurement Gridlock
1,664 VIEWS</p> | <p>How the Sharing Economy is Strengthening Emergency Response and Recovery
1,501 VIEWS</p> <p>How Digital Are States in 2014?
1,421 VIEWS</p> <p>\$23 Million Govtech Fund Opens for Business
1,411 VIEWS</p> |
|--|---|

Q&A: Is Cost-Effective and Comprehensive Business Continuity and Disaster Recovery Planning within Government's Reach?



DANIEL MORRIS
Director of Technology
for the Public Sector
Kovarus

Your agency or department may not think of business continuity and disaster recovery planning as one of the most critical elements of organizational soundness — but it should. Mitigating or eliminating downtime and ensuring rapid recovery following incidents or disasters is critical in an age of 24/7 connectivity. We talked with Kovarus Director of Technology for the Public Sector Daniel Morris about the challenges agencies face in properly planning for business continuity and disaster recovery, and how Kovarus can help agencies not only develop a comprehensive plan — but a cost-effective one as well.

Q: What are some challenges government agencies face when it comes to business continuity and disaster recovery (BC/DR)?

DANIEL MORRIS: While business continuation can have different challenges than disaster recovery, on the whole there is a knowledge gap from executive leadership all the way down to the implementers of BC/DR planning. This is not surprising — creating an appropriate plan for resiliency is complex and requires multiple interdependencies among people and departments. But there's also the challenge of gaining executive buy-in and sign-off for the time and resources it takes to build a plan. Many people see BC/DR planning as a requirement they must fulfill, not a critical focus for the organization. Finally, it's difficult for agencies to justify investments in BC/DR planning because they are spending money to prevent a problem — and the metrics for this are hard to measure. For example, what is the hard cost when an AIDS information website goes down? How do you measure the benefit of a vital public service that informs constituents about available programs?

Q: How can Kovarus help states keep up to date on BC/DR requirements and streamline their compliance?

DANIEL MORRIS: We're passionate about ongoing education campaigns, which can range from simple discussions to more comprehensive service engagements with agencies and departments. States and agencies need to constantly think about and evaluate how things like adopting a new technology might impact their DR plan. For example, how does implementing virtualization impact network availability?

We also conduct a monthly forum which is open to state, city and county clients. These forums typically include discussions around how new technology impacts a DR solution.

Q: How can Kovarus help government entities plan well and sidestep costly mistakes?

DANIEL MORRIS: We can't emphasize this enough: You have to know what assets you have, prioritize them and define a distinctive policy about recover point and recover time objectives. Without these elements in place, our clients can't prioritize, and

end up spending a great deal more money, time and human resources than necessary.

We conduct business impact analyses that help clients discover what the cost is for down time. If an agency has a set of systems that are mission critical — the lifeblood of the organization — we'll make sure those go to the top of the queue from a service level agreement perspective, and we'll guide the agency in that direction.

Q: What sets Kovarus apart from its competitors in the BC/DR space?

DANIEL MORRIS: It's a trifecta. One, it's understanding the regulatory requirements out there. Two, it's understanding the business of our agencies. We go to great lengths to make sure we understand the people and processes embedded within a client's business unit and how we can best accommodate the agency as a whole. Our consulting services can ensure that agencies are compliant. Our experts can't mandate policy, but can make recommendations on how to formulate appropriate procedures to meet policies. During their assessments they can see if some of the systems already in place can be repurposed, so it doesn't become a total sunk or unrecoverable cost.

Finally, it's keeping up with the technology, which changes constantly. In the last year, there have been many disruptive technologies deployed in the field, and there are interdependencies between how the business unit, regulations and technologies weave together. Kovarus prides itself in being at the forefront of those technologies and building BC/DR solutions — cradle to grave — to facilitate compliance in the most cost-efficient way.

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Best of the Web: A STROLL THROUGH TIME

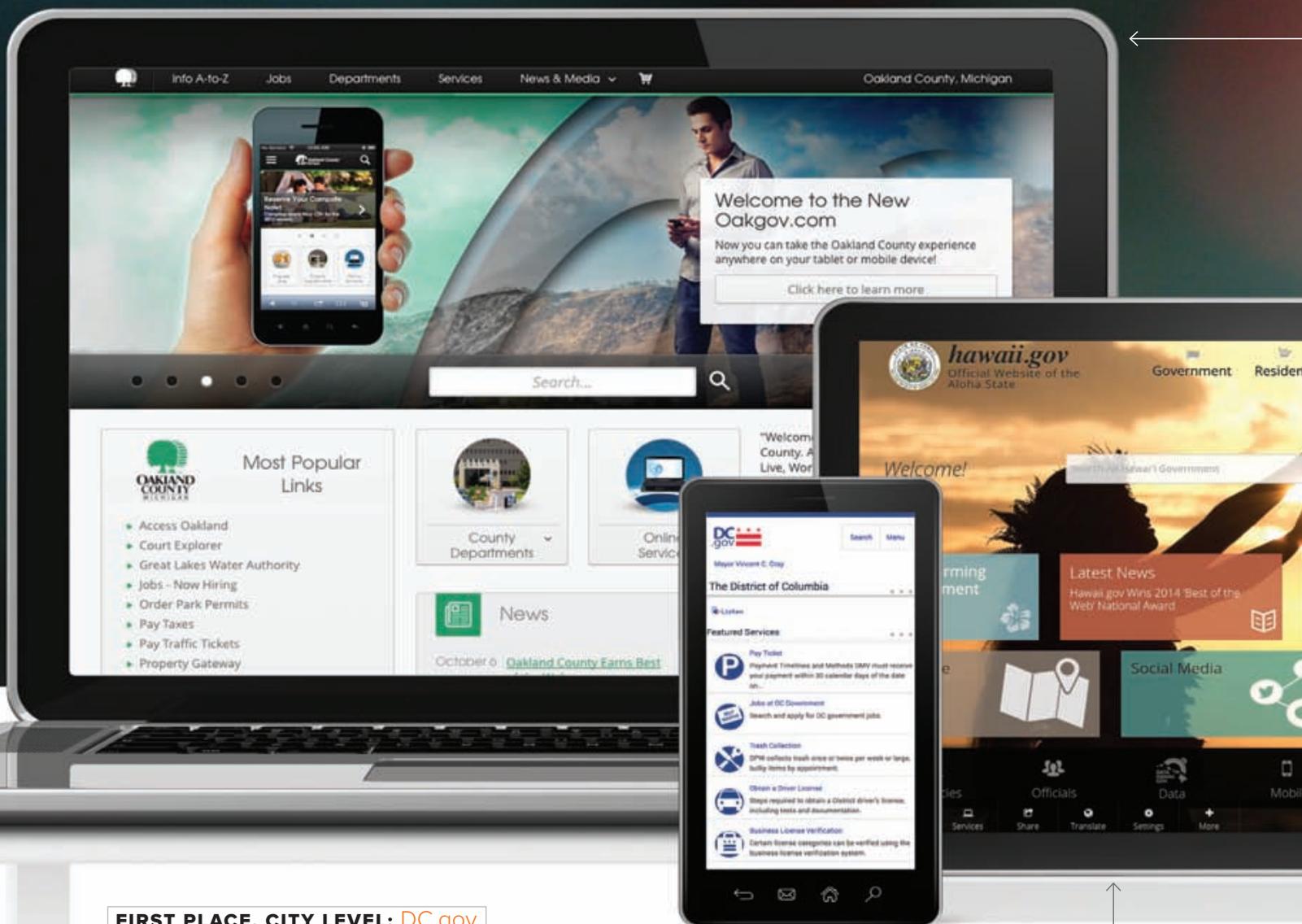
Hawaii, Washington, D.C., and Oakland County, Mich., are home to the best government websites in the U.S. These sites topped the 2014 Best of the Web awards, a joint project of *Government Technology* and e.Republic's Center for Digital Government, which highlights the

public sector's evolving Web capabilities. Winners were announced in October.

Nearly 300 government websites were judged on their innovative qualities, usefulness, and efficiency and economy in three categories — state, city and county. A panel of 2013's winners, former government

officials and executives from the Center for Digital Government selected websites that tried new things, while remaining functional.

Though clear progress in Web design has been made in the past decade, the websites featured in the right-hand column aren't merely representative of their



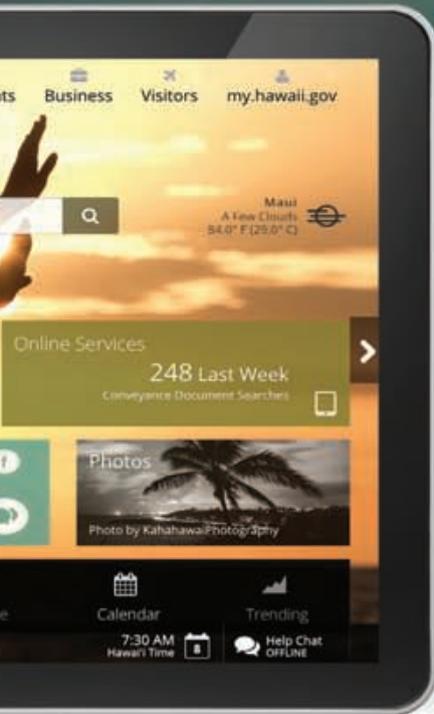
FIRST PLACE, CITY LEVEL: DC.gov

With its clean, responsive design, use of analytics for search and services content, and integration of social media, the District of Columbia's portal is top notch, befitting its 29 million visits in 2013. The portal relaunched this year on Drupal CMS, which saves \$300,000 annually in support and administrative costs. The new DC.gov offers more than 250 Web applications, and reflects a strong commitment to transparency, open government and accessibility: Its data catalog publishes nearly 500 data sets.

time — they are all former Best of the Web winners. Websites from 10 years ago didn't have a social media component, there wasn't yet a need for mobile access, and back-end integration was far cruder than what's available today. But the core functionality of what exists now was available then. A complete timeline of Best of the Web winners from 2004 to today is at www.govtech.com/webtimeline. **GT**

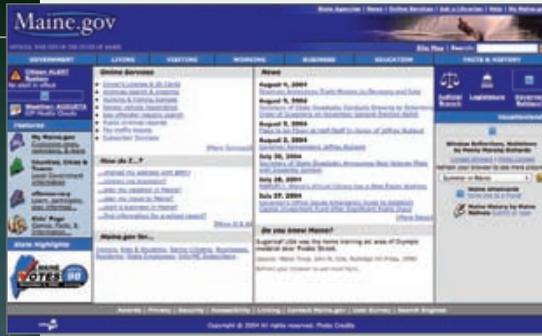
FIRST PLACE, COUNTY LEVEL: Oakgov.com

Oakland County uses adaptive design to detect a user's device type and deliver a version of the site matched to its dimensions and native features. Site navigation on the simply designed portal is organized around three choices — the most popular links, county departments and online services. These options lead visitors to the right information in 95 percent of use cases, the county says. In fiscal 2013, the site saw 2.5 million unique visitors, who viewed 13.2 million pages and played podcasts and videos more than 45,000 times. Online transactions produced gross revenue of more than \$13.8 million over that time, saving more than \$4 million for taxpayers and government operations.



FIRST PLACE, STATE LEVEL: Hawaii.gov

Hawaii's new website represents a dramatic overhaul, with simple, intuitive navigation and scenic imagery layered over a cloud-based, mobile-first site built on open source technology. This responsive site features a powerful search function, with rotating stats documenting actual online transactions. Registered visitors get a personalized dashboard, complete with transaction history, and gamification elements like leaderboards and badges help engage citizens.



Maine (2004)
Maine made online services a primary focus of its text-intensive portal, which compartmentalized links into tables as was typical at the time.



Seattle (2006)
Seattle.gov featured search as its primary avenue to desired city services, while a "choose your neighborhood" feature recognized that users wanted personalized content.



Utah (2007)
Utah has won several Best of the Web awards over the years (including second place in 2014), and its 2007 site was ahead of the curve with its streamlined interface that moved content into prominent dropdown menus.



Chesterfield County, Va. (2010)
Simple portals with intuitive navigation like Chesterfield County, Va., foreshadow the minimalist approach that is now a hallmark of modern public-sector Web design.



Alameda County, Calif. (2013)
Alameda County's Web strategy leans heavily on social media and other citizen engagement methods, while the streamlined mobile website boils down content into just seven categories.



Technology Takes on Hunger

Interactive Web tools and virtual platforms help city officials break down barriers to food access.

More than 23.5 million Americans live in areas without access to healthy and affordable foods, according to estimates from the U.S. Department of Agriculture's (USDA) Economic Research Service. Despite recent federal efforts to improve childhood nutrition, these designated areas — known as “food deserts” — persist due to a confluence of factors including systemic poverty, geographical distance to supermarkets and limited transportation options.

The USDA has made great progress in tackling this issue by launching an Internet-based mapping tool that presents a spatial overview of food desert neighborhoods. The Food Access Research Atlas opens up to a map of the United States that highlights clusters of food insecurity according to several indicators, including vehicle availability, public transportation access and average income level. Using the atlas, users can then pull up detailed information about a particular location by typing in a street address and viewing census-tract-level data at the neighborhood level.

Chicago has taken this initiative even further by integrating these data sets into its robust open data platform. With this project, Chicago has been able to increase government transparency and solicit citizen input regarding

new partnership opportunities. This, in turn, has improved the effectiveness of the city's efforts to reduce food insecurity, providing civic leaders with an easily accessible means to measure progress and identify priority areas that deserve even greater attention.

In the fight to eliminate food deserts, pinpointing neighborhoods that face the greatest barriers to food accessibility is an important first step. But as recent studies have shown, merely adding new grocery stores is insufficient to change people's shopping and eating habits. In order to produce lasting behavioral change, city officials also need to confront two major structural challenges to food security: physical mobility and education.

Baltimore has pioneered the latest solution by launching Baltimarket — a comprehensive suite of community-based food justice programs that uses a virtual platform to promote greater nutrition access, knowledge and self-efficacy. Launched in partnership with ShopRite grocery stores, Virtual Supermarket has received national acclaim for bringing healthy foods directly into the hands of Baltimore residents. Through this flagship program, shoppers can order groceries online either from a home computer or from designated library, public housing or low-income senior housing locations. Trained staff

and volunteers are onsite to assist residents, and once an order is placed, customers can pick up their groceries at a convenient neighborhood delivery site at no additional cost. Participating shoppers receive cash bonuses for purchasing healthy foods; residents can also use the virtual portal to access healthy recipes, locate the nearest farmers market or sign up for affordable cooking classes.

As these examples make clear, the issue of food insecurity cannot be solved by one single entity or program. Especially in this era of permanent fiscal shortages, city officials need to pursue cross-sector partnerships and innovative data solutions in order to achieve greater efficiency and value in service delivery. In light of these persistent concerns, it is clear that new technology tools hold the key to identifying areas with the highest need, while maximizing the efficacy of ongoing efforts to fight hunger. **GT**



Stephen Goldsmith

Stephen Goldsmith is a professor at Harvard Kennedy School and director of the Innovations in Government Program and Data-Smart City Solutions. The former mayor of Indianapolis, his latest book is *The Responsive City: Engaging Communities through Data-Smart Governance*.

GOING THROUGH PROCUREMENT PAINS?

The Center for Digital Government is pleased to present its **Best Practice Guide for Cloud and As-A-Service Procurements.**

Developed with input from state and local government leaders, as well as industry experts, the guide is intended to be a go-to resource for government leaders as they take advantage of modern technologies and create more flexible and agile procurement processes.

The guide includes Model Terms and Conditions for SaaS, PaaS and IaaS contracts as well as lessons learned from past cloud and XaaS contracts.

Procurement doesn't have to be painful.

Download the guide at govtech.com/procurement.





Tony Parham

Government Innovation Officer, Massachusetts

Tony Parham was named the state's first government innovation officer by Gov. Deval Patrick in 2012. Parham brings a varied background to the position, with experience in marketing, product management, software development and strategic planning. His mission is to find new ideas and technologies that make government function more smoothly for residents.

1 How has your office evolved? Under the executive order that created my role, I reported to the governor and the secretary of administration and finance. Since then we've enhanced our partnerships, and now we're also reporting into MassIT, our IT organization. I've also added a deputy GIO and launched a program that we call the Commonwealth of Massachusetts Innovation Fellows. We borrowed the concept from the White House Presidential Innovation Fellows program, where they bring in talented individuals from the private sector to tackle specific government projects. We thought that was a great idea, so now we have seven fellows who are absolute rock stars who will be working on projects for us for about 12 months.

2 What did you do first? In the beginning my staff was just me, and I had a seed fund that I

could use to start certain projects. I went on a listening tour where I talked to agency leaders about their customers and where there might be opportunities for innovation. Out of that came several hundred ideas. I created a set of guiding principles and identified a list of 11 projects. Business plans were created for each one of those and eight of them were funded.

3 Describe some of your best projects. We have health and human services programs that receive reimbursement from federal funds. But funds were being left on the table because our data warehouse couldn't report certain activities. So we enhanced the reporting capability of the data warehouse. For a \$1 million, one-time investment we increased our federal financial participation by \$11 million in the first year, plus \$7 million per year going forward.

We also created an innovation crowdsourcing platform called iCatalyst, which can

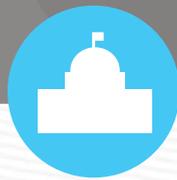
be pointed to specific audiences to provide feedback to help us solve thorny challenges. The tool can be pointed as narrowly or broadly as desired, and folks can securely get feedback from the audience to help them in their particular challenge.

4 How is the state using open data? As mobile devices have become more prevalent, our commonwealth transportation authority could have created mobile applications, but they did not. Instead, they used an API to publish train and bus schedule information in an open, computer-readable format. That created an ecosystem of third-party applications.

We've moved on to do other things. For example, we've partnered with an organization called hack/reduce in Cambridge to host hackathons with data professionals. And we held what we called a Mass EduData Challenge, which was a competition to make education data more useful to parents, school council members and others. Now one of our Massachusetts Innovation Fellows is creating an open data portal where we'll be publishing more open data. **GT**

— Steve Towns, Editor

Best Practices for a Converged IP-enabled Network



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a complimentary copy of
the Guide today at
www.govtech.com/converged-network-strategy



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A man in a dark suit and striped tie stands with his arms crossed against a colorful, geometric background. The background features large, overlapping shapes in shades of green, yellow, and pink, resembling a stylized architectural or abstract design. The man is looking slightly to the right of the camera with a neutral expression.

LARRY TWELE,
HOWARD COUNTY,
MD., ECONOMIC
DEVELOPMENT
AUTHORITY

TECH INCUBATORS
COME IN MANY SHAPES
AND SIZES. HERE'S A
LOOK AT A FEW THAT
SEEM TO HAVE A
WINNING FORMULA.

DAVID KIDD

GROWING INNOVATION

Technology incubators intended to turn innovative ideas into viable new companies are a key piece of economic development plans for many cities and states.

But what's the recipe for success? For this story, we interviewed the directors of five tech incubators about their operating models, relationships with the public sector and metrics of success.

A 2011 research study, *Incubating Success: Incubation Best Practices That Lead to Successful Ventures*, provides some guideposts. Funded by the U.S. Department of Commerce Economic Development Administration, the study was conducted by the University of Michigan's Institute for Research on Labor, Employment and the Economy; the State University of New York at Albany; the National Business Incubation Association; and Cybergroup Inc. It surveyed more than 100 incubators and came up with several observations.

The best-performing incubators collect client outcome data more often and for longer periods of time than their peers, the study found. Overall, two-thirds of top-performing incubators collect outcome data. More than half collect this information for two or more years, while slightly more than 30 percent collect data for five or more years. "Measurement is key," said Megan Reichert, who has served as venture accelerator program manager at the University of Michigan and director of incubation at the University of Toledo. Incubators must keep a focus on client milestones as well as the measures that the funders are interested in, which may be jobs or

investments from venture capitalists or angels, said Reichert, who also has served on the board of the National Business Incubation Association (NBIA).

Most high-achieving incubators are nonprofit models, and public-sector support contributes to program success. Only three of the top-performing incubation programs in this study operate without public-sector support. (Reichert noted, however, that for-profit incubators are becoming more common these days.) On average, nearly 60 percent of an incubator's budget is accounted for by client rent and service fees. That would suggest that some level of public-sector investment contributes to greater incubator outcomes in terms of job creation, graduation rates, etc.

Reichert said NBIA surveys indicate that one-third of incubators are affiliated with educational institutions and many have funding from economic development organizations. "It takes a diverse income stream to become self-sustaining," she said, "and government funding is one component."

From her experience in Ohio and Michigan, Reichert said economic development officials are focused on incubator data that makes a case for the return on investment, including jobs, leveraged funding and Small Business Innovation Research grants won. "They look for the effectiveness of the programs and absolutely will pull the funding plug on ones that can't demonstrate it."

Here's what directors of a handful of thriving incubators had to say:

BY DAVID RATHS

INCUBATOR: DUMBO INCUBATOR

LOCATION: Brooklyn, N.Y.

FOUNDERS: New York University School of Engineering, with support from the New York City Economic Development Corp. and Two Trees Management Co.

EXECUTIVE: Samir Ajmera

DATE OPENED: January 2012

NUMBER OF CURRENT PARTICIPANTS: 19 resident and 6 virtual

HOW IT WORKS: One of three incubators launched by NYU, the DUMBO Incubator focuses on hardware companies, mobile technology, enterprise software and Web 2.0. It's also very design-oriented. "We help [participants] build out their team and make connections with people at NYU," said incubator manager Samir Ajmera. Startups usually come in with one to five employees and graduate with 10 to 15 within 12 to 18 months. By then they usually have raised \$1 million to \$3 million and open their own offices. "We don't invite them to stay longer than 24 months," he said. "If you can't graduate in 12 to 18 months, something is not working." The incubator charges the startups \$400 per desk per month, and in exchange they get an array of business services, as well as access to angel investors and venture capitalists.

GOVERNMENT LINKS: New York City Economic Development Corp. negotiated subsidized rent on the incubators' behalf, "so we probably pay a third to a quarter of what other companies in our building pay. They also pay a percentage of our budget," Ajmera explained. The state of New York recently declared the three startup business incubators of NYU tax-free zones as part of the START-UP NY program to foster job growth and economic development.

SECRET SAUCE: I believe we are one of the best university-run incubators," Ajmera said. "How do you leverage your university to scale startups in a really interesting way? I think NYU has made a strong push to make that happen. People

want to be associated with NYU's incubators because they want access to the talent. We have a strong pipeline of NYU engineering students, computer scientists, Stern business school and law school. They believe when they come into our office that they have really good connections to talent. Because that is one of the big challenges startups face — building out their teams."

MEASURE OF SUCCESS:

Since 2009, the three NYU incubators have served more than 100 companies, with seven of those acquired by established public and private companies. Program graduates have created 900-plus jobs and raised more than \$60 million in equity funding.

INCUBATOR: ROCKY MOUNTAIN INNOSPHERE

LOCATIONS: Fort Collins (headquarters), Denver and Golden, Colo.

FOUNDERS: An array of private and public partners, including the cities of Fort Collins and Loveland and Colorado State University

EXECUTIVE: Mike Freeman

DATE OPENED: 1998

NUMBER OF CURRENT PARTICIPANTS: 39

HOW IT WORKS: Companies stay in the incubator a little over two years on average. "The whole idea is to support companies through a certain phase of growth. We have a very defined process, but it is not cookie cutter," said Mike Freeman, Innosphere's CEO. Space is an important aspect of what the Innosphere offers, because many startups need access to specialized facilities to do energy applications and large engine controls. The Golden office is located at the Colorado Center for Renewable Energy Economic Development, which is co-located with the U.S. Department of Energy's National Renewable Energy Laboratory. The Innosphere recalibrates with the companies every six months, defining milestones and successes. "We evaluate whether we are providing valuable services and whether the company is moving forward," Freeman said. "If either is not happening, we will sever the relationship."

GOVERNMENT TIES: The cities of Fort Collins and Loveland as well as Colorado State University are founding partners and provide sustaining funding. "I'm not clear how you would do what we do if you didn't have strong public support," Freeman said. "Fort Collins'

ROCKY MOUNTAIN INNOSPHERE HAS STRONG TIES TO LOCAL GOVERNMENTS IN COLORADO.





GANGPLANK PROVIDES SERVICES TO CITY GOVERNMENTS IN EXCHANGE FOR WORKSPACE.

CHRISTOPHER BARR PHOTOGRAPHY

economic development strategy has a significant component around innovation and entrepreneurship, and as they were developing that strategy a few years ago, we were tightly woven into that plan by design. The city is able to leverage their investment almost 10 to 1, because we fundraise and bring in other partners.”

SECRET SAUCE: “We have radically redefined how we screen companies by developing an online tool that our internal team and outside reviewers can use to quickly and effectively assess where a company is,” Freeman said. “For the companies we think aren’t ready yet, we offer them pre-client services. Their problems usually fall in one or two buckets: the technology is not far enough along or not enough market analysis has been done. We have built services for those companies. We want them to be clients, ultimately. I don’t see a lot of places doing that.”

MEASURE OF SUCCESS: In 2013, the Innosphere had its largest graduating class yet: 13 new companies. Client companies employed the most workers to date, with almost 200 full-time and another 100 part-time employees. Fueled by angel investors, client companies attracted more than \$35 million in new investment.

INCUBATOR: GANGPLANK

LOCATIONS: Chandler and Avondale, Ariz., as well as Richmond, Va., and Sault Ste. Marie, Ontario

FOUNDERS: Derek Neighbors and Jade Meskill

DATE OPENED: 2008

HOW IT WORKS: Gangplank is a nonprofit collaborative workspace group and startup incubator that works on a pay-it-forward or gift economy model, said

Co-founder Derek Neighbors. “Whatever participants get out of it, we ask them to give something equal in return,” he added. That might include mentoring or teaching a class. “We don’t do a typical incubation model for some time-lock period. Some people come in just for a few days, some run their business and have 10 to 15 employees.” Gangplank provides electricity, Internet and the space, as well as courses on how to run a business and mentoring. “We teach them how to succeed or fail fast,” he said. “People figure out if what they are doing is working for them or not working for them. If it is not working for them, they might join up with somebody else they meet here. But when a company gets to about 10 to 15 employees, it gets difficult for the company to separate its culture from Gangplank’s culture. That is about the time they start to look to move somewhere else. It becomes easier to grow by having their own space.”

FUCKRIN/HABITAT BLOG



JILL SEIDMAN SAYS CHICAGO-BASED HEALTHBOX IS FORMING A PARTNERSHIP WITH THE UK GOVERNMENT.

RELATIONSHIP WITH GOVERNMENT:

Gangplank provides services to city governments, such as helping them with open data initiatives and educational events. In return, the city provides space, Internet and electricity. “Some cities we are in don’t have a physical building so they give us a stipend to pay those bills,” Neighbors explained. “In other cities they have a physical building we can occupy, so we do a \$1-a-year rent.”

SECRET SAUCE: “We are trying to show a new way to work,” Neighbors said, “and show cities new ways to diversify themselves and prepare for an economy that looks much different.”

MEASURE OF SUCCESS:

Gangplank doesn’t formally track traditional business metrics. “If you want to change the model, you can’t use old metrics to determine success, so we have purposefully avoided those,” Neighbors said. “But we do follow everyone who has spun out of Gangplank. We have a strong alumni group that stays connected. They tend to be our biggest supporters. A lot of our graduates go to San Francisco, Seattle or Portland, so we have mini-Gangplank communities there. We are still connected to those individuals.”

INCUBATOR: HEALTHBOX

LOCATIONS: Headquartered in Chicago, with seven hubs: Chicago; Boston; Tampa, Fla.; Nashville, Tenn.; Salt Lake City and London (and soon Tel Aviv)

FOUNDERS: Nina Nashif and Sandbox Industries

DATE OPENED: 2012

EMPLOYEES: 22

HOW IT WORKS: Healthbox typically works with six to 10 startup companies per program. It raises money in a microfund structure to pay for its operations as well as make investments in early stage health-care companies. Funding comes from strategic partners, usually in the health-care field. “A good example is in a Chicago program where we have HCSC, Advocate Health Care, Ascension Health and several others participating,” explained Jill Seidman, a Healthbox director. “The typical structure is \$50,000 in exchange for 7 percent equity, but that structure does vary based on the stage of the company,” she added. Partner organizations invest for several reasons, Seidman said. They want to look at the broad base of innovation in health care and see where trends are going. They don’t want to be left behind.

They want to see the companies coming along that may create something that would change the way they do business. Or they are looking for companies that may be able to meet their current needs. “For instance, in our last Chicago program, one of the large health-care companies became partners with two of our portfolio companies,” she said. “They also want to expose their own employees to innovation. There are things employees of large organizations can learn from startups about flexibility and agility.”

RELATIONSHIP WITH GOVERNMENT:

Healthbox does not have any formal partnerships in the United States. It uses local economic development resources to help source companies to work with, and to expose that Healthbox is coming. In partnership with the government in the United Kingdom, this fall it is launching the Health Social Innovators program, which has a social enterprise focus. “As we raise a certain amount of funding, the government is going to match that amount,” Seidman said.

SECRET SAUCE: “Our health-care focus is different,” Seidman noted. “But the real secret sauce is how deep we go in working with our partners. Our thought process is that in other industries you are able to code and create Uber and disrupt an industry, but for health care you can’t just sit behind your computer. You need to be out there, interacting with physicians and understanding their workflows. The partnerships we formed to help these companies are the key differentiator.”

MEASURE OF SUCCESS: Healthbox has invested in 61 companies that are still operating. “A lot of accelerators will talk about fundraising — how much money the companies have raised. For us, that is just one factor,” Seidman said. “We look at the number of pilots, partnerships and early customers these companies are forming, with the idea that market traction really does help grow your business.” In addition, Healthbox looks at how many jobs they are creating. “We also look at the number of lives that have been touched by their product,” she said. “How many patients are you touching with the company you are building?”

INCUBATOR: MARYLAND CENTER FOR ENTREPRENEURSHIP'S INNOVATION CATALYST (ICAT)

LOCATION: Columbia, Md.

FOUNDERS: Howard County Economic Development Authority

CEO: Larry Twele

DATE OPENED: 1999

NUMBER OF CURRENT

PARTICIPANTS: 20 resident companies and 55 affiliate companies

HOW IT WORKS: In the last few years, the organization changed its name from the NeoTech Incubator to Innovation Catalyst. Speaking about the change, Howard County Economic Development Authority CEO Larry Twele said, "Incubators bring to mind a nice warm place where things are nurtured. That is a part of it, but we are trying to spur innovation. We want to get them in, coach them up and launch them out of here. Instead

of a place where they could have small offices and some mentorship, we have structured it to force collaboration." The iCat shifted the model of how it works with companies. There had been companies there for six to seven years in the old model. "We feel if they are here that long we are not doing our jobs," Twele said. "We have graduated them out." Previously the incubator took an equity share of 1 percent for every year the companies were there. "We no longer do that," he said. "We felt it limited the pool of candidates." The iCat affiliate members pay a fee and residents pay rent. While not completely self-sustaining, it is funded in large part by program participants.

GOVERNMENT TIES: Howard County funds the operations of iCAT. The quasi-public Economic Development Authority gets a large portion of funding from the county but also solicits private investments. The organization also works with the Maryland Technology Development Corp. (MTDC). "Their

role is to help commercialize technology for companies that are part of the statewide incubator system," Twele said. "The companies we work with get some grant funding directly from MTDC to develop prototypes or build branding."

SECRET SAUCE: iCat is part of a larger ecosystem that makes it work. For instance, one component is the 300-member Howard Tech Council, whose member companies interact with iCat companies. "That cross-pollination and connectivity makes the iCat a more valuable experience," Twele said. "We have a very interconnected system that I think is unique. They can leverage each other's strength and interconnected platform."

MEASURE OF SUCCESS: The iCat tracks capital fundraising and job growth. For instance, one recent participant came in with two employees and graduated as a 30-employee company. 

draths@mac.com



“WE WANT TO GET THEM IN, COACH THEM UP AND LAUNCH THEM OUT OF HERE.”

— LARRY TWELE

BREAKING

HOW (AND WHY) TECH ENTREPRENEURS ARE CHANGING GOVERNMENT SYSTEMS AND PRACTICES.

FOR A LONG TIME tech entrepreneurs have battered against the ramparts, looking for a way to breach the walls of government with services they believed could further civic aims. They are finally getting through.

“The platforms that have been around for a few years are really starting to become the norm in local government,” said SeeClickFix CEO Ben Berkowitz, who broke into the public-sector market with his 311-esque tool,

helping pave the way for entrepreneurs to work with (and help) the public sector. “The governments that are coming to partner are not necessarily the early adopters anymore. People are not just testing these things out. They are becoming standards.”

At the same time, some of today’s most innovative entrepreneurs in the civic sector say they still face challenges. Governments resist change; civil servants can feel threatened by

the tools of transparency; and procurement remains a choke-point. Smaller businesses especially are stymied when it comes to navigating public-sector buying processes. It still isn’t easy getting in.

That being said, some are making headway, delivering a range of tools to improve government and ultimately better the lives of citizens. Here are nine entrepreneurs who are making it work.

ADAM STONE / CONTRIBUTING WRITER

GIN

DONNA HARRIS / CO-CEO OF 1776



As Donna Harris looks across the technology landscape, she sees not just new avenues for consumer gratification. She also sees an emerging world where government and entrepreneurs can come together to make life better for everyone.

“If you look at what is going on with the Internet and social media, cloud, big data, we live in a world where there are incredible possibilities through technology,” she said. “Yet entrepreneurship has been primarily focused on our lives as consumers — Facebook, Angry Birds.”

But health care, education and energy are still “broken,” said Harris. “We haven’t seen that level of innovation coming to these really important markets. ... I would like to see entrepreneurs create enterprises that solve meaningful problems.”

1776 is meant to be one such solution. As an incubation platform working with startups worldwide, the organization focuses its support on government-regulated arenas like education and health. It provides funding, classes, mentors and customer connections.

New companies with aspirations to work in these areas face special challenges. In the consumer market, things are clear cut: Companies develop a product, market it to their audience and then people use it or not. But that’s not how it works in the public sector, where laws and regulations reign supreme. “There is a lot more complexity anytime you want to put a product into a market where the government plays a role,” Harris said.

On the upside, the same complex rules that keep a company out also can help it to get in. “Laws are changeable; regulations are changeable,” Harris said. “You can talk to legislators, you can get laws changed as a strategy to help drive growth. It’s not as complicated as you might think, especially when you are talking about state laws and local legislation.”



ANDREW HOPPIN / CEO OF NUCIVIC

FLICKR/DAVE PRINTER

As a former CIO of the New York State Senate and now co-founder of NuCivic, Andrew Hoppin has seen how much information typically flows freely between government and the public: barely any.

His company's flagship product, NuCivic Data, aims to remedy that. It offers government a simple platform for publishing maps, charts, graphs, data, blogs — anything that might help make operations more transparent.

And it's all done on an open source platform. "As a government CIO, I always was concerned: This seems great now, but what if my needs change next year, or my vendors change and they want to change their pricing?" Hoppin said.

An open source infrastructure, "means you're not locked into us. If you decide next year to take the service in-house or you think we're not doing a great job for you, you get to keep your software," he said. "We don't get to turn it off and leave you hanging." As an added benefit, open source tools are available to all, meaning there may be an entire community of users and developers working to improve the product.

It isn't always easy to convince government leaders of transparency's benefits. "Information has always been thought of as power," Hoppin said. "It means getting different stakeholders in the institution, along with skeptical people in the media and civic institutions, to believe that it is worth doing things differently."

Seeing often is believing. When the New York Senate voted in 2010 on marriage equality, "tens of thousands" of people tuned into a live stream, Hoppin said. "All of a sudden senators realized they could have all these new touch points with their constituents and that could be a great thing for them."

ALEXANDER KAPUR /

CEO, OPPORTUNITYSPACE

We can live in better spaces, if only government would step up. Sometimes, though, it's not that simple.

"Governments are always dealing with the most interesting problems," said Alexander Kapur, CEO of OpportunitySpace. "On the issue of how to create better places to live, work and play, government has so far done this with a very narrow focus — by neighborhood or by block — or they do it on a mega master plan that will never be fulfilled. Now I see a chance to influence what the places around us are going to look like."

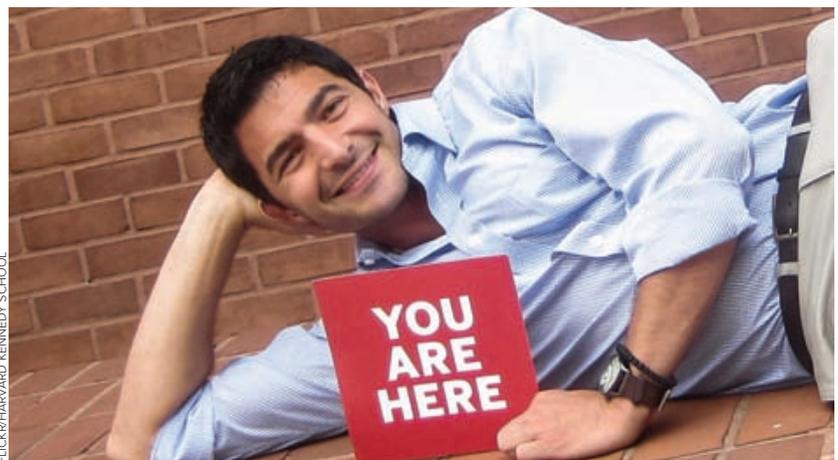
That opportunity comes in the form of land inventories. Cities struggle with development in large part because they simply don't know what they have. That's where OpportunitySpace comes in, researching and cataloging sometimes vast unknown landholdings within a municipality.

property through tax foreclosures or failure to comply with regulations.

It's not easy to ferret out all this data. Kapur's team scours asset management information systems, explores tax databases, pulls inventory information from development authorities, pores over Excel documents and wades through paper-jammed filing cabinets.

Even with data in hand, working with governments to turn this information into real-world outcomes can be a bear. Civic real estate processes are protracted, and people get frustrated when they don't see immediate change. Kapur's solution has been to find a link to those who care the most.

"There are many well intentioned people in government who are interested in this issue and they tend to be our champions when we go into a new city," he said. "There is also a



FLICKR/HARVARD KENNEDY SCHOOL

"A lot of people think of government-held property as fire stations and city hall," Kapur said. "But that is only a very narrow slice of the story." Governments may hold tremendous tracts of open space or possess properties taken by eminent domain as far back as the 1880s. They may have purchased waterfront land or industrial sites for forgotten development schemes or acquired

lot of civic energy we can harness, to enable partnerships between government and civic organizations that were previously adversarial."

Land-use transformations don't happen overnight, but Kapur said OpportunitySpace is helping to get the wheels turning a little bit faster.



MARCI HARRIS / CEO, POPVOX

It's been government all down the line for Marci Harris. Early in her career she served as the tornado recovery coordinator of Jackson, Tenn., and in 2007, she was a legislative counsel to Rep. Pete Stark, then-chairman of the Ways and Means Subcommittee on Health.

Along the way she learned a valuable truth: A vast disconnect exists between the voice of the people and the hearing apparatus of lawmakers. "I had the most visceral rubber-meets-the-road experience of how government impacts real people. But it was also the most visceral experience of how frustrating government processes can be when you try to get something done," she said. PopVox exists to bridge that gap.

Lawmakers do want to hear from you, but they don't want to hear from everyone, and certainly not all at once. Thanks to the Internet, requests and commentary flow constantly into legislative offices, but it's not always valuable input. "It was very difficult for Congress to distinguish signal from noise, to understand whether the input was even related to something that Congress was working on," Harris said. "I just kept thinking there ought to be a better way."

Through PopVox, individuals and organizations can check on current bills and create profiles explaining their positions. Messages go to the appropriate congressional offices. The basic service is free, while a pro version provides analytics that can help an organization understand how many people are

going to a Web page and actually sending a letter about an issue. "You want to know how effective your campaign is," Harris said.

The government site Thomas.gov makes available all information on pending bills, meaning PopVox is able to draw the meat of its offering directly from the government, no strings attached, no chasm to cross.

As Harris sees it, this technology will do nothing less than change the world. "Never on this planet has there been a responsive, transparent, inclusive, interactive government, because it has never been possible," she said. "Now that we have the ability, we have a greater responsibility than we have ever had to know what government is doing and how they are doing it."



TEDx
TampaBay
x is independently organized TED event

JORDAN RAYNOR /

CO-FOUNDER, CITIZINVESTOR.COM

So here's the plan: Citizens will see a need in their community and despite being overburdened by taxes already, they'll go online and fund the project themselves, rather than ask the city to pony up.

"I was confident this wasn't going to work," said Citizeninvestor Co-founder Jordan Raynor. "I was thinking sure, we can build it, I just don't think people are actually going to do this."

Wrong, as it turns out. Since its 2012 rollout, the crowdfunding site has attracted 50 projects, 68 percent of which have reached 100 percent of their goal. The average project costs about \$15,000, and the largest has clocked in at \$77,000.

Raynor has long been civic minded. He ran a political campaign straight out of high school and interned with the George W. Bush administration in 2006. And in 2009, he founded the political fundraising firm Direct Media Strategies, later bought out by Engage. "Government is the people working together for the public good, and that was always appealing to me — to try to better people's lives," he said.

"Working together" is an apt descriptor for Citizeninvestor, where grumbling about taxes is often overridden by a willingness to all row in the same direction. "Citizens are more than willing to pay over and above what they pay in taxes if you tell them what the government is doing," Raynor said. "They want a louder voice in the process by which government chooses which public projects to fund."

Projects on the site today include new trash cans in Central Falls, R.I., and a new playground in Chicopee, Mass. Despite early success, Raynor still wrangles with the complexities of engaging government in a novel funding program.

"This is something government has not done traditionally," he said. Once they've seen the wisdom, the greater challenge becomes setting the goal. "Municipalities put a lot of pressure on themselves to identify that perfect project. They want to gain some traction, they want to show some success to the citizens in order to generate ongoing interest. But it's government: It takes time."



KATHRYN PETERS

Not everyone can make it to the polls. Students in particular may be away from home at voting time, but there are many others who can't access the ballot box, for whatever reason. Democracy Works and its flagship product TurboVote aim to make the process easier for all.

For Co-founder Kathryn Peters, it's vital to see her compatriots punch the card. "The U.S. has some of the lowest participation rates of any established democracy," she said. Why don't people weigh in? "Part of it is process. We manage elections at a county

GREG TRACY /

FOUNDER, HACKINGMADISON

It's a case of ingenuity born of need. As he headed to work each day, Greg Tracy always wanted to know where his bus was on its route and whether he had missed it. The information wasn't readily available to the public, but Tracy found it buried deep in the Madison, Wis., mass transit site.

Thinking that others might want to see it too, he created a Web service tool to make the information publicly available. Then he published that tool and created HackingMadison, an open community where others can easily generate views into civic information. Now the site gets 2 million requests per week just for transit information. Other projects on the site let users "adopt" local fire hydrants and access police and fire details.

Those developing tools for tapping civic data typically do it in the evenings after work, Tracy said. But they are no less devoted to the work. "They can give back by using a skill set that they are really happy to use," he said. "From the city's perspective, they have a whole new volunteer community they can tap into, to build new services that



they cannot otherwise access."

There's been a happy symbiosis between the site and the city. Tracy met some resistance at first, but as civic leaders realized the site's utility, some began to use it to connect with the public in new ways. Take transit for instance: "Every time they make a scheduling change, they reach out to me to get it updated. Otherwise, when something goes down, people call the metro and complain."

Ideally HackingMadison will become the focus of an ongoing, two-way conversation. "Over time all this data will migrate in and be owned by the city," he said. "If I can transfer ownership of this back to the city, then everybody wins."

MARK NELSON /

CHIEF OPERATING OFFICER, REVELSTONE

"With good data, decisions are based on what you know, not what you think."

That's the driving philosophy behind Revelstone, whose tools help government organize and visualize performance according to solid, verifiable metrics.

"Governance risk and compliance is not sexy. It is not the coolest Web app," said COO and Co-founder Mark Nelson. "But we all need it. We all need to look at that data. So we are helping local governments have data-driven discussions, instead of just saying, 'That's the way we did it 15 years ago.'"

The service, a product of the Code for America

Accelerator, maintains a library of some 600 civic metrics. It can measure overtime for police, the number of fire emergencies, the number of building inspection permits, and even participation in soccer programs. "We're not big data, we are actually simple data. Local governments aren't ready yet for big, complex data," Nelson said. "They don't have analysts and rocket scientists to do all the analytics."



Instead, Nelson focuses on the simple metrics that demonstrate performance. Suppose, for instance, a flu vaccine deployment is hitting the wrong populations. Data can be a crucial factor in organizing the program. "Nobody wants to be the one who says we are stopping the service. But when you put the data on the table, then it makes the case internally, and you can make the case to your citizens as well."

Not every city official is thrilled with the new premise. "We are ultimately selling a culture change," Nelson said — a change that some may resist by wanting to keep their department's work internal. But that's exactly where data has the greatest value: peeling away layers of obscurity and laying out the facts.

CO-FOUNDER OF DEMOCRACY WORKS

and town level, and it is not consistent," she said. People don't know where to register; they don't know where to vote or how to vote absentee. "We looked at that and said, 'That's a part of it that we can help fix.'"

TurboVote is helping 215,000 users at present, and Peters said that number could double in the near

future. That's a big number for an effort fresh out of the gate. It helps that TurboVote aimed its early efforts at 58 colleges. (It now connects with 180 schools.) "[Students] tend to vote absentee and they are great early adopters," Peters said.

The site boosts participation in several ways. Users can log in to register

to vote or update their registration. They also can request absentee ballots by mail and get reminder notices as elections near.

Behind-the-scenes work has been challenging. Every voting district handles things differently, and there's no unified system for accessing the kind of information TurboVote needs. Last year

the company put people in various voting offices to observe the system, in order to better institutionalize the process.

As a result, this year TurboVote plans to launch BallotScout, a tool that lets election offices track outgoing and returning ballots. It also helps officials place widgets on their

websites that let voters track their ballots, ideally saving them from answering unnecessary phone calls.

Looking ahead, Peters is working with municipalities to develop and test email and text tools related to the voting process. "But we're still collecting a lot of ideas about what our next offering should be."

A portrait of Minh Tran, an independent mobile app developer. He is a man with short dark hair, wearing glasses, a dark pinstriped suit jacket, a white shirt, and a blue and white striped tie. He is looking off to the right with a slight smile. The background is a blurred cityscape with tall buildings under a bright sky.

MINH TRAN /

INDEPENDENT MOBILE APP DEVELOPER AND AUTHOR OF FIX311

It started simply enough: Minh Tran blew a tire in a pothole. But just try to get that divot fixed.

"I wondered how you reported something like this to the government," he said. "It turns out, if you went on the website, you had to fill in lengthy forms. If you called in, you were placed on hold and listened to music. The whole process was very inefficient."

Thus Fix311 was born. Using GPS and smartphone cameras, the mobile platform lets citizens report to the city everything from safety issues to public

works maintenance requests to cable service complaints. There's even a category for barking dogs. "I just wanted to improve government," Tran said.

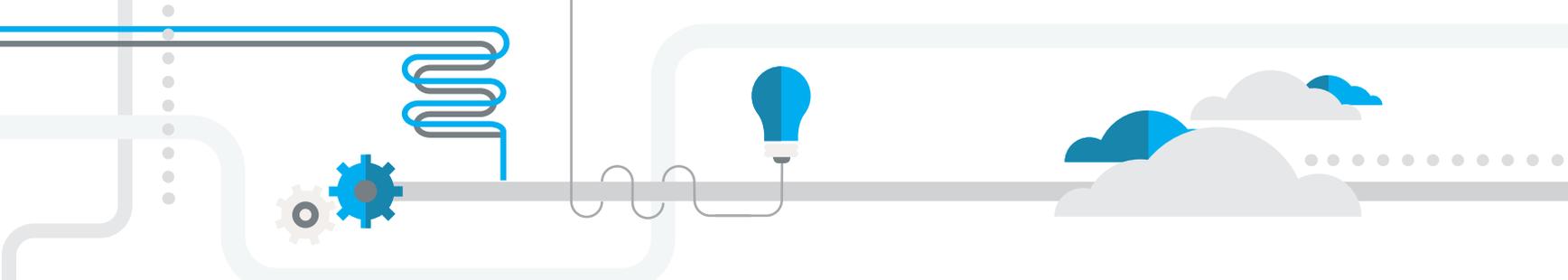
Because problems often cross jurisdictions, the app goes beyond local apparatus. Tran said the app knows, for example, if a request should be routed to a city or county.

So far the app interface has been adopted mostly by smaller cities like Jerome, Idaho; Piqua, Ohio; Yorba Linda, Calif.; and Lake Alfred, Fla. Cities pay \$800 to \$40,000 a year to use the service. "That's pretty good considering the city doesn't

have to build the system themselves or hire an IT person to manage it," Tran said.

Still, getting in the door has been a challenge. "They keep redirecting me to different people," he said. "I am still trying to figure out how they all work. Sometimes I am in contact with someone in public works, sometimes I am talking to someone in communications."

Tran's hanging in there, in the belief that ultimately his work will make a difference to all concerned. "It will help the image of government," he said. "It shows the government's desire to engage with the public." 



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E-GOVERNMENT AS AN
ENORMOUS SUCCESS.

It didn't evolve as
pioneers planned,
but government's
move to digital has
been revolutionary.

IS **E-GOV** REALLY DELIVERING?

Ask a half-dozen people about the origins of e-government and you'll likely get a half-dozen different answers. Some point to Y2K — the Millennium Bug — as a defining moment; if you were in federal government, it was the Clinger-Cohen Act of 1996 that set the e-government wheels in motion inside the Beltway; if you were in local government it was the small club of cities that built their own websites in the mid-1990s with the support of Public Technology Inc., the technical arm of the National League of Cities, the International City/County Management Association and the National Association of Counties; or, if you happened to live in Silicon Valley at the time, it was a bookstore in Palo Alto that launched a revolution.

“For me the origins of electronic commerce and e-government have their roots in a place in Palo Alto called the Future Fantasy Bookstore,” said P.K. Agarwal, who was the president of NASCIO at the time (then known as NASIRE or the National Association of State Information Resource Executives). “It was a science fiction bookstore and they were the first ones to put their book catalog online.”

Agarwal, who worked with IT in state government for many years, most recently as California's chief technology officer during Arnold Schwarzenegger's administration, said the bookstore originally went online to serve existing customers, but soon had orders coming in from around the globe. It was a pivotal moment, according to Agarwal, who suggested to his colleagues that government ought to consider doing something similar for how it purchases goods and services. “From my narrow vision at that time, e-government was actually e-procurement,” he said.

As Agarwal explained, this was the first of a multistage evolution in e-government at the state level. Already, government had begun to publish information online and, after the Y2K hiccup, began moving toward interacting with constituents and businesses and setting up the first transactional services online. Today, e-government is a given. Every state and nearly all localities have websites that offer services that can be done online instead of in line.

“E-government is an enormous success story,” said Steve Kolodney, the former CIO of Washington state. “There has been an explosion in the number of great examples of improved service delivery.” On a broader scale, you can include integrated workflow and processes that have made government more efficient, more channels for citizens to communicate and engage with government and better governance overall.

But there have been shortfalls too. Adoption rates vary for online services and remain low for some services, despite early expectations that may have proven too optimistic. State and local governments have invested hundreds of billions of dollars in e-government initiatives over the past 15 years, yet it can be hard to find quantifiable data that supports the cost savings they projected from the technology. “Governments are good at projecting savings, but never at harvesting them,” said Carolyn Purcell, the former CIO of Texas. “I think e-government should have been a more profitable engagement.”

States and localities also face challenges with their e-government strategies. How they cope with them could spell the difference between new opportunities or stagnation when it comes to e-government. For the first time, more Americans used a mobile device than a PC to access the Internet, according to the research firm Enders Analysis. A growing number of states and localities are opening up data sets, allowing more collaboration with the private sector and greater transparency. The result could be new online services, but in a way that is far different from the traditional e-gov model. How government handles these new trends could set the stage for e-government for the rest of the decade.

In the beginning there was electronic commerce. Before the World Wide Web, people in government saw technology and the emerging Internet as the means to speed high-volume, high-value transactions between government and its business partners. These interactions included tax filing and payments, customs information, student loan data and financial notices. The tools for making

this happen included electronic funds transfer and electronic data interchange.

What became immediately apparent, however, was the need for security, especially if the transactions took place across the open Internet rather than within proprietary networks, which were expensive. To help make all this happen, a group



P.K. AGARWAL
ORIGINALLY SAW
E-GOVERNMENT
AS A FORM OF
E-PROCUREMENT.

of state IT executives created the National Electronic Commerce Coordinating Council to figure out what technologies and policies were likeliest to succeed. The goal was to create model agreements and best practices that could be adopted on a national scale.

“There were a number of priorities happening at that time, but one of them was PKI [public key infrastructure],” said Purcell. “It was a recognition that in order to do electronic commerce, we would need some sort of security to protect important information to transact between government and business.”

But some businesses couldn’t wait for the methodical but slow wheels of government to fashion the rules and guidelines for e-commerce. In 1992, Kansas signed an agreement with the Kansas Information Consortium, a startup company dedicated to making e-government happen. The vision was to let the private sector do the heavy lifting of creating a working system so that businesses (primarily law firms at the time) could exchange legal information, explained Brad Bradley, one of the founders of what is now the National Information Consortium (NIC). The idea was that a private tech firm would build the

infrastructure necessary for e-commerce, install and run it for government, which would oversee the operation. To finance the operation, it used what NIC calls the “self-funding” model: A portion of the fees paid by businesses willing to use the electronic service would cover expenses.

“The origins of e-government really started as a business operation,” said Harry Herington, CEO of NIC. “It wasn’t until PCs became more affordable and the Web emerged that government-to-citizen e-government emerged.”

Another e-gov trigger was the Millennium Bug known as Y2K. In order to avoid having the software glitch shut down vital mainframe computers at 12:01 a.m., all levels of government spent an inordinate amount of time (and money) inventorying and upgrading their systems and networks, which opened the door to new technologies, according to Kolodney. “Y2K triggered a pent-up demand for new IT initiatives,” he said.

The combination of low-cost PCs entering the homes and businesses of Americans, coupled with the rapid rise of the Web and a burst of new ideas around technology, together with the expanding role of the government CIO, led to a wave of activity that gave shape to e-government as we know it today. States and local governments, whether on their own or with private-sector partners, like NIC, BearingPoint and other firms, began building portals to display searchable information and to offer a few core transactional services. “The portal became a wonderful way to show off what a state did with its taxpayer dollars,” said Kolodney. “It quickly became apparent that the function of the IT department was to provide new avenues to deliver services.”

In 2002, the federal government became a major player in the movement when Congress passed the E-Government Act. “It put into stone the whole idea of a Web-enabled government,” said Mark Forman, who is recognized as the first federal CIO. “The vision was to get an order of magnitude in improving government’s value to citizens. It was about shrinking the cycle time for government to make decisions.”

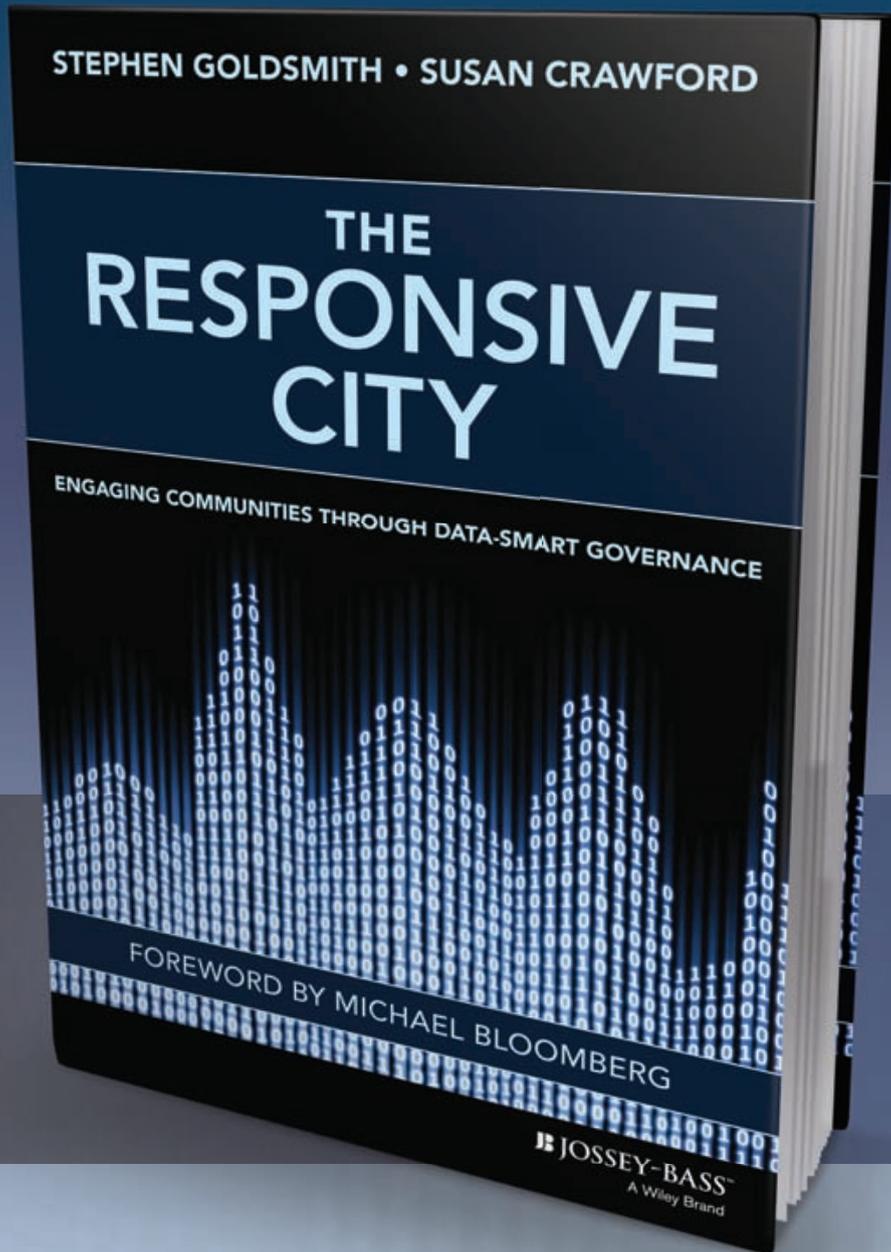
Today, e-gov is no longer a vision, but a given. Virtually every government entity has a website and most also offer some kind of transactional service, so that citizens and businesses can interact online, whether it’s filing paperwork or paying a fee or tax. E-government has matured in a number of directions: government-to-citizen, government-to-business and government-to-government. It operates through a multitude of channels, with interactions on mobile devices rising rapidly.

This year, Wisconsin updated its website for the first time in 10 years. On the customer service side, the state has launched 21 online services, including five mobile applications. With NIC as its partner, the state estimates that it will reap \$9 million in savings and value annually. And just as the first generation of e-government triggered a wave of activity that included both online services and IT improvements, Wisconsin has taken the opportunity to overhaul major internal management systems that handle accounting, budgeting, human resources, payroll and procurement.

To get there, however, the state had to set up a robust governance structure and overhaul its security, disaster recovery and broadband infrastructure, according to Chris Schoenherr, deputy secretary for the Department of Administration. Echoing the vision from the early days, Schoenherr spoke of the state’s renewed e-government initiatives as fulfilling “customer expectations” and “meeting the customer where they are.” In other words, adjusting to their needs rather than expecting them to adjust to the government way of doing business.

Wisconsin’s most popular mobile e-government service is its hunting and fishing application. That wouldn’t surprise NIC’s Herington, who said recreational and DMV-related applications are among the most popular services in the 29 states that NIC serves. But the pendulum has shifted since the early days of e-government. “When the Web was first introduced, 80 percent of the activity involved government-to-citizen activity,” he said. But there’s a limit to how many times citizens need to interact with government.

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As a result, business transactions, such as UCC filings and one-stop business startup services, now dominate. “Regulating businesses has become so complicated today,” said Herington, that it’s driving the need for more government-to-business applications.

The shift also reflects a more realistic set of expectations when it comes to citizen-centric e-government. “I think e-government has fallen short in adoption,” Agarwal said. “The percentage of people who go online is still too low.” Part of the problem could be the uneven activity of e-government. Only one-third of states offer online license renewals, according to the Center for Digital Government (which is run by *Government Technology*’s parent company e.Republic). California’s Department of Motor Vehicles, which has had an online presence for years, only processes 25 percent of vehicle registration renewals via the Internet.

The cost savings generated by e-government still remain somewhat a mystery. Direct cost savings, when published, tend to be either modest or are couched in terms such as “value to customer” or “cost avoidance,” which tend to be squishy. But don’t blame the CIO for overselling e-government as a cost-cutter, explained Kolodney. “Our job was to sell the idea, demonstrate the functionality,” he said. “But agencies didn’t want to reduce headcount because it wasn’t clear to them how e-gov would work.” In other words, e-government presented a radical shift in how government could operate, but few leaders were willing to follow through and overhaul government itself.

When the United Nations released its 2014 e-government survey, the U.S., a perennial leader in the field, had dropped to seventh place in international ranking, while other countries, most notably, Singapore, Korea and Australia, had shot up to the top. It’s not clear why the U.S. has struggled to maintain its lead in recent years. But the report emphasized that e-government is no longer just about service delivery, but must be a catalyst for change as well.



UTAH ISN'T RESTING ON ITS E-GOVERNMENT LAURELS, CHIEF TECHNOLOGY OFFICER DAVE FLETCHER HOLDS ANNUAL MEETINGS TO BETTER UNDERSTAND HOW THE STATE'S ONLINE PRESENCE CAN ADDRESS NEEDS.

DAVID KIDD

At the same time, government itself needs to be more integrated, proactive, transparent and accountable.

Utah Chief Technology Officer Dave Fletcher follows these trends closely. He also evaluates Gartner’s annual hype cycle to better understand which technologies are maturing and ready for adoption. He holds yearly meetings to better understand how technology and e-government can address the needs of the state’s citizens and businesses. At the same time, IT has to align with Gov. Gary Herbert’s goals that impact education, jobs, energy and self-determination.

Making sure technology helps the mission of the state’s agencies align with the governor’s goals is a large task, according to Fletcher, but e-government can help make that happen. It’s not just in the numbers — the state has 1,100 services online and more to come — but it’s about changing government into an effective and efficient service; it’s about meeting heightened expectations; and it’s about pushing the envelope when it comes to integration and collaboration, said Fletcher.

To that end, Utah has a mobile-first strategy for its e-gov services now (the state is a partner with NIC). Fletcher said open data will play an increasingly big role for the state. “There are lots of opportunities in that space, lots of new platforms.” Utah is also taking

advantage of the cloud to leverage agile development of new applications, and it has enhanced information integration, eliminating siloed data. “We’re out of the mainframe business,” Fletcher said.

All this puts Utah in a strong position to utilize e-government to deal with what the UN report called a “set of complex, multifaceted and interdependent challenges” that face all governments.

More e-government should mean less stodgy public-sector operations. State and local governments that use e-government the right way are on their way to becoming “a cutting-edge business,” said NIC’s Herington. “They want to take the bureaucracy out of government. They understand how to leverage e-government.”

Without sacrificing security and privacy, e-government can create a more transparent public sector that enables citizens to evolve and have the kind of influence that has never existed before. The assessment is that e-government has been an overwhelmingly positive force for government, despite some shortcomings.

“E-government has changed the face of government and the way we do government,” summed up Purcell. “It has revolutionized how people interact with government. It really has made a huge difference.” **CT**

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SOCIAL MEDIA'S NEXT FR

Your organization is on Facebook and Twitter — now what?

By Colin Wood

With all new things, there comes a time when the novelty has worn off, but people aren't ready to move onto something else. Like the coin collector who finally completes his penny collection, no matter how beloved, every project reaches a time when even the most emotionally invested are forced to stop and think, "OK, now what?"

Social media have provided government with free platforms populated

with millions of sprightly users. As a means to open new lines of communication with the public and meet the seemingly universal goal of increased transparency, social media delivered a solution unrivaled in its convenience, low cost and efficacy. In these early days of social media, the value to government is both obvious and severely limited.

No one talks about the flops, but they're out there. Twitter accounts with just a few followers. Facebook pages with almost no activity and that don't seem



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to serve a practical purpose. It could be that in those instances the fault lies with the craftsman and not with the tools, but those disenchanted with the notion that social media will somehow transform their organizations are somewhat justified.

Even those who appear to be winning in social media should be dubious of the impact. California runs a dashboard that allows citizens and government officials alike to revel in the glory of the state's social media presence. The dashboard shows that California has 433 social media

accounts and a combined 38 million Facebook likes, Twitter followers and YouTube views. Those sound like big numbers, but exactly what they mean is unclear.

On the heels of hype, 2014 feels like something of a social media impasse. The good news is that big change is imminent. The Gen Y Facebook exodus isn't social media's death knell, but an indicator that people are tiring with what the first generation of social media offered and are clamoring for new possibilities. A future of integrated digital technologies that will transform the world is being built right now.

The initial step of joining social platforms is for some governments accompanied by an array of basic social media tools. The Chicago Department of Public Health (CDPH) uses a Twitter monitoring tool to find possible cases of food poisoning and inspectors use that data to make restaurants safer. The city calls it Foodborne Chicago.

The program accesses the Twitter API to scan for instances of the phrase "food poisoning" tweeted within the geographic bounds of the city. Tweets caught by the software are manually sorted for legitimacy and relevance, and any users identified as possible victims of food poisoning are tweeted a message to visit the Foodborne Chicago website, where they can report their illness to the CDPH via the city's Open311 system. The health department then examines those cases the same as it does those received from all other channels.

The Foodborne Chicago Twitter software has a limited, narrow function, but it does its job well. "It's been hugely successful," said city spokesman Brian Richardson. "In about 30 to 40 percent of the inspections that take place that come via Twitter, they find a serious or critical violation at that food establishment, which is the same ratio as inspections reported by traditional means. But we're capturing different people in different reports that we may not otherwise."

The software has made a quantitative and qualitative impact. Since March 2013, Foodborne Chicago has identified

3,419 tweets referring to food poisoning in Chicago, replied to 392 of those tweets, and 443 reports of food poisoning have been made through the website, which equates to at least 126 violations. The service has also helped the city to build a stronger relationship with some of its residents. Twitter user @hesco182 tweeted, "Who knew that tweeting the word 'food poisoning' in Chicago could actually get you a response. Awesome."

There are limitless opportunities for similar applications around the nation, but there's reluctance by government to adopt social media beyond simply building a presence on the platforms. Smart Chicago, a civic tech organization connected to the city Department of Innovation and Technology, only succeeded in building Foodborne Chicago after encountering a series of agencies that weren't interested.

"We've tried things like this for other departments, but they never really got traction," said Cory Nissen, one of the developers of Foodborne Chicago. "But the health department was interested in working with us, and so that's why it went forward as it did. It's a combination of sticking it out and trying to find a city department that would work with us."

An organization like Smart Chicago provides a city with a special opportunity to work on projects that might otherwise be impossible for legal or logistical reasons, said Dan O'Neil, executive director of the group. Smart Chicago was founded by the city, along with the John D. and Catherine T. MacArthur Foundation and The Chicago Community Trust. Its mission is to bring together municipal, philanthropic and corporate investment in civic technology.

"I think it's a good model for really light collaboration between a government department and civic developers," O'Neil said. "Smart Chicago is a unique organization that sits in the middle, so we just help facilitate the interaction."

The future doesn't come easily in government. Foodborne Chicago is an open source project, so any organization interested in replicating it could do so with minimal work, but few have. New York may have used the code in a similar project, O'Neil said, but he's not sure any others have. Basic though they are,

the foundational processes of archiving, monitoring and analyzing social media data are considered innovations in 2014.

In a decade, those moves will look archaic. The future will consist largely of people cleverly connecting systems to form a tightly integrated network of services. When Chicago monitors Twitter and then manually directs users to a reporting website, the value is evident, but the implementation is inefficient compared to what it could be. A more evolved system could integrate Twitter monitoring software and image recognition systems connected to city street cameras to find and verify potholes, and those systems could be connected to an artificially intelligent personal assistant like x.ai that could schedule repairs through human teams, autonomous drones or even outsource the project through services like TaskRabbit or MuniRent. It may sound overly complex today, but once the connections between those services are made, such automatic functionality will be taken for granted.

Today's transition from a physical world to a virtual one bears similarity to the changes made when modern banking was first introduced during the Renaissance, said Jonathan Reichental, CIO of Palo Alto, Calif., and such change requires a shift in thinking. Banking introduced people to the idea of credit and then virtual currency. In a world where cloud services are becoming the norm, more pieces of the physical world become trivialized. The winners are determined by their ability to manipulate virtual assets, and it happens in near real time, as evidenced by the speed with which any celebrity can fire out a thoughtless tweet and lose millions in work and endorsements before the sun sets.

"It's not like the old days where you write a press release and it has to be vetted by 25 people, and then finally it was released," Reichental said. "The distance between the message and publishing it now is so tight. Here in Silicon Valley, if you're going to spin up a business, you're going to do it with a credit card and a computer. That's it. You're not going to build anything. Everything's going to be in the cloud." For organizations, social media data streams like Twitter represent an almost direct channel to what people are doing, saying and thinking.

Gathering and integrating data from many different sources will enable a new way of operating in every sector.

Asthmapolis was launched in 2010 to turn asthma inhalers into data collection devices that can inform health-care organizations, health departments and policymakers. Ted Smith, chief of civic innovation in Louisville, Ky., is now



Lindsay Crudele, community and social strategist for Boston's Department of Innovation and Technology

running an air quality monitor project with a similar goal of gathering data to improve public health. Through collaboration of his office and the Institute for Healthy Air, Water and Soil, Smith is combining the public sector's experience with private-sector innovation to change how decisions are made in government. Social media can fulfill that same function.

Most cities don't have an office of new urban mechanics and are poorly positioned to innovate, Smith said — government's strength is in knowing what its challenges are. The private sector and a government's constituents are the ones who innovate well and have the infrastructure to fuel that innovation. Devices connected to the Internet of Things and social media share a common trait in that they provide a constant stream of fresh data. "If you're a CIO of a city," Smith said, "it may not be good enough to work with 60-day-old data on something."

Boston, with its Office of New Urban Mechanics, is a paragon of today's transformation from basic to integrated social media functionality. Boston's now at a turning point in its social media strategy,

said Lindsay Crudele, community and social technology strategist at the city's Department of Innovation and Technology.

"Early on, it was very important for us to build our internal aptitude and think about taking what was before a very decentralized siloed program across the enterprise and really pull that together and integrate it into an internal strategy," Crudele said. "Now I think the next step involves de-siloing social from the rest of the operations."

Just as technology in general has experienced an integration into business processes, social media is experiencing an integration into business but is also becoming a vein that runs through all other technologies. Facilitating that change will require a change in mindset, Crudele said. Tech agencies will soon not view social media as one of many projects, but an opportunity to become an integral component of each new project.

Boston recently completed a social media campaign called Boston 101 that targeted new students in the city and engaged an estimated 1.5 million distinct users. "That translated into action by turning over reports of improper living conditions in the college housing community and things we wouldn't necessarily ordinarily have access to," Crudele said. Engaging in social media isn't a virtue in itself, she said — there needs to be some connection to outside processes or systems.

Boston also uses social media to crowdsource the hold music people hear when they call City Hall. It's an interesting concept, Crudele said, but the next step will be finding a way to make processes like that more automatic so that they're not just innovative and enriching, but also make the city's job easier. Just as Chicago uses Twitter to enable a manual notification process, the ultimate value will be derived from automation and deeper integration.

"The most compelling campaigns deliver some kind of result," Crudele said. "They're participatory in nature. There are a lot of opportunities to engage with brands and organizations in social, but the most compelling ones are meaningful and the meaning is the end goal, not the fact you're using a certain tool." **CT**

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Gaming the System

Civic tech lab creates games to engage citizens in city problem-solving.

By Jason Shueh / Staff Writer

Sometimes there's no better way to kill citizen engagement than by actually engaging citizens. As the meeting minutes accumulate, public comment swivels into monolog and there's only so much agendized minutiae one can take.

It's a Catch-22 that's tripped up governments for years: how to pull in public feedback without repelling residents in the process. However, in the last few years Boston and numerous other cities have moved to another source for engagement, and that vehicle is gaming. The switch was propelled by the Engagement Lab, a research unit housed at Boston's Emerson College that focuses on the development and study of games, technology and new media to improve civic interaction.

At the helm of the lab is Director Eric Gordon. He's an author of two technology opinion books, a fellow at Harvard University's Berkman Center for Internet and Society, and most notably, a devout fanatic of video games of a socially minded sort. Gordon founded the lab in 2011 as an



associate professor in the department of Visual and Media Arts, following a successful collaboration with the Boston Mayor's Office of New Urban Mechanics.

"I think the story is that I've been doing this work since 2007 ... that was when I connected with [Nigel Jacob, co-chair at the New Urban Mechanics office]. We were trying to use what we thought was a cutting-edge tool, to not just represent the city, but to actually use it as a means to foster deliberation and decision-making."

Gordon refers to the city's Hub2 project, a series of digital workshops that put residents into the skins of video game characters to experience a proposed city park. Organized with the virtual social simulator game *Second Life*, the endeavor set 120 participants loose in the digital environment. Players plodded their polygonal feet across pixelated lawns, between wire-framed gazebos and past 3-D modeled shrubbery. More than digital loitering, it was a game with assigned roles and tasks. What's it like to park a car in this space? To walk through a garden? To enter and exit the park? Players were told to go find out. In the

end, the city harvested pointed commentary grounded in an actual experience instead of conjecture and loose understandings.

"We had people inhabiting *Second Life* space while they were in a physical room together as a way to foster deliberation about spatial issues, that under normal circumstances, were very difficult to understand," Gordon said.

After that, everything snowballed.

Gordon started to seriously invest his research in gamification as a civic tool. Ideas were conjured and sketched, city and university resources were channeled and a series of projects began to materialize leading to the founding of the Engagement Lab in 2011. Today, the lab has nine games listed in its playbook, a set of workshops and courses, books and guides for reference, and a group of Emerson faculty and staff members to support research and development. Growth continues but its purpose remains the same: to study gamification and develop digital tools that answer civic needs.

Funding for the lab streams from multiple points, such as software users including the Red Cross and World Bank,





to government jurisdictions purchasing services, to philanthropic grant providers like the MacArthur and Knight foundations.

“Eric was really successful using that platform and built up a terrific reputation in terms of being able to effectively engage communities in civil dialog,” Jacob said.

Community PlanIt is likely the flagship game thus far. The online platform slices up the typical community questionnaire and fashions it instead into an online game that pairs question answering with social comment sharing while rewarding users by funding causes they care about. Here’s how it works: An organization selects an issue for feedback, questions are written and players sign up to participate. Once started, players begin answering questions in return for Super Mario Brothers-like gold coins, which they can pledge to a list of charitable or community causes. Following three weeks of play, the causes with the largest coffers of gold coins are funded with real money, typically \$1,000 or more.

Boston continues to run the game for a number of topics with questions picked

from current city issues. The game has drawn cities nationally and internationally with more than 25,000 players signing up since its launch. Beyond Boston, metropolises like Philadelphia and Los Angeles have also joined in, with others on the way.

“I think people love it,” Jacob said.

“The users love the idea of being able to engage in a very different way. Especially this mechanism that appeals broadly to young people who are typically not active members of civic deliberation in the more conventional vein.”

Yet for city officials, the lab’s data-centric games offer insights more difficult to glean from older engagement methods. The games supply user data that can be observed under a broad collection of microscopes. According to Gordon, data can be analyzed by themes in the commentary, repetition of words, time spent considering an issue, opinions based on demographics qualities, and the data points only increase with every mission. A distinguishing quality here, however, is that unlike common covert consumer

metrics, participants want their actions and voices to be understood and represented.

“In a lot of ways it really facilitates two-way collaboration with the community and it gives people an intuitive sense of what the community sees as important,” Gordon said.

This isn’t to say games are always the best approach for civic solutions. Gordon and Jacob see them as another approach to solving serious challenges. But the games serve as safe havens for experimentation, funnels to reduce complexities and magnets to gravitate interest — all traits often elusive in government.

“There are so many ways of approaching things through game systems or bringing the primary aspect of play into civic process,” Gordon said. “The way that I use it is focused on using game play as an entry point into difficult conversations, as a place where big complex systems can be simplified into playable systems, and as a place where risk taking and failure are acceptable.” **GT**

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Crowdsourcing the Law

Will online commentary dictate the future of legislative policy?

By **Brian Heaton** / Senior Writer

Drafting legislation is a task that typically falls to elected officials, their staff members and attorneys. But an increasing number of state and local lawmakers are turning to online crowdsourcing platforms to get the opinion — and in some cases, writing skills — of their constituents in the lawmaking process.

Crowdsourcing legislation took off this year, with California and New York City experimenting with the idea, among others. Although citizens have weighed in on proposed laws in the past, the trend of using online platforms for a more direct connection with residents is still in its infancy. But experts say using crowdsourcing to create and edit legislation is likely to expand and it could be here to stay.

Trond Undheim, crowdsourcing expert and founder of Yegii Inc., which bills itself as an insight network, said crowdsourcing was “certainly viable” as a tool to help legislators understand what constituents are most passionate about.

“I’m a big believer in asking a wide variety of people the same question, and crowdsourcing has become known as the long-tail of answers,” Undheim said. “People you wouldn’t necessarily think of have something useful to say.”

Transparency advocates are also encouraged by the use of crowdsourcing. Rebecca Williams, policy analyst with the Sunlight Foundation, said crowdsourcing legislation provides more opportunities for public engagement in the political process and fosters open government principles. She said if governments don’t engage community members in the future, it’ll be a political decision, rather than a practical one.

California Assemblyman Mike Gatto, D-Los Angeles, spearheaded an effort this year to let residents craft legislation regarding a measure designed to allow a court to assign a guardian to a deceased person’s pet. Gatto used the

online Wikispaces platform — which allows for Wikipedia-style editing and content contribution — to let anyone with an Internet connection collaborate on the legislation over a period of several months.

The topic of the bill wasn’t headline-making news, but Gatto was encouraged by the media attention his experiment received. As a result, he’s committed to running another crowdsourced bill next year on a bigger, more mainstream public issue.

New York City Council Member Ben Kallos has a plethora of technology-related legislation being considered in the Big Apple. Many of the bills are open for public comment and editing on GitHub. Kallos said he believes using crowdsourcing to comment on and edit legislation is empowering and creates a different sense of democracy where people can put forward their ideas.

County governments also are joining the crowdsourcing trend. The Catawba Regional Council of Governments in South

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Carolina and the Centralina Council of Governments in North Carolina are gathering opinions on how county leaders should plan for future growth in the region.

At a public forum in the spring, attendees were given iPads to go online and review four growth options and record their views on which they preferred. The priorities outlined by citizens will be taken back to decision-makers in each county to see how well existing plans match up with what the public wants.

California's Gatto says he's encouraged by how quickly the crowdsourcing of policy has spread throughout the U.S. He said there's currently a disconnect between governments and their constituents who believe elected officials don't listen. But that could change as crowdsourcing continues to grow.

"When you put out a call like I did and others have done and say, 'I'm going to let the public draft a law and whatever you draft, I'm committed to introducing it.' ... I think that's a powerful message," Gatto

said. "I think the public appreciates it because it makes them understand that the government still belongs to them."

Challenges

Despite the benefits crowdsourcing brings to the legislative process, there remain some questions about whether it truly provides insight into citizens' opinions on an issue. For example, because many political issues are influenced by special interest groups, what's preventing those organizations from manipulating the bill-drafting process?

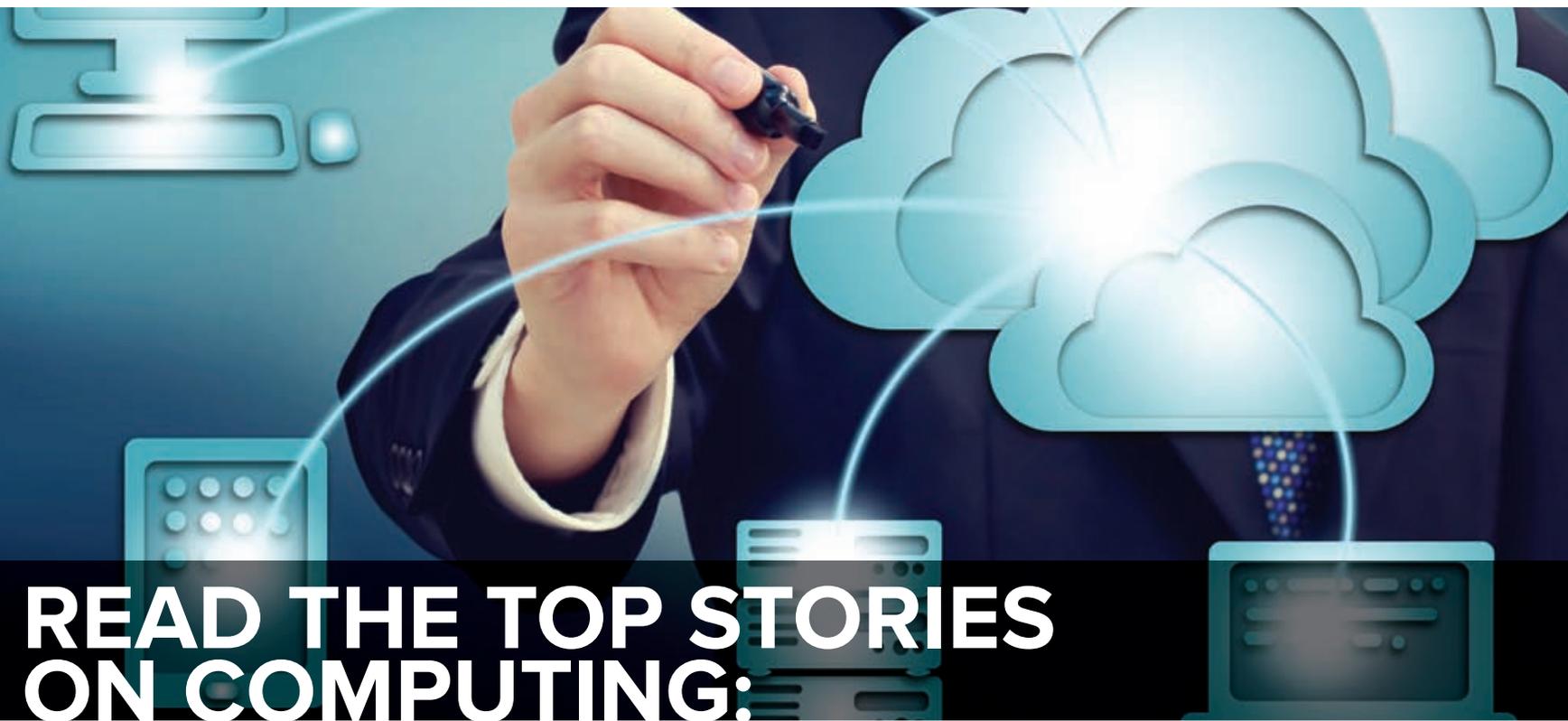
Not much, according to Undheim. He cautioned policymakers to be aware of the motivations of people taking part in crowdsourcing efforts to write and edit laws. Gatto shared Undheim's concerns, but noted that the platform he used for developing the probate law — Wikispaces — has safeguards in place so that a member of his staff can revert the language of a crowdsourced

bill back to a previous version if it's determined that someone was trying to unduly influence the drafting process.

Gatto explained that if a special interest group proposes a law or changes legislation in a blatantly biased way, people would see through it. At that point he said two decisions could be made: The first would be to get involved and cancel the changes, or, if the crowd working on the bill liked the ideas, perhaps the changes would remain, regardless of how the language was influenced.

"I think as long as there is sufficient participation, and that's the big key, then I don't think anyone can pull a fast one," Gatto said.

Not all lawmakers believe Gatto's vision of having citizens draft legislation is the right approach, however. San Francisco Supervisor Mark Farrell, R-District 2, thinks crowdsourcing — at least on the local level — should be used more for information gathering and soliciting opinions.



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“When you say, ‘I’m going to let the public draft a law and whatever you draft, I’m committed to introducing it’ ... that’s a powerful message.”

Farrell said that while city attorneys and other law drafters would be thrilled to receive drafts of proposed ordinances so that they wouldn’t have to craft them from scratch, he argues that the value of crowdsourcing is in idea generation, rather than writing and editing proposals.

As a result, anything that increases citizen participation in the issues governments are tackling on their behalf is something Farrell supports. He added that crowdsourcing is all about citizen engagement in the political process.

“Whether it’s coming up with ideas about legislation, whether it’s commenting publicly on things that are before us at the Board of Supervisors and City Hall, again ... it’s all part of the broader theme of how do we bring residents more into the fold,

in terms of what we do on a daily basis,” Farrell said. “I do believe that from the theoretical perspective of crowdsourcing, the more comments, the more input, the better the end product is going to be.”

Looking Ahead

While Gatto was pleased at the reaction his crowdsourced probate bill received, he admitted that only a handful of people really got engaged in the process. To increase participation, he plans to select a more riveting topic next year.

But Undheim had another suggestion: offer rewards. He said policymakers who are considering crowdsourcing legislation may want to give tangible recognition to the most active participants. Adding gamification elements

to the process, for instance, could spur excitement and boost engagement.

Farrell noted that while there are residents who put in their two cents at public meetings, they typically take place during the day, when most people are working. He wants to make it easier for everyone to voice their opinions.

He’s hoping to have a platform created that would offer San Francisco residents a user-friendly, interactive format in order to foster greater participation during business hours.

Williams added that technology has made the legislative process more accessible than ever. She hopes further use of crowdsourcing will shed some light on exactly how residents’ opinions impact lawmaking.

“Providing transparency about how drafted language or opinion polls factor into the overall legislative process is key to understanding if crowdsourced input is being used in practice,” Williams said. **GT**

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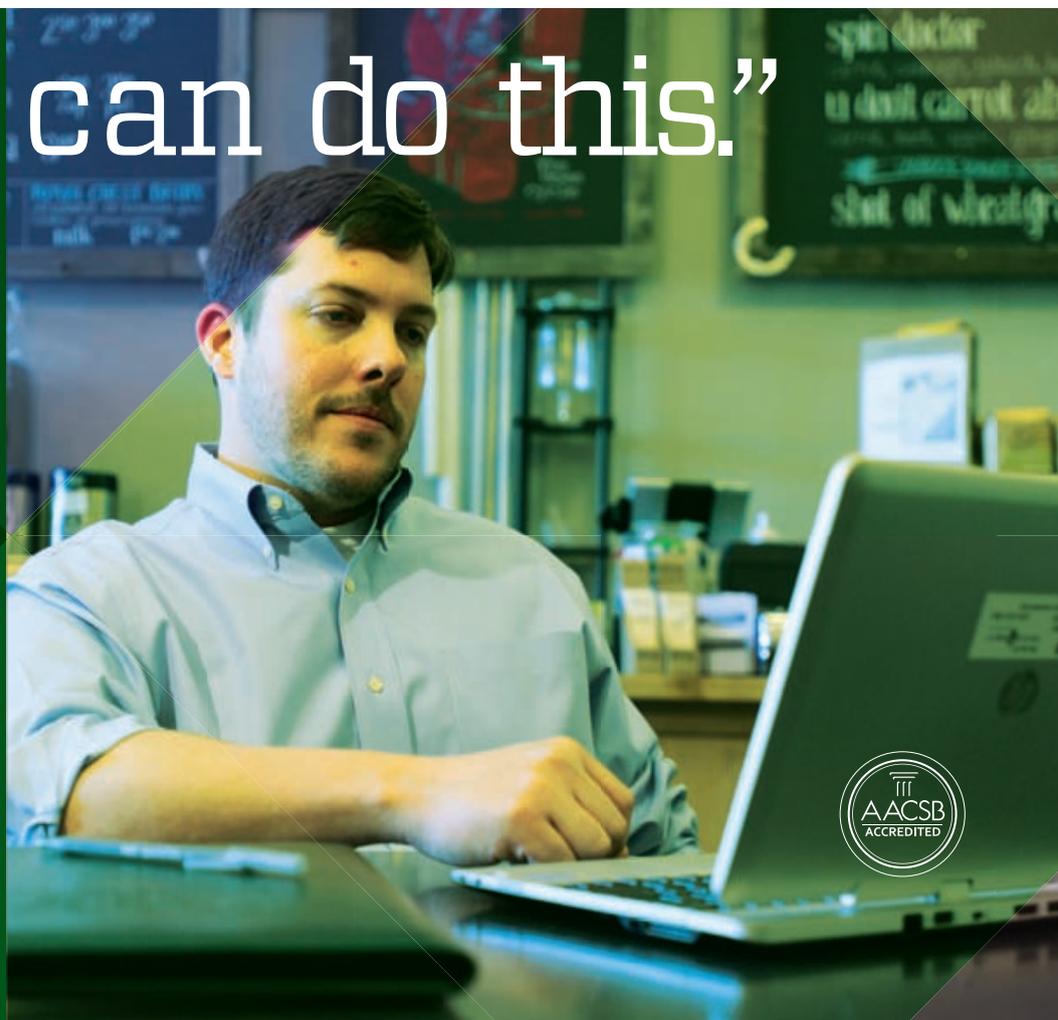
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Staying the Course

Despite big changes, don't jump ship with your agency's Facebook page.

Editor's Note: Starting this month, Kristy Dalton will write a regular column exploring government's use of social media.

About a year ago, I spoke at a forum on social media in government with Katie Harbath, a politics and government outreach manager for Facebook. She told the audience of city and county communication managers about some Facebook changes in the works.

We listened intently as she described that Facebook was adjusting its algorithm to take into account thousands of variables to filter which posts get displayed in fans' news feeds. She explained that this was an attempt to put relevant content in front of users. I realize that we were actually lucky to learn about this so early, as the business world started talking about it months after.

Fast-forward to a year later and page managers have seen a dramatic decrease in the "organic reach" of their posts. This refers to how many people see posts that are not sponsored, which is reportedly down to 6 percent.

A general frustration over these changes has led to talk in the government community about whether agencies should give up on Facebook altogether. The sense is, why waste time posting on the platform when so few people will actually see your efforts?

My advice is to stay the course with Facebook — but play the game smartly.

Why Stay the Course?

Let us talk through what abandoning your Facebook presence might look like. Your options would be to either delete your page entirely, or to keep your page, but not actively post on it. You might even change your profile language or create a pinned post at the top explaining your reasoning. Would this do the trick?

The reality is that your citizens are going to be confused with your actions. They will either observe that you do not have a profile or that you have an unmaintained profile. In either case, their conclusion might be that your agency is out of touch.

Let us consider, just for kicks, that you decide to play the ad game. What would a smart ad strategy for government even look like?

Ad Strategy for Government

Government is no stranger to advertising, but many times funds are allocated toward offline products, such as water bill inserts, newsletters and print brochures. Shifting the focus to social network ad spending will require a smart strategy of centering your ad dollars on programs and services that earn revenue. Revenue-generating programs might be a campaign focused on promoting the payment of uncollected taxes, or parks and recreation activities that charge a registration fee, for instance.

The key here is that you track the dollars put into every paid promotion and correlate that to the sales resulting

HOW TO PLAY THE AD GAME SMARTLY

-  Focus ad spend on promoting programs that earn revenue
-  Point ads to website landing pages, not your Facebook page
-  Retarget website traffic to ensure ads are reaching those most likely to click
-  Understand what works by placing a Facebook tracking pixel on your purchase confirmation pages
-  Try out Facebook's new Business Manager tool to oversee your ad accounts

from Facebook ad conversions (yes, this is traceable), in order to determine the dollar-for-dollar return on your investment.

It becomes a lot easier to secure an ad budget from departments when you can claim that for every, say, \$20 put into ads, on average you generate \$500 in revenue that can be directly attributed to the Facebook ad.

Admittedly, it's hard to put ad spend toward a platform that previously garnered much more free exposure. However, a strategic advertising program can yield much stronger results than even when organic reach was in its heyday. 

Kristy is known as "GovGirl" in the government IT industry. A former city government Web manager with a passion for social media, technology and the lighter side of government life, Kristy is the CEO of Government Social Media.

Freedom of Information/Public Records Request

Part I: I hereby request to: Inspect Copy the following records:
(please be specific and include names, dates, keywords, and name of record type where possible).

Please provide all Everton City and Police Department social networking content from May of 2012 regarding special notices and street closures related to the Everton Memorial Day parade

Part II: What format do you request? Electronic Paper

Part III: Name of individual(s) requesting information: John A. Reizer
Address: 1076 Freedom Way City: Everton State: TX Zip: 75496
Phone: (210) 867-5309 Email: jpublic1@gmail.com



For Internal Office Use Only

Date Request Received: **July 1, 2014** Request Status: **Pending**

Notes: Staff has invested more than ten hours scrolling through social media pages and collecting stored screenshots from department hard drives. Citizen comments no longer available, City Attorney issued subpoena to social network - response still pending after four weeks.

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<http://archivesocial.com/respond>





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The ASUS ZenWatch is powered by Android Wear and features a version of the ASUS ZenUI user interface developed specifically for ZenWatch. This slim device pairs with a smartphone running Android 4.3 or higher to provide relevant and useful information when it is needed most, and also to serve as a personal wellness manager in conjunction with the ASUS ZenUI Wellness app. The 2.5-dioptre curved glass increases usability with a smooth and responsive touch experience. The watch has a stitched-leather strap and quick-release clasp, and comes with a selection of instantly changeable software watch faces, allowing users to customize ZenWatch easily. www.asus.com

Alert Jewelry ▶

Mota SmartRing keeps users connected to calls, texts, email and social networks. Designed to work with Android and iOS, the SmartRing uses vibrations and a discreet LED screen to notify users of incoming calls. A downloadable app lets users set alerts and VIP contacts. Low-energy Bluetooth 4.0 communications provides a stable connection between a phone and the SmartRing. The ring charges via an inductive wireless charging station — users simply place the ring on top of it. The battery is designed to last one to three days on a single charge. www.mota.com



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SOURCE: INHABITAT



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THE GIFT OF SIGHT: Google Director of Engineering Ray Kurzweil has put his artificial intelligence expertise to work in service of the blind. A \$99 app developed in partnership with K-NFB Reading Technology Inc. and Sensotec NV is being billed as a "sighted adviser," helping users read menus, bus passes, recipes, health insurance cards and more, for the first time. Using image-processing technology, pattern recognition and smartphone hardware, the app turns printed materials into audio, while users with refreshable Braille displays can use cameras to take pictures of print documents and get them displayed in Braille. Now available for iPhones 5 and 6, the app is also coming to Android and potentially, Google Glass. SOURCE: REUTERS

SMART HEALING:

Bandages covering burns or other injuries conceal the status of the wounds underneath. Medical personnel charged with monitoring the healing process must remove the dressing, often painfully, to determine the next steps for patient care. But new research may simplify the process, allowing doctors to detect oxygen levels in the damaged tissue, indicating the progress of the healing process without disturbing the bandage. A thick fluid containing luminescence and dye dries directly on the wound surface, covered by a transparent layer on top. A handheld imaging device is all that's needed to check on the status of the wound via its oxygen levels. SOURCE: GIZMAG



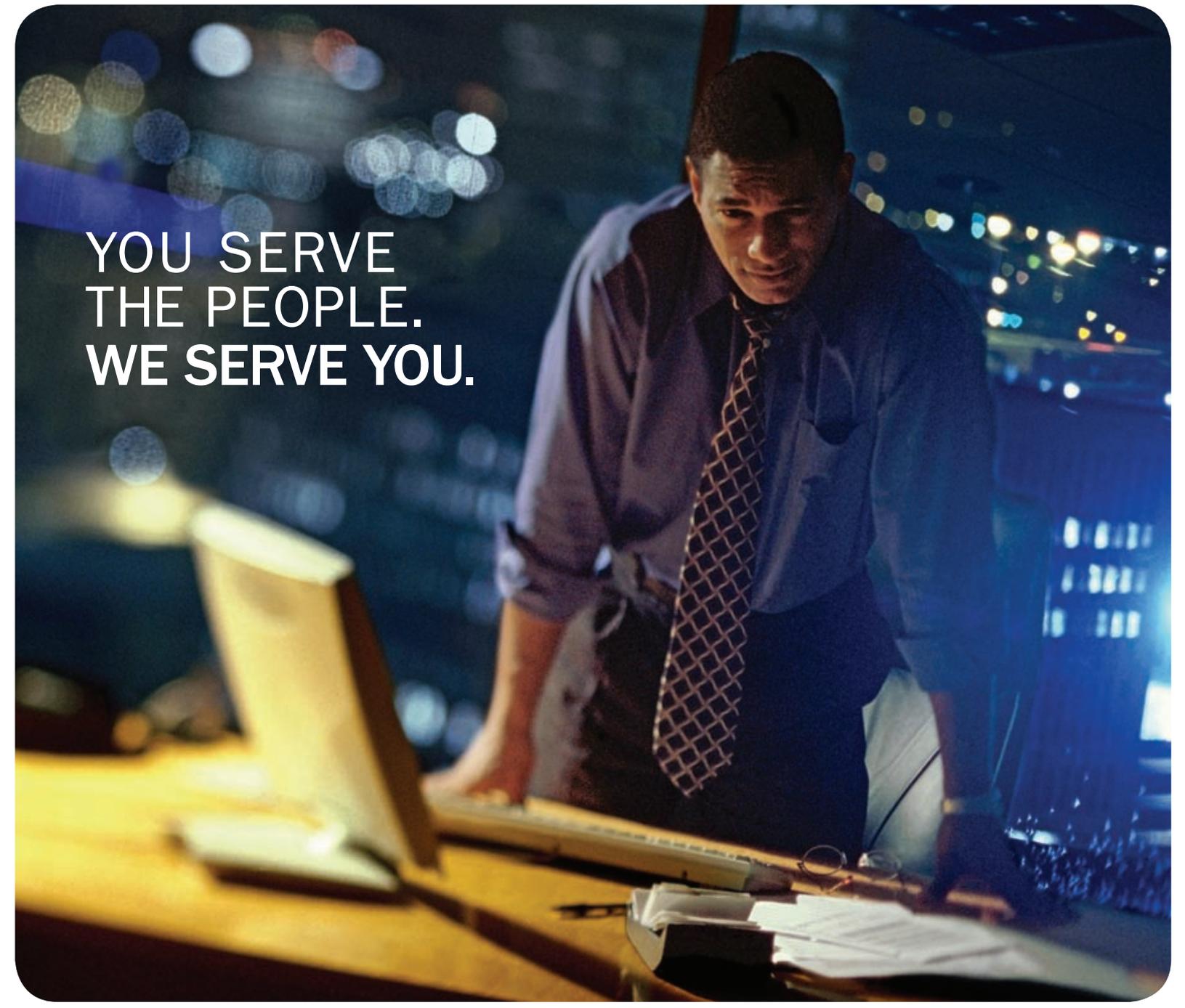
Get off My Wi-Fi

Concerned about diminishing privacy in the age of surveillance drones and Google Glass? A new handheld device, Cyborg Unplug, sends de-authentication signals to monitoring devices using their unique hardware addresses, effectively removing them from your network. While it can't interfere with the spying itself, it could interrupt attempts to upload or stream your data. The company won't vouch for the legality of its "All Out Mode," in which it also attempts to sever all of the surveillance device's other connections.

SOURCE: SLASHGEAR



Send Spectrum ideas to Managing Editor Noelle Knell, nknell@govtech.com, [twitter@GovTechNoelle](https://twitter.com/GovTechNoelle)



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