Mobility Gets Personal: Learning to live with BYOD

JusticeMobile: California app redefines police work in the field

Iowa Ingenuity: Virtual desktops turn budget cut into opportunity

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As this issue went to press, new Microsoft CEO Satya Nadella was vowing to retool the software giant to concentrate on the cloud and mobility. In a lengthy July memo to employees, Nadella outlined a vision for pushing the company away from former CEO Steve Ballmer’s “devices and services” strategy and toward a new focus on platforms and productivity. “We live in a mobile-first and cloud-first world,” Nadella said. “With the courage to transform individually, we will collectively transform this company and seize the great opportunity ahead.”

State and local agencies are harnessing the cloud in new and creative ways, and they’re also coming to grips with supporting mobile citizens and employees. We found a great example of this during a recent meeting with Iowa state officials in Des Moines. When budget cuts forced the state Department of Workforce Development to shut down 36 unemployment field offices, the department responded by implementing cloud computing and virtual desktop technology that both reduced costs and improved citizen access to vital unemployment programs. Now computers running virtual desktop software are available in nearly 100 locations, including libraries and National Guard facilities statewide. (You can read more about it on page 44.)

In addition, the department plans to launch a cloud-based, mobile-friendly app for filing unemployment claims this summer. Using responsive design and HTML5, the new app will make it easier for Iowans to file unemployment claims regardless of the device they use to access it. The department also expects to cut costs by developing the app using the open source Drupal platform and hosting much of it in the Amazon cloud. (You can read more about this project online at govtech.com.)

The jury, of course, is still out on Nadella’s plan to reinvigorate Microsoft. But he’s already right about one thing: The cloud and mobility are reshaping how organizations work and citizens live. And savvy government leaders are using these trends to their advantage.
JOINING FORCES: LAW ENFORCEMENT AND TECHNOLOGY UNITE TO ADVANCE CRIMINAL JUSTICE IN CALIFORNIA

The Integrated Law and Justice Agency for Orange County (ILJAC) leads California in developing technologies that vastly improve the criminal justice and court systems in the state — but that didn’t happen overnight.

A Joint Powers Authority (JPA) comprising 24 public agencies, including all 21 municipalities that provide police services to their residents, ILJAC began to take shape as a “project” in 1997 to pursue improvement of criminal justice in the region. It continued to develop, and was formally restructured as a JPA in 2006. In California, a JPA is a collection of governments that forms another governmental entity for a specific purpose and can represent its members with one voice. This diverse affiliation takes advantage of its combined size to take on large-scale projects none could accomplish alone. Touching every criminal justice system in the county, ILJAC represents the sheriff’s department, probation department, district attorney, public defender, city managers and the Superior Court of California in Orange County, in addition to police units from University of California, Irvine, and California State University, Fullerton.

Since 2007, ILJAC has been directed by Bob McDonell, a retired Newport Beach police chief with 38 years of law enforcement experience under his belt; 21 of which he served as a police chief in two different cities. McDonell says the group’s initial vision has helped refine law enforcement processes in a way that has the potential to save the public enormous amounts of money, while at the same time boosting productivity, efficiency and safety.

“We completed a study years ago and found areas where the criminal justice system in the county could improve,” he says. “As a result, we developed a strategic plan for the entire county, and during that process, asked each of the agencies, ‘What improvements would you like to see to the system?’ The representatives identified 15 priorities in the region, and began methodically knocking them off, one by one.

From Pushing Paper to Sharing Data Electronically

One such priority was the creation of a widely embraced exchange portal to transmit and share information. The first project for the portal was to electronically process Probable Cause Declarations (PCDs). When police officers arrest suspects and want to detain them until an arraignment on the charges, they need concurrence from a judge who reviews the circumstances and decides whether there is sufficient cause to do so. Until recently, requesting PCDs in Orange County was a paper-based process, with duplicate, manually created forms faxed or physically walked over to the court by sheriff’s deputies. Tracking the paperwork flow was, at best, a challenge, leading to the potential release of suspects because time ran out to verify concurrence from the assigned judge. It was a pain point for both law enforcement and the court system.

With funding in hand from Community Oriented Policing Services (COPS) grants and some undesignated capital reserve monies, ILJAC contracted with Sierra Systems in 2011 to streamline and expedite the probable cause declaration process. Sierra Systems partnered with Software AG to...
align business and IT for end-to-end process improvement to enhance operations and technology; architecting and development — together creating a secure exchange portal with Software AG’s webMethods platform. They used out-of-the-box functionality as much as possible to develop the portal, including the webMethods Composite Application Framework (CAF) to customize the required screens based on business rules.

The project had a number of goals, such as automating workflow, reducing duplicate data entries and integrating with systems already capturing information — but at heart, it all came down to information sharing. “The ILJAOC shares data on a number of platforms and already has a reputation for statewide leadership in that field,” McDonell says. “However, we needed a platform that could pass operational data and drive enhanced business practices at a more efficient level. The portal built by Sierra Systems, using Software AG’s webMethods platform, provided that infrastructure.”

The Software AG team focused on providing a solution with the potential to allow officers arresting and transporting suspects to jail to enter data once, and let it automatically populate other ancillary forms needed by separate entities, such as the courts and jail staff.

**Adapting to Change, Innovating for All**

Judicial hearing officers had long reviewed and made decisions for PCDs, but due to California’s budget cutbacks — midway through the portal project — Superior Court judges took over this duty as a cost-savings measure. In addition, 180 judges rotate this duty, so that each is on call to review PCDs for only one week every two years. This meant a substantial switch-up for the design team, who needed to swiftly modify the interface format for a new audience and simplify it to preclude the need for constant retraining when a judge’s turn at bat came up every other year.

Now, arresting officers can log into the portal, enter arrestee information and probable cause data onto a form and submit it electronically to the court. On their side, judges see a narrative description and green and red buttons to push, indicating “yes, hold suspect in custody” or “no, insufficient evidence to hold.” Using unique IDs, judges can access the application on iPads anywhere, taking advantage of mobility and ease of use to render decisions quickly for arresting agencies. Management screens on the portal help the jail manage interactions with inmates, so they know who has been approved for release versus who must stay.

“For the Orange County Sheriff’s Department, this solution reduces its role in managing the paper flow process — officers now have an automated notification for inmates awaiting the probable cause declaration concurrence process that warns them when time is running out to receive information before the suspect must be released.”

McDonell says. “The judges have embraced the electronic portal process, no longer needing to drag paperwork from place to place to accomplish the process. It provides more efficient data storage and the courts get a completed PDF back in the system that they can recover easily in a timely way.”

The probable cause declaration pilot project was an instant hit, allowing the courts to replace a laborious, redundant manual process for an electronic, multipurpose one — a lightweight deployment that easily integrated into the daily workflow of the court. Since this solution went live in 2012, the 24 agencies have produced more than 20,000 records. “We built a very robust information-sharing system that can now move operational data all around the county,” says McDonell.

**Continually Improving Criminal Justice**

With the exchange portal and other successes under its belt, ILJAOC is looking to leverage them for additional high-value solutions that will improve law enforcement processes.

Next up: Sierra Systems and Software AG will create another interface for ILJAOC that uses the data entered for PCDs to populate sheriff’s pre-booking and property forms — currently a cumbersome but necessary process needed to detain suspects. After that, they’ll explore building solutions to digitize and share criminal case files, and refine electronic search and arrest warrants.

“Any time we can be more efficient, it saves the public money. That’s the bottom line,” McDonell says.

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SEPT. 17-18, 2014 SACRAMENTO, CA
EV Chief

Many states discuss the economic benefits of promoting green technologies, but Oregon’s taking it one step further: It has the nation’s first public-sector chief electric vehicle officer, a position Ashley Horvat has held since 2013. The position was created in the Transportation Department to promote sale and use of electric vehicles in the state. For the last few years, she’s worked on e-vehicle projects to help support Oregon’s broader economic development strategy. The $8 billion residents spend on gas annually could instead be spent on local goods and services, while expanding the electric vehicle industry locally could attract high-value investments and skilled workers to Oregon.

Growth at 100 Gbps

For Wyoming, high-speed broadband is more than just a convenience. “This is part of the governor’s initiative to increase quality of life,” said state CIO Flint Waters. Last year, Gov. Matt Mead presented the Unified Network project as a way to use education and government broadband demands to promote capacity growth for the state. The project will boost capacity to 100 gigabits compared to the current 2.5 Gbps network. With access points in eight communities and anchored at schools or state offices, the network will create more redundancy and reliability.

WHO SAYS?

“We get new acronyms and gadgets and widgets coming along just about every day, but what really excites me is application of technology — especially where people take really simple tools and create really brilliant services.”

100

The number of Los Angeles County employees who will transition to Microsoft Office 365, as part of one of the largest implementations of the platform in state and local government.

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- Eight Governors Sign Electric Vehicle Promotion Pact
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Governments the size of New York are certainly large enough to develop and to manage the code of the software they use. They can do that in lieu of paid software licenses. They can do that by hiring software developers and providing infrastructure to allow developers within and without the government to cooperate on software. This is far more efficient than having each government pay again for the privilege of running their computers. Sharing of software between governments prevents reinventing the wheel and paying multiple times for that wheel.

FirstNet advocates a hardened network infrastructure built to first responder standards. But this is translating into enormous cost and enormous delays. There are currently four national fully functional commercial data networks, networks that are currently used by first responders and even federal law enforcement. Consider an alternative approach, where the multiple networks are configured into an integrated facility with inherent reliability far beyond the single network advocated by FirstNet.

A federated approach to technology with the expanse of services government supports is more reasonable. The CIO is the core to the enterprise applications as long as there is clear governance around the position that the agency is the customer service center for technology and not necessarily the subject-matter experts for business solutions.

For Your Eyes Online in response to Florida Seems Poised to Bring Back its State CIO’s Office

Colorado Names a New CIO

Colorado Names a New CIO
Q&A: Building Better Democracies with Open Government Services

Accela’s Civic Platform Expands Capabilities to Build Bridges between Citizens and Government

Government works best when there are no boundaries between agencies and the citizens they serve. In the past, cumbersome paper-based processes created a wedge between government and its citizens. Technology is bridging the gap and Accela, through its expanding Civic Platform, is helping lead the way. Accela CEO Maury Blackman talks with Government Technology about new Civic Platform capabilities and Accela’s open data ecosystem.

Q: Accela’s Civic Platform has been revolutionizing how citizens connect with government. Can you tell us about Civic Platform’s new capabilities?

MAURY BLACKMAN: We have expanded our legislative management capabilities, which enable online public meeting and town hall activities. Citizens can participate or reference what took place at their convenience — all online. This furthers Accela’s goal of building better democracies by providing open government services.

We have also added a functionality that better coordinates right-of-way management. Many times, road repairs or sidewalk replacements can be a nuisance. This solution coordinates improvements among agencies, utilities and highway departments to minimize disruptions and allow citizens and government to monitor improvements. It can be used for non-construction activities like events or parades to help reroute traffic while providing real-time information updates.

We’re using our platform capabilities to provide citizens with a 360-degree view of the activities in their communities and empower them to better participate in the decision-making process.

Q: What makes Civic Platform unique in terms of providing government agencies with a comprehensive approach to citizen engagement?

MAURY BLACKMAN: Accela’s Civic Platform is the only platform that addresses all of the needs of government inside the vertical we serve, which is primarily around how to open a business, develop land, manage assets or participate in decision-making around those services. We provide a platform to build these solutions, to enable and encourage third party integrators to implement our services, and to allow developers to deploy additional applications. When we add these businesses and capabilities, the architecture is open so our entire ecosystem has access to it.

Q: How is your CivicData.com platform an integral part of bridging the divide between citizens and government?

MAURY BLACKMAN: Government is great at collecting information, but it can be difficult to open data up and share it. The information that revolves around our products — like construction activities and new business requirements — is very important to citizens. Platforms like CivicData.com can bring in data not just from our platform, but from other areas like public safety, transportation, and health and human services. This can all be rolled into one data portal to provide a single view for the citizen looking for information about his or her community and for the civic-minded developer looking to build innovative apps to serve agencies and citizens.

Somewhere very important and exciting is the integration between public-serving applications — like permitting or licensing — and private applications like Yelp. Yelp does a great job of reviewing restaurants, and government does a great job of inspecting restaurants. Through open data, we can bridge those services to allow a citizen to access a restaurant review and also see inspection information.

Q: What do you see for the future of government and citizen engagement and how do you see Accela contributing to that?

MAURY BLACKMAN: We are going to see more applications that use public data in open data containers, and transactional data in platforms like ours to integrate with private applications. Creating those data points offers a powerful view of what it takes to build a building or open a business. It’s almost like a business wizard that looks at government requirements, but also helps individuals find properties to open their business or helps them establish banking relationships. We’ll start to link multiple services into one complete application.

At Accela, we believe that engagement makes all the difference. We’re ushering in a new era in which democracy thrives when government works directly with citizens by connecting through mobile devices, social media and networks and open data. The Accela Civic Platform bridges the gap between government and citizens with web and mobile applications; and enabling them to participate virtu- ally in civic meetings. We help build better communities by powering thousands of services and millions of transactions daily for agencies of all sizes. Accela is headquartered in San Ramon, California, with offices in San Francisco, New York, Melbourne and Dubai.

FOR ADDITIONAL INFORMATION, VISIT WWW.ACCELA.COM OR CONTACT US AT INFO@ACCELA.COM.
Right now we’re figuring out what’s the best enterprise approach to BYOD. Certainly mobile computing is part and parcel of how government does business these days. So we’ve allowed individual departments to adopt policies that allow employees to bring their own mobile device, but we focus on making sure they’re not introducing additional risk. Employees who bring their own devices must have security measures on the device and agree to let the state access those devices in the event that something does happen. Another issue is whether to provide a stipend or to reimburse for the cost to employees who are using their own devices. But we haven’t adopted a statewide policy on it yet. Some of these might be issues that are factored into collective bargaining agreements.

**CARLOS RAMOS**

CIO, CALIFORNIA

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CRAIG ORGERON
CIO, MISSISSIPPI

It’s a Wild West kind of issue. There are rapidly changing demographics in the workforce and rapid acceptance of the BYOD concept. If you visit with tech firms, they’ve moved to dramatically different models, like granting a technology stipend and allowing employees to buy the device they want.

I have to believe states will head down those kinds of roads eventually where we won’t be purchasing as many devices. But I would submit that states will continue to struggle because the mobile technology marketplace is so volatile with devices, plans and access.

BRENDA DECKER
CIO, NEBRASKA

The thing that really stops us on BYOD isn’t whether individuals will bring viruses into our network and things like that. The issue is, what do we do with state-owned information that ends up on a personal device? And if an individual leaves state government, how do we get that information back from them?

We’ve taken a policy position that if you’re going to use a personal device for work, you sign documentation that says when you’re ready to leave state employment, we can take your personal device from you and make sure that the information is cleaned off.

ERIK AVAKIAN
CHIEF INFORMATION SECURITY OFFICER, PENNSYLVANIA

Our policy is if employees want to use their own device, they can utilize some technology that we can put onto their device for secured email. Basically that is a secure container, so whatever they’re doing on their personal device, the secure container will contain the work data. For instance, if the employee gets terminated or they no longer work for the commonwealth, we can wipe that container but not necessarily wipe their whole device — we’re not going to wipe their pictures or anything else.

Those were some of the things that the legal teams looked at because if we’re going to have control over somebody’s device, we don’t want to be wiping their personal stuff, but we also need to maintain protection of data. By implementing the policy and then implementing the technologies, we were able to work to BYOD that way.

TIM ROBYN
CIO, MISSOURI

We do some things to help our employees use their own devices, but we don’t have a policy that allows them to just bring in their own computer and jump on our network. There are controls in place for how they access data, and we’re securing those better every day with better tools and a better understanding of how we can do more with BYOD. But we’re not going to jump out and say “bring your device” until we can best understand how to deliver that feature.
Health Data Isn’t Just for Hospitals
How planners in Oregon and Kentucky use smartphones to collect valuable information.

With wristbands that monitor heart rate and mobile apps that map jogging circuits, a growing number of Americans are using smartphones to measure their physical activity in facts and figures. These health and fitness apps collect personal data on exercise habits and remove the usual layer of guesswork in individualized fitness programs by delivering feedback to the user in real time.

At the same time, the Centers for Disease Control and Prevention reported that more than half of all Americans struggle with obesity, heart disease and other chronic health conditions, often due to unhealthy lifestyles. In some cities and states, however, planners are taking direct action against these public health concerns — and using data generated by mobile devices to do so.

Oregon’s Department of Transportation (ODOT) has turned to Strava, a popular fitness app, to better understand the behavior of the state’s runners and cyclists. This app tracks when, where, and most importantly, how runners run and cyclists ride, tracing their routes with the phone’s GPS. State planners, who paid $20,000 for one year of access to the maps this data generates, use the locational information to determine the effectiveness of current bike paths and decide where new ones could be built. ODOT already has put Strava data to use, analyzing cyclists’ speed on the state’s highways. They determined that rumble strips — designed to keep vehicle drivers alert — were a source of danger for cyclists, and took this into account in their placement of new ones. ODOT — which, according to the company, collects 2.5 million GPS-tracked activities per week — offers an invaluable set of data to planners who would otherwise have few analytical tools to quantify pedestrian and cyclist behavior.

Strava — which, according to the company, collects 2.5 million GPS-tracked activities per week — offers an invaluable set of data to planners who would otherwise have few analytical tools to quantify pedestrian and cyclist behavior.

Louisville, Ky., has a large population of individuals with breathing disorders such as asthma and COPD. To combat the problem, in May 2012, the city partnered with Propeller Health to distribute 500 smart inhalers to asthmatic residents. When the devices were used, they sent information on their place and the time to both the patient’s physician and city officials, who used the data to generate “heat maps” of emergency asthma attacks. With the help of data analysts at IBM, public health officials compared the trends against a variety of potential causes — including air quality, pollen outbreaks and traffic congestion — to strategize interventions in the most at-risk areas. Today, the project continues. The city plans to deploy bike-mounted sensors to monitor air quality along routes that are frequented by children during the summer.

In June, I spoke at The Washington Post’s Health Beyond Health Care panel. It was clear, among this interdisciplinary group of doctors, academics, politicians and architects, that public health should include not just hospitals and medicine, but also broad-scale health promotion and health planning.

To this end, collecting health-related data directly from citizens not only serves as an effective way of gathering information; it also fosters a sense of civic participation at very little expense to those who generate it. Usually health-related analytics stay within medicine. They originate from doctors, are filtered through hospitals and are distributed to health insurance companies. But health is shaped by the environment in which people live, work and play — the city — and it is therefore the city’s responsibility to address it.
Freedom of Information/Public Records Request

Part I: I hereby request to:  X  Inspect  Copy the following records:

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?  X  Electronic  Paper

Part III: Name of individual(s) requesting information:  John Doe

Address:  1076 Freedom Way  City:  Everton  Zip:  95630

Phone:  (209) 867-5309  Email:  jpublic@comcast.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
FOUR QUESTIONS

Ron Baldwin
CIO, Montana

1. Will Montana implement a bring-your-own-device policy? We’re embracing bring your own device. BYOD is here, and it’s here to stay. I would just like to make sure that this new technology can be embraced in a way that keeps it safe but available and accessible. I can tell you in Montana, when I’m sitting at the cabinet table, there are directors who come with their tablets and smartphones. Legislators are asking to bring their devices and be connected to our network.

2. What is the biggest challenge to implementing BYOD? The tough part will be how we pull mobile devices into the network — how we pull them inside the firewall. Part of that is making sure we have infrastructure and strategies to accommodate that. In Montana we have guest wireless, but we also have secure wireless, so we have the ability for a mobile device to connect securely to our network.

3. How are you handling security? One of the things that we’re going to do is implement a mobile device management policy and some additional software tools that help secure the mobile device. Information that’s specific to government and to your work as a government employee will be segregated from your private information and made more secure.

4. Why is BYOD and mobility important to the state? In my own experience, mobile technology provides a big increase in availability and productivity. So it’s something that, I think could really help government employees do their job more effectively and also attract a younger workforce. Younger workers are going to expect to be able to use their own mobile devices to help them do their job.

— Steve Towns, Editor

Ron Baldwin was appointed CIO of Montana in 2013, after leading technology efforts in the state’s Department of Public Health and Human Services for four years. He has 30 years of experience in private- and public-sector IT. Government Technology asked Baldwin about Montana’s mobile technology strategy in an interview earlier this year.
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MORE STATES AND CITIES ARE ANNOUNCING “MOBILE-FIRST” STRATEGIES, BUT WHAT DOES THAT REALLY MEAN?

BY JUSTINE BROWN

THE MOBILE IMPERATIVE

THE term “mobile first” was introduced by technology entrepreneur Luke Wroblewski in 2009. The term is an acknowledgment that many — maybe the majority — of users now use mobile devices to access information, shop and conduct various forms of business. A mobile-first strategy essentially means making mobile technology a priority rather than an afterthought.

Until recently, mobile first was primarily applied in the private sector. But over the last couple of years, governments have been building mobility into their IT plans. A number of states, including Texas, California, Georgia, Arkansas and Colorado, recently announced mobile-first policies. But what does mobile first really mean in terms of how an agency does business and operates internally?
“Mobile access is rapidly becoming the primary way in which people seek government information,” said Alan E. Webber, research director at IDC. “Mobile first is about being responsive to constituents and what they want. It’s about designing your sites and services with mobile in mind. In turn, that prompts you to do things — and think in ways — that perhaps you didn’t before.”

**Constituents in the Driver’s Seat**

Georgia adopted a mobile-first strategy in 2012 after statistics revealed that more than 50 percent of visitors to the state’s child support services website were accessing it via mobile phones. For Georgia, mobile first means that any technology or system the state designs is considered from a mobile standpoint first, said state CIO Calvin Rhodes.

“The majority of constituents now have mobile phones, and oftentimes that’s their only access to the Internet,” Rhodes said.

Arkansas’ mobile-first strategy came in March 2014. Working with e-government provider NIC, CTO and Information Services Department Director Claire Bailey introduced a variety of apps, including tools for obtaining hunting and fishing licenses, conducting sex offender registry searches, browsing the state’s health-care aid programs, and reviewing emergency preparedness information.

State-level Estimates from the National Health Interview Survey, 2012, an analysis conducted by the Centers for Disease Control and Prevention, found that Arkansas has one of the highest percentages of wireless-only households (at 49 percent). The fact that nearly half of the state’s population does not have a landline and gets online primarily through mobile devices was a major driver of Arkansas’ mobile-first strategy.

“One important thing about public service is understanding constituents, their needs and access points for receiving services or interacting with government,” said Bailey. “Our goal is to increase operational efficiencies, to make government easier to access and to streamline services to benefit citizens.”

In May, the Texas Department of Information Resources (DIR) announced the launch of a mobile-first design for Texas.gov, the state’s official website. The site provides access to more than 3,000 online government services. Texas CIO and DIR Executive Director Karen Robinson reports that mobile traffic to the site accounts for nearly 25 percent of total site visits.

Local governments also are getting into mobile-first strategies. Riverside, Calif., is incorporating mobile-first language into an update of its IT strategic plan. But mobile-first practices have been in place there for several years, according to city CIO Lea Deesing, who also is executive director of SmartRiverside, an initiative to attract technology businesses to the area.

“The rise in mobile technology has significantly impacted the way city IT does business,” Deesing said. “We have a constant backlog for the development of mobile applications and are in a constant development cycle for them.”

Current city applications include the Riverside Tour Guide, which uses advanced geofencing technology to push photos, audio and text to mobile devices. Residents, visitors and students can take a self-guided tour just by walking within close range of city landmarks.

Davenport, Iowa, also has developed a number of mobile apps designed to eliminate redundancy, improve transparency and meet constituent demand.

“We recognize that a lot of constituents are using mobile devices, so we wanted to figure out how we could best meet their needs,” said CIO Rob Henry.

For local governments, mobile technology can also be an impactful way to better connect with constituents.

“Mobile technology can help engage people who may not have had that opportunity before,” Henry said. “For example, busy parents that are shuttling kids to soccer practice and can’t attend the city council meeting can use mobile technology to find out what’s going on, air their opinions, etc. It’s allowing more people to get involved.”
Similarly, Riverside offers a Mobile Agenda app, which allows council agenda items to be viewed on a mobile device, and Riverside Resident Connect, which lets residents and visitors report graffiti, potholes, and other problems to the city.

NEW OR RENEW?
Not all state and local governments have formally adopted a mobile-first strategy, but most now consider mobile equally as important as other delivery channels. As they adapt to a more mobile world, state and local agencies must determine whether to adapt current content to mobile platforms or start fresh. Rhodes said his team began by examining the approximately 70 sites hosted on Georgia.gov to determine whether they should adapt what they had or create new content.

“We found agencies were more comfortable with scaling back and seeing what we could adapt,” Rhodes said. “Going forward we are creating all new sites with a mobile-first initiative. We now view every piece of content being created with a mobile viewpoint and we also base it on the analytics we pull — what’s the actual phone traffic, desktop traffic, etc., to each of those sites.”

According to IDC’s Webber, integrating mobility into existing back-end platforms can be one of the biggest challenges facing agencies as they move to support mobile device users.

“What are the critical pieces of information to collect and how can an agency design an experience that makes that information easy to enter on a mobile platform?” said Webber. “If you don’t get it right the first time, people will move on. It’s about improving the user experience, route it to the right agency, view available resources, assign or bid the work, and notify citizens who reported it that the problem has been addressed?

“It’s constructing that value chain that’s the challenge,” said Bryan Pagliano, research director for Gartner.

MORE THAN MEETS THE EYE
Government entities that have launched a mobile-first strategy say much of it is about improving the user experience. In Arkansas, responsive design, which adapts content to the specific device being used to access it, has served as the centerpiece for the state’s digital initiative. Responsive design presents a fully functional website across both traditional and mobile platforms that transforms based on the device and screen size. This approach, gaining traction in the public and private sectors in recent years, helps users navigate quickly and efficiently regardless of their device.

Similarly, Riverside’s recently redesigned Web page functionality automatically adapts to the user’s screen size, letting users conduct their city business using their device of choice. For example, on a smartphone, the left navigation column becomes a dropdown menu and the right column drops below the content. Content then fills the entire screen width for better usability.

Rhodes said the biggest challenge for Georgia has been creating content specifically for mobile devices. “Our agencies often want to cut and paste from a huge Web page, but that doesn’t work on mobile. Mobile users generally do not like the aspect of scrolling through a large amount of information,” he said.

Beyond the user experience, mobile also has the potential to allow public agencies to redesign and streamline their business processes.

“The real opportunity in mobile is to figure out how you add value to the constituent either through enhancing online services or in changing how constituents are using the service,” Pagliano said.
Privacy has never been this easy.

For example, several states have fish and wildlife apps that allow an individual in the field to pinpoint where the fish stocks are, or to easily report back what they caught or are taking. Pagliano pointed to apps that have added a social component, taking advantage of the fact that people want to share their catches on social media.

“The state integrates that into the app so someone is not only posting on Facebook, but they are also reporting what they caught to the Fish and Wildlife Commission so they can better improve their management,” he said.

Another consideration is how data gathered via mobile apps could interact with additional data gathered outside that specific interaction. For example, the license plate camera on a police car could scan a plate, automatically run it against a database, and find that the plate is going to expire in the next 60 days. The owner could then automatically get a text message or email reminding him that his registration is coming due. The text might also mention a potential smog issue, and suggest the owner handle the problem.

“When we match up the context of a mobile platform and we talk about big data and analytics and the Internet of Things, you can see how a one-dimensional experience with government can shift significantly,” said Webber.

**FUTURE NEEDS AND CHALLENGES**

Going mobile first also comes with a set of challenges. Unlike private industry, government doesn’t have the luxury of turning off old delivery channels when new methods emerge. While a private company can choose to only deal with customers online, via smartphone or another method, government agencies still have to offer physical offices, phone centers and mail programs. A new delivery channel is a new expense unless an agency can significantly reduce the number of people using other, more expensive channels.

“We are servicing multiple generations of Arkansans,” said Bailey. “In government, even though we may introduce new, more affordable technologies, we still have to make sure other methods of interaction are available for those that don’t have Internet coverage.”

The lack of Internet access may not be the only impediment, according to Webber. Despite the growth in technology uptake over the past decade, the digital divide is alive and well.

“If you look at the bottom 20 to 30 percent of the American population, a lot of them have mobile phones, but they don’t necessarily have the life experience to engage with government across the depth of services that they need on a mobile platform,” Webber said. “One of the difficult things to do on a mobile platform is to provide the additional context people may need to be able to move forward in a process like applying for disability insurance, unemployment or health care. Government has to have the ability to function for everybody.”

Standardization across agencies is another challenge for government agencies. The best tool available two years ago may be obsolete today, so agencies can end up using different tools despite a state’s best efforts at consistency.

“At first we had agencies doing 20 different things and none of them were coordinating,” said Rhodes. “One significant challenge we’ve dealt with in Georgia is trying to standardize across the enterprise but still trying to give agencies flexibility.”

“A mobile strategy is not necessarily easy,” added Henry. “All these different devices cause support issues, security issues, etc. It’s moving faster than perhaps a lot of places can comprehend or manage. It’s going to be a continuously evolving process. But mobile is here to stay, and you have to work with it.”

Similarly, recruiting the talent to develop and maintain mobile application infrastructures and stay up to date with evolving technology can be a significant hurdle.

“The tools available are getting more advanced,” Bailey said. “My goal is to make sure we’re using common products, that we have standardized, embedded security measures, and that we’re moving everyone in the same direction.”

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SOLUTIONS TO DEAL WITH SECURITY AND DATA PRIVACY ISSUES HAVE SPROUTED UP IN DROVES, BUT IS THERE A GOOD FIX TO THE PEOPLE PROBLEM?

by Adam Stone

Jon Gjestvang: Napa County provides stipends for employees who use personal smartphones on the job.
The BYOD phenomenon is becoming more entrenched in government, and with good reason. Bring your own device promises potential cost savings and increased productivity. Moreover, employees want it. They’re used to accessing the world through their tablets and smartphones, and taking their work on-the-go feels like a natural extension of their mobile lifestyles.

Faced with tough fiscal choices, many city and state managers find BYOD a tempting proposition. In a 2013 study, Cisco’s Internet Business Solutions Group said BYOD could net employers up to $3,150 per employee each year on device expenses and increased productivity. BYOD employees gain 17 minutes per week in productivity, while spending more than $1,500 a year on device expenses and increased productivity. BYOD employees gain 17 minutes per week in productivity, while spending more than $1,500 a year on device expenses and increased productivity.

As with any emerging technology, the transition to this new paradigm presents a range of hurdles to IT managers trying to do what’s best for the jurisdiction while simultaneously supporting the desires of end users.

Security is a primary concern, as work data increasingly commingles with private information and travels outside the office walls. But there are other sticking points, including concerns about privacy, issues of overtime and the burden on IT of having to support a broad range of devices, to name a few.

Public-sector technology leaders say these challenges can be overcome, but it takes some creativity and forethought.

PEOPLE FIRST

Even before concerns about technology, IT leaders are wrangling with questions about people. Perhaps more than any other facet of IT today, BYOD challenges technology managers to consider the end user, both as an employee and as an individual with specific personal needs. At the same time, the employee’s relationship to the workplace must be addressed.

Take, for instance, the issue of discovery: the possibility that participants in a lawsuit could demand access to the content of a personal device in order to investigate work-related information.

“Now somebody wants to see if you have documents on your device that pertain to subject X. What does the law really say about that?” asked Minneapolis CIO Otto Doll. “We don’t see the laws as being clearly written to say you can only look at the business side of the device and not the personal side. It is not very clear how someone would ascertain just what is the business side versus the personal side.”

Some see the issue of discovery as a major impediment, largely because of employees’ reluctance to make their private data public. “The city or state has to provide access to relevant public documents. This means the government has to have access to that device,” said New Hampshire state Rep. Bill O’Brien, a former state speaker of the House and now COO of Brainloop, which delivers collaboration tools. “Let the last thing any employee would expect is to have their devices summoned into court.”

Even without the threat of litigation, it’s a real issue: New Hampshire has received as many as 203 requests for open records. The state’s response has been straightforward, mirroring what many say is the best approach to employee-based BYOD concerns. That is, candor upfront. Employees bringing their own devices are told at the start that the state has the right to demand that any content be made available as needed.

AM I AT WORK NOW?

Privacy is just one aspect of the “people” equation. Of further significance are questions of compensation — both in terms of device usage and work hours.

In Napa County, Calif., where several hundred of the county’s 1,300 employees bring their own devices, CIO Jon Gjestvang has tackled the issue directly, deciding early on that employees should receive some form of stipend if they make productive work use of their own devices. The county will pay $35 to $120 a month to cellphone users, along with a $50 to $60 data allowance.

“It was based on your job, how much we thought you would be calling for business, and the data stipend was based on roughly the cost of a data plan at the time we made the policy,” he said. The basic rule for compensation: “It’s available, but there has to be a business reason for it.” And that’s up to department heads to decide.
BYOD POLICIES 101

BYOD management starts with a sound policy for acceptable use. There are many variants out there in this fast-changing realm. The sample policy elements here are drawn from the federal CIO Council, the state of Michigan and the Society for Human Resource Management.

SURRENDERING A DEVICE: The owner of a portable device may be required to surrender it, for example, to comply with electronic discovery requirements imposed by the courts or as part of an acceptable use investigation.

SENSITIVE DATA: Storing of sensitive data such as personally identifying information on any portable device is prohibited.

STORAGE OF GOVERNMENT DATA ON INTERNET SITES: Data related to government business cannot be transferred to Internet sites with which the agency is not under contract.

PERSONAL USE: Employees must handle personal matters on nonwork time and ensure that friends and family members are aware of the policy.

SEPARATE RINGTONE: All employees must use a preset ringtone and alert for work-related messages and calls.

REMOTE CONTROL: In an effort to secure sensitive data, employees are required to have remote-wipe software installed on their personal devices by the IT department.

PRIVACY: Government employees do not have a right to, nor should they have an expectation of, privacy while using government-provided devices at any time.

LOST DEVICES: If the device is lost or stolen, the user will notify the help desk within one hour.

Ted Doll, provost of the University of Denver, agrees. "If you give someone $50 per hour and the employee reports $50 it, there’s a problem," he said. "The employee should be paid for that time."

"You need to define those parameters, that there is no additional requirement to do more work because of having these devices. It is only intended for the convenience of the employee. That has to be in every single policy," said Jerry Irvine, CIO of Prescient Solutions and a member of the National Cyber Security Task Force.

Some jurisdictions have started addressing the overtime question explicitly in their BYOD policies. In Rancho Cordova, Calif., hourly employees using personal devices outside of their normal work schedule can work up to seven additional minutes per day without needing to report it, Irvine said. Anything beyond that, however, must be accounted for on the employee’s timesheet. The rule aligns with the city’s policy of rounding minutes worked to the nearest quarter hour.

TECH HURDLES

While IT must consider the human element, there also are a range of technology-related impediments in play. One of the most significant of these is the matter of device management.

“When we started allowing access back in the BlackBerry days there was one device, one operating system. It was pretty simple,” said Gjestvang. “With the introduction of multiple devices, that has opened up challenges for us.”

Gjestvang’s team has installed a server separate from the BlackBerry server and developed software components to manage multiple devices. Setting up isn’t hard, he said, but upgrades can be a bear. A recent upgrade to the email system didn’t take on every device, even though the software was always meant to play nicely on multiple devices.

“As Gjestvang noted, the same apps won’t always play nicely on multiple devices. As Gjestvang noted, the same apps won’t always play nicely on multiple devices.

Sometimes issues arise on individual devices. One way to simplify that situation: Wash your hands of it. Gjestvang’s team as a rule will not offer support for personal devices. “We won’t just hang up on them, we’ll tell them what to do next, whether it is taking it to their carrier or dealing with some issue within the device,” he said. “Anything else really just stretches IT too thin.”

Rancho Cordova IT Manager Jay Hadley takes a similar approach. “We are always willing to assist them, but there is a line there where we can do nothing more,” he said. “In 90 percent of the cases when a user comes to us with an issue, it is just a small glitch or a misunderstanding about how to use it. But there are times when there is something going on that is on the carrier side. Then there is nothing we can do.”

Hadley stretches his resources further by posting information about devices on the intranet, including how to choose a device. “They can read it themselves, and if they need more information we are glad to sit down and help them with that,” he said.

Even if they can reduce the complica- tion by offering only minimal support, IT managers still have to wrangle with obstacles inherent in the devices themselves. As Gjestvang noted, the same apps won’t always play nicely on multiple devices.

It seems simple, but there are complications. Governments are supposed to be saving money, and yet the stipend, in some cases, feels like an expense, even if the user is gaining productivity. “If I give you $50 to come in with a phone, that’s still $50 that I am paying,” Doll said.

One further point on the human element: When are you at work? And should you be paid for that time? Will hourly workers claim overtime for work done at home? Is that a convenience or a new way for management to squeeze out more work for less pay?

“According to a 2009 survey by the National Cyber Security Task Force, 91 percent of hourly employees have used their personal devices for work. Clearly it is critical that the government understand the convenience of the employee. That has to be in every single policy,” said Irvine.

In Cordova, Calif., the city policy states that employees can use personal devices for work, but also states that employees can be required to surrender the device if the employee is on a non-work-related call. E-mail policies, Irvine stated, are a good place to start.

“For example, we have a policy that says employees can e-mail friends and family members at home. That is an OK policy. It allows employees to save time.”

That policy, Irvine stated, is something that needs to be reviewed periodically. Some jurisdictions have reviewed their BYOD policies every year since the introduction of BYOD.

For more information, visit www.govtech.com/julyaugust2014.

Wall Street Journal

"YOU NEED TO DEFINE THOSE PARAMETERS, THAT THERE IS NO ADDITIONAL REQUIREMENT TO DO MORE WORK BECAUSE OF HAVING THESE DEVICES."
You can put some policies on mobile devices, but we still don’t have the same comfort level that we have when we put policies on workstations. We can tell it to require PINS, we can tell it to lock devices, but it’s still not satisfying.

But sometimes IT leaders bring the problems on themselves by trying to take an overly simplistic approach to launching mobile apps for BYOD. Israel Lifshitz, CEO of Nubo Software, said it won’t do just to try and port a desktop function onto a range of mobile devices. Often, a multifaceted desktop tool is wedged onto a mobile device and asked to do too much. “For example, you can see that the work of one Outlook desktop application [when shifted onto mobile] uses at least five different apps: email, calendar, contact, notes and tasks,” he said. The result? Diminished user experience.

“A leading concern involves the nature of the devices themselves and the way people use them. “Most people don’t protect the data in their personal smartphones the same way their data in a work device would be protected,” said Michigan Chief Security Officer Dan Lohrmann. “There aren’t the same mandates, and ultimately people don’t perceive the risk, so they don’t take the precautions.”

Without those precautions, it’s easy to see a catastrophic scenario. In Napa County, Gjestvang voices the worry that is foremost on the minds of many IT executives dealing with BYOD: data loss. “The big concern is about the data going out, anywhere from personally identifiable information to protected health information,” he said. Maybe it happens via a breached firewall or a lost device. The prospect of outsiders gaining access to inside information is the leading worry.

Gjestvang’s solution is not atypical. Workers can sign into county systems using a mobile device management system, but no county data will reside on their devices. Everything comes in encrypted, containerized and password protected, and it can be wiped remotely.

Hadley makes use of a mobile device management solution, a mechanism through which IT managers can program in rules and establish routines intended to give strict guidance to the movement of data over the network. But it’s not a perfect fix. “You can put some policies on mobile devices, but we still don’t have the same comfort level that we have when we put policies on workstations. We can tell it to require PINS, we can tell it to lock devices, but it’s still not satisfying,” he said. “Suppose the mobile device gets a virus, for example. I want something that will report that back to us, and I haven’t seen anything like that.”

Paced with the same issues, others have taken a range of approaches, said Dux Raymond Sy, chief technology officer at AvePoint Public Sector:

- Third-party providers lock down data on employees’ devices, often through the use of additional verification methods such as geofencing and two-factor authentication.
- Government assumes control over an entire smartphone or tablet through mobile device management or other means.
- Containerized solutions create partitions between personal and work-related data.
- Secure file sharing and collaboration tools allow content sharing while maintaining control over data.

In King County, Wash., IT Enterprise Manager Bob Micielli frets the mundane, the proverbial laptop left on the train. He implemented a couple of layers of safeguards against such an eventuality, relying especially on cloud provider Max360. Not only does a cloud solution help ensure data is safely out of reach from malicious actors, it also lightens the IT load.

“It gives us the flexibility to access the information from anywhere you are,” Micielli said. “You don’t have to sign into our environment, you can use the cloud portal. So rather than us building the servers, supporting the software, supporting the applications, we let the cloud provider handle all that. It means we don’t have to set up an entire IT stack.”

Despite such potential solutions, few in IT are comfortable with the state of BYOD security: There are just too many unanswered questions. “We know just don’t have the same tools that we have on laptops and workstations,” Hadley said. “I haven’t seen anything that totally satisfies us.”
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Governments become more sophisticated in how they purchase, deploy and think about hosted services.

By David Raths

If you want to understand the evolution of cloud computing adoption in state and local government, one place to start might be in the Alachua County Property Appraiser’s Office in Gainesville, Fla. The appraiser’s office occasionally struggled to maintain the onsite GIS it operates for itself and other local jurisdictions. “We’ve had experiences where our software license management server has been up and down,” said Bob Bates, executive director of GIS, Technology and Support Services. “We’ve had staffing issues in the IT department. We got proposals for contracting the service out, but it’s very expensive.” So a few months ago, the county shifted its Esri ArcGIS instance into the cloud with Amazon Web Services (AWS). Its first monthly bill was only $230. “That is the beauty of the cloud,” Bates said. “It is pay as you go. If we want more resources, we can just check a box.”

Logan Couch, a GIS programmer analyst, said many things can be done much faster in the cloud. “We can do the type of setup in one day that used to take weeks because it would have to touch on several county departments and city agencies. Now I can just jump in and do it myself.”
BATES: “PAY AS YOU GO” SCALABILITY IS A MAJOR REASON THE CLOUD APPEALED TO THE ALACHUA COUNTY, FLA., PROPERTY APPRAISER’S OFFICE.
THE CLOUD GROWS UP

PLAYERS

ACCELA  A longtime provider of self-service permitting and licensing applications, Accela has focused attention on hosted services in recent years, making its products more accessible to smaller jurisdictions. Cities like Palo Alto, Calif., and El Paso, Texas, now use Accela’s platform to develop citizen-facing apps tracking services like permits and garbage pickup.

AMAZON  Amazon Web Services (AWS) is a leader in the infrastructure-as-a-service market and has a strong presence in the public sector. The company was among the first major cloud providers to comply with the federal government’s FedRAMP cloud security standards. AWS also is the platform behind a number of innovative state and local government deployments, including an open source, cloud-based unemployment application launching this summer in Iowa.

GOOGLE  Google Apps for Government, the global search engine’s cloud-based public-sector productivity suite, has taken hold with many government agencies. Among the states in its portfolio are Wyoming, Colorado and Utah. The greatest number of Google Apps users in state and local government to date comes from Maryland, which made the switch earlier this year for its 54,000 employees. Local deployments include Boston, which finished its migration in early 2014, and Omaha and Douglas County, Nebo, which made the switch in a joint move affecting 5,000 employees across 70 departments.

HP  Hewlett-Packard has carved out a significant percentage of the marketplace in health-care information systems, bringing its cloud-based platform to several states, most recently Colorado. A $176 million contract with HP is directed toward improving the state’s Medicaid Management Information System (MMIS), in which separate client and provider portals will enable real-time access to claim and benefit data. The upgrade will also empower the state to make in-house adjustments according to regulatory changes.

Bates said the county is considering putting a disaster preparedness and response application in the cloud too, so that city and county executives could use their mobile devices to access it. “We’re just getting our feet wet,” he said.

Alachua County’s experience shows how and why resource-constrained government agencies are taking advantage of cloud services.

Steve Halliwell, senior global director of state and local government and education at Amazon Web Services, said he sees lots of customers like Alachua County that turn to the cloud to execute well on their core business functions. They’re realizing they can experiment and have more agility in terms of starting on projects without waiting for hardware or a business justifica-
tion based on capacity planning, he added. “I see folks who don’t have their own data center or 60 IT people on staff, but are able to use AWS to get going quickly because we do the differentiated heavy lifting and they can focus on their business processes.”

Budget cuts have forced the hands of many small local governments, said Lauren Nelson, an analyst for Forrester Research. “They’re out of data center space, so what do they do? It’s basically an outsourcing story, she said. The recession forced many local governments to scale back on IT costs and staffing. “Many have the same amount of work but half the team,” she said, so moving to cloud services, both hosted private and public, can help.

Besides budget pressures, there are elemental changes in how vendors talk about cloud now that could encourage public-sector cloud adoption, said Charles King, principal analyst at Pund-IT. A few years ago, it was common for early adopters to predict that desktop computing and private data centers would disappear and be replaced by enormous public cloud infrastructures. But customers have told cloud vendors that some propri-
ety apps and heavily regulated data will never leave their data center, he said.

“Now we’re seeing repositioning around the notion of the hybrid cloud, where an organization could put some business processes, such as customer relationship management (CRM), into a cloud like Salesforce.com offers,” King said. “This allows CDIs to support departments with services from Amazon or Google but still keep critical IT assets behind locked doors.”

At the other end of the spectrum from Alachua County’s Property Appraiser’s Office are larger, more sophisticated IT organizations developing cloud strategies that fit into their enterprise architecture planning.

The promise of software as a service (SaaS) rings true for Delaware CIO Jim Sills. In 2010 when the governor’s office needed a CRM application for constituent tracking and private data centers would disappear, he said, the county is considering putting a disaster preparedness and response application in the cloud too, so that city and county executives could use their mobile devices to access it. “We’re just getting our feet wet,” he said.

Alachua County’s experience shows how and why resource-constrained government agencies are taking advantage of cloud services.

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JUST LOOKING

In a 2013 survey of state transportation departments, seven out of 13 respondents (54 percent) had positive responses with respect to cloud data storage. But only three out of those seven agencies currently store data in the cloud, while the four other agencies may consider plans to do so. The remaining six said they do not plan to store data in the cloud.

Source: State DOT User of Web-based Data Storage, prepared by Cambridge Systematics Inc. for the New Jersey Department of Transportation.
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Dionna Mobility
Dionna Mobility is a family of enterprise solutions that bring together mobile devices, agency case management & eligibility systems. With out-of-the-box connectors for IBM Cúram and Oracle Siebel and configurable connectors for all other systems, we offer a better approach to making mobile technology a game changer for your agency.

We help governments help people
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IBM targets the federal market with its SoftLayer cloud infrastructure enhanced for FedRAMP and FISMA compliance. Big Blue also offers a suite of cloud solutions for local and regional governments. In state government, the company is involved in a number of major initiatives, including a long-running contract — along with AT&T — to operate IT infrastructure in Georgia. Earlier this year, IBM won a $37 million contract to run California’s CalCloud, an initiative to provide cloud services to state and local agencies through the state’s data center.

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The city and county of San Francisco also is investigating how best to apply private and hybrid cloud environments for the scalability and flexibility they offer. “There are legacy applications that we’re going to keep on premises, but even on premises, you can still take advantage of the cloud approach or value proposition,” said Miguel Gamito Jr., acting CIO for the city. “Cloud is a very broad term. It is a philosophy, not a product. I can apply cloud strategies and philosophies to my on-premises environment.” San Francisco’s IT leaders look at a matrix of public, private and hybrid clouds, as well as onsite environments. “We go platform by platform and application by application and draw a box where it might best reside. We also are re-evaluating our own data center constructs, architectures and vendors, as we establish those different environments,” explained Gamito, who’s also leading San Francisco’s transition of close to 30,000 users to Microsoft’s Office 365 public cloud.
Q&A: Transform Service Delivery, Maximize Citizen Interaction
Enterprise mobile solutions from Diona improve the reach of HHS agencies.

Q: How can mobility transform HHS delivery, and why is it so important now?

Patricia Donaldson: The traditional model of HHS delivery is really a one-size-fits-all approach that doesn’t always take into account the unique needs of each citizen. It is difficult for an HHS employee to have a holistic view of all services being delivered to a citizen and when someone may need more help than others. This is compounded by various funding and resource constraints. Mobility can help HHS agencies overcome these challenges and transform the traditional service delivery model. Mobility enables agencies to provide the correct and relevant information in the hands of their citizens when they need it through a self-service model. This eliminates unnecessary phone calls and office visits and lets citizens interact with government in the way they want to — on their own terms.

Mobility also equips HHS caseworkers in the field with important and timely information so they can spend more time helping citizens and less time making trips back and forth from the office.

Q: How do Diona’s solutions help HHS agencies implement an effective mobile strategy?

Patricia Donaldson: Diona’s understanding of HHS and the citizens being served allows us to define and design our solutions in the most appropriate way for the HHS market. We are focused solely on enterprise mobility solutions for HHS, and our understanding of the problems and challenges in this market really differentiates our products. Our product development teams have a long history of developing software for the HHS market and include former social workers to ensure our solutions incorporate HHS-specific requirements. We aim to solve the challenges HHS agencies face by leveraging the capabilities of mobile devices to create a transformative approach to solving the problem. For instance, caseworkers meeting clients face to face may not feel comfortable typing notes the whole time — maybe they want to record the conversation or take pictures or video. Our solutions offer that flexibility to address a business problem with inherent mobile device capabilities. From a technology perspective, our commercial-off-the-shelf products can be used immediately, reducing time to implementation and risk. HHS agencies are able to reap the benefits more quickly. In addition, our solutions will grow and evolve over time to meet changing customer and market needs.

Q: Why is it more beneficial to take an enterprise approach to mobility?

Patricia Donaldson: An enterprise approach to mobility is where true transformation takes place. We see a lot of agencies simply take their back-end systems and force the same functionality through the device. That’s not transformative, tends to be poorly designed and doesn’t leverage the capabilities of the technology. With mobility, it’s very natural to think all about the app, but the app is really just the tip of the iceberg. While design and function of the front-end app are essential to the user experience, an enterprise solution provides everything that is below the waterline to enable that solution to work in a scalable and secure way, including integration with back-end systems, device management, data encryption, and identity and access management. When mobile solutions are effectively utilized, social workers are no longer tied to their desks and citizens are no longer standing in office lines.

Q: What is the impact on citizens when HHS agencies go mobile?

Patricia Donaldson: Citizens typically engage with government either by visiting an office or making a phone call. Mobility allows citizens to help themselves whenever and wherever they need that help — whether it’s information about payments or notifications about benefits. By leveraging the capabilities of mobile devices, Diona creates a better way for citizens to interact with government and receive help. Everybody wins. Citizens receive better customer service, agencies can free up resources to focus on more complex cases and taxpayers see resources more effectively used. For more information, visit www.diona.com
SALESFORCE This fast-growing, cloud-native firm recently was named America's most innovative company by Forbes. The U.S. General Services Administration has used the Salesforce platform to develop more than 100 applications in the cloud, according to the agency. State and local government customers include the city of Boston, which uses Salesforce for data management in its Neighborhood Development Department, and the state of Delaware, which is creating a growing number of applications with the platform.

SAP While enterprise software giant SAP is working with governments around the world on big data projects, its HANA product is gaining insights using cloud technology. In response to Gov. Mike Pence's directive to create a central data sharing and analysis platform for state-level agencies, Indiana is taking an enterprise-level look at key metrics from its agencies. Working with SAP and Hopscotch on the project, the state aims to use the insights to help reduce its infant mortality rate, one of the highest in the country.

XEROX As you would expect, Xerox is a leading provider of enterprise document services. But the company also has a broad portfolio of cloud-based offerings for government, ranging from hosted infrastructure to application management. In 2012, Xerox won an eight-year contract worth more than $800 million to consolidate Texas state data centers and move them into the cloud.

UNISYS The company has long-standing services contracts in state and local government. For instance, Unisys has operated IT infrastructure for Minneapolis since 2003, and the firm's data center operations for the state of Pennsylvania date back to 1999. At press time, Unisys announced an even bigger deal with Pennsylvania: a $681 million contract to consolidate state data centers into a single hybrid cloud.

The state has considered cloud services but rejected them.

A more comprehensive list of cloud companies active in state and local government will be published on govtech.com.

"We have to build those various platforms before we can move the applications, but we have to analyze the applications' eligibility for those platforms, so we scale them properly," Gamiño said. "It's a classic chicken and egg problem. We have to build it and plan for it simultaneously."

Like San Francisco, Michigan's cloud adoption has matured and evolved from experimentation to something more systematic. “Every time projects are prioritized, we look at architecture and design and ask ourselves which model makes the most sense,” said Rodney Davenport, CITO of the state’s Department of Technology, Management and Budget (DTMB). “Return on investment is applied to projects at the highest level and cloud is considered as an option. We have to look at the relative strength of where it makes sense to run which applications.”

The DTMB regularly reviews how its computing functions align with state agency business needs in light of new cloud computing opportunities and offerings. Michigan's MiCloud initiative—a centralized cloud computing service launched several years ago—has made great progress in areas like virtual data storage and virtual server hosting. And as the DTMB has noted previously, one benefit of cloud computing is that it frees up resources. “We reduce cycle times for standing up test and production servers, because development server requests are removed from the work queue,” a DTMB document notes. “Our capital is not tied up in physical development infrastructure; virtual development servers are de-allocated when not in use. This also saves power, HVAC, UPS capacity, rack space, floor space, switch ports, SAN ports, monitoring capacity, OS licenses, application licenses and database licenses, among others.”

Ne promising aspect of cloud computing in the public sector is the opportunity for shared services. "There may be certain kinds of functions and processes that don't vary much from one state to the other. It seems silly to have 50 unique applications for something like managing payments," said Pund-IT's King. "The idea of states working together with common pools of resources to develop platforms they need and share development costs makes perfect sense."

Michigan's state government has explored working with other jurisdictions on sharing cloud infrastructure and applications. "We are working with Oakland County [Mich.]'s G2G Marketplace on an RFP for external cloud providers," Davenport said. "We expect to use several for storage and processing in burst capacities."

Michigan also partnered with Illinois on a shared services cloud module that they've dubbed "Medicaid as a Service." The first of three envisioned phases included the recent rollout of the Electronic Health Records Incentive Payment Program, an online solution that lets state administrators review provider registrations and authorize incentive payments for approved providers.

Multijurisdictional efforts like these are starting to become more common. "We're starting to see more examples of..."
Digital Transaction Management for the Public Sector

The tide is shifting in the public sector, with citizens expecting a higher level of accountability, transparency and efficiency from government agencies and educational institutions.

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business portals and statewide archiving, as well as disaster recovery and GIS applications in emergency response.”

Pund-IT’s King said another promising area is using the cloud as a development platform. “It is an area where Amazon found its real success. It is easier for application developers to create an Amazon instance than to set up physical hardware on-premises,” he said. “That model continues to be a major portion of Amazon’s service business, and there is no reason application and process developers at the state and local level couldn’t gain the same kind of benefits.”

Shawn McCarthy, IDC Government Insights research director, also sees promise in hosted development environments. An agency or group of agencies may lease a cloud space to develop something. They may keep it in the cloud, or because of agency restrictions about who can access it, they may move it back onto internal servers. “As more of these cloud environments get approved for government use, there is not necessarily a reason to move them back inside.”

Open data initiatives may be another good candidate for cloud computing. Chris Thomas, government industry manager of Esri, said his company is working on ArcGIS for open data. “I am not sure, but I think cities will tend to put those in the cloud for scalability.”

San Francisco, which has devoted considerable resources to open data initiatives, sees potential for the cloud in those initiatives. “Open data is an interesting paradox because on one hand we are trying to make data available in a readable format, because we want people to be able to access it in its raw state,” Gamiño said. “But we also have increasing security concerns regarding the source systems of that data. We have to be careful about how we build those open data systems to make sure data is transparent and easy to get to. The hybrid cloud may help with those conflicting priorities, so we can lock the gate but let you see through it.”

Companies like Amazon and Salesforce are making headway in government with their cloud development platforms.

BY THE NUMBERS

In 2013, 46 percent of state and local government officials said they already had or were planning to implement some form of cloud computing.

Source: Center for Digital Government

Over the past three years, Amazon’s Halliwell said he’s noticed an evolution toward more sophisticated uses of cloud computing in state and local government. “When I first started engaging with customers, they were looking at some first-adopter things such as websites and storage;” he said. “Now we’re seeing more customers doing big data analytics, high-performance computing, collaborative applications, government-to-

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The technology advances of the last decade have powerfully transformed the way the world does business. But in the case of public sector agencies, these innovations tend to enter the market at a swifter pace than legacy infrastructure and budgets can accommodate. When investing in new technologies, government organizations are often put in the unfortunate position of deciding whether to incur a big expense on new software that will run on aging, inadequate hardware.

Many of them opt for virtualization technology to realize a larger return on hardware investments and save physical space, or sidestep the burden of inadequate legacy infrastructure altogether. Virtualization can create many independent servers, or virtual machines, in one physical box, each with its own operating system — greatly extending the distribution of computing power. It can also provide many operational benefits such as streamlining the testing of updates; implementing code changes and patches; and allowing IT staff to deploy test, development or quality assurance environments — quickly, affordably and without impacting production. Through virtualization, disaster recovery and business continuation are also simplified.

These benefits aside, however, the most popular advantage of virtualization is game-changing cost savings — a real win for cash- and resource-strapped government organizations.

Putting an End to Expensive Licensing

Kovarus, known for its integrated IT expertise, is adept at virtualizing Oracle environments, a common platform used in government agencies. Through a well-virtualized Oracle environment, Kovarus can greatly reduce an agency's need for extensive, expensive Oracle licensing.

“One of the beautiful things about virtualization is that it shrinks footprints. We can reduce the number of servers dramatically while still providing an increase in performance,” says Alex Weeks, director of consulting for Kovarus. This reduction in servers can happen in part because many Oracle environments are running on older and sometimes unsupported hardware. Moving those Oracle workloads to faster servers with modern multi-core CPU, along with virtualization, enables IT departments to increase utilization rates and lower overall costs.

Swift Recovery, Easy Business Continuity

When critical data systems fail, it’s never a good thing. When the system holds sensitive information and belongs to a government entity with a very public audience, the fallout can be particularly detrimental.

Through virtualization, we can automate the process of testing disaster recovery and the actual fail-over. And in many cases, shrink disaster recovery time to a matter of hours or minutes.”
— Alex Weeks, Director of Consulting, Kovarus
In July 2013, a major Oregon state data center outage occurred unexpectedly, causing state employee email to crash and delaying unemployment payments for recipients. In September 2013, a similar power outage in a New Jersey data center caused a temporary shutdown of all state websites and computers, to the great inconvenience of citizens trying to access services and information. New Jersey citizens were especially disgruntled since it was the third occurrence in two months. While nothing can completely predict or prevent such situations, organizations can dramatically reduce the frequency and duration of unplanned data center outages that may cost them thousands of dollars per minute, as well as the public’s confidence.

Weeks says, “Disaster recovery from a physical site can take days — if IT staff can even get it back up in that time. Through virtualization, we can automate the process of testing disaster recovery and the actual fail-over. And in many cases, shrink disaster recovery time to a matter of hours or minutes.” A virtualized Oracle environment converts to files that reside on an agency’s storage area network (SAN) if and when a primary data center goes down. Because the operating system, applications and data can be brought up as packages, automated scripts can be put in place to restart the environment at a secondary location swiftly and easily. The replication environment can also be designed to return as closely to real time as desired, or is affordable.

Kovarus Consultants — Assess, Understand, Recommend

Before implementing virtualization of an Oracle environment, Kovarus consultants examine a government’s environment closely to understand what currently exists and why, and to make sure customers have a clear understanding of their own asset array and business needs before introducing new technologies and processes.

When getting started with a new customer, Kovarus consultants explain what a virtualized Oracle environment would look like and what resources it would require, identify virtualization opportunities, give insight on the potential return on investment, develop a virtualization roadmap, optimize processes and document architecture design. Following implementation, proof of concepts and load testing validate that the newly virtualized environment can handle workloads.

A key component of project success is ensuring knowledge transfer from Kovarus to customers who may not be familiar with virtualization. If that’s the case, Kovarus staff tailor formal classes or operational workshops for optimum management of the environment moving forward.

“Kovarus consultants understand how technologies integrate with each other, consider interdependencies and view the issue holistically. We educate customers on the pros and cons of certain decisions that are made, and when applicable, enjoy having the customer work alongside us during the project — it’s the best way for them to learn,” says Weeks.

Through consultative services, a thorough design process, and dashboards and metrics that show value, Kovarus can also help IT departments gain greater in-house relevancy, so that when leadership makes decisions, IT is consulted about rollout requirements from day one.

Conclusion

By virtualizing their Oracle environments, government organizations can stretch their limited budgets, create IT efficiencies and ensure business continuity — all while instilling confidence in the public. Kovarus helps government take any complication out of virtualization. Kovarus’ success with virtualization stems from helping organizations maximize computing power despite limitations such as budget shortfalls and old infrastructure. “We don’t focus on a single product or technology,” Weeks says. “We focus on how IT functions as a business.”

Endnotes

1. www.govtech.com/data/224102581.html

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Kovarus is a consultative, agile IT integrator specializing in IT-as-a-Service; supporting organizations who envision IT as a business investment, at the heart of growth, transformation and innovation.

For more information visit www.kovarus.com
PRIVATE CLOUDS are operated solely for a single organization. Many state and local governments have evaluated (and launched) private clouds so that the central IT department can deliver cloud services to its internal customers: the agencies, departments and offices it serves. The private cloud may be owned and operated by the government, a third party or a combination of both; and it may exist on- or offline. Private cloud is the leading deployment category in the federal government, with spending expected to reach $1.7 billion in fiscal 2014, according to IDC Government Insights.

But private cloud has its critics. Government still has to buy, build and manage a private cloud, reducing the overall benefit.

PUBLIC CLOUDS, as the name implies, are computer services that are available to the general public or government, but are owned and operated by the cloud service provider. Los Angeles County’s contract to use Microsoft Office 365 is an example of a public cloud offering. Public cloud deployments are just a fraction of what government invests in private cloud projects, according to IDC. The reason most often given has to do with security, although that issue has diminished as major public cloud providers, such as Amazon, Google, Microsoft and others, have worked to meet security requirements established by the federal government.

COMMUNITY CLOUDS are used by several organizations that have shared concerns (mission, security requirements, policy and compliance, for example). The cloud may be owned and managed by one of the organizations within the community. One prime example is the FBI’s development of several community cloud offerings, such as the Next Generation Identification system, the Integrated Automated Fingerprint Identification System and the National Instant Criminal Background Check System, all of which serve different levels of law enforcement.

HYBRID CLOUDS are composed of two or more cloud types (private, community or public) that remain separate entities but are bound together by technology standards that enable the transfer of data and software. Hybrids pop up when an organization may have sensitive constituent data in a private cloud application, but wants to interconnect it to a billing service that runs on a public cloud by a commercial provider. This type of deployment is not too common in government and accounts for the smallest share of cloud growth at the federal level, according to IDC. However, some experts, including IT research firm Forrester, believe hybrid, public-private clouds are more common than previously thought. This can happen when a single agency or department procures a cloud resource such as an on-demand virtual computer service or an application — without informing the IT department — and interconnects it with internal IT systems.

COMMUNITY CLOUDS

PRIVATE CLOUDS

HYBRID CLOUDS

PUBLIC CLOUDS

Categories of Cloud

Growing interest in cloud computing has driven development of multiple models for cloud-based services in government. The National Institute of Standards and Technology has organized cloud services into four categories based on how they are deployed.

By Tod Newcombe, Senior Editor

www.govtech.com // July/August 2014 37

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Q&A: Empowered Citizens: Hear Their Voice

iCitizen gives elected officials an aggregated view of what constituents care about most.

Government representatives are elected to serve the people, but it can be difficult to get an accurate, aggregated picture of citizens’ views and their opinions on important issues and legislation — particularly in between election cycles. iCitizen is changing that by empowering citizens with the ability to make their voices count through a new civic engagement platform connecting them with their representatives. In this interview, iCitizen CEO Duncan Dashiff shares how iCitizen is changing the conversation between citizens and their representatives, and what elected officials can do to get started.

Q: What is the overall mission of iCitizen?

Duncan Dashiff: iCitizen is a civic engagement platform with the mission to empower citizens by giving them a real voice on the issues and legislation they find most important. It also provides elected officials with a real-time and dynamic view of the will of the people and a more effective means of engaging with them.

Q: How does iCitizen help elected officials better understand the concerns and needs of their constituents?

Duncan Dashiff: Every constituent has what we call his or her “political DNA,” meaning individuals have a certain set of issues — at the federal, state or local level — that are high priority concerns for them. Citizen enables individuals to self-select the issues they feel are most important and that they want to monitor or influence.

For the elected official, we provide a view into the iCitizen ecosystem, which compiles an aggregated look at how their constituents feel about particular issues. It gives them the ability to see not only what people care about, but also what is going to influence their voting behavior and their concerns between election cycles.

Q: How is this communication different from a social media site like Facebook or Twitter?

Duncan Dashiff: Our platform is about civic engagement, which is desperately needed in the marketplace. The distinctions between this and social media are pretty substantial. Politics may be one of the most commonly discussed topics in social settings — whether online or in person — but the issues tied to an individual’s specific political DNA can be very personal. Citizens may want to keep their opinions about these issues private, while still wishing they had a voice around these topics.

Another challenge with Twitter, Facebook or other social media sites is that it is difficult for an elected official to obtain a truly aggregated view of constituent opinions. Our platform is built with a different approach. We have a heavy emphasis on privacy and enable individuals to freely express their opinions on a piece of legislation or an issue. We compile this data and provide an aggregated view to elected officials on a de-identified basis.

Q: How can an elected official get started with iCitizen?

Duncan Dashiff: The first step is to download the app, which will allow legislators to immediately see what’s happening inside the ecosystem and their constituents’ views on specific legislation, as well as consensus opinions on particular issues.

Additionally, we will soon launch a back-end solution that will be pre-populated for every federal and state representative. This will give them a dashboard view of data delivered in a concise, consolidated and customized way so they can see the polls that are trending in the platform and where iCitizens stand on those topics. They will also be able to conduct their own polls and get specific data related to the community they serve. An advanced analytic component will allow them to view constituent opinions over a period of time.
This new civic-engagement platform offers a unique way for state and federal representatives to engage and interact with citizens.

Allows citizens to:

- Follow issues affecting them.
- Support legislation.
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At the moment when two police officers in San Francisco needed a photo to identify a fleeing suspect, JusticeMobile was there to deliver it. Using the California Department of Justice’s mobile application platform, the officers checked the suspect’s mug shot on a smartphone and, pausing before knocking, spotted him at the end of the apartment hallway turning around and running away. The officers chased the suspect down and caught him.

“It sounds really simple, and you would think officers had been doing this for years — but it’s not so simple,” said Susan Merritt, CIO of the San Francisco Police Department (SFPD). Merritt retold the incident as evidence of JusticeMobile’s information-sharing power in her jurisdiction.

JusticeMobile is a mobile platform and application, and the first statewide solution for law enforcement officers to access local, state and federal criminal justice information services right where they work — in the field.

The application taps into 13 key confidential criminal justice databases with access to information about people and property. Another application on the platform, SmartJustice, transcends different data sources with a Google-like search portal.

The secure platform is a joint project between the Office of the Attorney General and the California Department of Justice (DOJ) and tested by partnering agencies to simplify officer access to information and keep them working in the field.

“It’s increasing the safety of our communities by law enforcement actually having access to this kind of information in the field, and it’s also making law enforcement more efficient,” said Adrian Farley, CIO of the Justice Department.

Accessing Information
In 2013, JusticeMobile was first tested by the SFPD and the DOJ’s Bureau of Firearms and was then expanded to 2,000 officers by the year’s end. Since then, the platform has been rolled out to 2,000 more officers with access to information about people and property. Another application on the platform, SmartJustice, transcends different data sources with a Google-like search portal.

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officers, totaling 4,000 today. And the user numbers are likely to keep expanding. More than 100 agencies currently are interested in getting the technology, Farley said.

The DOJ delivers the JusticeMobile service to agencies so they have mobile access to the state’s private law enforcement network, the California Law Enforcement Telecommunications System (CLETS).

But how jurisdictions experience JusticeMobile can be different as the DOJ works with agencies to help them package the platform so it delivers the applications they need. DOJ firearms agents, for instance, can use the technology on their iPads to check potential gun buyers’ backgrounds. The platform has led to dozens of firearm-related arrests, and background checks. The platform has led to dozens of firearm-related arrests, and background checks.

Farley estimates that it makes the DOJ’s 100 Blue Ravine Road

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Historically, officers accessed information by using radios or cellphones to call into dispatch, or they drove back to the district station. And information has been contained in different local, state and federal criminal justice databases, all requiring separate, secure sign-ons, Merritt said.

“Getting to the right information took time and, Merritt said, it was easier for criminals to give false identifying information because officers didn’t have mobile access to photos or fingerprints, which is possible with the JusticeMobile platform.

“The idea is that officers will no longer have to call over the radio; they won’t have to drive to a district station,” Merritt said. “They will, with just a few taps of a button, be able to get everything they need right on the phone.”

The DOJ now offers JusticeMobile to its law enforcement agency partners throughout California as a way to manage information and ensure the security of that data, as mandated by the FBI’s security policy.

The policy requires agencies to use a mobile device management system to access mobile information. To do so, the JusticeMobile platform uses Citrix XenMobile and the Cisco AnyConnect Secure Mobility Solution, and was built with many security components, including two-factor authorization, strong password requirements and encryption.

XenMobile helps the DOJ create an isolated, standard environment to allow its applications to interact with each other but not with the rest of the device, said David Smith, director of state and local government at Citrix. And AnyConnect combines Web security with remote access technology such as the ability to control or remotely wipe a device if it’s lost or stolen, according to Cisco.

As soon as their endpoints are proven to be secure, agencies can adopt the JusticeMobile solution and its device management capabilities.

Forty California agencies now use the application, which is planned to be the single JusticeMobile app for all criminal justice information related to people, Farley said.

This information is viewed in a simplified Web-based interface from searches that simultaneously integrate state data sources; it also accesses county, probation and regional information-sharing systems. Officers accessing SmartJustice partner to share and contribute data.

In addition to searching officer profiles, other SmartJustice functions include probation features, mapping capabilities and an executive dashboard.

The one-stop portal helps solve the historic problem of officers having to visit different databases, said Susan Merritt, CIO of the San Francisco Police Department, whose jurisdiction is piloting the mobile application.
Starting in San Francisco

Farley said the initial challenge was to build the business case to make an investment in the state’s resources, given Justice-Mobile’s steep security requirements. But the DOJ did it — and also created the platform in-house — by partnering with others to develop a secure framework and pilot JusticeMobile. Starting off small and building a core functionality helped the DOJ make the platform successful, Farley said.

To build its user interface, the DOJ used HTML5 and packaged the application for iOS and Android. One of the DOJ’s ground-floor partners was San Francisco. Under the leadership of Police Chief Greg Suhr, the SFPD had all the precursors to a mobile system, including a Web-based server, an incident reporting system and officer-selected Samsung phones. But one piece was missing: a portal through which officers could access the CLETS network. For this, the agency needed the DOJ.

That’s when Suhr, whose mission was to keep officers working in the field, went to California Attorney General Kamala Harris and shared his desire to get CLETS access on officers’ phones. Her office was thinking of implementing the JusticeMobile platform and began working with San Francisco to make it a reality.

The opportunity for the SFFPD to use the JusticeMobile infrastructure proved to be a win-win, as the department was able to use the tech and the DOJ could test it.

The SFPD piloted JusticeMobile in five months, helping to ensure the security of the DOJ’s infrastructure. The platform was then rolled out from June through December 2013 and now all 1,650 San Francisco police officers have smartphones with this technology.

Suhr estimates that the technology saves officers an hour on most police calls, and it keeps them in field and ready for their next assignment. Officers can also peruse photos on their phones and see statewide alerts, shaving off even more time spent in police stations.

“The efficiency of being able to stay in the field with these phones with the information that it has and how fast they are, it has been a home run,” Suhr said.

The police department uses Justice-Mobile to access CLETS through its own Web-based crime data portal, called the Crime Data Warehouse. Given a query, the 2-year-old system can retrieve information from crime reports going back about a decade, Suhr said.

The DOJ has since partnered with many other California jurisdictions, including Santa Clara and San Diego counties, as well as the state Highway Patrol and U.S. Marshals Service.

For its part, the DOJ is continuing to bring JusticeMobile to more law enforcement agencies and to add features, including more case management and record management capabilities and the ability to capture images and conduct field interviews.

The SFPD is expanding the capabilities of its smartphones by piloting fingerprinting in the field and the use of local school maps during shooting situations.

Given the platform’s power to make officers more effective, Suhr thinks mobile policing will someday be standard issue nationwide, revolutionizing the way law enforcement departments communicate and share information.

“The more people get on systems like this where we can interconnect, we are that much closer to being where we are all sharing information, and it’s going to make everybody safer,” Suhr said. “It’s time.”

jessphughes@yahoo.com
With the increased adoption of smartphones and mobile technologies, public agencies are reaping the benefits of geospatial technologies. Public organizations can access a wealth of data to better inform decision-making and enable superior citizen service.

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In 2012, Microsoft trumpeted a study by IDC, an IT research firm, showing that cloud computing would generate more than $1.1 trillion in new revenue and 14 million jobs worldwide by 2015. The study reported that the cloud would help companies “be more innovative … by freeing up IT managers to work on more mission-critical projects.”

The study also predicted that the jobs created will be split about equally between small and large businesses. Yet in Iowa, Gary Bateman said he’s seeing cloud computing help people who have lost their jobs. Bateman, the CIO of Iowa’s Department of Workforce Development, explained that help is coming in the form of thin clients that have been deployed around the state after budget cuts forced administrators to close 36 unemployment field offices.

“Computers running the virtual desktop software have been installed in libraries, National Guard armories and other facilities — 99 locations total — giving citizens a place to sign up for unemployment benefits,” said Bateman. “The shift to virtual desktop technology allowed the state to increase the number of locations where unemployment services are available despite the fact that the Legislature closed a number of the agency’s branch offices in a cost-cutting move.”

After some initial hang-ups, the program has been so successful that some 1,800 thin client PCs have been deployed around the state in public and private institutions. Bateman said the department rolled the first one out in July 2013. “My director wanted 200 [thin client PCs] by the end of the year,” he continued. “We had 500 of them. It’s been a phenomenal success.”

The state has saved $6.5 million by closing the field offices and replacing them with a network of thin client PCs. When the savings is subtracted from the cost of the new technology, the overall expense for the state is $10,000, according to Bateman.

**Better Security and Faster Speeds**

A thin client is a scaled-down computer that must be hooked up to network infrastructure to run applications. The Google Chromebook and HP’s Compaq t5730w are examples of popular thin client PCs. While private sales of thin clients have steadily picked up, government employment agencies around the country have not widely adopted the cloud-based computing system. Some states are...
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The New Job Hunt

One of the major concerns detractors had about the system was that many unemployment claimants lacked the computer literacy skills to adequately utilize the thin client virtual desktops. “We heard all kind of things about how silly we were to expect people to have computer skills,” Bateman said. “But that percentage is becoming fewer and fewer.”

He also noted that if job hunters want to apply for a job at Starbucks or Walmart, they’re going to have to fill out an online application. “And we do teach those skills,” Bateman added.

As for impaired participants, such as the blind or deaf, the department has partnered with service agencies, such as the Iowa Department for the Blind, to ensure those claimants have access to the system.

Overall, the numbers show that the population served by the department is increasingly tech-savvy. “We’re at or above 50 percent of hitting mobile services — this concept that people aren’t technologically literate is going away,” said Richard Thielman, application development manager for the Workforce Development Department.

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ISM 2014 will provide conference attendees with a unique opportunity to network with local, state, and private sector IT professionals from across the United States. Sessions focused on our conference themes—New Service Delivery Models, Emerging Technologies, Best Practices, Data Analytics and Healthcare Reform—will be presented in 24 breakout sessions led by federal, state, local, and private sector HHS thought leaders. The final day of the conference is “Federal Day” during which Federal agency representatives including Penny Thompson, CMS and Mark Greenberg, ACF, will discuss a wide range of topics of interest to our attendees. As a special treat, we will have a performance by the satire group Capital Steps on Tuesday September 23rd. The exhibit hall will host more than 40 private-sector vendors who will be displaying their products, solutions, and services. Additionally, a number of Government agencies, both State and Local, will demonstrate their systems in our Solutions Center.

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Disappearing Data

Logicube announced the ZX-Tower (a.k.a., ZX-T), an eight-target, hard drive wiper, which operates at 24 GB per minute and can wipe eight drives simultaneously. To ensure that sensitive data is completely removed, the tower provides a Secure Erase mode, a custom pass setting or a powerful seven-pass Department of Defense wipe mode. ZX-T offers built-in support for SAS and SATA hard drives. The ZX-T also supports USB enclosures with four USB 3.0 ports available. Optional adapters are also available to support other drive interfaces.

www.logicube.com

Energy Boost

Soofa, from MIT Media Lab spinoff Changing Environments Inc., is a solar-powered bench that offers people free outdoor charging and location-based information, like air quality and noise level, by uploading environmental sensor data to soofa.co. The bench contains a solar panel, a battery and two USB slots. Users must supply a USB cord, but the company plans to introduce an inductive-charging version of the Soofa, so people can place their device on the Soofa surface to charge up. The company has begun placing Soofas around Boston and Cambridge, Mass.

www.soofa.co

Fabulous Phablet

The ASUS PadFone X is a 5-inch full HD smartphone that activates a 9-inch full HD tablet when the phone is docked. It runs Android KitKat 4.4 and contains 16 GB memory and 2 GB RAM, plus a MicroSD card slot (up to 64 GB). The phone has a front 2-megapixel and rear 13-megapixel camera, while the pad has a front 1-megapixel camera. The phone has up to 20 hours of talk time; the phone plus docking station offer up to 54 hours of talk time. The unit has Bluetooth 4.0 and can serve as a mobile hot spot for up to five devices.

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Shah Ardalan is president of Lone Star College-University Park Campus, which uses telepresence for regional workforce development.

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The Total Package
The latest in wearable technology has it all — smarts and beauty. Ringly makes rings with 18-karat matte gold plating and precious and semi-precious stones that sync with an app that helps prioritize incoming digital communications. Available for iOS and Android, the ring vibrates to alert you of texts, calls, calendar alerts or emails, and can also be programmed to notify you of push notifications from social media platforms. Users can customize vibration patterns and alert colors based on which interruptions warrant grabbing the smartphone.

SHEDDING LIGHT ON THE WINTER BLUES:
Shorter days and darker skies bring depressed moods and reduced productivity for sufferers of seasonal affective disorder. But help could be on the way in the form of a new kind of light therapy called CoeLux from Professor Paolo Di Trapani of Italy’s University of Insubria. A decade in development, the system uses LED lighting along with sophisticated optical tools to reproduce the effects of the sun and its rays. Resembling a virtual skylight or wall-mounted window, the CoeLux offers three settings, emulating natural lighting conditions in different geographic regions.

Labs in the Lab
Compared to cats, most would call dogs relatively simple creatures. But Diesel, a yellow Labrador retriever belonging to North Carolina State University assistant computer science professor David Roberts, is revealing that there could be much more to learn. Diesel happily (how else?) sports a technology-laden vest, complete with motors, speakers, a microphone, a camera, Wi-Fi and GPS. Sensors on the vest measure the dog’s heart rate, respiration and muscle tension, while others detect radiation and gases. But why saddle the dog with so much technology? Roberts and colleague Alper Bozkurt, also an assistant computer science professor at North Carolina State, say the vest could make dogs more useful in search and rescue operations by enabling them to safely move beyond their handler’s line of sight, and help improve dog training practices in general. “Computers can take a lot of the human error out of the process of training and communicating with dogs,” Roberts said. Diesel modeled the vest among the crowd at the White House SmartAmerica conference in June, where many technologies with potential in disaster response were on display.
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