



digital communities

Local Government in a Digital World



/ The Emergence of Digital Local Government

In the past few years, we've seen a remarkable increase in the quantity, sophistication and usefulness of mobile and Web e-government apps at the local level. We've also seen rapid growth of investments in "civic tech" and the resulting burst of local government application startups, entrepreneurs and electronically engaged citizens. It's worth noting this has happened in spite of — or perhaps because of — an economic downturn that slowed IT spending at all levels of government. There is evidence that rather than *hunker-down*, leading local governments have decided to *double-down* on their commitments to digital government initiatives, with the purpose of reducing service costs and increasing citizen engagement and satisfaction.

"The good news is that public sector organizations have largely followed the commercial sector, and are now operating within the digital world. Public sector organizations are encouraging their citizens and customers to submit vehicle registrations, report noisy neighbors, file tax returns and complete other tasks online," says David Moody, vice president and global practice leader of the government and public sector group for Verint. "Some of this encouragement is driven by government austerity measures, but regardless of the reasons why, this digital shift undoubtedly gives citizens and customers what they want and expect in today's digital world."

Often lacking the in-house resources to maintain IT infrastructure and core platforms while simultaneously building citizen-facing applications, leading localities have focused on driving down IT costs (such as through virtualization, collaboration and cloud computing) and enhancing their core systems and networks for increased productivity

of the broader local government workforce. Phil Bertolini, CIO and deputy county executive for Oakland County, Mich., notes, "Engaging in the practice of innovation has created an environment where local governments can work across government lines to leverage technology dollars with many localities. Intergovernmental collaboration has become the standard for lowering technology costs while embracing partnerships."

Localities that successfully implemented these strategies have reaped the dual benefits of freeing up resources for reinvestment in innovative new services and citizen-engagement tools, as well as creating a base of integrated data to fuel the interaction. The residual benefits of cross-boundary collaborations have kept the fires stoked.

To provide citizen-facing applications, local governments are increasingly leveraging outside resources, including established companies with robust local government platforms, entrepreneurial startups, nonprofit civic tech advocacy organizations, open source applications, philanthropic local technology businesses and talented citizens. We are starting to see the emergence of local government digital ecosystems, based on both loose and tight collaboration among a variety of actors, each doing what they uniquely do best. The result is improved traditional local services, and a flurry of new digital interactions and services for governments of all sizes.

Interest in moving in this new direction is driven by several factors, including:

- Abundant evidence that a majority of individuals and businesses prefer to interact with government online if possible
- Recognition that smartphones are the device of choice (particularly among Millennials) and that this channel helps



"Engaging in the practice of innovation has created an environment where local governments can work across government lines to leverage technology dollars with many localities. Intergovernmental collaboration has become the standard for lowering technology costs while embracing partnerships."

Phil Bertolini, CIO and Deputy County Executive, Oakland County, Mich.

close the digital divide (many citizens without access to broadband have and use smartphones)

- Acknowledgement that technology, smartly applied, is a boon to open government
- Awareness that mobile technologies and new ways of thinking about citizenship (digital citizens) open opportunities that weren't previously envisioned, such as public-private partnerships around open data
- A new generation of tech-savvy leaders who grew up in the digital age and are convinced digital government is key to economic development
- Breached barriers to entry due to the lower costs of technology coupled with the expanded skillsets of industry resources

It's only natural that this type of innovation would be strong at the local level where government operates closest to the citizenry, and where services literally hit the road and individual initiatives can have the most influence on government actions. Aspiring "Smart Cities"¹ are making the most of their rich assets and the creative ideas around how a future digital government could look. Local government leaders sit on a treasure trove of data, and they have constituencies, civic technology advocates and non-traditional application developers that are beginning to exhibit a mentality of self-reliance and innovation.

Is this simply a unique moment in time, or are we witnessing a disruptive change? What will ultimately be the impact of this trend: Is it a harbinger of a new age of digital citizenship and open government, as well as a fundamentally new way for government and the citizenry to interact? Time will tell, but all signs point to something that is new, exciting and here to stay.

/ Local Government Services and Citizen Expectations

Local governments offer a complex set of services, many delivered on the front lines, and all supported by an array of IT infrastructure and applications. This paper focuses on the latest types of these applications, which serve and engage citizens digitally and foster virtual local government. "Today's digital government initiatives will actually increase the importance of government employees. They are critical in providing the support customers and citizens need to be able to complete more tasks online," Moody says. "This places even more demand on solutions, such as live chat, Web page co-browsing, video, workforce optimization, social engagement and others, to empower agents to provide the quality of service citizens deserve and expect." These applications and citizen interactions will play an important role in determining the future vitality and competitiveness of individual cities and counties, particularly those that aspire to become Smart Cities and talent-enticing innovation centers.

Many of these new types of applications are dependent on a solid foundation of infrastructure, reliable data and core business applications. For example, Web and mobile apps that enable citizens to report 311-type complaints or file permit applications may not seem progressive if the locality can't automatically direct a work order or application to the proper department, report the status of the request

/ Narrowing in on Public Safety's Perspective

Digital transformation has significant impact on public safety at the local level given the complexity and volume of data being made available in communities. Given the environment that public safety jurisdictions need to operate in today, it is important to recognize that a 'one size fits all' approach is a non-starter. "Public safety solutions should be designed to be modular and expandable to conform to customers' budgets and requirements, while at the same time being built upon common platforms, standards and interfaces," says Tom Miller, director of intelligence-led public safety solutions for Motorola. "Taking this approach means those systems purchased today, with today's needs and budgets in mind, can grow over time to meet new demands, and take advantage of new funding sources as they arise, without requiring 'forklift upgrades' or significant change-out of the solution-base integration technology."

back to the citizen and then present its overall performance data. In fact, not having that back-end, straight-through processing capability behind a citizen-facing service app may simply further the notion that government doesn't listen and isn't responsive to its citizenry. "Process automation isn't just an added bonus for busy government employees, it has become a necessity. Automation tools play a key role in ensuring citizen requests are addressed efficiently," says Katie Burke, government program strategist at Laserfiche. "Ultimately, automation allows staff to stop pushing papers and focus on what really matters — providing excellent service."

The dependency on foundational systems is driving localities to modernize and integrate core systems and data, and to consider new ways of developing and maintaining core applications beyond the expensive and challenging build-and-run-your-own approach.

Those new ways include clear trends toward:

- Cloud and "as-a-service" offerings from multiple third-party providers to both modernize IT infrastructure and re-align staff resources to other necessary duties
- Commercial-off-the-shelf (COTS) civic government platforms from vendors that specialize in local government operations
- Shared services and collaboration with other jurisdictions
- Open source and reusable local government solutions made available by peers and civic technology groups, such as Code for America and sharing sites like GitHub
- New, more agile and modular development methodologies
- Open data, including GIS data and APIs, that encourage and enable entrepreneurial citizen developers

Resource constraints have limited the new things that governments at all levels can do alone. "To keep systems performing optimally, earmark a healthy chunk of annual IT budgets toward updating, managing and maintaining IT infrastructure. Without these

investments, agencies won't be able to deploy new services since the network, data center, applications or clients may not be up to snuff," advises David Hutchins, vice president of state and local sales for CDW-G.

Additionally, leading local governments are promoting collaboration with multiple partners, bringing innovative approaches to citizen service and engagement through mobile and Web e-government applications. Those applications generally fall into two broad categories:

Traditional services delivered untraditionally. The first category of applications is traditional municipal services delivered in new ways and accessible by various devices. These applications, often sourced from third-party IT providers, put existing government services online or provide them through expanded channels.

Some of these are inward-facing productivity applications — including modern asset management systems — linked to GIS data, mobile tablet interfaces and video, and used to reduce costs and increase effectiveness of infrastructure maintenance. Cities like Westminster, Colo., for example, have experienced significant reductions in water infrastructure failures and substantial savings derived from implementing such systems.

Others are outward-facing applications delivered in new ways, including mobile and Web 311, mobile online payments for services ranging from taxes to parking to online permit applications. Justifications for outward-facing applications typically cite increases in citizen satisfaction.

New services, creatively developed and delivered. The second category contains new services developed and delivered through innovative means. The jury is still out on how relevant and sustainable some of these apps and their development and delivery channels may be in the long run, but there's little doubt that the forces behind them, including mobile device dominance and the drive toward "open everything," are powerful and here to stay.

At the heart of this movement is open data. Open data advocates have pushed hard and been successful at promoting an approach best described as "give me all of your data, through an API, and I'll do things with it that you haven't imagined." From there grew the trend we see taking hold today that initially involved mash-ups of analytical and location data from multiple sources presented in new and creative ways, which now feeds an industry of mobile and Web application developers. This has huge implications for local governments and the focus of their technology efforts, driving them from *application provider* to *application enabler* roles.

Complementing the external forces pressing governments to provide innovative citizen-facing apps is an emerging push from a new generation of digital-savvy local leaders who have grown up in a persistently connected world. These leaders often see digital interaction as the norm and a pre-requisite to economic competitiveness.

“To keep systems performing optimally, earmark a healthy chunk of annual IT budgets toward updating, managing and maintaining IT infrastructure. Without these investments, agencies won't be able to deploy new services since the network, data center, applications or clients may not be up to snuff.”

David Hutchins, Vice President of State and Local Sales, CDW-G

The City of Boston provides a good example. The top digital city in the Center for Digital Government's (CDG) 2013 Digital Cities Survey,² Boston explicitly employs innovative technologies and strategies to create a business-friendly virtual and physical environment. Boston launched Boston Business Hub³ to provide digital services for new or expanding businesses, and has created a 1,000-acre Innovation District,⁴ complete with both high-tech (e.g., fast Internet) and low-tech (e.g., restaurants and shops) supporting infrastructure to lure entrepreneurial technology startups and accelerators.⁵

Other exciting new forces with disruptive potential are driving this trend as well, but their "staying power" seems less certain at this point. They include:

Digital citizenship. There is rising interest in, and advocacy for, digital civic engagement, potentially leading to a new generation of digital citizens with a renewed, but fundamentally different, interest



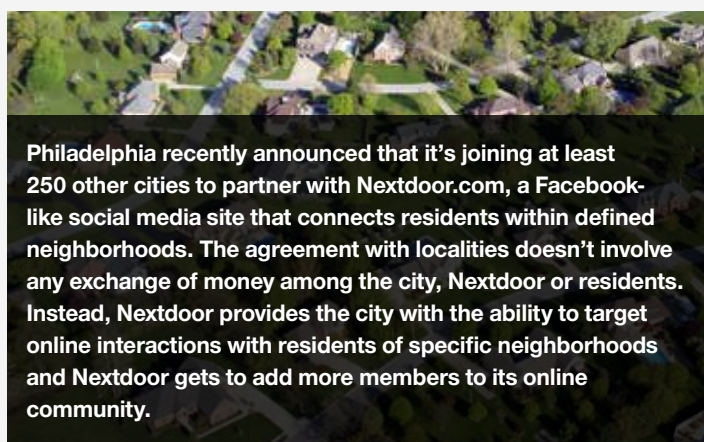
in citizenship. If the traditional definition of an engaged citizen is one who votes, reads to stay informed, writes to public officials and attends public meetings, a digital citizen is one who wants to engage with government the same way he or she engages in other aspects of life — electronically, and increasingly through apps on a mobile device.

Citizen creators vs. citizen consumers. Driving the civic technology trend is a type of digital citizen and growing cadres of civic organizations who aren't content to simply wait for government innovation to occur, but rather jump in and provide value-added services themselves. These are the organizers and participants in such phenomena as hackathons, "CityCamp"⁶ events (hackathons' big-picture cousins), crowdsourcing and crowdfunding.

/ The Growth of Local Government Digital Ecosystems

The convergence of the various trends addressed in this paper with the current realities of local government IT is convincing many local governments they don't need to handle all IT matters themselves — in fact they're better off if they don't. Due to this, we are starting to see the emergence of local government digital ecosystems based on both loose and tight collaboration among a variety of actors — each leveraging their unique strengths and exploiting opportunities as they arise. This is a powerful force and, we believe, a disruptive trend that will change the way local governments think about information technology and digital communications.

The IRS pioneered this digital ecosystem approach with its income tax e-filing initiative, perhaps the largest and most successful e-government initiative of all time, poised to reach over 84 percent participation next year.⁷ The implications for cost savings, faster refunds, better service and reduced fraud have been enormous. Yet, the IRS has never built, nor contracted to have built, a single income tax e-filing system (other than the internal systems that accept e-filed data). Instead, the IRS chose to focus on empowering an existing ecosystem of third-party e-file providers who leveraged the IRS' data and account management systems to provide valuable services to taxpayers — at no cost to the IRS. The IRS focused on the things it did best, and fueled a vibrant ecosystem of tax industry providers, banks, IT solution providers and taxpayer representatives. Taxpayers have been the beneficiaries.



Mapped data can identify dangerous dog locations in Austin, Texas.

/ Not Your Father's Old Mobile

The City of Austin, Texas, a leading digital city, has taken advantage of many of the digital ecosystem features presented in this paper. Austin uses the open source platform Socrata to make large volumes of data available through APIs, offers free access to its GIS data and sponsors hackathons to encourage citizen developers to use the data creatively. At a recent hackathon, a participant used a city data set identifying dangerous and vicious dogs, mapped the data using the city's Esri open GIS data and created a mobile app that barks when the user approaches a known dangerous dog location. Very clever, but are apps like this enough to sustain a movement?

The environment seems right today for local government to adopt a similar strategy, focusing government resources on the end goals of citizen engagement and constituent service, rather than on the means of directly providing "e-this" or "mobile that." Indeed, we're seeing signs of movement in this direction at the municipal level. Philadelphia recently announced that it's joining at least 250 other cities to partner with Nextdoor.com, a Facebook-like social media site that connects residents within defined neighborhoods.⁸ The agreement with localities doesn't involve any exchange of money among the city, Nextdoor or residents. Instead, Nextdoor provides the city with the ability to target online interactions with residents of specific neighborhoods. In exchange, Nextdoor looks to add more members to its growing online community.⁹

As this sort of ecosystem grows, you could imagine it unfolding like this: A problem is identified on a 311 app such as SeeClickFix,¹⁰ a solution is proposed through a crowdsourcing app such as Mind-mixer,¹¹ a project idea is funded using a crowdfunding platform such as Kickstarter¹² (which has seen 7.9 million users pledge \$2 billion to fund 78,000 projects since its 2009 launch),¹³ tasks to complete the project are accomplished through an implementation solution such as Taskrabbit,¹⁴ and the results are validated on Nextdoor social media. The bottom line: Creative new local services are quickly provided with

no expenditure of public funds by seeking mutual benefit and having each entity in the ecosystem do what it does best. “As digital ecosystems become more common, system integration will also be incredibly important for streamlining high-volume processes. Moving forward, we will begin to see technology systems forming a hub-and-spoke type relationship, wherein each specialty solution feeds information to a central system of record, which then pushes that data to the other relevant systems in an automated and standardized manner,” says Burke. “Integration will allow the specialty systems to achieve their individual functions while seamlessly sewing the pieces together, and technology platforms that provide simple integration tools will ultimately be leaders in this new environment.”

In this new ecosystem model, success is no longer strictly tied to size and resources. In the most recent CDG Digital Cities Survey,¹⁵ small jurisdictions impressed judges with their ability to provide or enable creative online and mobile services. Williamsburg, Va., a city of only 14,000 residents, managed to place fifth in its population category by standing up an impressive array of mobile and Web apps targeted at promoting tourism, open government, citizen engagement, public safety and business development — not bad for a three-person IT shop. Carl Drescher, technology services director for the town of Marana, Ariz., adds, “An important part of our town’s strategic plan for

economic sustainability is using our assets — nature, infrastructure, recreation, etc. — to attract visitors, new residents, new businesses and higher education to our town.”

That said, not all localities will get off their marks as quickly in this looming race. Early success will come to governments that have a clearly defined vision and strategy and that have actively managed and developed their ecosystems to position themselves for competitive advantage, including leveraging regionalization through collaboration with neighboring jurisdictions or public-private partnerships (see sidebar about OurCycle LA). There is opportunity for significant transformation if data — and applications built on that data — can be shared among multiple jurisdictions. As Story Bellows, co-director of the Philadelphia Mayor’s Office of New Urban Mechanics, suggested recently at a CDG conference, networks of city innovation teams could be a powerful force for developing useful, shareable solutions to address common municipal challenges.

As they mature, these local digital ecosystems will gravitate toward more targeted purposes and strategic priorities. Already, Code for America, a civic tech leader for five years now, has narrowed its focus to health, economic development, and safety and justice.¹⁶ The group



Instead of just recycling unneeded computers, OurCycle LA transforms unwanted or inoperative technology into operational and educational tools for communities in need.

/ Public-Private Collaboration: OurCycle LA

OurCycle LA, an innovative new Los Angeles program, uses 10,000 unneeded computers as fuel to improve society. Los Angeles launched OurCycle LA, a program seeking to close the digital divide, create new jobs for the formerly incarcerated and support local businesses. The effort involves more than a dozen organizations, from nonprofits such as human-I-T for refurbishing to social enterprises such as Isidore for e-waste and job training to companies such as Best Buy for digital literacy training.

OurCycle LA is a great example of a successful public-private partnership collaboration to transform unwanted or inoperative technology into operational and educational tools for communities in need. The program strives to go beyond recycling by taking a progressive approach to e-waste management, vocational training and the digital divide.



will now work with localities and other players in the ecosystem to bring transformational apps to these critical program areas. Other signs of maturity include soliciting help from partners to close the digital divide and expand high-speed broadband access. After all, digital engagement means nothing to citizens without access. Winston-Salem, N.C., has engaged nonprofit organizations to create WinstonNet, an organization that works in partnership with academic, public, community and private institutions to provide computer access and training to populations in need. Winston-Salem also understands the need to “get big” through regional partnerships, such as the North Carolina Next Generation Network comprised of 10 municipalities and universities. Winston-Salem CIO Dennis Newman says this is essential to a city’s economic vitality. His position is that, “in today’s environment, Winston-Salem competes with every city in the world.”

/ Here Today, Gone Tomorrow?

Time will tell whether these civic technology and digital citizen engagement movements are sustainable in the long run, but we’re already seeing evidence that they’re most likely here to stay. In the 2014 CDG Digital Cities Survey, online citizen engagement was cited as a top three trend.¹⁷ We find even more compelling evidence if we “follow the money.” In the past few years there has been significant financial investment in, and energy around, promoting digital citizens and citizen creators. Municipalities are putting money behind their intentions. For example, Arlington, Va., alone, with about 200,000 citizens, has earmarked \$2 million for the development of community engagement mobile apps. The Knight Foundation has identified \$431 million in funding for civic tech organizations as of mid-2013. In a recent *Government Technology* article,¹⁸ IDC Government Insights researchers project U.S. state and local governments will invest approximately \$6.3 billion in civic engagement technologies in 2015. A December 2014 article by McKinsey and Company suggests that globally, a comprehensive public sector digital transformation could free up to \$1 trillion annually in economic value — a savings potential that governments will find hard to ignore.¹⁹

Established IT solution providers and entrepreneurial startups are also making significant investments in these new technologies, further

suggesting this movement is real and lasting. Leading local government IT platform providers have integrated civic engagement and mobile computing features into their products, and new players are appearing with innovative point solutions that fill gaps in existing capabilities. *Government Technology* recently cited five civic tech startups to watch in 2015, offering products that specifically enable governments to get up and running with civic and mobile apps more quickly and easily, and at lower cost.²⁰

Social media players are also getting into the act, providing even more traction to the movement. Yelp, a mobile and Web app that shares crowdsourced reviews of local businesses, has partnered with local governments, including Los Angeles County and San Francisco, to develop standards for reporting uniform health inspection scores along with restaurant reviews. Citizens’ reactions are also more positive when services are provided through their preferred media. In Boston, users of the city’s StreetCred app report they feel like they’re helping when they use the app, versus complaining when they report problems by phone.²¹ Boston reinforces the sense that the city values citizen input by offering rewards to users of the app. This is important — citizen perception will be the determining factor in whether this is ultimately judged to be a disruptive and positive transformation.

/ What’s Next?

At this point, meaningful discussion about the future of digital local government and civic engagement has to take place in terms of trends. We’re far enough into this movement to know that something significant is happening, but not far enough to know for sure what the end-state will look like. We’re confident, however, that the change will be transformational, and for any municipality that wants to get there, the path will need to follow a progression from *individual initiative* to *deliberate design*.

It’s fine that the early stages of this digital transformation are somewhat unplanned and opportunistic. Early success for any significant movement is dependent on quick wins, derived from unbridled creative energy and guided by a light touch on the controls. Hackathons are a great example of such creative efforts. But hackathons often suffer from their one-off, ad hoc character. Good but unfinished ideas are frequently left on the table, and successful apps from other jurisdictions are typically not repurposed, leading to the wheel being reinvented at multiple events. They also often result in

/ Why does any of this matter?

The civic tech movement, open data, virtual government, any device/anytime/anywhere interaction, and the emergence of digital citizenship are fundamentally reshaping the perception of local government for the better. Transparency and accountability build trust. Citizen participation promotes engagement and lends legitimacy. Meeting citizen and business service expectations sends a constituent-first message. It’s not easy, but it’s worth it.

“This level of ‘civic technology infrastructure’ is as essential to the city’s economic competitiveness as its physical infrastructure.”

Bryan Sastokas, CIO, City of Oakland, Calif.



DAVID KIDD

development of tactical apps that *can* be built versus strategic apps that *should* be built. Again, instant gratification is fine for kicking off a movement, but not sufficient to sustain one. A more planned, strategic approach is required.

The challenge, of course, is to not quash creativity with too much discipline. We’re now seeing an upsurge in strategic digital community collaboration sessions that can be thought of as “designathons.” The focus is still innovation, but rather than promoting individual initiative to develop clever apps that spring from the minds of citizen coders, these new sessions aim to create a collaborative vision and strategy for civic technology and digital government. To succeed in the long run, these sessions need to be driven by strategy, guided by standards and inclusive of not just technologists, but also local government program leaders,

“If in the year 2020, we’re still crowdsourcing pothole location as opposed to development of policy, we may all have collectively failed.”

Chris Osgood, Co-Chair, Boston Mayor’s Office of New Urban Mechanics

local entrepreneurs, private sector technology innovators, civic tech organizations, citizens and, ultimately, other municipalities. In early 2015, such events — called CityCamp “unconferences” — were held in San Francisco, Sacramento, Oakland, Calif., and Chattanooga, Tenn. CityCamp SF, which was produced by CivicMakers, supported by Code for America and sponsored by a host of traditional technology and civic tech firms, drew more than 200 citizens and civic leaders.²² “Civic engagement isn’t only happening at in-person events and city hall, though,” says Burke, “online communities of practice and collaboration platforms are being leveraged to allow citizens to interface with local government at their leisure, from their home.”

Boston’s use of next-generation technologies is part of a creative, comprehensive strategy to inform, engage, interact with and deliver services to its citizens, and to create a business-friendly environment. As noted by Chris Osgood, co-chair of the Boston Mayor’s Office of New Urban Mechanics, “If in the year 2020, we’re still crowdsourcing pothole location as opposed to development of policy, we may all have collectively failed.”²³ Philadelphia and San Francisco have also established innovation offices to drive their efforts. The city of Oakland has created OpenOakland,²⁴ which “works to improve the lives of Oaklanders by advancing civic innovation and open government through engaged volunteers, community partnerships and civic technology.” The organization sponsors weekly civic engagement sessions. Oakland CIO Bryan



Sastokas notes, “this level of ‘civic technology infrastructure’ is as essential to the city’s economic competitiveness as its physical infrastructure.”

/ Conclusion: The Path to Digital Local Government

Mobile apps, Web-based services, digital civic engagement, open data — they’re all essential elements of the transformation toward a new model of virtual local government, but by themselves they are not the fulfillment of the transformation. Collaborations that provide win-win results add credibility to the movement. And increasingly, “Digital governments need digital employees to serve digital customers,” says Moody. “The role of the digital employee is now more important and challenging than ever before.” For this movement to be sustainable and to create meaningful change, localities need to actively pursue a series of planned progressions:

- **From chaos to a new order.** Today’s movement is largely ad hoc and will need to become a deliberate, strategic effort that is actively managed by local governments, and that engages political leaders and multiple partners with a common vision.
- **From seed money to sustained investment.** Crowd-funding, philanthropy and civic grants have lit a fire, and sustained investment through stable funding sources will be needed to keep it burning. To be sustainable, those sources will need to tie to strategic enterprise priorities and include redirected funds from consolidation, cost-cutting and productivity initiatives, supplemented by resources of vested partners in the ecosystem.
- **From “because we can” to “because we must.”** The early mobile and Web apps of the local digital transformation have been opportunistic, often more “today’s cool” than “tomorrow’s tool.” In its mature stage, digital local government offers 24/7 virtual service and makes a new form of digital citizenship possible.
- **From “go it alone” to sharing and collaboration.** Only the largest municipalities have a chance of making this transformation without partners, and it is clear that even they are choosing not to “go it alone.” Leading localities will partner with each other in regional coalitions, and will leverage the digital ecosystem to maximum advantage.
- **From application developer to solution enabler.** In spite of having a leading number of mobile and responsive-design Web apps, Lea Deesing, chief innovation officer for Riverside, Calif., notes that she “can’t develop enough apps fast enough to satisfy the growing demand.” No locality can on its own. Local governments need to see themselves as enablers, promoting and encouraging the collaborative efforts of a wide variety of players in a digital ecosystem. Local governments need to work on the part of the iceberg

that’s below the water line, building core capabilities (e.g. modern infrastructure, system integration, open data and APIs, citizen relationship management systems, GIS) that enable the development of high-value civic apps by other actors in the ecosystem.

- **From digital government to a digital society.** The notion of a vital digital government assumes the governed have equal access to technology, which of course is not currently the case. Enlightened local governments, such as Riverside, Calif., are doing something about that. Deesing is also the executive director of SmartRiverside, a nonprofit coalition of partners whose vision is to establish the city as an internationally recognized center for innovation. The work of her group includes equipping low-income families with PCs and Internet access, training young citizens to develop technology skills, and coordinating the philanthropic efforts of local businesses and civic leaders to help close the digital divide (not just the access divide, but the skills divide as well). Its Digital Inclusion Center is among the most outstanding and highly recognized centers in the United States.

Transformational change may start at the fringes, but it can’t stay there. We’re starting to see, and expect to see more, integration of digital government aims into the core vision of creative local government leaders.

If local governments are willing to continue down these paths, we’ll soon see a fundamentally changed form of grassroots governance and citizenship, emerging at a time when traditional governance is struggling for trust and respect. Transformational change may start at the fringes, but it can’t stay there. We’re starting to see, and expect to see more, integration of digital government aims into the core vision of creative local government leaders. Their advocacy for, and leadership of, this movement will be critical to boosting it from its origins in ad hoc “individual initiative” to a level of “deliberate design” of ongoing civic tech engagement and electronic service delivery. Action will need to follow vision by incorporating sustained digital government initiatives into ongoing planning and budgeting activities. Local governments will need to shift their focus through this process to become enablers of change. By doing so, they will empower an entrepreneurial ecosystem of private sector, not-for-profit, peer and citizen organizations to do more collectively than any government could do on its own as a sole provider of services, and will give new and positive meaning to the term “government in the cloud.”

Acknowledgements:

Digital Communities would like to thank the following individuals for their specific contributions to this paper.

Phil Bertolini

Deputy County Executive and CIO, Oakland County, Mich.

Katie Burke

Government Program Strategist, Laserfiche

Carl Drescher

Technology Services Director, Town of Marana, Ariz.

David Hutchins

Vice President of State and Local Sales, CDW-G

Tom Miller

Director of Intelligence-Led Public Safety Solutions, Motorola Solutions

David Moody

Vice President and Global Practice Leader of Government and Public Sector, Verint

Steve Reneker

General Manager, Information Technology Agency, City of Los Angeles

Ted Ross

Assistant General Manager, Information Technology Agency, City of Los Angeles

Mark Wolf

Executive Officer, Information Technology Agency, City of Los Angeles

Endnotes

1. www.govtech.com/local/Smart-Cities-on-the-Rise-Report-Says.html
2. www.govtech.com/local/2013-Digital-Cities-Survey-Winners-Announced.html
3. <http://businesshub.boston.gov>
4. www.innovationdistrict.org
5. www.govtech.com/pcio/special_reports/Next-Generation-Government-2014-Q1.html
6. <http://citycamp.govfresh.com/>
7. www.irs.gov/pub/irs-pdf/p3415.pdf
8. www.govtech.com/internet/Nutter-City-and-Nextdoorcom-to-partner-free-for-social-networking.html
9. www.govtech.com/public-safety/Nextdoor-Debuts-Service-for-Public-Agencies-.html?utm_source=related&utm_medium=direct&utm_campaign=Nextdoor-Debuts-Service-for-Public-Agencies-
10. <http://en.seeclickfix.com/>
11. <http://mindmixer.com/>
12. www.kickstarter.com
13. www.kickstarter.com/hello
14. www.taskrabbit.com
15. www.govtech.com/dc/digital-cities/282325731.html
16. www.govtech.com/data/Code-for-America-Shifts-Strategy-for-2015.html
17. www.governing.com/columns/tech-talk/gov-technology-trends-local-government.html
18. www.govtech.com/data/10-Drivers-of-2015-Smart-City-Planning.html
19. www.mckinsey.com/insights/business_technology/public_sector_digitization_the_trillion_dollar_challenge
20. www.govtech.com/products/5-Tech-Startups-to-Watch-in-2015.html
21. www.govtech.com/applications/Bostons-New-App-Rewards-Citizens-for-Reporting-Problems.html
22. www.govtech.com/local/Thoughts-on-a-Successful-CityCampSF-Industry-Perspective-.html
23. <http://technical.ly/philly/2013/05/28/mayors-innovation-civic-apps-data/>
24. www.openoakland.org

Industry Members:

