FOR THE
People

HOW USER-CENTERED DESIGN IS OVERHAULING PUBLIC BENEFITS IN MICHIGAN.

Plus:

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from Within**

A look at the role
of the government
chief innovation officer.

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June 2018

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A Whole New Class

The theme of this month's issue is transformation stories. It's the kind of topic that doesn't tie us to a particular area of government IT. We just looked for big ideas with similarly big impacts, or the potential for them — not just cleaning up processes around the edges. Thankfully, there were a number of ready examples, which you'll find on the pages that follow.

But beyond the stories in this magazine lies a parallel sea change taking place within the offices of state CIOs across the country. At the National Association of State Chief Information Officers midyear conference in Baltimore at the end of April, they mapped the changes in state tech leadership for all of 2017 and so far in 2018.

This year, as of press time, there have been eight state CIO changes — either a CIO left his or her position, a new one was named, or both. In 2017, there were 14 of those changes. And of the 36 states and three territories with gubernatorial elections this year, 18 will take place in jurisdictions without an incumbent in the race. And while a few chief information officers are able to successfully navigate a change in administration (the odds go up if the political party doesn't change), more often than not, a new governor means a new CIO.

So as the facts clearly demonstrate, a transformation in state CIO offices is underway. Several veteran state tech chiefs now in place are likely nearing the end of their tenures. Keep reading Govtech.com for news on when they announce their next moves.

Tennessee CIO Mark Bengel holds the current record, in the post since 2007. Ushered in on roughly the same timetable as the current governors of their state in 2011 is another group of long-serving CIOs: Ohio's Stu Davis, Mississippi's Craig Orgeron, Georgia's Calvin Rhodes, Connecticut's Mark Raymond and New Mexico's Darryl Ackley.

The clock is busily ticking for all of them as they work to complete projects they've spent significant portions of their respective tenures on. Davis remarked at a recent event that he's focused on getting things in order for the next occupant of the CIO office in Ohio. Ackley told us recently, "We're just trying to bring a lot of things home, finish strong, sprint to the end on a number of initiatives."

The average tenure of a state CIO hovers at about two years, and these leaders have far surpassed that. But as we reflect on their many accomplishments in consolidation, cybersecurity, data analytics and citizen service delivery, it's clear there's a talented class of CIOs waiting in the wings to usher in a fresh wave of skills and ideas.

Newly appointed CIO for Nevada Michael Dietrich was drawn back to the public sector after starting his career as a teacher, subsequently spending most of his time in private industry. "I would love to attract more folks from the private sector, some of the bright minds that

> ❝ **I already feel that energy of being able to give back to the public, give back to the state.**

are working on these technologies that we're talking about into public service," he told *Government Technology* recently. "I already feel that energy of being able to give back to the public, give back to the state. And that's the message for me. It's the power of public service."

We look forward to seeing who joins him in the months ahead. gt

RAISE YOUR VOICE ✉

Your opinions matter to us. Send comments about this issue to the editors at **editorial@govtech.com**. Publication is solely at the discretion of the editors. *Government Technology* reserves the right to edit submissions for length.

WHEN VIDEO ISN'T ENOUGH

Video – whether from body cameras, dashboard cameras, CCTV or even citizen smartphones – can provide police departments with insight into what's happening on the ground in their communities. However, to gain the most value from video, public safety officials need to readily access and analyze it.

VIDEO DATA IS GROWING EXPONENTIALLY

Approximately **1/3** of the **18,000** law enforcement agencies in the U.S. use body cameras.[1]

Michigan State Police could produce **5,000** to **7,000 TERABYTES** (1 terabyte is about 1,000 hours of video) of information over 3 years if it deployed body cams for its entire force.[2]

The Seattle Police Department produced more than

360 TERABYTES

of data from just its dashboard cameras.[3]

Endnotes:

1. http://www.govtech.com/em/emergency-blogs/disaster-zone/police-body-cam-data-storage.html
2. http://www.govtech.com/public-safety/Price-Tag-for-Kansas-City-Mos-Body-Cam-Program-Reaches-6-Million.html
3. http://www.govtech.com/em/safety/Cloud-Storage-for-Camera-Data.html
4. http://www.govtech.com/public-safety/Price-Tag-for-Kansas-City-Mos-Body-Cam-Program-Reaches-6-Million.html
5. http://www.govtech.com/em/safety/Even-After-Theyre-Bought-Body-Cameras-Cost-Taxpayers.html

THIS PRESENTS CHALLENGES FOR POLICE DEPARTMENTS

On-site storage for body cam footage would cost Kansas City, Mo., police approximately

$3.2 MILLION

for a 5-year contract.[4]

Gartner reports that only **2%** of surveillance footage is reviewed with an average delay of **20 mins** from time of collection to analysis.

Sedgwick County, Kansas, requested to hire 4 part-time crime analysts at a cost of close to **$90,000 ANNUALLY** just to review video footage.[5]
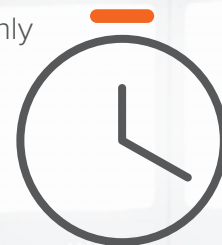
THEY NEED A NEW SOLUTION

Police departments need a solution that combines powerful storage capability with cutting-edge artificial intelligence (AI) techniques in a single turnkey platform, which is why Pure Storage is at the forefront of fulfilling this need.

A SINGLE, INTEGRATED ARCHITECTURE

provides the underlying collaborative platform and streamlines management.

AUTOMATED ANALYTICS

turn video data into valuable intelligence and free up staff time.
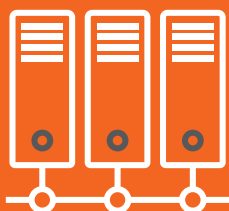
MEMORY-BASED, HIGH-PERFORMANCE STORAGE supports high-volume and varied data streams, as well as AI capabilities.

For more information about how Pure Storage's emerging solution can help your police department harness its video data, download the paper "What Comes after Video Surveillance" at: **WWW.PURESTORAGE.COM/CLOUD**

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Safety Hacks

The third annual Internet of Things civic hackathon in Fishers, Ind., in April focused on finding solutions for public safety and specifically FirstNet, the dedicated nationwide network for first responders. By bringing hundreds of technologists together with public safety officials and first responders, developers were able to better understand the innovation potential in everything from mobile response units and communications vehicles to drones and helicopters. Developer teams then broke out to create apps and other tech that would support the needs of those working in the public safety field, and first- and second-place prizes recognized achievement in IoT, mobile and data visualization.

BIZ BEAT

West Virginia has become the first state to allow Internet voting by blockchain, offering the technology to military service members deployed overseas and in the U.S., and their families in two counties. The pilot test is in place for the state's May 8 primary elections and is very limited in scope. If it goes well, the state wants to try allowing all eligible military voters statewide to use it during the November general elections. West Virginia is using tech from Voatz, a Boston-based blockchain voting startup that raised $2.2 million in venture capital funding earlier this year.

$241M

The amount San Francisco collected in property tax revenue in less than two weeks, 11 times what was collected in the same period the previous year, thanks to an online filing system.
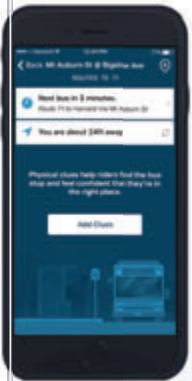
Increasing Visibility

Connected devices are making mobility easier for blind, visually impaired or otherwise disabled transit riders. Transit officials in Boston, through a partnership with the Perkins School for the Blind, have been contributing data to BlindWays, which combines GPS data with special clues to get users to the exact location of a bus stop. Without those clues, visually impaired users may be as close as 100 feet from a transit stop, but will miss the bus because they're not in the exact right spot. BlindWays provides crowdsourced visual clues to help users navigate those last few crucial feet, while Massachusetts Bay Transit Authority is also in the early stages of placing Bluetooth sensors on bus stops that will pair with the app. Similar pilots are underway in Los Angeles and Austin, Texas.

43%

The public sector was responsible for nearly half of the 53,000 security breaches in the U.S. in 2017, according to a report from Verizon.

22

communities are participating in the second Smart Cities Collaborative, which will explore how new technologies are changing the way people move around cities.

WHO SAYS?

"It's very interesting to hear people talk about government and how risk-averse and static it is, but it can be a dynamic place. We didn't have libraries until someone created libraries."

Govtech.com/quoteJune2018

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The value of NYC's startup ecosystem, according to the *Global Startup Ecosystems Report* 2018.
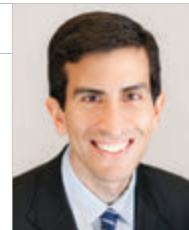
Terms of Service

Do states need to update their data breach laws after the Cambridge Analytica debacle?

Data breaches are a serious problem. Last year, there were a record number of data breaches in the U.S., with the total increasing 44 percent over the previous year. Following revelations that Cambridge Analytica, a UK political consultancy, gained illicit access to data on 87 million Facebook users, many were left with a simple question: Was this a data breach?

According to Facebook, it was not. Indeed, the circumstances around how Cambridge Analytica came to acquire the data in question do not fit the profile of a typical security breach.

Most data breaches involve some type of hacking, such as phishing attacks and ransomware, where an attacker successfully exfiltrates data from an adversary's computer system. In this case, 300,000 Facebook users downloaded an app created by Aleksandr Kogan, a Cambridge University researcher, allowing him to collect data on them and their friends. As Paul Grewal, Facebook's deputy general counsel, notes, "People knowingly provided their information, no systems were infiltrated, and no passwords or sensitive pieces of information were stolen or hacked."

The distinction matters because companies must report data breaches. Unfortunately, every state has its own data breach notification law, and each state's law is different in terms of what personal information it covers and what triggers a requirement to notify consumers or regulators of a breach, creating a regulatory headache for most companies.

But even if the Cambridge Analytica incident was not technically a data breach, it certainly involved data misuse. Regardless of whether Kogan acquired the data lawfully, he sold it to Cambridge Analytica, which then used it for commercial purposes — both actions in violation of Facebook's terms of service. And Cambridge Analytica misled consumers and Facebook about how their data would be used. This raises the question of whether policymakers should update their data breach notification laws to cover misuse.

There is a strong case to be made for doing so. After all, for most consumers, the method by which a third party misused their personal information is likely of less concern than the fact that their information was misused to begin with. But if a data misuse standard is not sensitive enough, it will fail to protect consumers. And if triggered too easily, consumers could become inundated with notifications, rendering them ineffective.

While a federal data breach law would be ideal, if states update their laws to account for data misuse, they should consider three points.

First, data misuse notification laws should only apply to first-party data, i.e., data collected directly by a company. While states have clear jurisdiction over companies doing business in their state, they have limited ability to enforce laws against foreign companies that have no domestic presence. But as the Cambridge Analytica incident has made clear, various third parties, some of which may be located abroad, have access to consumers' personal data even though they have no direct connection to those individuals. The onus should be on the company with first-party data to notify their customers in the event of data misuse by one of their partners.

Second, data misuse notification laws should include a harm analysis provision. If a company can reasonably determine that the data misuse was incidental and would not likely lead to consumer harm, then it should not be required to notify consumers. Such a provision would incentivize companies to clarify their expectations for how their business partners handle data and their recourse in the event of data misuse.

Finally, companies should disclose what steps, if any, they take to ensure their business partners adhere to their data handling policies, such as conducting audits. Companies can't report on data misuse by their partners if they are unaware of the problems.

In short, policymakers shouldn't restrict companies from sharing data with business partners, but they should hold companies accountable for the commitments they make and the business partners they use. Doing so will reward companies that use responsible data handling practices and provide consumers more choice. **gt**

Daniel Castro is the vice president of the Information Technology and Innovation Foundation (ITIF) and director of the Center for Data Innovation. Before joining ITIF, he worked at the Government Accountability Office where he audited IT security and management controls.

Tyler Kleykamp
Chief Data Officer, Connecticut

The role of the chief data officer has grown increasingly important as more state and local governments ramp up their collection and use of big data for a range of problems, from criminal justice and health care to transportation and community engagement. CDOs in local government have been in the forefront with their initiatives, but states also have CDOs and their numbers are increasing. At last count, 18 states and the District of Columbia had a CDO, according to the Pew Charitable Trusts.

One of those is Tyler Kleykamp, who became Connecticut's first CDO in 2014. He also is one of the founding members of the State Chief Data Officer Network, a voluntary, self-organized group of state CDOs, similar to the Civic Analytics Network, which represents city CDOs.

1 Why do we need a state CDO network? Most of us are the first person to do this job in our states. There's no blueprint to follow; nobody has preceded us to explain how it's to be done. There are a lot of unknowns. It's also very different in the public sector compared to the private sector.

Having a peer network, where you can ask someone questions, get advice, bounce ideas off somebody, is really important. It not only helps us do our jobs better, but also it appears that states are going to continue to hire CDOs. We keep seeing more states add the position — Florida, Vermont, Virginia are recent examples — so as these people come on board, it's helpful to have a group to work with.

2 What's your process for engaging with an agency? A lot of this starts with a use case or problem statement. For instance, if we are looking at an opioid issue, we might start at a high level — address the number of deaths, for example — and look at what we have: what different systems might agencies have; what's the data we might have; what's the relationship between all of this?

For example, we have data on overdose deaths, which in Connecticut is fairly public information. There's also a criminal justice policy division within our office, so we are able to take that and look at people who have been involved in the prison system. One of things we found through matching records is that in 2016, about half the people who died from an overdose

were at some point involved in the prison system [in Connecticut]. That tells us there's another place to dig in and start to plan how to help these individuals, such as in re-entry programs.

3 How do you interact with the state's IT apparatus? We are decentralized here. Our IT agency provides enterprise services, and they have a role in procurement, but there are some things that agencies manage on their own. That presents some challenges, where it might be easier if it was just the CIO and me who figure something out. But the reality is I have to work with the agencies.

My role is a little less involved with some of the back-end data management components. It's a little more high level for us, so we'll issue a policy or administrative rule that says, "This is how you should do things to ensure some best practices," but we're not getting into the weeds with everybody on how they follow that practice.

4 What are some of your biggest challenges as state CDO? There are always legal restrictions on what we can and cannot do with some of the state's data. … If we can talk to other states through the network about how they are able to use some data in a legally permissible way, or work within constraints of a universal law to do critical work, that can be really helpful.

Another challenge is data quality for analytics. In the private sector, there is a concept emerging called data ops, which takes the principles of agile and applies them to analytics. I've been working to modify that to be more applicable to government. It starts with a series of principles you operate under. Next, you want to involve everybody that touches data. … There's a lot of work in government that goes into making data suitable for analysis, so there are issues around older systems and data quality. This is a way to address that. Data ops starts with some simple questions and then uses the data and finds the best way to address those data quality issues. By taking a team-based, agile approach to it, you can get things off the ground sooner in terms of data and grow that over time. **gt**

— Tod Newcombe, Senior Editor

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Connecticut	Minnesota	Tennessee
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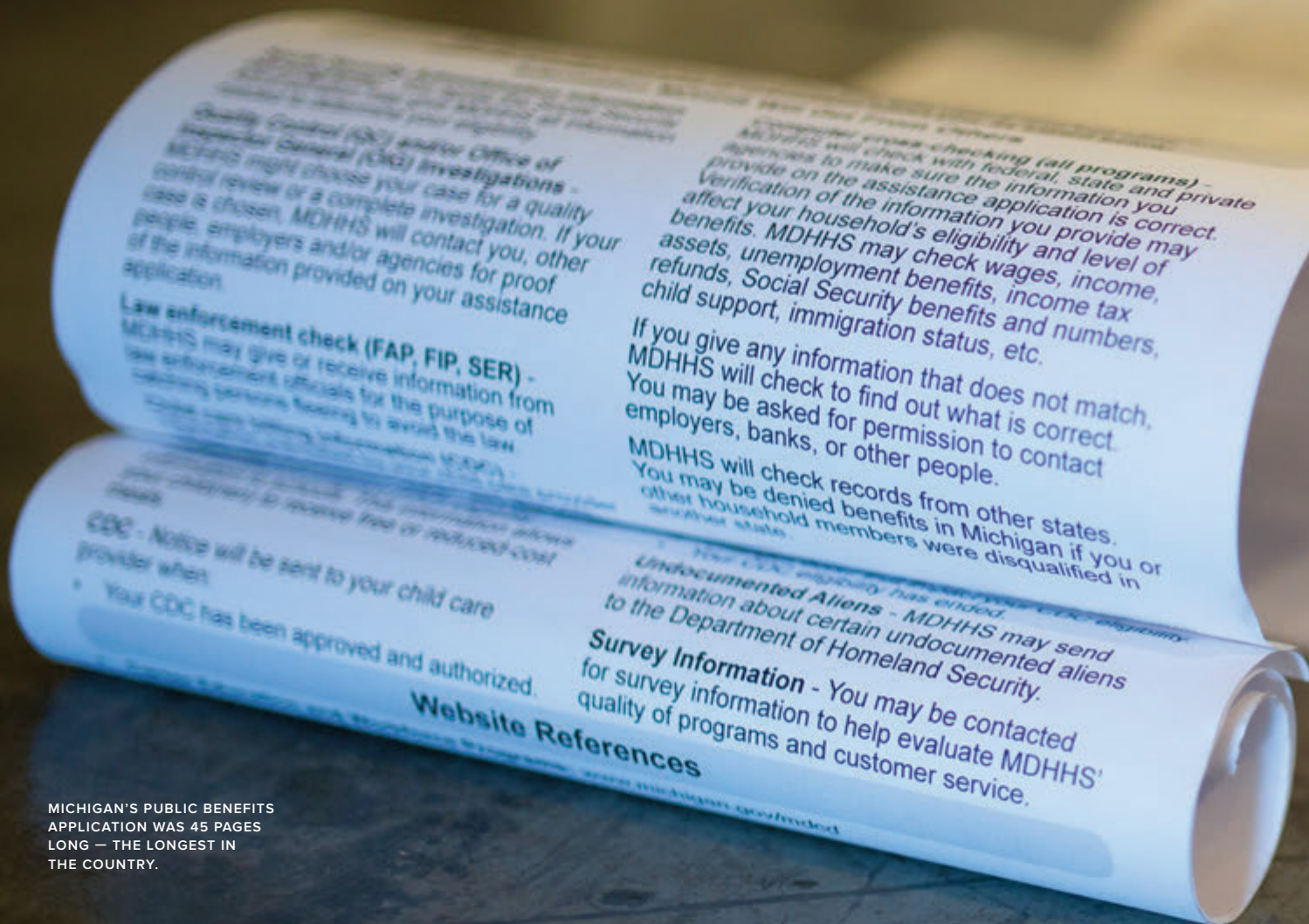
MICHIGAN'S PUBLIC BENEFITS
APPLICATION WAS 45 PAGES
LONG — THE LONGEST IN
THE COUNTRY.

*How redesigning a
  form created a model
for vast government transformation.*

BY ZACK QUAINTANCE | PHOTOS BY DAVID KIDD

Human-Centered Change

CIVILLA CEO MICHAEL BRENNAN LEAFS THROUGH A BOOK OF FEDERAL REGULATIONS THAT THE NEW FORM NEEDED TO FOLLOW.

A blueprint for lasting and effective governmental change might be lying on the floor right now in an unheated storage space in Detroit.

This blueprint is a 100-foot-long, colorful document drawn on white paper, and it's only abstractly about change. Materially, it's a story of what applicants went through when applying for food assistance, disaster relief or other help via Michigan's Department of Health and Human Services (MDHHS), which until this year had the longest public benefits application in the nation. The change blueprint was developed by Civilla, a design studio located in an office beside the storage space, and it was shaped by more than

4,000 hours of interviews with benefits applicants as well as public servants and caseworkers who process requests.

When Civilla started its work in 2015, the MDHHS benefits application form clocked in at a massive 45 pages, 8,000-some words and 1,000 questions. The blueprint was created during Civilla's effort to redesign the form and to reduce its dense wording, walls of text and ample redundancies.

Civilla used human-centered design, based on end-user needs rather than existing government systems, to make the form faster, friendlier and more efficient without sacrificing vital information. In some ways, however, redesigning the form was the easy part. The greater difficulty was pitching the redesign — dubbed

Project Re:form — to the state, a process that required navigating the governmental maze of procurement, stakeholder buy-in and other procedural difficulties.

Essentially, Civilla was a private company that found a challenge in government and wanted to use their expertise and resources to fix it. This isn't an unusual story. Civilla, however, also successfully pitched their idea to the state.

And it's good they did. Earlier this year, MDHHS took that idea and rolled out a revised benefits application with just 3,904 words, 18 pages and 213 questions; early indications show the new form coming in 94 percent complete compared to a previous average of 72 percent, which required caseworkers to reach out to applicants for additional information.

How did Civilla team with the state on this innovative, modern and extensive redesign within one of its largest agencies? The answer is — in part — found on that blueprint on the floor in Detroit.

Pitching Project Re:form

Leaders from the MDHHS first came to Civilla's office in Detroit on a frigid winter day, bundled in big coats and gloves and scarves, remembered Civilla CEO Michael Brennan. The company's office is on the second floor of a repurposed building in downtown Detroit where years ago Chevy designed the first Corvette.

When the government leaders got off the elevator, Brennan and his team had fixed up the hallway to look like a public benefits office, complete with

A BLUEPRINT FOR CHANGE ON THE FLOOR OF CIVILLA'S LARGE INDUSTRIAL SPACE DEPICTS PAIN POINTS IN THE BENEFITS APPLICATION PROCESS.

> "It was designed intentionally to have them feel how it felt to interact with the system, not just intellectually understand it.

chairs, people filling out forms and ambient office noises piped in over speakers. Brennan gave them a copy and asked them to complete the form, waiting a full 15 minutes as they struggled with questions, including a now-infamous inquiry asking the dates an applicant's children were conceived.

"That was the first time some of them had seen the application," said Lena Selzer, Civilla's director of design. "I think it was really eye-opening for them."

Afterward, the team led the state officials into the storage room where the blueprint for lasting and effective change was spread on the floor, all 100 feet of it, taking attendees through a journey of what happens after a resident turns in an application.

The blueprint includes simple blue and orange drawings depicting the snags Civilla's human-centered research uncovered, such as caseworkers sending paper letters to clients asking for paystubs, clients subsequently mailing paystubs back, clients not knowing what the status of their application was for weeks at a time, etc.

"It was designed intentionally to have them feel how it felt to interact with the system, not just intellectually understand it," Selzer said. "We feel today this is one of the biggest reasons we ended up taking a step toward working with [the state]."

There is a universality to the pain points in the blueprint for anyone who has dealt with complex systems.

It wasn't that the state set out to design it like that, said Bob Wheaton, a spokesman for MDHHS, but over the years the form grew unwieldy as agencies and processes consolidated. The department wanted to improve it, but staff was so consumed with daily business that it was just too difficult. Having an outside actor like Civilla was vital.

The Lessons Learned

Civilla feels a bit out of place in a Midwestern city where mechanics and

functionality have long reigned supreme. Civilla is a company where a team of seven or eight meets twice a day in a plywood hut they call a dream cocoon to touch base and refocus on life and work. Civilla's CEO takes hours out of his day to walk visitors through the MDHHS form redesign journey — with its various triumphs and setbacks — because he so firmly believes that its lessons can show the world how to improve complex structures that modern individuals have been lost within.

And, indeed, there is much to be gleaned here. The tenets of user-centered design are spreading quickly throughout the public sector, as state and local governments race to launch websites, mobile apps and service portals aimed at providing better experiences for constituents. Civilla is now teaming with Code for America to simplify Michigan's online and mobile applications much the same way it did for paper versions.

Many intangible victories and much gumption made Civilla's story possible, from leaders at the MDHHS such as Deputy Director of Field Operations Administration Terry Beurer championing the work to some of Civilla's staffers coming to the project from Stanford University's Hasso Plattner Institute of Design.

One constant, however, was that when stakeholders were given a sense of how actual humans involved felt, it motivated them to act, to consider a new way of doing things, to say yes.

Part of what the blueprint shows is the importance of a human approach to successful change. Vital to Civilla's work with the form was the first end user they spoke with, Dr. LaTina Denson, a Michigan resident who suffered a stroke at age 38 and needed assistance from MDHHS. Civilla spent hours with Denson, learning about her journey through the system.

Denson speaks highly not just of the redesigned form but also of the effort put forth by Civilla.

"It was just a breath of fresh air," Denson said. "Before working with [Civilla], all I could do was talk to my family and friends. I was looking for someone to listen like them, to listen and feel my pain." gt

TAKING THE PAIN OUT OF CLOUD PROCUREMENT

Despite focusing significant time and money on cloud adoption, many government leaders still struggle to capitalize on cloud's potential. The Center for Digital Government (CDG) wanted to know why.

With support from Oracle, CDG surveyed and interviewed 82 state IT and procurement officials in June 2017. The paper, "Understanding Cloud Procurement: A Guide for Government Leaders," analyzes the findings and presents a cloud procurement checklist to help leaders better navigate cloud adoption and IT modernization. Here are some key findings:

CLOUD OFFERS A VIABLE PATH TO IT MODERNIZATION

42%
of states have
CLOUD-BASED CONTENT MANAGEMENT SYSTEMS.

55%
of states already use
CLOUD-BASED EMAIL SYSTEMS.

BUT PROCUREMENT SLOWS ADOPTION
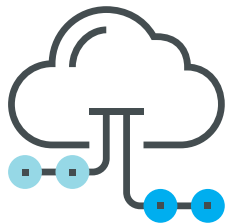
Only **42%**
have formal
CLOUD PROCUREMENT METHODOLOGIES.

Only **47%**
have formal
DUE-DILIGENCE POLICIES IN PLACE
to evaluate cloud providers.

For the full cloud procurement checklist, download
"Understanding Cloud Procurement: A Guide for Government Leaders"
at **www.govtech.com/oraclecloud**.

UNDERSTANDING CLOUD PROCUREMENT:
A GUIDE FOR GOVERNMENT LEADERS

GOVERNMENT NEEDS A
CLOUD PROCUREMENT CHECKLIST

UNDERSTAND NEW BUDGET AND WORKLOAD REQUIREMENTS.

✓ **How does the budget need to be reallocated?**

✓ **How much staff time needs to be dedicated, and what skills are required?**
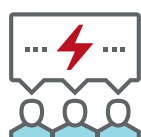
WORK CLOSELY WITH IT.

✓ **Do you have a working group established that includes IT and procurement officials?**

DETERMINE SECURITY AND COMPLIANCE REQUIREMENTS FOR DATA.

✓ **Do you know what security standards are appropriate for the data moving to the cloud?**

✓ **How is data secured within the cloud data center?**

✓ **How comprehensive is the service provider's security strategy?**

SPELL OUT WHO OWNS GOVERNMENT DATA AND HOW IT WILL BE MANAGED.

✓ **Who owns the data?**

✓ **In the event the contract ends, is there a workable plan to recover data?**

✓ **Where will the data be stored and will you be notified if the data moves to a different location?**

CREATE FORMAL POLICIES FOR VETTING VENDORS.

✓ **What is the cloud vendor's reputation?**

✓ **Does the vendor have experience in the government market?**

✓ **Will the vendor support a hybrid cloud environment?**

✓ **Does the service provider offer pre-established SLAs?**

By Theo Douglas

BETTER TOGETHER

Like-minded and like-sized states join forces to modernize unemployment systems.

At all levels of government, agencies are reaching out to benefit from the collective knowledge of their peers. But beyond sharing information and hard-fought lessons learned, many jurisdictions are seeing opportunities for tangible collaboration as they look to overhaul even some of the most stalwart public-sector systems.

Driven by a desire to create efficiencies, defray modernization costs and improve results, a number of states are forming consortiums to streamline their delivery of unemployment insurance. After all, a majority of the development work is duplicative, even across state lines. But that's not to say that the process is simple.

The typically years-long process is a deep dive, encompassing examinations of feasibility and requirements, scrutiny of existing infrastructure and code, and many conversations between lead and member states to codify relationships, timelines and funding, and eventually, to vet vendors and sign contracts.

But it's one that agency heads, technology leaders and observers agree can be less expensive than supporting antiquated systems, yield better performance for staff and residents alike, and — like so many other government refreshes — improve workflows.

Federal unemployment insurance (UI) was born of the Social Security Act of 1935, and quickly mirrored by states and territories. But in modern times, states have been inhibited by the cost of getting off mainframe and legacy systems. Thankfully some post-Great Recession federal funding — notably, from the U.S. Department of Labor — along with a realization that any remaining COBOL-era programmers will soon be leaving the building, has kickstarted several consortiums.

These big overhaul partnerships are in various stages, but word of their current and predicted success has spread, and in some cases, officials are adapting the consortium idea to other levels of government and areas of service.

ACROSS STATE LINES

One four-state partnership is rolling out a streamlined solution directly in the cloud. ReEmployUSA, which began development in 2004 as the Mississippi Department of Employment Security (MDES)' Access Mississippi (Access MS), is led by the state of Mississippi and architected and coded by Tata Consultancy Services (TCS). Originally known as MRM — for Mississippi and members Rhode Island and Maine — its name changed when Connecticut joined.

Access MS was funded through state funds, UI administrative monies and a $90 million grant from the U.S. Department of Labor.

Consortium-level benefits including the state of Mississippi went live on-prem in 2015 and 2016, then migrated to the cloud in August 2017, along with Mississippi's single-state UI tax system. Consortium-level UI taxes, including Mississippi, migrated to the cloud in September.

The benefits side of Maine's UI system migrated to the cloud in December 2017, and officials plan to deploy its tax system in the cloud in August. Rhode Island plans to migrate to the cloud in 2019, and Connecticut in 2020 for benefits and 2021 for taxes.

Operating in the cloud, as other states have noticed, has quickened scaling, testing, maintenance and patching, according to MDES Deputy Executive Director Dale Smith and Mohammed Jalaluddin, director of the MDES Office of Technology Support and Innovation.

Maine's deployment brought a learning curve for citizens, some of whom experienced system lockouts. The state's Government Oversight Committee is investigating the handling of the rollout and the response to claimants, but John Feeney, director of the Bureau of Unemployment Compensation at the Maine Department of Labor (MDOL), attributed early issues to residents' difficulty creating new passwords. He described the platform as "very reliable" and said MDOL is meeting all performance metrics.

The number of weekly "high-priority support issues" in Maine has declined significantly since the deployment, and its UI tax deployment may occur even earlier than August, Smith said. Automation realized by Access MS saved thousands of work hours, a 2013 TCS case study found, including 5,111 annual hours responding to employers about claims; and roughly 2,000 hours a year spent detecting claim overpayments.

As the relatively smooth rollout continues, Smith said Mississippi is beginning to mine its new data streams to identify internal challenges and education opportunities; and to watch for fraud. Recognizing code commonalities of around 65 to 75 percent with agencies in Missouri and Wyoming, which had previously adapted Access MS, Smith said ReEmployUSA is also exploring working with the two states to leverage their support.

CUTTING COSTS

In a similar partnership, the Idaho Department of Labor's Internet Unemployment System (iUS), a two-state consortium between Idaho and Vermont, went live in Idaho in 2014 with what iUS Executive Director Mark Mayfield refers to as version 1.0, a "monolithic" solution. It reduced manual work spent by staff by more than 2,000 hours and is now being updated in a more modular format for subsequent deployment in both states. North Dakota is also looking at joining the consortium.

Bringing together geographically diverse agencies in one system is not without its challenges. Here are a few best practices from states that have made the leap:

1 Ensure member states are similar in size and mindset.

2 Create a central management entity.

3 Communicate directly with all staff, and emphasize training and education.

4 Avoid going live in multiple states at once.

5 Be clear about which state leads and which states are members.

6 Consider the perspectives of residents and agency staff.

iUS finds its origins in 2009 when Idaho and North Dakota formed the AWIN consortium with Arizona and Wyoming, with partial federal funding. After a roughly two-year research period, Idaho officials realized they had a very urgent need to get their agency off mainframe and parted ways with AWIN. (Arizona and Wyoming, along with Colorado and North Dakota, later formed WyCAN, a UI system shared among those states.)

iUS began its build in early 2012, buoyed by $10 million in state funding, and went live in September 2014 — three months ahead of its deadline — for just $7.2 million. When scaling the tightly structured architecture to other states proved difficult, officials began to create the new framework, version "2.0," which Mayfield said should be easier to update.

"When you do a module or microservices, you can actually upgrade that technology in smaller chunks, so you can kind of prioritize out — 'Let's update that one,'" he said.

Version 2.0 should be ready this summer, he said, though it may not go live in Vermont until next year, as seasonal unemployment makes winter a busy time for UI in that state.

The system is generating a roughly 75 to 80 percent savings over the state's mainframe UI system, which Mayfield said had annual costs of more than $1 million.

SCALING DOWN

Some states are taking the consortium model and using it for different or smaller-scale platforms than those massive state UI systems, finding the benefits of partnering but perhaps without the prospect of total IT transformation.

Like some of those bigger UI consortiums, Louisiana Workforce Commission's Office of Unemployment Insurance is also taking advantage of the efficiencies realized by shared services. The state has become known for its infrastructure consolidation, from a federated structure to the Office of Technology Services under CIO Dickie Howze, but more recently in another example of teamwork has joined roughly 12 agencies over the past three years in a new cloud-based "soft phone" system consortium.

Louisiana's Office of Unemployment Insurance is the latest member of that partnership, joining in July 2017, and achieving a significant transformation, said Renita Ward Williams, director of the Office of Unemployment Insurance Administration. The new system, which liberates roughly 150 agents from being tethered to a specific device or landline, has dramatically lowered hold times that previously averaged 30 minutes, to mere minutes or seconds in some cases — and improved the agency's Google reviews.

On the back end, officials at the agency, which handles an average of 5,000 calls a week, can now see how long calls last; whether claimants are calling multiple times; and join calls to help agents assist customers. The new system, from Canadian software provider Enghouse Interactive, has enabled staffers to rewrite call scripts and call flows, eliminating unneeded messaging and streamlining customer options, Williams said. Her agency is expected to save $64,000 annually as a result of joining the platform, she added.

LET'S GET TOGETHER

The benefits of partnering are many and varied — though the most commonly heard include being able to share and trade ideas among staff who previously may not have communicated, improving ideation and process, and realizing efficiencies as residents and staff migrate and become familiar with a new system. New systems can also bring improved security and compliance standards; and officials may eventually be able to leverage everything from maintenance to software support costs.

However, Patricia O'Brien, deputy director of the Bureau of Unemployment Compensation at the Maine Department of Labor, cautions lead and member states against expecting dramatic savings immediately.

"From an IT cost perspective, we were anticipating almost a flat exchange," O'Brien said, noting that cost divisions are more likely to change once the third state, Rhode Island, becomes active in ReEmployUSA. (In planning for the end of their federal grant monies, Maine

officials have discussed "front-loading" maintenance costs to establish a recurring fund for infrastructure changes.)

Another key benefit consortium members may experience — particularly those operating in the cloud — centers on disaster unemployment assistance, according to Scott Sanders, executive director of the National Association of State Workforce Agencies. This is the idea that modern, more connected UI agencies may be better positioned to help fellow agencies in states stricken by hurricanes, floods and the like.

"I'm hoping they all improve to [that] point and all operate in the cloud. It just makes it that much easier," Sanders said.

That's exactly what states in the South and West have done, Williams said. UI officials in Texas assisted staffers in Louisiana after flooding in 2016; so, in the wake of Hurricane Irma's devastation last September, Louisana UI quickly scaled up its new cloud contact center to answer calls from Florida residents during the next three to four months — then de-scaled after recovery.

Growing pains and early deployment issues may come with the territory according to Sanders, but consortiums and similar partnerships hold the potential to power through and redefine agencies' public images, erasing bad impressions formed by labyrinthine processes and long minutes lost on hold. These updates can cut both ways, serving residents more quickly but also empowering agencies to pivot staff more effectively — from taking calls, where they're no longer needed, to handling claims, as in Louisiana.

Not surprisingly, the idea of connecting staffers thousands of miles apart whose workflows may be 80 percent common —

but 20 percent unique — elicits its share of warnings and suggested first or early steps from those who have done it.

Perhaps chief among them: Ensure consortiums or partnerships are formed by like-sized and like-minded agencies and staff to avoid conflicts over mission, and service and resource allocation.

"That is very important when you form consortiums and work on consortiums, is to make sure the IT teams are aligned and agree to all infrastructure-related networking-related items. And if there are constraints, you work toward resolving them and you don't just stand your ground and say, 'My way or no other way,'" Jalaluddin said.

"The other thing is, in the current environment, we at this consortium do not believe that it is advisable to bring on states that are much larger than we are. Because we are a consortium of small states," Smith said, using California as an example of a large state that might therefore be a bad fit.

Officials also recommended creating a central management office or entity to help spearhead the effort; communicating directly with all staff; planning to on-board deliberately, emphasizing training and education; avoiding going live in multiple states at once; and being very clear on which state leads and which are members.

Getting other perspectives is also key. Williams recommended polling residents for user takes on outdated systems and features that should be added — and circling in agency staffers.

"It's having those discussions between the IT people as well as those who know the business and those who you serve to ensure that everything is covered ... that you're using that to give people the best service that you can," she said. **gt**

> *"If there are constraints, you work toward resolving them and you don't just stand your ground and say, 'My way or no other way.'"*

How to Succeed with Performance-Based Budgeting in Local Government

Any responsible government leader wants to spend taxpayer money judiciously. At the same time, constituents and various public groups desire detailed and immediate access to information about how their tax dollars are spent. But while expectations are rising, budgets are not. Agencies need to track expenditures, align spending to pre-determined goals and share data with the public to demonstrate they are spending wisely and achieving results.

In response, some government officials are adopting a performance-based approach to budgeting. The idea of performance-based budgeting is simple. Steer funds to programs that achieve their desired results based on past data — and away from those that don't. Reward achievement and progress. Limit funding for poor performance. When implemented well, performance-based budgeting helps agencies align costs to strategic objectives, provides leaders with a comprehensive view of each department or agency, and improves transparency and accountability for stakeholders.

"Performance information is essential for local governments," says Dr. Jim McDavid, a professor at the University of Victoria in British Columbia and one of the leading public administration scholars in the fields of program evaluation, performance measurement and management. "If you're looking at the relationship between results and budgetary decisions, it makes a lot of sense."

While the concept might be straightforward, putting it into practice is not always easy.

"Despite widespread interest and growing use of performance budgeting practices, the process of tying performance information to funding decisions in an effective, meaningful and practical manner continues to be a major challenge for all levels of government," notes a National Association of State Budget Officers report.[1]

Agencies can implement performance-based budgeting software and systems to help them achieve their goals, but there are potential obstacles and challenges. Every organization is different, and there is no one-size-fits-all approach or software that can determine which key performance indicators are important to a particular jurisdiction. Therefore, any form of performance, priority or outcome-based budgeting and tracking requires time and effort from an organization's financial and executive staff.

Some of the biggest obstacles to implementing performance-based budgeting systems are:

- They require specificity to operate efficiently
- They are time consuming to review and discuss
- They assume accurate and valid performance data
- People within the agency may have different views of what to prioritize

Successfully implementing a performance-based budgeting system requires careful planning, thoughtful execution and robust training — before, during and after the rollout. The following best practices can help agencies improve their chances of success.

Best Practice: Decide What to Measure

Experts suggest agencies start by defining goals and associated performance indicators. This isn't always an easy process.

"We often see organizations that understand they need a performance management system but have no clue what it is they are going to measure," says Craig Ross, vice president of Business Development at Questica, a leader in capital and operating budget software. "Having a solution that allows you to track performance is meaningless unless you have solid measures that align with the goals you are trying to achieve."

Performance indicators should be specific, measurable, attainable, relevant and time-bound. Before an agency launches a performance-based budgeting initiative, they should first consider which types of performance measures to track and their related outcomes. The five primary types of performance indicators are: input, output, outcome, efficiency and quality.

Key performance indicators for a parks and recreation department might include acres of green space in a city, park maintenance expenditures or class/program/facility registrants. For a police department, key performance indicators could include 911 response time, violent crime reduction or number of traffic accidents with fatalities.

Professional associations such as the Government Finance Officers Association[2] and the International City/County Management Association[3] also have performance-based budgeting resources available.

HOW TO SHARE PERFORMANCE DATA WITH CITIZENS

Reporting and sharing performance information with the public can be daunting. The International City/County Management Association suggests the following tips for putting the information into perspective.[4]

- Share your goals
- Share your timeline
- Limit what you report
- Provide context
- Explain what you are measuring and why
- Keep it current

Best Practice: Overcome Potential Resistance

Elected officials and senior administrators can encounter resistance from staff to move toward a performance-based budgeting approach and process. Staff may feel their work is being boiled down to a few data points that don't reflect the full value of their department or program's effectiveness — or they may simply resist what they see as unnecessary additional work.

There are ways to overcome this resistance. First, involve key staff members from the beginning of the request for proposals (RFP) process for budgeting and performance software to ensure what is ultimately purchased meets their needs.

"Giving staff a sense of ownership in the process goes a long way when it comes to motivating them to implement and use a new solution," says Ross.

Next, demonstrate how a new system will make employees' work easier long term.

"The more the solution encourages collaboration and the more efficient it makes the organization, the more readily it will be adopted," says Ross.

Best Practice: Invest in Long-Term Training

Initial training programs are essential when implementing a new software solution, but it's equally important to provide ongoing training opportunities, especially as new staff come onboard.

In addition, while some functions of a software package are used routinely, others may only be needed occasionally. Staff may forget how to use certain features as time passes. Ongoing training mechanisms allow staff to stay current as new features and upgrades become available.

"Having good training resources available to keep people up to speed on new features and to onboard new staff is critical," says Ross. "If that doesn't happen, systems often don't get used to their full potential."

Training — either online or in person — should provide a mix of hands-on tutorials and step-by-step examples that can be archived and accessed when needed. Vendors should supply manuals, reference documents and ongoing access to learning materials with every new release of software.

There is also an important project management aspect to launching a new software solution. The priority is always to get up and running as quickly as possible with minimum system capabilities, but too often other important features are ignored and never implemented. Managers need to identify which functionalities will be used to go live, and which ones will and should be implemented later and when.

THREE WAYS HIGH-PERFORMING CITIES SHARE PERFORMANCE DATA BETTER[5]

1 They collect and share data across departments, with leadership and with residents.

2 They create open data policies to support the sharing of performance metrics and transparency initiatives.

3 They increase resident access to data through the web and other educational programs and expand opportunities for local businesses.

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HOW THE CITY OF LARGO, FLA., BOOSTED TRANSPARENCY

Interacting with a large printed budget document (or even an online PDF document) can be time consuming, and data is static and not always up to date. The city of Largo, Fla., wanted an interactive, web-based tool to communicate with internal and external stakeholders using a variety of financial snapshots, including revenue sources and comparisons of expenditures to budget. City officials also recognized they needed to share their financial data in a more engaging manner.

In 2015, Largo issued an RFP for a budget reporting and analysis software solution with integrated personnel, operating and capital budget systems. Questica was awarded the project based on its workflow management system and a robust dashboard management system. In 2016, Largo implemented Questica Budget, followed by Questica OpenBook, a data visualization tool designed to evolve how budget and other information is shared with stakeholders internally and externally.

Today, OpenBook allows city personnel to monitor budget developments and track spending in a single department or across the entire organization via a customized dashboard. They can also see proposed changes to the budget — and the subsequent outcomes of those changes — in real time, giving them a more efficient decision-making process. Largo residents can also access information — in an easy-to-understand format — about how the city spends their tax dollars, which increases transparency and accountability.

For more information, visit Largo.com

The Power of Data

No matter which budgeting methodology a local government chooses, the desired outcome is the same — to create a budget that is developed with thought and insight and managed appropriately. Data is an increasingly important part of the process because it gives government officials the information they need to determine the effectiveness of programs, to gauge constituent budget priorities and to improve transparency.

There will always be a blend of methods utilized to gather data, but government officials recognize the value of performance-based budgeting. It may be complex, but performance-based budgeting is an effective way to prove an agency is spending money on programs important to constituents and achieving the results the agency, elected officials and the public seek.

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BY ADAM STONE

Less than a decade ago the chief innovation officer or CINO was viewed by some as a silly job title, just another ill-defined guru/Sherpa/visionary/Jedi thing.

Who's laughing now?

Government CINOs are driving demonstrable change. Anchorage, Alaska, is poised to reap $1 million in revenue thanks to a rewrite of a couple city form letters; Rhode Island schools are driving down absenteeism by texting parents when kids don't come to school; Arkansas is taking the paper out of government procurement. All these initiatives got their start in the CINO's office.

In announcing the top data-driven cities of 2018, What Works Cities Executive Director Simone Brody made a telling statement. "All over the country, local governments are jumping into this movement and dramatically improving how their cities operate," she said.

This comment on the rise of open data serves equally well as a launching point for a broader conversation about the rise of the chief innovation officer. Rooted in data and buoyed by IT advances, the CINO (and the less-common chief transformation officer) increasingly can be spotted on state and local government org charts. Some 40 percent of cities and 42 percent of counties had full-time innovation professionals on staff in 2017, and 49 percent of states reported having an innovation position on the books in 2016, according to surveys of city, county and state IT departments conducted by the Center for Digital Government.*

That makes this an ideal moment to pause and take a deeper look at the role these individuals play in driving government forward.

CINOs are empowering dramatic improvements with better data, better processes and creative collaborations.

STEVE BOXALL

Settling N

We check in with the second wave of C-Suite-dwellers charged with bucking the status quo.

Michael Sarasti, Director of Innovation and Technology, Miami

"That's where some of the best innovation happens, when you have three departments and you put them in the room together. That's when the magic happens."

They're often underfunded, and often must execute a complex dance with their counterparts in IT — but they are moving the needle.

What's the job?

If we're going to explore the effectiveness of the CINO, we'd better start by defining the job itself. Ask a half-dozen innovation chiefs what they do for a living and you'll get half a dozen answers, but some common themes emerge. For most, technology is a helpful tool, rather than a guiding light. Primarily, they say, the CINO is there to drive organizational change.

Miami Director of Innovation and Technology Michael Sarasti, who until May served as CINO, says he's here to urge process improvements, to leverage best practices from the private sector and to open up civic data. All this results in projects like the Innovation Academy, a monthly event that has so far trained some 100 city employees on "innovation techniques, generally based on lean thinking," he said. "It's a two-and-a-half-day course, training about 20 people per cohort. We teach them to see problems in their work area, we teach them a little bit about agile, about user testing and the cycle of experimentation. It's about them feeling inspired about their work, feeling like they have some sense of control."

Some innovation chiefs do their work at the highest levels of government, spurring big-picture structural changes. In Arkansas, Chief Transformation Officer Amy Fecher (one of just a few government officials to carry that title) is seeking to streamline processes statewide. She recently led a strategic planning exercise for cabinet-level agencies; she's working on data center optimization and is also developing a new e-procurement regimen. "We want to see how we can go to less paper and more technology," she said.

By contrast, others take a more citizen-centric view of the work. Anchorage CINO Brendan Babb wants to put health inspection data online alongside Yelp reviews. He wants to layer real-time bus information on Google Maps. He's free to do that because of his place in the org chart, which puts him outside the ordinary daily grind. "It's hard to experiment in government, where people are quick to accuse you of wasting taxpayer money. I can create a space where people can try things," he said.

Others talk about the collaborative nature of innovation. In Rhode Island, Director of Government Innovation Kevin Parker has launched an Innovation League that has so far pulled together some 50 eager innovators from 18 different departments. "These are people who are doing great work, but who need time and space to take their projects further," he said. "We come together to re-imagine how we can best meet the needs of users. For example, the group performed a user-shadow exercise at the Department of Health to walk in the shoes of someone coming into the building for the first time: What do they experience and how might we improve it?"

Still others describe innovation s a deeply personal exercise. They see themselves as drivers of change not just at the organizational level, but at the human level.

As CINO of the Texas Department of Licensing and Regulation, Randy Nesbitt invites folks to stand before a 21-foot whiteboard and work through their problems in teams. They get two-and-a-half hours to come up with three or four practical "safe to fail" solutions. Being OK with failure is key to innovation, he says, as is working side by side. "When people sit across the table and brainstorm, then they become competitive," he said. "When people are shoulder to shoulder facing the same problem, rather than sitting across from one another, it changes the dynamic. Most people don't think about that."

In Cary, N.C., Assistant Town Manager and Chief Innovation Officer Dan Ault gives perhaps the most succinct explanation of the CINO's task. "My No. 1 role is to help people become the best version of themselves that they can be, to achieve whatever they want to achieve in their jobs," he said. "In a municipal organization, you can't always do everything, but if you are passionate about public service, I want to help you tap into that and realize that passion."

Amy Fecher, *Chief Transformation Officer, Arkansas*

Tools of the trade

These CINOs come to the table with big vision ... and limited resources. Most have no dedicated budget for "innovation," and may rely on grants or else piggyback on funds allocated in support of specific agency projects.

Money isn't a prerequisite for innovation, but it helps. Sarasti, for instance, has a small discretionary fund of $50,000 that he uses for targeted projects. Say a useful app emerges from a hack-a-thon: He might spend $5,000 to adapt it for use in city systems.

Last year, Babb did a review of government form letters, including an animal control letter about dog registration and a library overdue notice. He spent $12,000 to prototype changes, and this convinced the Treasury to spend $55,000 on broader revisions that are expected to result in $1 million in revenue from previously uncollected fines. Cities will invest, "but it helps if you can do initiatives that show a direct financial return," he said.

Money isn't the only tool in the CINO toolbox, however.

Ault says his strategic partnerships with companies like Salesforce, Box and Microsoft are key. "We are evolving more to a platform-based approach, and their enterprise platforms are what will power the city. This is what gives us the ability to configure and to build and to get updates, which in turn allows city employees to truly get the information they need when they need it," he said.

More than just vendor relationships, these are true partnerships, in the sense that both sides benefit from their combined efforts. "We are the best lab for molding these products: We have so many different needs, so many different processes. We are working on the front lines, so it becomes a matter of mutual success. They need people like us to pioneer these things, to show that these things work," he said.

In lieu of an actual "transformation" budget, Fecher has an ad hoc group of supportive colleagues helping to drive her agency. The 14-member transformation board is not an official state body, but rather a group of eager volunteers drawn from the public and private sectors and

Kevin Parker, *Director of Government Innovation, Rhode Island*

from academia. Executives from corrections and human services, a retired government finance executive and others meet every six weeks to talk about change.

"This is a group that can evaluate any possible projects and give their expert advice and recommendations. It's an advisory role but it is very important because it gives us all these different perspectives. It gives us a fresh view that someone who is entrenched in state government might not have," she said.

For some, neutrality is a major asset. As a direct report to the governor's office, Parker has both the clout and the objectivity to do things a department head, for instance, could not do.

"Perhaps one of our strongest tools is our convening authority, our ability to be a neutral party," he said. "We have the ability to bring people together to solve problems: Small business owners, technologists, academics, artists/designers — subject matter experts who are excited about the collaboration, whether they are internal or external."

Internally, he's careful to wield that authority delicately. "We can't come in heavy-handed and say: 'Hey, your website stinks,'" he said. The aim is "to learn what they are trying to achieve and then offer departments a set of nontraditional tools to help them do that."

Finally, the CINO arsenal includes the all-important "fall guy" mechanism.

How do you drive change? Be willing to take the lumps on everyone's behalf.

"If an idea comes out of the departments and I try and it fails, I can take the blame for that a little more freely because of my Harry Potter-like title," Babb said.

Sarasti: "I tell people that as long as I have a job, you can blame me. The running joke here is that it's my fault. If you get in trouble, lay it on me."

Parker: "I offer that all the time: Because I'm not embedded in their office the way they are all day every day, it's easier for me to be the bad person, so they don't have to take the hit. You need someone in the role who's willing to take the arrows because we are trying to institutionalize change, and that is something that can happen a little faster by strategically sharing the burden."

Dancing with IT

On first glance, some people presume the innovation chief to be a technology leader, at least in part. There's a natural inclination in our tech-centric era to conflate change and improvement with digital evolutions. Better government? Surely there's an app for that.

While this view is not totally unfounded, the CINOs themselves describe a more complex relationship with the IT department. They depend on IT to manifest change, but innovation itself is not an IT function. Nor do they wish to be seen as driving the IT agenda, showing up on the CIO's doorstep every week with a new development to-do list. A closely choreographed dance emerges.

Fecher meets regularly with the state CIO to mull opportunities of mutual benefit. Lately that has meant a shared focus on enterprise solutions, a methodology that streamlines workloads for IT while also enhancing the transformation agenda. "We want to make it easier to do things. If agencies are on the same platform, we can pull information more easily, we can be more holistic in our approach," she said.

Sarasti describes himself as occupying an advisory role when it comes to IT, although some aspects of the traditional IT workload seem to flow naturally in his direction. There's no chief data officer in

Miami, so data-related decisions often fall to the innovation head. He can also take user testing problems off of IT's shoulders, being already immersed in those conversations.

Mostly he tries to make life easier for those on the IT side by leveraging transformation as a means to lighten the burden of technology. "IT gets asked to do a lot of stuff that they shouldn't be asked to do," he said. "We help people to first refine what they are doing, so that they have really good processes before they go to the IT team."

While there is generally a clear divide between innovation and IT, in some rare cases that gap can be bridged. Julia Richman, for instance, came to the city of Boulder, Colo., as innovation and analytics officer. In March she took on the tech mantle, becoming innovation and technology officer.

That gives her some muscle. Innovation had a $100,000 budget with 12 personnel answering to different department heads. Now, she directly oversees 50 people and a $10 million budget. She described it as a logical evolution.

"By starting in the city manager's office, I had an easy way to work across the whole city, I had constituents everywhere and the support of my boss to get things done," she said. "Now that I run a central service, I have both push and pull. There are a lot of services that I can offer. Not only am I asking you to do business differently, I am

enabling you to do that. When it is a tech problem, I can draw on those resources."

The road forward

Richman's transition may be indicative of a trend. Last spring, for example, Vermont repositioned its CINO, John Quinn, as CIO of a newly reorganized state IT agency.

Some envision the CINO taking an even more pragmatic turn. Last year, for instance, Ohio Gov. John Kasich speculated that a state-level chief innovation officer could help to commercialize research being done at Ohio universities. (The state Legislature has since moved to nix that idea.)

To get a sense of where the CINO is heading next, it's helpful to look at what's working, and to consider the wish lists of those presently on the job.

Breadth works. Successful innovation leaders say they can do their best work when they are given authority to operate across multiple lines of jurisdiction. "You need the ability to cut across departments. That's where some of the best innovation happens, when you have three departments and you put them in the room together. That's when the magic happens," Sarasti said.

Outreach is another valuable tool. "Talking to other cities has been very beneficial to me," Babb said, pointing to his collaborations through What Works Cities. "These relationships where you get to see what others are doing, where you

have someone to call if you have a particular problem — that peer network of innovators can be really helpful."

There's broad consensus that the future success of the CINO, and the further expansion of this role, depends largely on buy-in from key stakeholders. The governor and the mayor, the city council and the department heads: All need to support the premise of innovation both philosophically and practically.

"Most state governments get entrenched in the way work has 'always been done,' but technology is changing so rapidly. We need strong leaders who want to embrace transformation, who will change with the digital community rather than fighting against it," Fecher said. "When we want to implement a digital way to do something, rather than pushing paper around, that should be obvious, and right now it isn't always. It is still challenging for a lot of people in state government to think that way."

Suppose folks do come around. Then what's next for the CINO? Ideally, some would say, oblivion.

"If the chief innovation officers do their job correctly, their job will eventually be unnecessary," Nesbitt said. "Things will grow and change organically across the organization. If it's done right, innovation shouldn't just be an office held by a few people. I love my position, I think we are making headway, but innovation can and should happen anywhere, with anybody. In the long run, there doesn't have to be a chief innovation officer."

Others take a similar if somewhat less dramatic stance. Keep the CINO or do away with it, they say. What matters is not the title but the spirit that drives the enterprise.

"I don't want my title to distract from the mission," Ault said. "People focus on labels and buzzwords, they want to turn innovation into a specialization. I don't believe in that. There is no 'cool kids club.' I am just here to increase capability, to help people achieve what they want to achieve." **gt**

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Intelligent Jail Management
Unlocking the Power of Data

Incarceration is one of the costliest components of the criminal justice system.¹ And even though jails and other detention facilities are 24/7 data factories — generating volumes of information about offenders, booking, housing, health care, correctional officers and more — many are unable to harness that data to help control costs and manage facilities effectively.

Business intelligence solutions enhance the value of data by providing clear, accurate and actionable insight into what has happened and what's likely to happen in a facility. Using dashboards, operational reporting, data modeling, predictive analytics and other business intelligence tools, jail managers can go beyond basic record-keeping to not only reduce incarceration costs, but also track trends, predict outcomes, set short- and long-term goals, inform policymaking, minimize liability, and ensure compliance with federally imposed population caps and other government requirements.

A *government technology* Case Study | Laserfiche

STREAMLINING THE RESPONSE TO PUBLIC RECORDS REQUESTS

HOW LA PLATA COUNTY USES PREBUILT PROCESS TEMPLATES TO AUTOMATE DOCUMENT GATHERING AND REQUEST MANAGEMENT
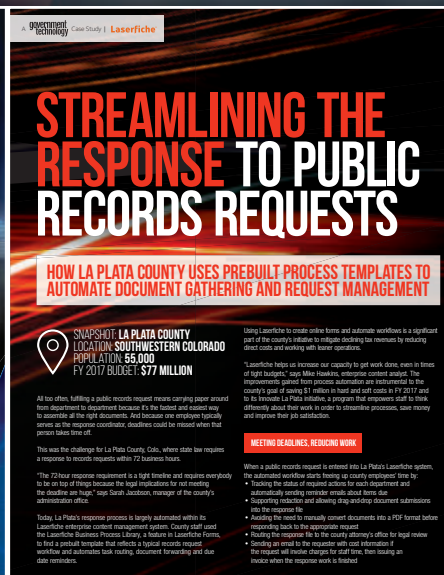
SNAPSHOT: **LA PLATA COUNTY**
LOCATION: **SOUTHWESTERN COLORADO**
POPULATION: **55,000**
FY 2017 BUDGET: **$77 MILLION**

All too often, fulfilling a public records request means carrying paper around from department to department because it's the fastest and easiest way to assemble all the right documents. And because one employee typically serves as the response coordinator, deadlines could be missed when that person takes time off.

This was the challenge for La Plata County, Colo., where state law requires a response to records requests within 72 business hours.

"The 72-hour response requirement is a tight timeline and requires everybody to be on top of things because the legal implications for not meeting the deadline are huge," says Sarah Jacobson, manager of the county's administration office.

Today, La Plata's response process is largely automated within its Laserfiche enterprise content management system. County staff used the Laserfiche Business Process Library, a feature in Laserfiche Forms, to find a prebuilt template that reflects a typical records request workflow and automates task routing, document forwarding and due date reminders.

Using Laserfiche to create online forms and automate workflows is a significant part of the county's initiative to mitigate declining tax revenues by reducing direct costs and working with leaner operations.

"Laserfiche helps us increase our capacity to get work done, even in times of tight budgets," says Mike Hawkins, enterprise content analyst. The improvements gained from process automation are instrumental to the county's goal of saving $1 million in hard and soft costs in FY 2017 and to its Innovate La Plata initiative, a program that empowers staff to think differently about their work in order to streamline processes, save money and improve their job satisfaction.

MEETING DEADLINES, REDUCING WORK

When a public records request is entered into La Plata's Laserfiche system, the automated workflow starts freeing up county employees' time by:

- Tracking the status of required actions for each department and automatically sending reminder emails about items due
- Supporting redaction and allowing drag-and-drop document submissions into the response file
- Avoiding the need to manually convert documents into a PDF format before responding back to the appropriate request
- Routing the response file to the county attorney's office for legal review
- Sending an email to the requester with cost information if the request will involve charges for staff time, then issuing an invoice when the response work is finished

CENTER FOR DIGITAL GOVERNMENT

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government technology

Q&A: Tackling Cybersecurity Head-On in Texas

George Spencer   Todd Kimbriel

The Texas Department of Information Resources (DIR) recently announced a comprehensive Managed Security Services (MSS) contract that gives state agencies, local governments, school districts and other public entities cost-effective access to powerful resources for helping to protect vital systems and data. Government Technology recently spoke with Texas CIO Todd Kimbriel and George Spencer, AT&T Public Sector Assistant Vice President – Texas, about how the MSS contract helps Texas agencies respond to an increasingly hostile security environment.

Q How has the cybersecurity landscape shifted over the past few years?

Kimbriel: Cyber threats continually evolve and we now know that cybersecurity is a lifetime commitment. The sophistication of attacks requires thoughtful planning and response. This has led to a growing maturity and awareness across Texas. Our state leadership has made it clear that cybersecurity is a priority. We just had a 22-page cybersecurity bill pass that outlines 16 new requirements and is driving new activity for DIR around expanding reporting and managing risk. Cybersecurity is part of the underlying fabric of everything we do, and as a state we have decided we would prefer to respond rather than react.

Q What security services are available through DIR's MSS contract?

Spencer: The MSS offering consists of three major components — security monitoring and device management, incident response, and risk and compliance — each of which includes multiple services that agencies can choose to meet their IT security needs.

Security monitoring and device management includes network and web application firewalls, intrusion detection and prevention, and end-user device management. Incident response includes services that help agencies plan and prepare upfront to manage security incidents. It also offers an automated service that lets agencies request incident response help through DIR's MSS portal. Risk and compliance includes penetration testing to analyze where security vulnerabilities might exist,

enabling agencies to address weaknesses before cybercriminals exploit them. This category also includes services to help agencies understand and comply with complex security regulations.

These capabilities are provided through a pre-vetted, pre-competed contract for security services. Agencies can go to the DIR portal, identify the services they need and place an order for them. This model also simplifies the management of security services because DIR monitors vendor performance and sees to it that contractors comply with contract terms.

Q Why is the MSS contract so important versus going it alone?

Kimbriel: Consistency of service and strategy is an important component for us. Some of our agencies have the resources and capabilities to manage cybersecurity in house and some don't, so how do you protect the state in that environment? One of the things we provide through this service is assurance that the contracts we issue with organizations like AT&T have been thoroughly vetted so the customers using these don't have to do that themselves. Another advantage is having a bird's eye view of the whole environment. For instance, if our managed security services vendor delivers a certain cyber service to one agency and detects a threat, it immediately can apply a solution to all agencies who use its services. Or there may be an advanced persistent threat against several agencies but it only impacts each one minimally and wouldn't catch the attention of an individual CISO. The managed security services provider has the bigger picture to intervene and improve the overall security posture.

Q **Explain how AT&T can provide this 'bigger picture' threat intelligence.**

Spencer: As a global network provider, we're uniquely positioned to understand the cyber threat environment. The AT&T global network carries more than 200 petabytes of data traffic on an average business day. A single petabyte is like streaming an HD movie for 45 years — it's a phenomenal amount of data. This traffic is monitored in our Global Network Operations Center, where we can see early warning signs and react quickly to threats. From that vantage point, we can spot changes in worldwide network traffic and identify potentially harmful activities, and then share that intelligence and take steps to help mitigate potential attacks. In addition, AT&T has eight Security Operations Centers (SOCs) worldwide that operate 7x24x365 to protect our managed security services customers. There's really no way a single government agency is going to get that perspective on its own.

Q **Who can participate in the MSS contract?**

Kimbriel: In addition to state agencies, the MSS contract is available to any taxpayer-funded organization in Texas. This was a key part of the strategy because smaller, funding-challenged organizations, for example, may not know what to do when they experience an attack. To have a qualified incident response team step in and guide their reaction is monumental. We don't expect everyone to be interested in the services, but it's advantageous to those organizations that don't have a CISO or trained cyber professional on staff.

Q **Why is it important for small and medium-sized agencies to strengthen security protection?**

Spencer: There was a time when agencies could do cybersecurity by obscurity because they were too small to be a target. But with the automation of threats, everyone is at risk. The bots and malicious programs aggressively come after all vulnerabilities.

The MSS contract gives government entities throughout Texas easy access to powerful threat intelligence and security capabilities through a simplified procurement model. It also delivers long-term benefits because agencies only pay for the portion of a service they use, and they don't need to make a big capital investment in capabilities they may not need.

Q **Can this be applied to any type of infrastructure?**

Kimbriel: There is no particular type of infrastructure targeted for this. We have a consolidated data center program that many state agencies participate in that's based on an on-premises infrastructure, and this contract can deliver services to those customers. We also have our hybrid cloud where we connected the on-premises consolidated data center program to five cloud environments and these services are also available to any customers that participate in that. For the most part, the infrastructure environment is not relevant to the services available.

Q **What does the cyber landscape look like in the future for Texas state and local governments?**

Kimbriel: Cybersecurity will continue to be a key area for us; and mitigating risk associated with cyber will continue to be high on the priority list. We are looking forward to interacting with state leadership and giving them the information they need for informed policy decisions. The bill from last session required us to set up a Texas ISAO (Information Sharing and Analysis Organization), so we are looking for our cybersecurity coordinator to spearhead that effort. This ISAO will deliver threat dissemination services, forensic analysis and other services — many of the same capabilities offered through the MSS contract — but this is through a nonprofit organization that is primarily focused on the private sector. We haven't seen anyone else put together something as broad or comprehensive as what we are envisioning, so it's exciting to see that come to reality and bridge the gap between public and private sector.

To learn more about the Texas MSS contract, please visit the following resources:

> **MSS catalog:** att.com/texasmss

> **MSS contract page:** http://dir.texas.gov/View-Search/Contracts-Detail.aspx?contractnumber=DIR-MSS-SCP-001

AT&T

FIGHTING FIRE WITH DATA

With more than 300 years of experience, the Boston Fire Department continues to find new ways to improve fire safety.

By Tod Newcombe

When it comes to civic history, it's hard to beat the city of Boston. It's the home of America's first public park, first public school, first college and first post office. It's also where fire safety got its start. In 1631, Boston passed the first fire prevention ordinance, banning thatched roofs and wooden chimneys. Fire suppression followed next when, in 1653, the young city contracted with Joseph Jynks to build a fire engine. By 1678, Boston had its own fire department.

Since then, Boston has had plenty of practice at fire prevention and suppression, and while the days of "firsts" might be over, the Boston Fire Department (BFD) continues to develop new firefighting strategies in a city where many streets still follow the same paths laid down by its Puritan founders. The proof of BFD's ongoing progress lies in how it has embraced data and analytics to manage its operations while continuing to prevent and fight fires.

Overall, the city has a well-earned reputation for using data analytics that can be traced back to the mid-1990s, when Boston began collecting data on outputs and outcomes to support its budgeting process. Later, it established the Mayor's Office of New Urban Mechanics primarily to take on innovation and civic engagement, but with data as the underpinning driver of the kinds of projects it nurtured. Data analytics has received a big boost from Mayor Marty Walsh, who established the Citywide Analytics Team, which has formalized its use and built relationships with various city departments.

BFD has come to represent one of the city's success stories in using data to improve operations, according to a report published by the Rappaport Institute for Greater Boston at the Harvard Kennedy School of Government. Because of its reliance on manual and paper-based processes, BFD realized it had significant opportunities to use data to improve decision-making.

But BFD's willingness to embrace data and analytics also stemmed from leadership, according to Steve Poftak, author of the 2016 report, *City Hall's Technology Journey*, and executive director of the Institute. "Commissioner Joseph Finn has been very open to using technology," he said. Finn was appointed fire commissioner by Mayor Walsh in 2014 and was enthusiastic about partnering with the mayor's analytics team to develop innovative, data-driven projects.

"We have a fire commissioner who is very big on using data analytics," said Connie Wong, BFD's deputy commissioner for labor relations, human resources and legal affairs. The commissioner's push to use data analytics comes at the right time for the department, according to Wong. "BFD has historically accumulated a lot of data, and it just sits. It would be a shame not to compile that data in a usable and shareable format to drive the department's operations and make us more efficient in the field and administratively."

As the founders of Boston realized when they banned thatched roofs and wooden chimneys, prevention is key to reducing the possibility of fires that can destroy property and take lives. In 2015, fire prevention took a leap forward when BFD and the Citywide Analytics Team collaborated on the development of the Building Intelligence System, which provides fire dispatchers with information that helps them understand a building's hazards. Dispatchers need this information so they can inform trucks en route to an incident about the location of standpipes or the condition of a building, whether toxic materials might be stored onsite, or if the floors are in poor condition.

"A lot of incidents happen in unoccupied buildings," said Wong. Dispatchers need to provide the trucks with as much specific information about a building, and doing that before they arrive helps in a number of ways. "With a fire, every second counts," she said. "Giving out information to trucks en route can save a lot of time. It also helps with tactical operations in terms of positioning trucks at the right locations during a fire."

The Building Intelligence System is a dashboard that dispatchers and firefighters can use on their mobile command terminals. It integrates several city data sets, allowing firefighters to view permitting, inspection, code violation and hazard data. The open source system was built in-house using Google Maps and software from Esri, according to Harvard Kennedy School's Data-Smart City Solutions. In addition to the

"BFD HAS HISTORICALLY ACCUMULATED A LOT OF DATA, AND IT JUST SITS. IT WOULD BE A SHAME NOT TO COMPILE THAT DATA IN A USABLE AND SHAREABLE FORMAT."

data sources, the system delivers computer-aided-dispatch-related data, which includes asbestos, biohazards and other information. BFD and the Citywide Analytics Team also created a tool that allows users to quickly see all nearby hazards through satellite imagery and street view images. This tool is now available on mobile devices, such as tablet computers.

Helping firefighters during an emergency is just one use of the data dashboard. Jack Dempsey, BFD's deputy fire chief and city fire marshal, said the dashboard has become indispensable to the city's fire prevention efforts. "We use it every day to look at construction site safety, fire alarms, sprinklers, asbestos removal and more."

Dempsey described Boston as a city undergoing a building boom, which has increased the number of inspections and permits BFD must handle. "In 2015, we issued 2,500 hot work [welding, soldering and other types of fire-producing activity] permits, and in 2018 that number increased to 4,000. For 2019, the projection is 4,500 hot work permits," he said.

The same is happening with sprinkler permits — 6,500 last year — which has led to interactions with development companies that are in a hurry to know when the permitting will take place. BFD's response has been to use the dashboard as a customer service tool as well, tracking where the permit request is in the process. "Having that information at our fingertips saves a lot of time," said Dempsey.

A third use of the dashboard is for analytics. The system gives BFD managers data on the number of fires and medical calls a company in its fire district has responded to in a given time period. That information can help BFD decide whether to make personnel or equipment adjustments, according to Jonathan Manos, a data analyst with BFD. "They can see response time,

which allows them to compare metrics and decide whether to adjust staffing or provide more equipment if a certain district is experiencing more incidents," he said.

Another key area where data has improved how BFD operates is in human resources. The department has had a complex system of tracking daily attendance, which is complicated by the fact that firefighters don't work a standard 40-hour, five-day-per-week schedule, according to the Rappaport Institute. After reports surfaced in *The Boston Globe* about problems with scheduling that included a practice known as shift-swapping, which led to misuse of sick time and overtime, Commissioner Finn made reforming the firefighters' work schedule a top priority when he took over.

That led BFD to work with the city's analytics team to create FireStat, a set of dashboards that allow human resources staff to quickly view the latest shift schedules.

BFD can now identify where improper time-keeping has taken place. By identifying errors more quickly, HR staff can correct the problems and ensure firefighters aren't working beyond the recommended number of hours. Last year, Data-Smart City Solutions reported BFD was on track to save $1 million in overtime costs thanks to FireStat and its analytics.

Both the attendance tracking tool and the building intelligence dashboards were challenging and laborious to complete, according to Poftak, who studied how they were developed. But there was a rationale behind the approach. "I think, to their credit, the City Analytics Team took a look at the value of the problem in the eyes of BFD's management, and worked at putting together a solution as opposed to trying to do something that was

"WITH A FIRE, EVERY SECOND COUNTS. GIVING OUT INFORMATION TO TRUCKS EN ROUTE CAN SAVE A LOT OF TIME."

technically cutting edge, but not actually useful for the managers," he said, calling both projects good examples of how data analytics, managed by the mayor's office, can work with client departments to figure out what their problems are and then build an in-house solution to fix it.

Clearly the data-driven tools are having a broad impact on BFD, giving it access to information that had been locked away. "Most of these dashboards didn't exist a year ago," said Manos. "They are very new developments, and we had to go and find the data, understand what it means. We've been able to compile it and make

it accessible in the field and in the fire prevention office. It's nice now that it's in the hands of those who need to use it."

More importantly, the efforts at BFD wouldn't have happened without the leadership of Commissioner Finn, who recognized that data was key to opening the door to transformation, and then collaborated with the mayor's office and its Citywide Analytics Team. That kind of collaboration probably wouldn't have happened a number of years ago.

BFD's experience also provides a model for how other kinds of nuts-and-bolts city departments can transform. That's

going to be important going forward, according to Poftak. "There's ongoing pressure to provide stronger performance measurements and outcomes in city government," he said. "I don't foresee the pressure to do service delivery better abating. This is one of the ways to deal with that pressure. Doing it wisely and collaboratively, the way the city of Boston and the fire department has, is a smart way to go about it." gt

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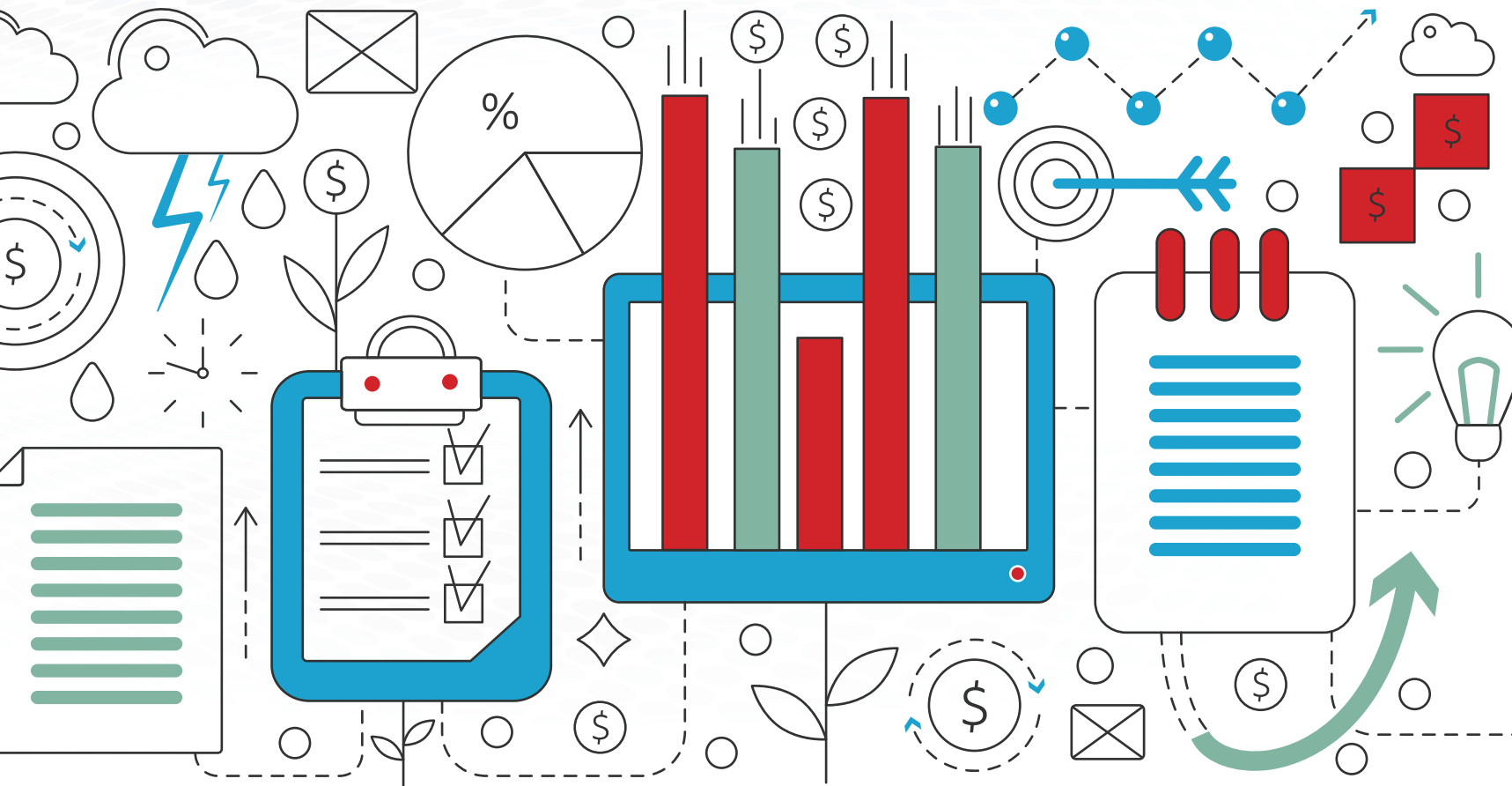
Integrated Platform Drives Major Improvements in Utah's IT Services

Cloud-based IT service management system — including a new asset management function — saves state millions of dollars, boosts department revenues and keeps technology running for thousands of state workers.

In 2006, the state of Utah started to consolidate its IT services under the newly formed Department of Technology Services (DTS). Since then, DTS has been working to provide better service to its agency customers, while also operating more efficiently and reducing costs.

As part of that effort, in 2013 DTS began moving its IT service management (ITSM) operations to a cloud-based platform from ServiceNow of Santa Clara, Calif. More recently, the department implemented the ServiceNow Asset Management system to gain better control over hardware devices employed throughout the state, and to improve billing to the agencies that use those assets.

Together, those projects have saved Utah millions of dollars, streamlined processes for managing services, provided better security and increased DTS's revenue, to name just a few of the benefits the agency has gained.

ITSM in the Cloud

In its early years, although DTS moved many of its management functions to a centralized IT support platform, it still relied on separate solutions for certain functions, including portfolio management, configuration management and IT procurement. Those multiple platforms presented key challenges.

"We had to do quite a bit of customization to each of them to meet our needs," said Dave Fletcher, chief technology officer at DTS.

The development work, including on-going maintenance, consumed resources that DTS might otherwise have used for other activities. Largely to solve that prob-lem, officials at DTS decided to replace the array of management tools with a single service management platform.

As DTS started the search for its new solution, officials identified three major criteria.

"First, we wanted to move to the cloud, where the service provider would maintain

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"People know where to go for all their issues associated with IT support, whether it's purchasing a new laptop, or getting help with a password or buying software. And since it's all cloud-based, it's accessible online and through mobile devices."

— Dave Fletcher, Chief Technology Officer, Utah DTS

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our underlying architecture, so that updates happened seamlessly," Fletcher said.

Second, they wanted to integrate as many functions and users as possible on a single platform.

Finally, they wanted to be able to scale the system easily to match changing demand.

"This way, we wouldn't always have to be dealing with infrastructure and other issues underlying the system itself," Fletcher said.

After an extensive procurement, in 2013 DTS chose the cloud-based ITSM solution offered by ServiceNow. In just six weeks, DTS had implemented the system, integrated it with Utah's single sign-on portal and completed training for all users — including about 100 agency procurement personnel and 725 DTS employees.

The new system incorporates an array of functions, including:

- ☑ Incident and problem management (service desk)
- ☑ Hardware and software procurement
- ☑ Self service/request fulfillment
- ☑ IT knowledge management
- ☑ Reporting and SLA management
- ☑ Asset management
- ☑ Portfolio management
- ☑ Configuration management

"Getting all of that onto a single platform was critical, especially a platform that could integrate with our real-time support system," Fletcher said.

The platform was quickly embraced by the organization's employees and the agencies it supports. In the first year of operation, DTS used the system to manage more than 190,000 service

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requests. (It now uses the system to manage about 120,000 service requests per year.) Among other improvements, it gave end users more options to report problems. For example, users now can create requests through an online portal or from a mobile device. Tracking and notification allows DTS employees to ensure a request gets resolved as quickly as possible. Hardware and software procurement has also moved online.

Realizing Significant Improvements

Migrating its service operation to ITSM in the cloud has helped DTS realize major financial benefits, including a one-time cost reduction of $3 million and more than $1.2 million in annual savings. The upfront benefit came from not having to replace some of the agency's older management systems, since the integrated platform included those functions.

The system's cloud-based architecture is responsible for the operational savings: DTS no longer needs internal resources to maintain on-premises technology for service management.

"We were able to reduce some support staff and reassign them to other issues," Fletcher said.

By integrating the ServiceNow solution with the department's business intelligence platform, DTS gained valuable insights, helping technicians get to the root of persistent problems that once created extra work. For example, end users kept creating requests to help reset their passwords.

"We identified where the issues were and automated those processes," Fletcher said. "We saved a lot in that area by reducing the number of requests and support calls by about 80 percent."

ITSM in the cloud has also improved the way agencies procure new technology. Automating the approval process and associated workflow has cut the process in half, from eight days to four days.

"It's a lot simpler and quicker now, and people can do it from their mobile devices," Fletcher said.

Another benefit is simplified billing for IT services. In the past, DTS used several separate billing systems. State agencies had to aggregate data from multiple sources to understand which services DTS had provided them, and what they were paying for those services.

"Now they can find information about all their services, including the associated costs, in one place," Fletcher said.

Finally, migrating to an integrated platform has given agencies a one-stop shop for IT services.

"People know where to go for all their issues associated with IT support, whether it's purchasing a new laptop, or getting help with a password or buying software," Fletcher said. "And since it's all cloud-based, it's accessible online and through mobile devices."

Going Further with Asset Management

Another big change Utah has seen since it implemented ITSM in the cloud is the advent of a new asset management capability. DTS started implementing ServiceNow's Asset Management module, part of the ITSM solution, in June 2015. The goal was to better manage and track the state's desktop computers, laptops and thin clients.

In Utah, each agency buys its own computer hardware, but DTS maintains the records on those machines. Because it bases its service billing on the number of machines an agency has in house, it's important to keep an accurate inventory.

DTS formerly used spreadsheets to monitor computer assets throughout the state, assigning technicians to record new machines as they installed them, moved them or took them out of service. Unfortunately, those spreadsheets were never entirely accurate.

"It was kind of a patchwork," said Dan Frei, chief financial officer (CFO) at DTS. "Some people were using one spreadsheet; some were using another."

Even when technicians tried to consolidate their information in a single document, the numbers never quite reflected reality.

That got DTS in trouble with agencies, where auditors were counting machines on their premises, making spreadsheets of their own and then asserting that DTS's billing was wrong.

"We didn't want 23 agencies going around counting," Frei says. "We wanted a single source of truth."

DTS found it especially hard to track computers after they were entered into inventory.

"Agencies complained to us, 'We have these computers we bought, but we don't know where they are,'" Frei said. "'Are they still being used? Have they been taken? Have they been retired?'"

Imprecise asset management in Utah also raised security issues. According to standards established by the National Institute of Standards and Technology (NIST), keeping an accurate inventory of physical devices is an important security measure. Among other benefits, it helps technicians respond faster to security alerts, since they know where each machine is and how it's configured, and it ensures that techs install the necessary security patches on every machine.

Over the years, DTS tried several times to improve its asset management processes. In one instance, it sent technicians out to canvass the state, counting machines and putting the information into a single inventory spreadsheet.

"We didn't have the right tools, and we didn't have a good process," Frei said.

For example, there was no bar code scanning software to capture serial numbers. DTS obtained an accurate, one-time snapshot of its computer assets, but it had no sure way to update the spreadsheet as machines were moved or retired.

That all changed after DTS implemented its new ITSM platform. Now, the organization had tools that were up to the challenge. Other elements also fell into line.

"We had the right team in place, and we got buy-in from senior leadership," Frei said.

Using the ServiceNow platform, DTS inventoried and tagged more than 30,000 computers, including both billable and non-billable equipment. Technicians use bar code scanners to capture a serial number

BY INTEGRATING THE SERVICENOW SOLUTION WITH THE DEPARTMENT'S BUSINESS INTELLIGENCE PLATFORM, DTS GAINED VALUABLE INSIGHTS, HELPING TECHNICIANS GET TO THE ROOT OF PERSISTENT PROBLEMS THAT ONCE CREATED EXTRA WORK.

from each asset, immediately making that computer billable. A technician also scans the machine again each time it's moved and when it's taken out of service. This practice ensures the system always has an accurate count and knows the status of each asset.

The asset tracking system generates a list of devices to be billed and transmits that information to Utah's billing system. It also automatically generates information for agencies to review, either directly in the console, or in a PDF file that DTS distributes monthly. At any time, an agency

employee or DTS technician can query the system to find information on a device, such as its service history, warranty status and who it is assigned to.

The system starts monitoring an asset the moment an agency initiates a purchase.

"We can track how long it takes to get approvals, how long it takes the vendor to ship to us, how long it takes us to inventory it and get it out to the location where it's going to be installed, and how long it takes the techs to install the computer," Frei said.

Early on, some service technicians resisted the project. "I'd hear things like, 'I work on tickets; I don't do inventory,'" Frei said.

However, as employees discovered the valuable information the system could generate from inventory data, they got behind the project.

Better Security, More Revenue

With a real-time, highly accurate view into inventory, DTS now complies with NIST's asset management standards aimed at security. The department knows where every desktop computer, laptop and thin client is located and to whom that

> "We've never had a project with such far-reaching effects. It's quite an amazing feat."
>
> — Dan Frei, Chief Financial Officer, Utah DTS

machine is assigned. That knowledge is invaluable, for instance, to ensure laptops carrying sensitive material don't fall into the wrong hands.

Also, if DTS becomes concerned about certain security vulnerabilities, the asset management system can help pinpoint which machines technicians should check first.

"We can run reports and see if we have machines that could be susceptible to those vulnerabilities," Frei said.

The asset management system has also increased the accuracy of DTS's billing. With better inventory processes, DTS has increased the number of billable assets it's tracking by more than 1,000.

DTS has used the extra money to buy more bandwidth for the state's network, replace network gear and add much-needed staff, among other initiatives.

DTS now has an accurate count of all devices deployed across the state. The

agency's leaders trust the data in the asset management system, especially since they can see it for themselves at any time.

"They wanted to be billed correctly, and they weren't in the past," Frei said.

Conclusion

By putting all its service functions onto one management platform in the cloud, and gaining a single, accurate view of devices across the state, DTS has significantly boosted the quality of its service. It's also operating more efficiently, cutting costs and bringing in more revenue.

Frei said he ranks the asset management portion of the ITSM initiative among the top five projects at DTS in the dozen years since Utah formed the department.

"We've never had a project with such far-reaching effects. It's quite an amazing feat."

This piece was developed and written by the Government Technology Content Studio, with information and input from ServiceNow.

Getting to Tech Woke

As public trust in social media wanes, agencies must look at their own policies as well as those of the platforms they use.

If you've ever written a policy statement on, say, privacy that nobody has ever read, you'll be excused for enjoying the schadenfreude of this moment as Facebook, Google, Twitter and other technology platforms face scrutiny on both sides of the Atlantic.

You may have enjoyed the sight of Mark Zuckerberg wearing a suit — two days in a row — as he tried to explain himself during congressional hearings that generated little heat, and even less light.

But that feeling of joy from the "tech-lash" may be short lived. New but long-planned European privacy rules are pivoting the policy debate from Washington, D.C., to that unseen foreign shore. The irreducible core of the European privacy rules is the requirement to provide opt-in consent to share personally identifiable information, which includes the right to withdraw consent.

That is appealing to many users who have begun to reject the proposition that they pay for free services using personal data as currency. That's enough to rock your business model. "However," as fellow *Government Technology* columnist Daniel Castro reminds us, "sharing data on Facebook is a feature, not a bug." Castro, who is also the vice president of the nonpartisan Information Technology and Innovation Foundation (ITIF), cautions that becoming even vaguely European would "stymie the U.S. digital economy."

ITIF and other like-minded organizations are not wrong when they insist that we have to define the problem correctly if we are going to find a suitable solution. That includes figuring out who should be held accountable for what, and where current laws (or their enforcement) fall short.

ITIF also advocates for giving the private sector a wide enough berth to develop and prove out solutions to the problems of data abuse. The uneasy compromise we seem to be moving toward is regulation if necessary, but not necessarily regulation.

In the meantime, public agencies have a responsibility to take a fresh look at not only their own terms of use, but also those of the platforms they use in serving their publics. Are the two compatible? If you cannot change the providers' terms, are you willing or able to change your own? Or stop using the platform in favor of another that is more consistent with policy priorities and values?

Values are front and center in the findings of an international longitudinal study of public trust. In its ninth annual Trust Barometer, the global communications and advisory firm Edelman has documented dramatic shifts in public opinion. The public has been whipsawed by scandal and the dizzying speed of technological and societal change.

Not surprisingly, trust in social media has dropped 11 percent among the general population in the U.S. The number plummets by 28 percentage points among college-educated respondents, or what Edelman calls "the informed public."

Emerging technologies are also suspect. Compare a trust rate of 75 percent in technology overall — itself down 19 percent among the informed public in the last year — to significantly lower rates for the Internet of Things (63 percent), artificial intelligence (56 percent), self-driving vehicles (50 percent) and blockchain (49 percent).

Edelman helpfully puts numbers to both the tech-lash and the beginning of what could become an era of being "tech woke." More than three-quarters of respondents tell Edelman that technology companies should take a larger role in education (79 percent) and workforce preparation (76 percent). Almost two-thirds (64 percent) of respondents believe technology companies contribute to the greater good — even as trust in government fell 14 percentage points in the last year.

After a decade-long dalliance with what entrepreneur, Internet critic and author Andrew Keen calls "the cult of the amateur," voices of expertise are regaining credibility. Technical experts, economists, policy analysts and entrepreneurs now register credibility levels of 50 percent or higher. CEOs recorded a seven-percentage-point gain since 2017.

The public we serve is looking for someone to lead at this disruptive moment. Edelman CEO Richard Edelman says two-thirds of the population wants business leaders to act and not wait for government in ushering in an era of being woke. But they cannot get there on their own. The necessary and often thankless job of translating intent into a framework for moving forward falls to those in public service. gt

Paul Taylor is the chief content officer of e.Republic, *Government Technology's* parent company.

Turning Down the Heat

Hantavirus, a rare but potentially fatal disease that can cause respiratory problems, is practically unheard of in Connecticut. As of January 2017, the U.S. government doesn't know of anyone having contracted the virus in that state.

But in the future, Connecticut might have to get ready for hantavirus. That's because as temperatures steadily creep upward in the decades to come — something virtually guaranteed to happen, due to an increasing concentration of greenhouse gases in the Earth's atmosphere — the habitat of the hispid cotton rat will expand. Today, the hantavirus-carrying rat is mostly found in the Southern U.S., venturing as far north as the Chesapeake Bay.

As temperatures rise, more of the U.S. will become hospitable to the rodent. Between 2070 and 2100, under a United Nations Intergovernmental Panel on Climate Change scenario that estimates a temperature rise of 3.4 degrees Celsius worldwide by the end of the century, the hispid cotton rat will likely have reached Connecticut.

"If you're going to be in an area that's going to see hantavirus ... for the first time, you need to have that on your list of differential diagnoses," said Este Geraghty, chief medical officer and health solutions director at Esri, the mapping software company. "It needs to occur to you that hantavirus could be a potential diagnosis."

Government doesn't typically plan to deal with a problem that lies so far in the future. Yet this is the nature of climate change: When it comes to questions of timing and magnitude, uncertainty reigns. Climate change has upended how we view the future. Consider the following predictions: Extreme weather will wreak more damage on people and property; low-lying cities will flood more often until some parts become permanently submerged and must be abandoned; habitats will change and spread diseases to new areas; drought will test the ability of humans to live in certain areas; and heat waves will stress infrastructure to its limits during the warmest months of the

By Ben Miller / Staff Writer

Can government – with the help of technology – manage the impact of climate change?

year. Perhaps most dramatically, people will migrate to new places en masse, whether for opportunity, comfort or survival.

All of this is very likely to happen, even if every country takes quick, dramatic steps to cut greenhouse gas emissions. That's because the atmosphere has already changed — the gases now inhabiting it will last for hundreds of years.

Even if we manage to slow down the rate of carbon dioxide emissions and reduce the severity of some climate-related issues, trouble is on its way. The world must either prepare for these changes or be caught off guard when they do happen. That's where government is right now: dealing with today's

problems, with assurance that many of them will get worse as time goes on.

"Climate change is a challenge that intimately disrupts the lives of Americans across our country already. It's a challenge we should all know beyond the graphs and news headlines, because it affects us all," wrote Victoria Herrmann, president and managing director of the nonprofit Arctic Institute, in an email to *Government Technology*. "And looking beyond climate change mitigation, we all have a part to play in helping our country adapt to the effects of climate change we can no longer avoid."

Fortunately for government, it has several decades to prepare before many of those climate change-related challenges

will mount. And here's the good news: There are already many technological tools available today to start preparing for and adapting to those changes.

A lot of the technological tools out there today have to do with planning: when things will happen or where they'll happen or how they'll happen. Some can be used to deal directly with the effects of climate change, but most of them have more to do with enhancing what government knows. For all that technology can do for government, knowledge just might be its most effective weapon against the challenges of the future.

For more tools, as well as hyperlinks to tools, visit the online version of this story at govtech.com/climatechange.

Tracking fires

Steadily increasing temperatures will make it easier for fires to start in both urban and rural environments, and water scarcity will increase the chances those fires will grow out of control. But with technology, government is learning to better track, respond to and even predict fires.

In San Rafael, Calif., the city government has been using performance management software to follow the number and locations of fires related to homeless encampments — a problem because those fires can sometimes escape their bounds and spread.

In New Orleans, the city merged Census demographic data with building information and fire history to create block-by-block assessments of fire risk. Then it targeted smoke alarm outreach efforts to those areas.

There are also emerging efforts, like those coming out of the University of British Columbia, to monitor forests for wildfire risk using satellite imagery to assess moisture levels in plants. Finally, drones are helping firefighters manage those fires better. Equipped with cameras, drones can help crews on the ground get a quick aerial view of fires, while infrared cameras can help find hot spots.

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Measuring the rise of the seas

Scientists have done some extensive work modeling how much the sea level will rise around different parts of the U.S. coast, including specific locations in communities that will be most affected. Several tools can visualize this data. The U.S. Army Corps of Engineers has put together one that emphasizes rise over time, while the organization Climate Central has published different tools that focus more on location detail.

Utilities also have access to tools that plan for changing conditions. One example is the Environmental Protection Agency's Climate Resilience Evaluation and Awareness Tool (CREAT), which helps water utilities identify what challenges — rising sea levels, for example — they will face in the future due to climate change, and then come up with a response to them.

Mapping the spread of diseases

The hispid cotton rat problem is a perfect example of how climate change will affect health. But it's not just hantavirus that the U.S. will have to worry about. Habitats will be changing everywhere, so a lot of states will start seeing diseases they haven't had to worry about much in the past. Take the Zika virus, for example. When the virus, borne by specific species of mosquito, first broke out in the U.S., Esri rushed to provide tools for government to track the disease, predict where it might go next and fight its spread.

Interactive maps can also be used to do certain kinds of work quickly. Esri has tools that help coordinate mosquito control activities. For example, a map can show where employees with mosquito-spraying equipment are. Then managers can plot out reports of standing water or clouds of mosquitoes on the map and assign an area to an employee.

Then they can plan what that employee will need.

"I might draw an area that, based on this report, I think needs to be sprayed. So, the computer calculates the acreage, and that translates into how much pesticide I need on my vehicle to handle this request," Esri's Geraghty said.

Digital maps can also be used to represent many layers of data, which can help cities monitor climate-related health problems. A map could show where a city has its worst problems with heat. Then it can show how many shade-providing trees are in that area, and how many cooling centers are within a certain walking distance. Finally, it can layer in the location of people vulnerable to heat-related medical issues, or it can show where there are lots of people working in jobs that require them to be outside during the hottest parts of the day.

ESRI

Sensing bigger storms

One problem with climate change is that it has a tendency to concentrate rain into shorter, more intense downpours, which can mean flash flooding in cities, where most of the land tends to be capped off with concrete and asphalt. In Chicago, the Array of Things project led by Argonne National Laboratory and the University of Chicago is demonstrating how networks of smart cameras, computers and sensors can help a city keep on top of the problem. The nodes that make up the Array can be fitted with rain gauges, which can report rainfall amounts in near-real time and give insights into how rain is falling differently across a city.

"It gives us much denser measurements across the city, so that those who are responding to the storm, whether it's a power company or the city, can get a sense of where the rain's falling and then look at where they should respond as a result," said Charlie Catlett, a senior computer scientist at Argonne National Laboratory who is leading the project.

The nodes also include downward-facing cameras connected to computers that use artificial intelligence algorithms to crunch the footage and look for standing water, and they can send back that data in near-real time. If a city were to install enough of those cameras looking at drains or flood-prone areas, they would be able to send people out to clear storm drains or do other flood mitigation work.

A private company, One Concern, also offers software to help government respond to disasters, including extreme weather such as hurricanes. The company helps cities identify, among other things, where the most vulnerable populations to different problems are located. That gives public officials the ability to quickly figure out where they should direct resources during an emergency.
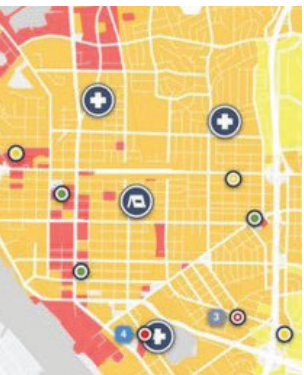
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Gauging stress on infrastructure

Chicago's Array of Things project also has microphones and accelerometers to detect vibrations. That means they can monitor infrastructure for signs of stress. By measuring temperatures and light intensity, they can also offer insights into the kinds of things that put stress on infrastructure, potentially giving government a better idea of what infrastructure might need maintenance the most.

Extreme weather can trigger an acute infrastructure problem by knocking out power to valuable assets, such as hospitals, shelters and government buildings. An increasingly popular solution to that problem is microgrids. By putting solar arrays on rooftops, installing batteries that store power, investing in efficient technology and using software to coordinate power usage, critical buildings can keep running with power even when the rest of a city goes dark. **gt**

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A More Modern CRM

A modular, cloud-based system positions Colorado on the leading edge of benefits management.

By David Raths / Contributing Writer

Most state government health and human service agencies continue to rely on unwieldy legacy software to run their eligibility systems. Because of their complexity, updates and replacement projects often end up over budget and behind schedule. But with the encouragement of the federal government, some states have begun deploying commercial cloud platforms and a modular approach to speed up development and reduce risk.

In January Colorado announced it would move its Colorado Benefits Management System (CBMS) to Salesforce's customer relationship management platform. More than 5,000 county and medical assistance site employees across the state use CBMS to determine citizens' eligibility for food, cash and medical assistance. Each month, the system is used to process approximately 30,000 new client applications and 40,000 client reauthorizations. In addition, CBMS communicates with approximately 50 external systems.

Launched in 2004, CBMS has had some high-profile problems over the years. A 2011 report by two University of Denver professors titled *Seven Years of Failure* noted that "since 2004, there have been a series of promises and attempts under two separate administrations to fix CBMS so that it meets performance requirements. Nothing has worked."

State IT officials point out that although CBMS is still a monolithic system with millions of lines of code, it actually has been fairly stable over the last few years. "We put a lot of work into stabilizing it, just because of the sheer importance of it," said David McCurdy, the state's chief technology officer. "But as we looked to the future, we had to ask ourselves if we want to maintain that code set or invest in something that is going to have a lot longer life and integration with other things in the cloud."

McCurdy described the strategy this way: The guts of the system — the rules engine, database and enterprise service bus — are not being rewritten. "They will operate the same way they do now," he said, "but we are moving them from the state data center and legacy IT infrastructure to Amazon Web Services." Meanwhile, Salesforce will provide the new front-end user experience for the county-level workforce.

OIT executives believe that if they can build a more modular system and a new user experience on the front end, they can be more responsive to agency partners and make changes faster with lower risk and potentially lower cost.

The U.S. Centers for Medicare and Medicaid Services is funding 90 percent of the work. The timeline of the project, which is expected to cost approximately $25 million, calls for most of the development

and design work to be done in 2018. "We plan to roll out the application initiation module this September," said Herb Wilson, director of health information services and CBMS in the Governor's Office of Information Technology (OIT). "The balance of the functionality will roll out in 2019."

The system is being designed with a "micro services" approach, Wilson explained. "If we need to change the application initiation function in the future, we can change the front-end layout and change the workflow and rules just related to application initiation, and not impact the rest of the functions."

McCurdy noted that the life cycle for changes to CBMS has been about nine months. "Our goal is to cut that down so we can iterate faster. With micro services, it is less risky and a smaller development effort, which should be faster and more positive in the longer term."

The decision to use the Salesforce platform is an extension of previous work in other state agencies since 2011. "I think the state has around 95 Salesforce apps," McCurdy said, "which is one of the largest pools of Salesforce apps of any state government. There is a comfort level with Salesforce as one of our standards."

Colorado is working with Deloitte Consulting on the system transformation, as well as maintenance and opera-

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tions. Deloitte principal Sanjay Shah noted that while many other states are making significant strides toward moving to the cloud, "Colorado will be one of the first to move an entire integrated eligibility case management system to the cloud and use Salesforce to give their citizens a better customer experience."

Shah pointed out other potential benefits: "When CBMS is fully implemented, the system will comply with strict FedRAMP [Federal Risk and Authorization Management Program] security standards; it will be faster and easier to enhance; it will have automated disaster recovery features; and the cost of the infrastructure will be more predictable for state budget officials."

The new user interface should make caseworkers' lives easier, Wilson said. "A simple example is enhanced searching. In Salesforce, everything is indexed, which allows so many more data elements to be searchable, so the searching capabilities alone should help them be more efficient in doing their jobs," he explained. "We are looking at how to make the layout and navigation more natural, so that it is like navigating other websites."

Using an agile approach, OIT is bringing in representatives from the Department of Human Services, the Department of Health Care Policy and Financing, Connect for Health Colorado (the state health insurance exchange) and county representatives to participate in application design sessions three times a week. "We are striving to lay out the screens in a way that is more modern and more natural, but not change it so much that we have to completely retrain the workforce," Wilson said.

Nicole McNeal, a director at consulting firm Public Knowledge, helped the state with strategic planning around its benefit management systems. She said Colorado's approach is quite innovative, although a few other states also have made inroads. "The state of New Jersey has a full eligibility system in Salesforce," she added, "and was successful in getting a fully configurable cloud-based solution deployed pretty quickly."

In another example, Delaware has just gone live with the nation's first cloud-based system for child-welfare caseworkers. State CIO James Collins said he saw several advantages to the platform-as-a-service approach. "Sometimes these systems take so long to build that by the time you are done, some of the technology has to be refreshed almost immediately," he explained. "We wanted to have an evergreen technology that the users could have some control over. Part of our strategy is to leverage these platforms that are highly configurable, so that non-IT people can actually partially administer the system and make changes to it. That

helps us keep cadence with the innovation demands that our agency partners have."

Another advantage, Collins said, is that cloud-based platforms are natively mobile. "Our governor wants services pushed out to where citizens need them," he said. For instance, Delaware is putting social workers in probation and parole offices to meet people where they have the need and wrap services around them. "That necessitates a mobile workforce," he added, "and our applications have to be responsive."

So why haven't more states taken this approach? Some of it may have to do with perceived risk and procurement limitations, McNeal said. "This is such a complex environment, with lots of rules and regulations, and a limited marketplace of vendors. It is a high-risk area to play in, so I think a lot of states still play it safe."

This change is not just about the benefits of software as a service, McCurdy stressed. It is also about attracting developers interested in learning newer programming languages and using bolt-on apps in the cloud. "We are going to be taking advantage of artificial intelligence and advanced analytics," he said. "By going to the cloud, we can focus less on all the hardware and operating systems updates and more on core development delivered back to our customers." ᵍᵗ

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cio central

King County, Wash., Appoints CIO

Having served as interim CIO following the departure of Bill Kehoe for L.A. County last October, **Tanya Hannah** has been named the permanent CIO for King County, Wash. Hannah first joined the county IT department as deputy director in June 2017.

CIO OF KANSAS CITY, MO., RETIRES

After nearly 30 years of city service, Kansas City CIO **Mary J. Miller** retired at the end of April. Deputy CIO **David Evans,** also a 30-year staffer, has taken over the role.

BOSTON CDO MOVES TO FACEBOOK

In May, Boston's inaugural chief data officer **Andrew Therriault** announced he had left the city after two years in his role and will now work at Facebook as a data science manager.

Oregon CIO Steps Down

As of June 1, Oregon CIO **Alex Pettit** resigned from his role, announcing a move to work with the secretary of state's office as business community program manager. Pettit was previously CIO of Oklahoma until he came to Oregon in 2014. Deputy CIO Terrance Woods will serve as interim CIO until a permanent replacement is found.

Nevada Names New CIO

Following the departure of Shanna Rahming in February, Nevada appointed **Michael Dietrich** to serve in the state's top technology position. Dietrich comes to Nevada from the private sector and ranks cybersecurity as his top priority.

Sastokas Moves to L.A. Metro

April 9 was **Bryan Sastokas**' first day as CIO of the Los Angeles County Metropolitan Transportation Authority. He previously served as CIO of Long Beach, Calif., since 2015. Long Beach has named Lea D. Eriksen, assistance director of finance, as interim director of the Technology and Innovation Department.

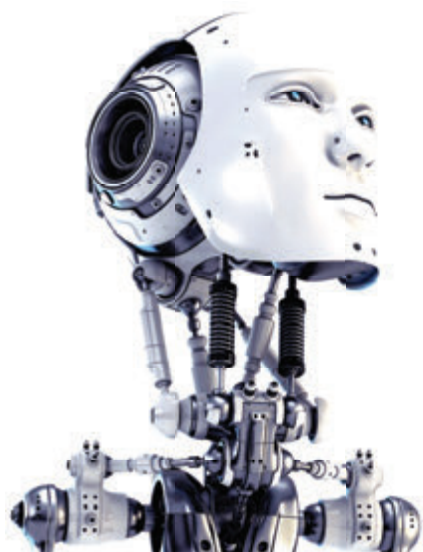## MASSACHUSETTS SECRETARY DEPARTS

Effective June 18, **Mark Nunnelly** will leave his position as Massachusetts' inaugural secretary in its Executive Office of Technology Services and Security. He will be replaced by **Curt Wood,** who has served as the state's undersecretary for forensic science and technology in the Executive Office of Public Safety and Security since 2011.

San Leandro, Calif., Innovation Officer Exits

Chief Innovation Officer **Deborah Acosta** left her position with San Leandro, Calif., to lead Women Entrepreneurs Accelerate, a for-profit women's entrepreneurship incubator aimed at closing the gender gap in Silicon Valley. Acosta had been with the city since early 2013.

SOUTH DAKOTA CIO RETIRES

Dave Zolnowsky, the commissioner of the Bureau of Information and Telecommunications (BIT) for South Dakota, retired March 30, after six years in the role. Gov. Dennis Daugaard appointed BIT's CTO and Director of Telecommunications Pat Snow to serve in an interim capacity through the end of the year.

Gamiño Announces New Private-Sector Role

After seven years in IT leadership for major U.S. cities, including San Francisco and New York, **Miguel Gamiño** has accepted a position as executive vice president for global cities at Mastercard, focusing on partnering with cities on urban problems.

Former New Jersey CTO Heads to Private Sector

Having departed his position as chief information officer of New Jersey in January, **Dave Weinstein** announced he will take up the role of vice president of threat research at Claroty, a New York-based cybersecurity firm.

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CLOSING THE GAP:

About 15 percent of the world's population — more than 1 billion people — have a disability, ranging from temporary ailments to permanent impairments, according to the World Bank. Yet the World Health Organization reports that only one in 10 of those disabled people has access to assistive products that can help them interact better with the world around them. Microsoft announced at its annual Build conference in May that the company aims to develop tech to reach that underserved population and will invest $25 million in grants over five years to develop programs that will use artificial intelligence to assist those with disabilities. SOURCE: ENGADGET

AI BS

Carnegie Mellon University has been called the best computer science school in the country by *U.S. News and World Report* and currently offers about a dozen artificial intelligence-related courses. But starting in fall 2018, the Pittsburgh college will offer what it says is the first of its kind in the nation: an undergraduate degree in AI. Courses will include math and computer science, as well as machine learning and neural networks so students will learn not only how to use AI tools, but also how to create new ones that will have real-world impact. SOURCE: VENTURE BEAT

GETTING CARDED:

Thanks to a law passed in December, New York City policing is getting a little more transparent. Following an interaction with the police that does not result in an arrest, the Right to Know Act requires officers to give the citizen a business card that explains how they can acquire the officer's body-cam footage of the incident. The card includes the officer's name, rank and shield number, along with instructions for navigating the relevant NYPD website. The program is currently in a pilot with four precincts and will roll out citywide by the fall. SOURCE: CNN.COM

55%

In March, Norway's electric vehicle market hit a new personal best: According to a report from CleanTechnica, completely electric and hydrogen fuel cell cars made up 37 percent of new car sales in March in the Scandinavian country, which, when combined with the number of plug-in hybrids sold, totals more than 55 percent of the vehicle market. While the U.S. also hit a record high for plug-in cars sales in March, CNN finds just 20 percent of Americans say they are likely to make their next new vehicle an electric one. SOURCE: TREEHUGGER.COM

Send Spectrum ideas to Managing Editor Lauren Harrison, lharrison@govtech.com

Looping in Leadership

Getting agency heads on board with social media can ensure your efforts don't go unnoticed.

Government social media coordinators are sometimes so focused on doing their work well that they forget the tremendous value of bringing in agency leaders. There's an art to doing this strategically, and it ensures a consistent reminder to leadership of the good work you're doing for your organization.

Don't get into the mindset that as long as you remain under the radar, your social media program can continue to function unbothered. While this may be the case for some agencies, more often than not, communicating your successes to leadership will help reinforce buy-in and ensure continued growth of your program. Social media should be constantly evolving, adapting and meeting your citizens' needs. The best way to keep that happening is to loop in leadership on your social media successes and strategies to earn their ongoing support.

Avoid Information Overload

Virtually all the social media platforms you use offer some type of data analytics. This ranges from information on reach and impressions to demographic characteristics to full-blown charts and graphs. Before you start pulling together 20-page social media reports with all the supporting data you can find, take some time to consider who you're preparing the reports for, and appropriately tailor the style and information you present.

Department heads are usually interested in social media results that pertain directly to their programs, while the highest-level reports are most likely to resonate with executive leadership and elected officials. I always recommend using visuals with charts or graphics that highlight the pertinent information and make it easy to digest with only a glance (which is usually all the time leadership can afford to spend). Keep in mind that leadership has many demands on their time, and a short executive summary of the key highlights is usually preferred.

Show, Don't Tell

Another approach for looping in leadership with your social media strategies is to directly involve them in some aspect of it. For instance, ask them to participate in a particular tweet-along, live video or live tweet. This tactic can be fitting for department heads, commissioners, mayors, chiefs — virtually any leadership position.

Make sure that you're extremely organized, the activity is well-planned and they're well-coached. Include an outline, talking points and anything else that will enhance an agency head's experience. The point is that they'll see your behind-the-scenes process, which is likely much more sophisticated than they expected.

When using the show-don't-tell approach, don't forget to come full circle when the social media activity is complete and provide them a mini-report showing them the direct results of their involvement. Seeing the impressions, reach, comments and so on can show them how their participation resulted in tangible interactions. Sometimes, drawing the direct connection between effort and real-world results can make all the difference.

It continues to be an exciting and important time for social media in the public sector in 2018, and support from leadership can be critical to your agency's efforts. gt

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

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