Forbes
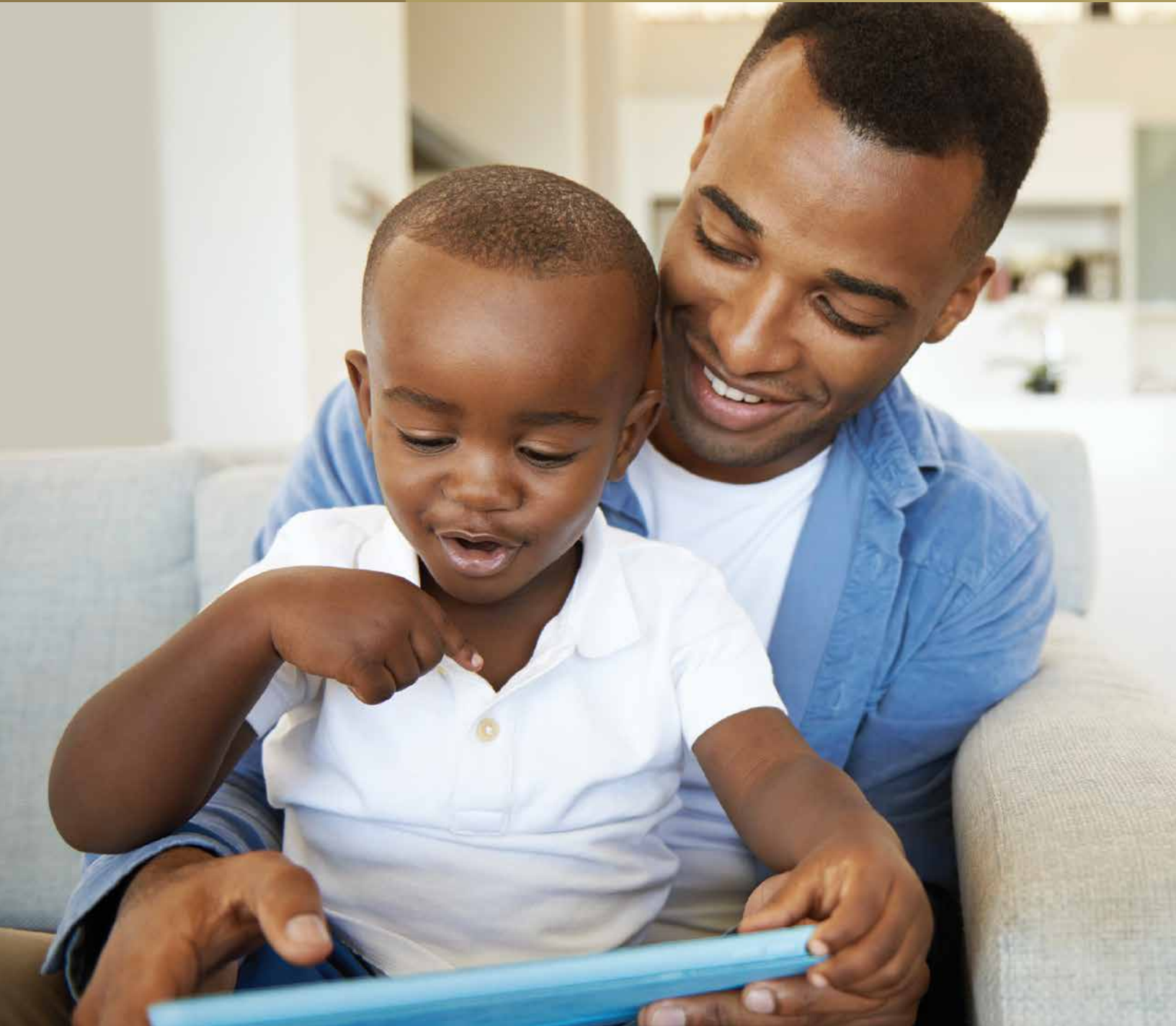## INSIGHTS

DIGITIZING HUMAN SERVICES

FIELD NOTES AND FORECASTS FROM THE FRONT LINES
OF GOVERNMENT'S TECHNOLOGICAL TRANSFORMATION

IN ASSOCIATION WITH: **KPMG**

CONTENTS

FOREWORD

Technology is transforming the provision of human services.

- It may be driven by a policy directive from a mayor, governor or still more senior executive.

- The key driver is often financial: a sobering realization that tight government budgets are here to stay leads to the need to do more with less.

- No doubt rising expectations play a role, because as citizens experience greater ease and convenience in their broader commercial lives, they wonder why they cannot interact with government on similar terms.

- Or the focusing element could be the passionate desire among government workers and leaders to simply do more to help constituents, be they seniors, the homeless, at-risk children, the developmentally disabled or anyone similarly in need.

Whatever the driving force or forces may be, leading agencies are doing more to harness technology.

oday this means dramatically greater effectiveness in tools provided to workers: for example, a case management system, smartphone accessible, helping to share information between and coordinate the roles of a wide range of related agencies and external providers. It could mean more data-driven, predictive tools, putting the right information in the right hands at the right time to drive optimal resource allocation, decision making and outcomes. Or, adding cloud capabilities to introduce a host of benefits including lower cost and scalability.

For citizens, this leads to exponentially greater visibility and access to government services—a transformation in the human services user experience. It may begin with web-based tools. But because research shows that citizens in need are far more likely to access the web via mobile, the key and yet still underutilized tool becomes the smartphone. Mobile applications can help clients of government to more readily identify programs best suited to their needs.

> **Mobile applications can help clients of government to more readily identify programs best suited to their needs.**

Additionally, mobile can help clients more easily find and secure needed forms or schedule interviews, exams or other procedures essential for program qualification and intake. Less time in lines and waiting rooms; greater benefit from the government programs that are helping them get on with their lives. In all cases, the technology in the background is leading to a more efficient and effective spectrum of experience between agencies and citizens.

Of course, the ultimate gauge of user experience is outcome-based: how effective is government in meeting the needs of the citizen? Are we becoming more effective in alleviating homelessness, preventing suicides or minimizing acts of violence toward children? Leading agencies are doing more—such as harnessing data to better define their most critical metrics. And they're recognizing the need to do more to design technology from a practical and behavioral worker or citizen perspective, not simply automate existing practices.

This latter point bears repeating—and exploration. It is not enough to simply design a case management tool or mobile app with the right fields to capture or share the needed information. Tools and processes need to be designed from a user perspective. How can the language be simplified; the required number of clicks or swipes reduced; the process be tweaked to obtain optimal results? Leaders are using behavioral science techniques—testing and observing end-users in real life—to learn how small adjustments can deliver massive improvement. To develop tools and approaches that are truly intuitive and effective for critical processes, agencies should begin viewing behavior-based design as less of a luxury and more of a necessity.

But perhaps most of all, transformational results require a shift from an agency-by-agency focus to a citizen-based perspective. What is the full raft of services this citizen, this family, this community needs? And how best can the entire spectrum of human services providers collaborate and coalesce, harnessing process and technology to optimize outcomes? The ideal may seem far away—such an approach turns practice on its head—but a growing number of government leaders are taking up the challenge. And where leadership meets vision, the results, as the work below demonstrates, can be remarkable.

The core lesson: apply technology, reinvent core processes—and radically move the needle. Getting it done requires no small degree of collaboration. The provision of human services tends to involve a complex interplay of federal, state and local agencies, for- and not-for-profit providers, charitable organizations—to name only the key players. It also requires visionary and committed leadership, far closer collaboration between the front lines and IT staff, as well as integration across a wide array of technology platforms and tools.

The following report reaches out to government agencies at all levels—metropolitan, state and federal—to sample the collective pulse as it relates to the provision of human services. Some of the agencies are at the beginning of their journey. Others are well along, demonstrating remarkable progress alongside still greater ambitions. We celebrate this progress—insist there is still a long way to go—but submit this work to inform, inspire and support the progress of all others pursuing such a transformative vision. Good luck in your missions—and your journey.

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ABOUT THIS RESEARCH

This report was researched and written by Forbes Insights. It is sponsored by KPMG.

Our findings are based on interviews with over 30 senior executives from a range of government agencies, consultancies and technology providers.

Both Forbes Insights and KPMG extend their thanks to the following executives, who are quoted in the report:

- **Lauren Aaronson**, Assistant Deputy Commissioner, Office of Business Process Innovation at Human Resources Administration, City of New York

- **Uma Ahluwalia**, Director of the Montgomery County, Md., Department of Health and Human Services

- **Paul Baltzell**, CIO, State of Indiana

- **Jen Bump**, Director of Consumer Education and Data Services, Indiana Association for Childcare Resource and Referral

- **Maria Cancian**, Deputy Assistant Secretary for Policy, Administration for Children and Families, U.S. Department of Health and Human Services

- **Mike Carroll**, Secretary, Florida Department of Children and Families

- **Kathy Conrad**, Principal Deputy Associate Administrator for the Office of Citizen Services and Innovative Technologies/18F, Government Services Administration

- **Beth Davidson**, Acting State Health Information Technology Coordinator, Alaska

- **Nadine Dechausay**, Implementation Research and Project Manager, MDRC

- **Jascha Franklin-Hodge**, CIO, City of Boston

- **Linda Gibbs**, Principal, Bloomberg Associates

- **Gwynne Kostin**, Director, Digital Government Division, Office of Citizen Services and Innovative Technologies/18F, Government Services Administration

- **Alan Millar**, Executive Director, Idaho PTECH

- **Melissa Mowery**, Director, HOMEBASE, CAMBA

- **Stephanie Muth**, Deputy Commissioner for Social Services, Texas

- **Kim Nelson**, Executive Director, S&L Solutions, Microsoft

- **Andy Pitman**, Director, Health and Human Services Solutions, Microsoft

- **Simon Taylor**, Financial Management Services—Information Technology Services Business Applications Manager, Alaska

- **Maxwell Thayer**, CEO, Mobile Benefits

- **Stuart Venzke**, COO, Montgomery County, Md., Department of Health and Human Services

- **Albert Wall**, Division Director of Behavioral Health, Alaska

TECHNOLOGY
CHANGES THE GAME

Whether looking at a federal, state or local program; whether viewing roles of agencies themselves or the activities taken on by external profit-seeking or not-for-profit (NFP) entities: when it comes to the provision of human services by government, technology is the game changer.

This begins with pressure to transform the whole of government. But as work progresses, many of the most remarkable advances are taking place in human services. Consider the following perspectives, one each from the federal, state and local levels:

• Federal agencies have their marching orders

Kathy Conrad, principal deputy associate administrator for the Office of Citizen Services and Innovative Technologies/18F (OCSIT), says 2009 began a sea change in the prioritization of technology adoption by federal government. Back then, the White House challenged federal agencies to rethink their use of technology.

Even sharper focus took hold in 2012, says Conrad, "when the White House went on to release its Digital Government Strategy (DGS)." A recognition was setting in "that the sorts of user experiences citizens could achieve in their commercial lives—such as with anywhere, anytime, any device interaction—needed to be paralleled by government," says Conrad.

> **"A recognition was setting in that the sorts of user experiences citizens could achieve in their commercial lives—such as with anywhere, anytime, any device interaction—needed to be paralleled by government."**
>
> **— Kathy Conrad**
> Principal Deputy Associate Administrator,
> Office of Citizen Services and
> Innovative Technologies/18F (OCSIT)

The DGS provided a vision for improving technology, says Conrad. But the focus would be not merely enhanced efficiency but more important, overall "mission effectiveness" or, in other words, the drive to transform outcomes. Such work demands new ideas for rethinking underlying technology and process architectures in ways to enhance citizen-facing tools and "significantly expand the sharing of public data."

It is with just such ideas in mind that a handful of agencies were pulled together to create OCSIT. Since its formation, its charter, says Conrad, "is to work with federal agencies to use appropriate technologies and processes to better deliver their mission to the public."

The work, says Conrad, "is transformative—helping agencies learn new ways of operating or use new tools like the cloud or mobile to deliver government services in the ways people expect today." This includes oversight of everything from innovative resources like FedRAMP, an approved list of fed-certified technology tools, to the creation of DigiGov University, a learning-focused community primarily for federal but also state executives (both detailed later in this report). Although the work touches all phases of government, there is no doubt, says Conrad, that much of this advancement and innovation "is occurring in human services."

• Leading states are following suit

Expectations were clear in 2013 when incoming governor Michael Pence appointed Paul Baltzell to the position of CIO for the State of Indiana. As Baltzell explains, owing to its transformative potential, he was asked by the governor to pursue "the vision" of making Indiana "a leader in the use of technology." Initial work focused on relatively low-hanging fruit such as IT consolidation, already begun under the prior administration but now ongoing.

But future plans are even more ambitious, focusing on the use of technology to enable everything from stronger interagency cooperation, to a more citizen-centric approach featuring improved mobile and online tools for citizens, to greater use of predictive analytics. Essentially, says Baltzell, the state IT department's role is shifting "from keeping the lights on" to enabling step change in the "effectiveness of government."

City of Boston

• **Major cities are getting serious**

Jascha Franklin-Hodge, CIO of the City of Boston, says the city is "on a binge—a mission to leverage technology to make government more efficient and effective." Focus crystalized with the election of Martin Walsh, "the first mayor of Boston to have a computer in his office that he actually uses—and a smartphone," says Franklin-Hodge. Under Walsh's leadership, "we're challenged to look at tech as an essential ingredient to successfully implement any government program you might conceive of or improve anything already in the field."

Recently tech-infused processes for the city already include everything from enhanced, mobility-enabled tools for city building and health inspectors to vastly greater interagency coordination among housing, mental health, drug abuse and homeless services. In each instance, "by stepping back to focus on the mission [and the individual citizen]—what is it we're trying to achieve?—we've been able to find the ways technology can improve outcomes." Going forward, says Franklin-Hodge, "there are very few areas in government where the right technology and the right information in the right places and times can't deliver [breakthrough] results."

STRUCTURAL CHALLENGES:
THIS IS NOT THE PRIVATE SECTOR

I n their lives as consumers, citizens have come to expect a great deal from business. Choices are abundant, as is information about usage and pricing. Desires can be ordered, paid for and delivered the same day with one click or voice command. Because sellers do their data homework, offers are increasingly personalized and relevant, such as discount coupons downloading to a smartphone based on proximity to a store display. Logistics, product development, marketing, finance, production: all endeavor to work seamlessly, presenting one face to the customer. Businesses know their customers—intimately—and facing competition, work hard to delight.

Such a transformational set of customer experiences from the private sector creates considerable pressure for government to deliver comparable citizen experiences. But in doing so, agencies' executives must evaluate and, to the extent appropriate, overcome an array of hurdles. Some of the key structural and operating differences for the public sector include:

• Monopoly conditions
Though exceptions exist—the private sector can indeed deliver human services for a fee—most government providers operate as monopolies. That is: if a citizen with limited resources doesn't like "this" set of disability services, there is no alternative provider.

• Less incentive to "fight" for customers
Since moving to another city or state presents a steep barrier for most citizens in need, government fails to "experience" a key signal that in the private sector sounds a glaring wakeup call: the loss of a customer. Moreover, as the CIO of a major southeastern U.S. city explains, "operating with limited budgets to begin with, there can actually be a disincentive to making it easier to obtain benefits." That is, "the more citizens gain access to programs, the higher the costs" to government.

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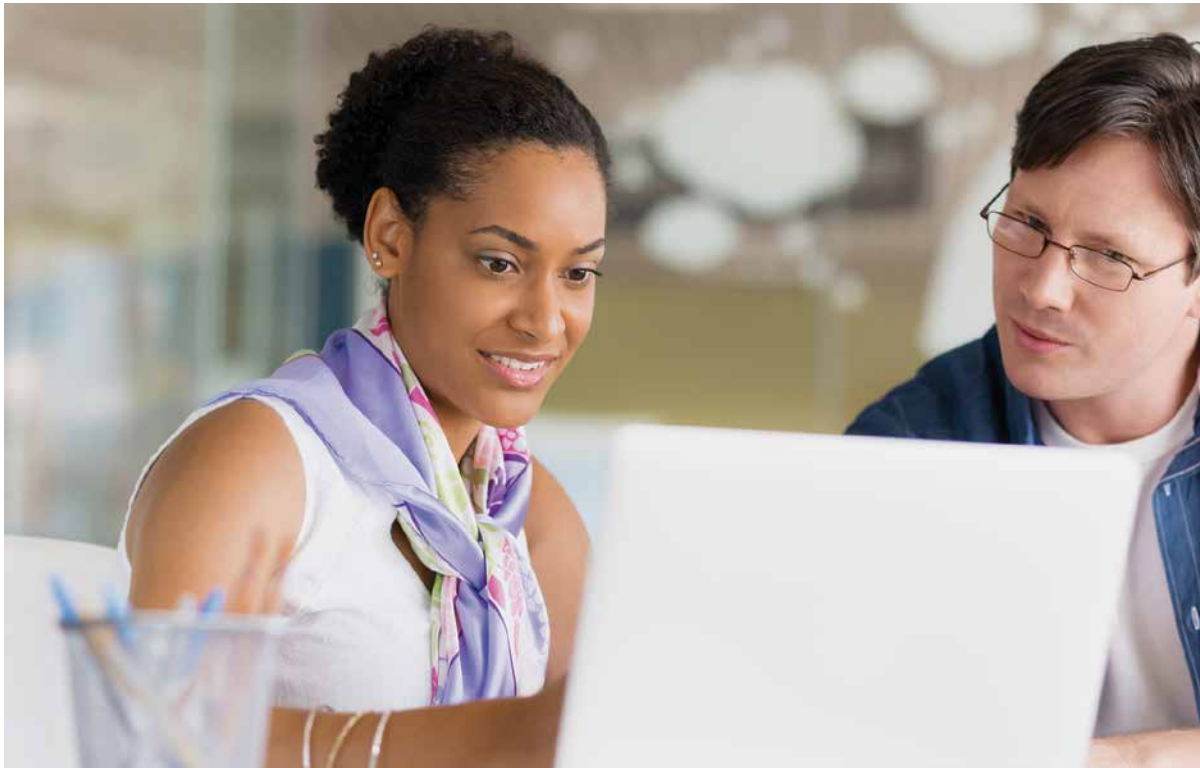
Relative to the private sector, government is enormous.
According to the U.S. Census Bureau, over 14 million people
work in state and local government.

• Scale

Relative to the private sector, government is enormous. According to the U.S. Census Bureau, over 14 million people work in state and local government. A single state like Texas has over 1.3 million such workers, including approximately 67,000 in corrections, 5,900 in housing and community development, 4,200 in social insurance administration—plus 125,000 in health and hospitals (many of whom are performing human services roles). All such workers need to be positioned to provide equal quality of services to all citizens no matter where they reside—adding yet more scale-related logistics challenges. Compared with the typical private sector organization, government is a much more massive, multifaceted, multipurpose entity facing legislated mandates.

• Complexity

Now add the state agency layer. Again in Texas, alphabetically, this includes the Affordable Housing Corporation, the Department of Aging and Disability Services and the Department of Assistive and Rehabilitative Services—and that's just the "A's," never mind the federal or local agencies, plus the for-profit, NFP and charitable organizations—all of whom play important roles.

• The tendency to form and maintain silos

Whereas the private sector has spent the last 20 or so years diligently tearing down any walls between finance, operations, logistics and other moving parts, silos in government remain comparatively unassailable. Attitudes are changing rapidly—the mandate to transform is clear. Still, a wide range of fundamental agency processes remain highly regulated, driven by explicit rules prescribed by agencies and legislatures.

But are rules preventing data sharing between agencies as restrictive as believed? In practice, leading agencies are learning that under closer scrutiny, many rigid silos are exaggerated, self-imposed or can otherwise be altered and overcome. Linda Gibbs is a former New York, N.Y., deputy mayor for health and human services under New York City's Mayor Michael R. Bloomberg. Today Gibbs is again under "his honor's" employ, this time as a principal at Bloomberg Associates, an international consulting service founded by Bloomberg as a philanthropic venture to help city governments improve the quality of life of their citizens.

According to Gibbs, many such strangleholds are nothing more than risk-averse bureaucracy. And by bureaucracy, she means, "it's lawyers." Gibbs, herself an attorney, says that whenever agencies try to cooperate across silos, "there's always a lawyer saying, 'No, we can't, because of this or that.'" But in truth, says the executive, there are many instances where such barriers could be easily overcome through cooperation and persistence.

• Issues of interoperability

In the private sector, many breakthroughs occur by design, as systems across the enterprise are purpose-built with interoperability across functions and geographies. But owing to a legacy of independent, customized IT development, sharing data or processes across agency boundaries can present a solid barrier.

• "Can't fail" missions

Finally, because most government missions are "can't fail" in nature—the Social Security checks must go out; the shelter must remain open—"agency heads tend to be risk averse, sticking with what works," says Andy Pitman, Microsoft's director for health and human services solutions. "There's no profit incentive, no tolerance for failure, and that reduces willingness to go with anything that isn't already proven."

• Legacy technology

One of the greatest impediments for government agencies, says Kim Nelson, Microsoft's executive director for state and local government solutions, is legacy IT. Back in the 1980s, government diligently followed the lead of the private sector to adopt that era's best efficiency-generating technologies.

But bear in mind two things, says Nelson. First, "this was a time when people thought of voicemail as a brave new innovation." Second, because of heavy investment in this 1980s/90s technology, yesterday's mission-supporting enterprise software is now today's legacy leg iron. The point is, says Nelson, "we've reached an inflection point where a great many government agencies are feeling locked into outdated processes and technology, and yet they realize they need to revamp their infrastructure to improve their service delivery." Adding to the challenge, adds Nelson, is figuring out "how to do so in a cash-strapped environment."

• Limited resources

Additional hurdles commonly encountered in government, explains Gibbs, include centralized and often "overworked" IT departments that are often "too far away from the mission" to be truly effective business partners. Another challenge is personnel, as government agencies cannot always find, attract or retain new and in-demand skills like data science.

Alternatively, as an on-the-record interviewee in this instance wishing to go unnamed explains, there are cases where agencies simply do not trust their IT department to deliver needed solutions. "They're overworked or otherwise more focused on IT issues than the goals of the agency. In any case, there's a chasm today, because they cannot be relied upon to deliver as needed."

• Low expectations

In practice, "there tends to be low expectations for government," says the major southeastern city's CIO. "People are used to long waiting periods, complicated application processes, waiting rooms and bureaucracy, because they have no choice." And sadly, says the CIO, "because of issues such as [the above], most agencies feel no pressure to change."

BUT CHANGE IS COMING

It is for such reasons, Bloomberg Associates' Gibbs explains, that today, "there's an enormous gap between the [customer experience you see from the private sector and the citizen experience you get with] government." Though trying to change, "government is well behind."

In December 2010, CIO Vivek Kundra voiced a
"cloud first" policy for the whole of the federal government.

But change is coming. Recall that in December 2010, CIO Vivek Kundra voiced a "cloud first" policy for the whole of the federal government. Similar policies have since been announced in a number of states (such as Illinois and Ohio) and even major cities. Note, says Microsoft's Pitman, that cloud adoption "tends to be accompanied by a strong willingness and desire to innovate." Next add Conrad's mention of the White House's Digital Government Strategy. Add similar pronouncements from numerous governors, mayors and other senior government executives and everything points to a coming surge in government adoption of technology.

Such a surge is precisely what our research reveals. From Alaska to Indiana, Texas and Boston, city, state and federal government agencies are rushing to adopt a wide range of technologies. Case studies and vignettes show how local, state and federal agencies are moving fast to:

• *Eradicate silos*

Whether to cut costs, improve mission performance or both—more government leaders are taking a no-nonsense approach to interagency cooperation. Silos can be intergovernmental (between federal, state and local agencies) or intersectoral (between government and various for-profit, NFP or charitable organizations). Regardless of their nature, as case studies will demonstrate, the removal of silos is perhaps the most transformative and therefore critical step available to those seeking quantum improvement in outcomes. Small wonder, such moves are being incentivized by governors, mayors, state and city CIOs and other leaders.

• *Adopt the citizen perspective*

Often, agencies cannot begin to fully appreciate the citizen's experience until the silos fall. It is only then that a complete picture can be drawn. Nonetheless, true transformation cannot occur until the whole of services are viewed not from an agency but rather from a citizen perspective. Similarly, the performance of agencies and programs should be measured based on outcomes in citizen terms, as opposed to internally focused metrics.

• *Upgrade/revamp their back-office footprints*

Whereas intergovernmental and intersectoral collaboration may be a key goal, legacy architecture can remain a damper. However, municipalities like Montgomery County, Md., and states like Alaska are building technology overlays to create what for now can provide a vastly more efficient and effective technology chassis.

• *Develop "back office" applications for staff…*

In Boston, building inspectors are carrying Android tablets that streamline their workflows. In New York City, NFPs like CAMBA are using geographic and predictive data to identify critical factors for identifying those most at risk for homelessness, then creating smartphone applications to better deploy case workers.

• *…improve "front office" tools for citizens*

Government agencies are seeking to provide streamlined access or "client pathways" to key services. Indiana, for example, is creating well-organized websites and mobile-optimized sites enabling the public to conduct a wide range of its transactions with government wherever and whenever they choose. This includes a broad array of human services, from housing and homelessness to childcare.

• *Incorporate "user centric" design*

Even as the whole of human services provision should be organized around the citizen in need, specific tools must be developed with an eye toward how they will be received by workers and citizens alike. Three ideas to consider: (1) work with end-users—citizens and/or workers—to develop tools that will actually be embraced (meaning: intuitive and efficient); (2) think behaviorally, observing how tools are actually used, leading to further refinements (sometimes the simplest aspect of a process can have a profound impact on effectiveness); and (3) avoid simply automating existing processes (instead seek transformation).

• *Harness data*

As silos collapse, a focus on citizen experience emerges, and technology gains traction, insight and opportunities for cooperation and innovation proliferate. Leaders from Florida, Indiana and elsewhere are mining more data from more sources, leading to remarkable improvements in focus and effectiveness.

These stories and more to follow.

The Indiana Statehouse

SETTING THE TABLE FOR SUCCESS: INDIANA'S "FOUR LEGS"

Charged with leading Indiana government into the digital age, CIO Paul Baltzell refers to "four legs" in his state's technology strategy. They are:

1 **Portal-style citizen access**
Baltzell says it is important that government web- or mobile-sites are "modern and easy to navigate and execute business." Indiana's core website, In.gov, centralizes a remarkable range of fundamental state and even federal services, ranging from "Agriculture & Environment" to "Business & Employment" to "Family & Health." Human services include programs like SNAP, TANF, disability, aging and child services (including the aforementioned Paths to Quality childcare program), to name just a few. Users of the site, explains Baltzell, "can find forms, contact numbers" and other useful tools to "see how to qualify for programs, access services and in most cases apply online."

Of vital importance, says Baltzell, is that "it's an open and transparent website where researchers or [software] developers can download data sets for whatever they're working on." The thinking here, says Baltzell, is that the sharing of data equates to better service for citizens "and can lead to social good and improved government."

2 KPIs front and center

Baltzell and his team have also worked with each of Indiana's core agencies to identify their "four or five most critical KPIs." Performance against these KPIs is now continuously tracked and automatically reported "with no need for human intervention," says Baltzell. The result is not only less costly and more efficient reporting: now government is equipped with a dashboard to drive focus "on what matters."

3 The "war room"

Two of the key challenges in identifying opportunities to harness technology to improve government are (1) inspiring agencies to think outside the box and (2) to encourage interagency cooperation. To this end, the group has established a high-tech demonstration and conference room in the basement of the capitol. Though in its prior life, Baltzell likes to joke, "this was likely a stable," today the space looks as if it belongs in Silicon Valley, with open seating, collaborative workstations and touchscreens.

Financed in part by a grant from Indianapolis-based Eli Lilly & Company, the war room "gives us a chance to bring in people and show them what they can accomplish with technology," says Baltzell. It also goes a long way toward breaking down agency silos "as agency leaders can come in, sit down, watch how we manipulate the data and then better understand the benefits of collaboration." Overall, this enables clearer and more focused discussions with various agency heads and, says Baltzell, "it sends a message: we're committed to better government through closer cooperation and technology—get on board."

4 Data!

Baltzell and his team are only in the beginning stages of bringing needed agencies to the table with the goals of breaking down silos, sharing data and improving government performance against KPIs. Early work, as others in this report have seen, is already showing significant promise.

For example, in a study of infant mortality, it was quickly shown that a handful of factors carry significantly greater influence than other considerations. Actions with the most impact could be as simple as improving education for a new mother. To that end, Indiana is taking steps such as commissioning applications that turn prenatal learning into a sort of smartphone game. Other vital steps might include "arranging a free shuttle" to get an expectant mother to a pre-natal exam or "placing greater emphasis on finding work for the father," says Baltzell. Going forward, "analytics and data are going to be important tools for enhancing effectiveness across all state agencies."

> **"Indiana is taking steps such as commissioning applications that turn prenatal learning into a sort of smartphone game."**
>
> **— Paul Baltzell**
> CIO, State of Indiana

ONE HICCUP

Overall, Indiana is exhibiting leadership in the adoption of technology. But when it comes to cloud computing, Baltzell points to competing priorities necessitating the lesser of two evils. "Much of the data [these various agencies bring to the table] is very sensitive." Consequently, Baltzell is more interested in securing interagency cooperation than getting into discussions about cloud security. Perhaps later, work can migrate to the cloud, but for now, cooperation is paramount.

Such a pragmatic approach has its downsides. First and foremost, Indiana, for now, loses out on benefits such as scalability, lower costs and accelerated application development. But in addition, "our data scientists don't like this one bit," as access is tightly restricted and no "outside" or mobile devices are permitted. Finally, any new algorithms, "whatever is the latest and greatest from Berkeley" or elsewhere, says Baltzell, "must be vetted before deployed." Why such tight data restrictions? "This is the only way to get so many agencies interested and willing to cooperate," says Baltzell. Maybe at some future date there will be mechanisms enabling less restricted access, but not all key agency heads are "convinced [of the benefits of cloud and that] the security measures are sufficient."

THE DREAM TOOL: MOBILE

Agencies seeking nearly immediate and potentially breakthrough performance would do well to take a closer look at mobility. Today's smartphone technology, already pervasive in the private sector, is ideally suited to the needs of human services agencies and benefit recipients.

KEY FEATURES OF MOBILE—AVAILABLE TODAY—INCLUDE:

Proven technology
Though deceptively high-tech, mobile technology is already in widespread use and is proven to be reliable and secure. While any given agency may have its own specific security requirements, there really are very few cases where a secure solution cannot be configured.

Widespread use
Growth rates in adoption are stunning. The Pew Research Center reports that "64% of American adults now own a smartphone of some kind, up from 35% in the spring of 2011." For government at large, that makes mobile access a wise choice as an information interface since a solid majority of citizens are already connected. The same report also reveals that 19% of U.S. residents are "smartphone dependent," meaning that mobile is their primary if not sole access to broadband. Of vital relevance to human services agencies, 13% of low-income residents, a likely group of clients, are "smartphone dependent."

Adaptability
Private-sector transactions among citizens, from personal banking and investing to major purchases, are now routine. Consequently, processes that could streamline the provision of human services—such as the identification of programs, the filing of forms or the sharing of documents such as ID or Social Security cards—are readily achievable. Moreover, as case studies from Texas, Mississippi and elsewhere demonstrate (below), mobile applications are readily customizable to meet agency needs.

A ttributes like these deliver a host of attractive benefits for citizens and government alike. As processes such as intake, update and record-keeping are digitized, case workers and other staff are able to achieve more with less. For citizens, the ability to use mobile tools to apply for services or provide updates and other documentation means fewer face-to-face visits. That's less time in waiting rooms, arranging childcare, taking off work, finding transportation—and for government, fewer space and on-site staffing requirements.

Meanwhile, case workers and other front-line staff can devote less time to filing forms and reports and spend more time in the field. This means less burnout for overworked departments and a clearer focus on the mission, culminating in a better experience and better outcome for citizens. These and other benefits/attributes of mobile technology are evident in case studies, including:

- **Mobile Benefits**
- **Texas**
- **Mississippi**
- **New York City**

64%

64% of American adults now own a smartphone of some kind.

CASE STUDIES FOLLOW

MOBILE BENEFITS

Mobile Benefits: Making WIC work

Maxwell Thayer is the CEO of Mobile Benefits, a Seattle-based startup hoping to improve the user experience in supplemental nutritional programs for women, infants and children, commonly known as WIC. Such programs—funded by Congress but administered by over 90 state and local jurisdictions across the country—are a great benefit to families, notes Thayer. But one day, when speaking to a woman about her use of the program, "I was totally taken aback by how difficult the experience can be. There's no easy way to tell if this or that specific product qualifies until you've taken it to the register." Likewise, "it's difficult even to track your balance." These and related issues "can lead to unnecessary hassles and embarrassment—and to me, this was a problem we could solve with technology."

The solution, says Thayer, "is a continuously updating database and the smartphone." Mobile Benefits scours the marketplace to identify UPC codes for approved items. Accessing the list from their smartphone, clients can search based on either product names or descriptions, "or they can take a picture of the barcode" and the tool evaluates eligibility. In addition, users can also "check their account with just a few taps—so they know their balances before they go to the checkout."

Today the application is in use by some 4,000 WIC recipients, members of the Chickasaw nation. Going forward, Thayer believes additional state and local agencies will not be far behind. "We showed this to the powers that be at WIC and they said this is a game changer," says Thayer. Regardless of this specific application's success, this demonstrates how basic technologies—like databases and smartphones—can be harnessed to dramatically improve citizen experience.

"Accessing the list from their smartphone, clients can search based on either product names or descriptions, or they can take a picture of the barcode and the tool evaluates eligibility."

— **Maxwell Thayer**
CEO,
Mobile Benefits

Mobile, online and the agency lobby: Self-service Texas style

Forecasts show Texas's population increasing as much as 20% by 2020. Staffing at the Texas Health and Human Services Commission (HHSC), meanwhile, will not grow in lockstep. The reality becomes: pressure on performance.

Technology offers a proactive solution. Based on society's digital habits, Texas HHSC has had an aggressive approach in deploying a variety of self-service options over the last five years. The organization's two cornerstone offerings are its website, YourTexasBenefits.com, and the Your Texas Benefits mobile app.

The website launched in 2010, and offers clients the ability to apply, renew and report changes for their benefits at any time and any place. The site includes the ability to upload documents, sign up for text or email alerts and choose paperless correspondence.

A mobile solution was the next logical step. The Your Texas Benefits mobile app debuted in late 2014, with features such as checking benefits status, uploading documents and finding a local office.

Flash forward to 2015, and self-service is now business as usual. On a given month, over 60% of applications for HHSC services come in through YourTexasBenefits.com. In the last year clients reported over 2 million changes to their cases online, and digital benefit renewals have trended up 30%.

Adoption of the mobile app has also been rapid. In the first six months following launch, document uploads through the mobile app surpassed the website. "The mobile app was clearly the right offering at the right time," says Stephanie Muth, deputy executive commissioner of the Office of Social Services. "The growth demonstrates clients are happy with it, which makes us happy."

60%

On a given month, over 60% of applications for HHSC services come in through YourTexasBenefits.com.

Improved technology delivers a wide range of benefits. Clients now have convenient ways to apply, renew and manage their benefits—no longer taking time off work or searching for transportation to visit a local office. Staff sees reductions in data entry, lobby traffic and incoming calls, allowing for clearer focus, leading to more accurate and timely decisions for clients. The state itself avoids costs in overtime, paper imaging, and postage, faxing and call-volume costs.

Improved citizen experiences and agency performance are "win-win for everybody," says Muth. "We take pride in fulfilling our mission of connecting Texans to services."

MISSISSIPPI

Mississippi: Personalized mobile learning apps for the developmentally disabled

In his role as director of health and human services solutions for Microsoft, Andy Pitman is charged with helping agencies use technology to redesign processes for greater effectiveness. An intriguing example comes from work commissioned for the Mississippi Department of Mental Health.

There are many instances in which citizens require service from more than one agency. For example, a key goal for many agencies is to help bring persons who are behaviorally or developmentally disabled back into society. Getting it done, says Pitman, "may need everything from transportation to therapy or training plus everything in between." Participants in the process can include not only multiple agencies and funding mechanisms but also for-profit and NFP providers.

To this end, Microsoft, working through its partner CoCENTRIX, is providing the Mississippi Department of Public Health with a care-centric solution. Essentially, says Pitman, this is CRM technology being used "to deliver a more coordinated, efficient and effective approach to an individual's care."

A key part of the program is Talking Tiles, a daily-living and learning application available on major mobile platforms. Using what it knows about any individual through the CoCENTRIX system, Talking Tiles automatically renders a customized tablet or smartphone experience.

In terms of daily-living, if an individual is not fully verbally capable, "the application can help them express their needs—they can point at a picture they want or perhaps order some food," says Pitman. In addition, the application can render an individualized program to develop life skills. "It can provide lessons on how to engage in society," says Pitman, "like go to the store, identify products, go through the checkout and pay."

A key part of the program is Talking Tiles, a daily-living and learning application available on major mobile platforms.

New York City: Using a behavioral approach to optimize mobile outcomes

AccessNYC is an online portal enabling citizens to find out if they qualify or to apply for three of "over 30 city, state and federal" benefit programs, including food stamps. The site is so successful, says Lauren Aaronson, assistant deputy commissioner with the Office of Business Process Innovation at the City of New York's Human Resources Administration, "that almost 80% of food stamp applications are now coming through this portal."

But the portal's success in driving traffic in turn led to a new business challenge. Namely, as more food stamp applicants opt for the online system, "we're seeing a huge spike in the number of applications that are missing needed eligibility documents." Essentially, because of the steps needed to scan and email or fax documents, the process was stumbling "a lot more than we'd like," says Aaronson.

But then the agency began thinking in mobile terms. What if food stamp applicants could use their smartphones to snap a photograph of their birth certificate, Social Security card or whatever is called for, then text or email the documents? Such an approach, says Aaronson, seemed to have considerable potential.

So the agency began work on a mobile solution. But instead of an immediate launch of a downloadable application, the agency instead opted for a highly targeted rollout of a mobile website. Moreover, the team would gather feedback on the app in real time. Specifically,

80%

Almost 80% of food stamp applications are now coming through Access NYC.

WHAT IS THE VALUE OF A MOTIVATED GOVERNMENT EMPLOYEE?

The focus in human services should be on the citizen in need. But a key consideration is the degree to which technology can transform the effectiveness of government workers themselves. Processes redesigned and infused with technology to deliver improved outcomes can sharpen the connection between an individual's actions and the impact on the citizen, family and community. Greater automation leads to less time spent on administration and more focus on higher value-added activities. Meanwhile, supplying employees with more information and more tools like mobile creates greater working flexibility as well as greater commitment to the mission. Which leads to:

- **Increased motivation**
- **Greater job satisfaction**
- **Reduced turnover, recruitment, training and related costs**
- **Improved job performance**

There is no doubt that agencies need to do more to focus less on how they, themselves, are organized and more time on how services can be configured to be more effective for citizens. But one way of doing more with less for citizens is to amplify the value of each government employee. Better, behaviorally informed workflow design, enabled by technology that is intuitive and efficient, can lead to superior employee commitment and performance.

says Aaronson, the plan is to have "staff at our SNAP offices ask people, 'How would you like to try our new mobile application?'" and when the answer is yes, "they navigate to the mobile site." Staff on hand could then "observe where people are getting stuck or have additional questions." Having Wi-Fi within local offices also means "that applicants wouldn't have to use their own data plans," removing a possible objection to the program. Overall, such learnings will be used to improve the application, making it more intuitive and effective.

A key insight already uncovered by this iterative, behavioral approach "is that when people are in crisis, they aren't as trusting as they might be otherwise," says Aaronson. Which means "they want to see the clerk take their documents and enter them into the system; know that they're in the system and what the next steps will be." Such an orientation tends to favor an in-office visit. But the lesson here, says Aaronson, is that "if we want to get our population to use mobile tools," the application has to provide cues such as "receipt notices" to show citizen that their submission is complete and their case is under way.

Beyond its core "upload" feature, the next iteration will enable clients to review case status, cash balances, recertification schedules and similar attributes. Note, says Aaronson, "that we're taking a great deal of learning from the private sector." Namely, "transactions that require a lot of data input are not appropriate for mobile—so our focus is on basics like e-notices or change requests."

Overall, says Aaronson, "the mobile channel has to provide a better experience than what clients/applicants can get coming into the office or it won't be as successful as we'd like." This also means, "that on the back end, we have to make certain we follow through 100%—we have to show people that we are committed and trustworthy."

> **"If we want to get our population to use mobile tools," the application has to provide cues such as 'receipt notices' to show citizen that their submission is complete and their case is under way."**
>
> **— Lauren Aaronson**
> Assistant Deputy Commissioner,
> Office of Business Process Innovation,
> City of New York's Human Resources Administration

As of end-July, the mobile tool is being piloted on a limited basis. But following another round or so of behaviorally based observation and enhancement, the tool will be ready for full-out launch. "When we go public," says Aaronson, "we want to have an app that is intuitive, effective and extremely easy to use. We want to make the experience of working with us so easy that people will prefer this channel over coming to our offices, which will be better for them and us."

The next section will delve more deeply into the use of data and predictive analytics.

HARNESSING PREDICTIVE ANALYTICS IN A GOVERNMENT SETTING

"Nobody collects more information than human services organizations—and nobody uses that information less effectively," or so says Stuart Venzke, COO of Montgomery County's Department of Health and Human Services. Though "our goal is to change that," admittedly, the county "is just getting started down the path toward wider use of data and analytics." Where this leads, "we really won't know until we get a clearer look at the data and what it reveals about our opportunities." Still, the executive is confident the efforts will bear fruit.

This resonates with Bloomberg Associates' Gibbs. Thinking about both today and her tenure in the mayor's office, Gibbs says, "I am perpetually frustrated by the outdated practices in human services." Such agencies "generate so much information," she explains, and yet in the majority of instances, little to nothing gets done in terms of "timeliness, responsiveness, interagency cooperation or quality." In short, says Gibbs, "these agencies have so much data, but in practice, too many just aren't doing anything with it."

But much of this is changing. More and more agencies are seeing the transformative potential of a more data-driven approach, starting with the next two examples from Florida and New York City.

FLORIDA

Understanding what the data says to prevent unnecessary child deaths

"A few years back," says Mike Carroll, secretary of the Florida Department of Children and Families, "we had this desire to first get our feet wet and then get ahead of the curve in data-driven decision making."

Analysis began with a closer look at closed cases in the child welfare system involving death, accidental or otherwise. Initial data identified an array of high-risk characteristics, including children aged three or younger, young parents (under 26) along with mental health issues or drug abuse in the home.

Impressed by the early insights, the agency brought in an outside vendor (SAS) "to help tighten our risk model," says Carroll. From its initially limited scope, the analysis expanded to include data from a much broader swath of the state's health and welfare databases. "Now we could see not only the characteristics of the family," says Carroll, "but also what other [state] services were in the home."

Somewhat unsurprisingly, says Carroll, this broader sample and more detailed analysis tended "to mirror and reinforce what we had already seen in the initial work." Still, this was an important confirmation because "before we made major changes in practice, we needed to make sure we were right."

Today the organization is better equipped to understand which children in which families are at highest risk. Now when a child is classified at risk, "we seek to assign our most senior people—we get our experts to inject themselves at the right times with the most appropriate intensity," says Carroll. This is an important step because, owing to stressful and often upsetting conditions, turnover among investigators is high—and those with less experience tend to be less effective. Alternatively, assigning those with greater experience to the highest-risk cases tends to lead toward better outcomes.

Still, Carroll draws the line at calling such analysis truly "predictive." As the executive explains, "we can never actually predict behavior." However, "what we can do is identify those situations that have a tendency to present the highest risk—then make certain we respond with an appropriate intervention."

Next up, Carroll and his team are looking to get even more value from data. It begins with "leadership from the state," which Carroll hopes can lead to closer cooperation in the form of "hard-hitting interagency agreements that will allow us to share more data." From there, the agency intends to explore still greater sophistication such as "machine learning," which Carroll believes can show relationships that are otherwise hidden from view. "When we look down the road, we see a program like this that can give us clear indication as to which actions and funding initiatives are having the greatest impact." That, says Carroll, "leads to greater bang for the buck—greater effectiveness—for children and families in Florida."

DIGITAL BOSTON

Jascha Franklin-Hodge, CIO of the City of Boston, says it is time to digitize the whole of government. "The way most work in government is done today," says Franklin-Hodge, "it's manual; it's paper based; it's largely being done the same way things were done in the '70s."

So Franklin-Hodge and his team are taking steps to bring antiquated processes into the digital age. "Everybody who works with the city, almost with no exception, is being given the opportunity to improve their work with more digital tools," says the executive. "That means less time on paperwork and more time on higher-value activity. They're more mobile. They're happier as employees, they're more efficient, focused and effective," which in turn leads to still more innovation and generally better services for the public and businesses.

As for examples, earlier this report mentioned how building inspectors in the city are now making use of mobile tablets. Forms, applications and the like can now be handled on site, streamlining and accelerating processes for all. The same is true for health workers, who in addition to having improved mobile tools are now using restaurant reviews on social media "to make them more effective in deciding which [establishments] to inspect," says Franklin-Hodge. Still another of the city's digital initiatives is a refurbishing of its human resources department, converting paper-based processes to a digital model.

Data: It's not always fancy math
The city is also doing more to make use of data. "A lot of our work right now is getting to a data platform giving us visibility into what is going on: the outcomes we want to measure and the related ongoing work." Value can be derived "when we find ways of getting the right information into the right hands at the right times. We want the right data for operations."

Note, however, that according to Franklin-Hodge, the effective use of data does not always equate with complexity. "We're working right now to end homelessness," within a program called "Housing First," says Franklin-Hodge. This is premised on the lesson that no amount of medical, mental health, drug addiction or similar treatments are going to be effective until the person needing treatment is in the most appropriate housing given their particular circumstances. In other words, spending by a range of agencies across the face of government on the same client can be optimized by addressing the housing challenge first.

But the legacy hurdle "is that there's no system for collecting information about what kinds of housing is available and matching that to individual needs," says Franklin-Hodge. Accordingly, "we're working with several departments—Health and Human Services, the Department of Neighborhood Development and various shelter and housing providers—to develop a coordinated access system." This way, "anyone homeless coming in through any of the [participating] channels can be quickly directed to the most appropriate housing for their specific needs."

What is particularly important to note about this data-intensive example, says Franklin-Hodge, "is that it isn't predictive, it's not even a particularly challenging management problem. This isn't fancy math. It's simply putting the right data in the hands of people who can make a difference."

NEW YORK

CAMBA: How better data helps case workers prevent homelessness

CAMBA is an NFP based in Brooklyn, N.Y. From its beginnings in 1977, the group has grown to provide over 150 integrated services and programs in education, youth development, family support, health, housing and legal services.

Melissa Mowery is the director of CAMBA's HOMEBASE program, where "a primary focus is on the homeless: we do everything from [managing] drop-in centers and shelters to building affordable housing." One thing CAMBA has learned from its partnership with the City of New York is that housing the homeless is an expensive proposition. Consequently, a focus for CAMBA is "innovation in homelessness prevention," says Mowery. "If we can keep people from becoming homeless in the first place, that's not only better for that person or family—no one wants to have to go to a shelter—that's less costly for everyone."

Today CAMBA is learning that with the more effective use of data, the organization can better identify those at relatively higher risk of becoming homeless and simultaneously direct resources to where they can do the most good. A few years ago, Marybeth Shinn, a professor from Vanderbilt University, "came to us with some key risk factors," says Mowery. The single strongest predictor "is whether or not you've ever been in a shelter before." Once someone has been in a shelter, "they are significantly more likely to return."

But there are other risk factors as well: being a young, unwed or unaccompanied mother with children; being under the age of 28—or moving more than four times in a given 12 months. So, explains Mowery, "we look at data from a variety of sources to identify those at highest risk."

This and related data is entered into a proprietary tool that overlays information about potential CAMBA "clients" onto a Google map accessible by PC, laptop or smartphone. Field workers for CAMBA can now see concentrations of those at highest risk for homelessness. Various colored dots—red, orange or blue—represent those who have been to housing court or have been to a shelter. Click on a dot and the field worker can see details such as the composition of the family.

> Today CAMBA is learning that with the more effective use of data, the organization can better identify those at relatively higher risk of becoming homeless and simultaneously direct resources to where they can do the most good.

CAMBA field workers can now prioritize their case work, seeking interaction with the greatest numbers of those at greatest risk. "They can knock on the door, send a flier, let them know that we understand they're having an issue and we're here to help," says Mowery. Field workers can also use what they see on their smartphone to adjust their day "on the fly" to take advantage of opportunities as they arise.

Today's technologies can also be used to expand the physical outreach. With funding from the Durst Family Foundation, CAMBA recently purchased an RV—well-outfitted with mobile technologies including computers. The RV can be driven to targeted outreach neighborhoods, parked directly in front of a building where at-risk tenants reside, providing eviction prevention services literally on doorsteps. Ultimately, says Mowery, "technology is enabling us to target our outreach more effectively, improving the chances we can prevent someone from becoming homeless."

Next up, tearing down walls to enable closer collaboration and improved citizen outcomes.

BIG WINS FROM CLOSER COLLABORATION

Breaking down barriers, a key step toward a citizen-centric approach and quantum improvements in citizen experiences and outcomes, can be hard work. But not all agencies face such obstacles alone. Technology is being advanced on so many fronts from so many areas of government that in many cases, others may already be standing by, ready to assist. Consider the next three cases—nationwide foster care, Indiana daycare and Idaho job training—where initiatives from diverse, intergovernmental and intersectoral sources are coalescing to improve outcomes.

NATIONAL FOSTER CARE

Crashing through state barriers to improve national foster care: The Administration on Children, Youth and Families

One of the greatest challenges for government agencies: working with other government agencies. As Maria Cancian, deputy assistant secretary for policy at the federal Administration on Children, Youth and Families (ACF), explains, "rules and procedures" as well as "pace of technology adoption" can vary widely from agency to agency or jurisdiction to jurisdiction. But just how ACF and related agencies are using technology to overcome such hurdles and improve practices in foster care placement provides a worthwhile template for getting things done.

Foster care placement often moves children across state lines. But states vary widely in their rules, practices and technology for evaluating foster homes, approving arrangements and executing transfers. The result, says Cancian, is that children in need can remain in limbo for "many more months than we'd like."

Enter NIEM: the national information exchange model. NIEM is a data translation protocol in continuous collaborative development for over 10 years now by agencies such as the Department of Homeland Security and the Department of Justice. The goal: improve information flow between agencies. "NIEM is a universal translating language," says Cancian. "Rather than replace every system in every jurisdiction, NIEM translates whatever is needed—documents, approvals, reviews, signatures—so all these [disparate] systems can operate as one."

In late 2013, the ACF began using NIEM standards to enable yet another acronym, NEICE: the national electronic interstate compact enterprise. As Cancian explains, the goal of NEICE is to use technology to "streamline, accelerate and improve the placement of children." By June 2015, just 17 months into the initiative, results are remarkable. Six states, having entered 6,000 children for placement, have seen 4,000 placed through NEICE. Along the way, administrative costs have been pared "by 40%," says Cancian and wait times reduced "by 20%."

And, says Cancian, "this is only the beginning." Early successes will likely lead to even more states signing up for the program. Moreover, NIEM standards can be used as a bridge to address an even wider array of inter-jurisdictional health and human services challenges. Though there are always hurdles, the ACF/NIEM/NEICE example, says Cancian, "shows that technology can be transformative."

The goal of NEICE
(the national electronic
interstate compact enterprise)
is to use technology to
"streamline, accelerate and improve
the placement of children."

Indiana and MDRC: A helping hand for working parents looking for childcare

Many of the most successful innovations will be a combination of rethinking business as usual and then incorporating technology to create a comprehensive solution. Nadine Dechausay is an implementation researcher and project manager at MDRC, a not-for-profit social policy and evaluation firm dedicated to harnessing the power of behavioral science to address the needs of low-income families and individuals, including children. As Dechausay explains, "Not only do we evaluate the effectiveness of human services programs, but we are often able to help agencies think innovatively about how they can redesign and improve their programs using behavioral insights."

Since 2010, MDRC has been working with the Office of Planning, Research and Evaluation of the federal Administration for Children and Families on a project known as Behavioral Interventions to Advance Self-Sufficiency, or BIAS. BIAS, says Dechausay, "introduces a behavioral perspective" to human services programs in an effort to improve outcomes. Simple steps, such as "writing clearer instructions, reducing the paper or including a handwritten request to complete a form" can make "a meaningful difference."

Enter the Indiana State Government's Office of Early Childhood and Out of School Learning and the nonprofit Indiana Association for Childcare Resource and Referral (IACCRR). OECOSL contracts with IACCRR to advance a shared mission of increasing the quality, accessibility and affordability of childcare for all Indiana families. IACCRR's primary role is to help families make informed childcare choices by delivering free individualized childcare consumer education and referrals by phone, Internet and in person.

BIAS is highly relevant to the state's desire to connect low-income working parents to quality childcare through the state's "Paths to QUALITY" (PTQ) rating system for childcare providers. That program, partially state and federally funded, "gives childcare vouchers to qualified low-income parents who are working or attending training," explains Dechausay. Meanwhile, PTQ is a program that rates the quality of childcare providers across the state.

....

A shared mission of increasing the quality, accessibility and affordability of childcare for all Indiana families.

....

It is well understood, says Dechausay, "that the quality of childcare can have an enormous impact on a child's learning and development." Consequently, the State of Indiana "wants to steer those with vouchers toward the best childcare available." The problem, however, is the difficulty in identifying good options and in changing childcare providers. "When a childcare voucher is offered to a parent, they have very little time to decide which provider they want to use," says Dechausay. So "they may just stick with what they already know."

The breakthrough occurs when the desire to expand access to quality childcare blends not only with behavioral insights from the BIAS program but also with a degree of technology. IACCRR leveraged the state government database, Google's free geographic information system (GIS) tools for nonprofits, and its own childcare database to generate individualized PTQ childcare program profiles for families on the waitlist for a childcare voucher.

The profiles, which were designed based on mock-ups created by MDRC's behavioral scientists, include the childcare program's contact information, PTQ level and a map showing the location of the program in relation to the parent's home.

Each week IACCRR generates profiles for hundreds of families who signed up for childcare vouchers days before. Families in turn receive referral profiles for the three highest-rated PTQ providers closest to the family's home.

Jen Bump, IACCRR's director of consumer education and data services, says the implementation could be accomplished in any state with the willingness to adopt innovative practices. "The marriage of behavioral science, technology, and data- and information-sharing between state government and IACCRR were all pivotal in this implementation." All states, says Bump, have the potential to implement this model, which "is exciting," says Bump, "because it means we can make it easier for families everywhere to make better childcare choices."

How effective is the BIAS approach in expanding uptake in PTQ providers? Right now MDRC is evaluating the program by comparing the choices of parents in a control group (receiving basic information) with a second group receiving individualized referrals with enhanced geocoded recommendations. For good measure, a third intervention group gets not only the individualized referrals, but also a follow-up phone call—another hands-on behavioral tool from the BIAS project. "We aren't certain of the impacts yet—it's early," says Dechausay. But the overarching point, she maintains, "is that government agencies and others need to be open to new ways of getting things done. The use of behavioral science—and technology—needs to be evaluated and refined."

IDAHO JOB TRAINING

Innovation and collaboration in job training: Idaho PTECH

For-profit and NFP providers are working with schools, colleges and universities to infuse technology and revolutionize job-training and workforce development. The Idaho Pathways in Technology Early College High School (PTECH) model melds the interests and capabilities of public schools, private businesses, universities, community colleges and students. Essentially, PTECH serves as a facilitator of crucial conversations among employers, education departments and students. Learning what employers need, PTECH helps all parties figure out the best uses of technology and processes to help students become workforce-ready.

According to Executive Director Alan Millar, the PTECH model had its beginnings in 2010 when IBM approached the City of Brooklyn with an innovative approach to jobs training. The idea, says Millar, "was to make education more relevant to the students, giving them a path to college credits and skills IBM needed," becoming a win for all parties concerned. The program in Brooklyn and elsewhere has been so successful, says Millar, "that we decided to bring it to Idaho, but tailor it to fit our unique needs."

But "if you haven't noticed," says Millar, "there are some geographic differences between Idaho and Brooklyn." For one, while Brooklyn is densely populated, Idaho is decidedly rural. Consequently, not only are students widely dispersed, but schools are smaller, "meaning less concentration in teachers/professors" in the technical areas desired by employers. Such issues, says Millar, "make technology even more important."

Another difference: while Brooklyn has $92 billion IBM as a sponsor, Idaho has no single employer of such scale. As a result, says Millar, "we had to build a consortium of partners from technology, aerospace and healthcare." Another key contributor to the program is the J.A. and Kathyrn Albertson's Foundation, an organization committed to the education of Idahoans.

In addition, all PTECH programs face similar challenges in terms of garnering the support and cooperation not only of the public school system but also that of universities and community colleges. "This requires a great deal of flexibility for all concerned," says Millar. For example, "colleges tend to resist the idea of breaking tech courses down into bite-sized pieces," says Millar. Meanwhile, for public school teachers and administrators, "this has a significant impact on scheduling and other areas." Overall, says Millar, "it's easy to

> "Enablement begins with the provision of hardened, dedicated-to-the-program-only laptops for all of the students."
>
> **— Alan Millar**
> Executive Director,
> The Idaho Pathways in Technology Early College High School (PTECH)

sell the concept—but it's a lot harder to make it work."

In spite of such challenges, Idaho PTECH saw its first four participants graduate high school in June 2015, with many more behind. These initial students, still part of the PTECH program as they progress, "already have college credits in areas that are relevant to employers in the state." As a result, says Millar, "we believe [this] will lead to better performance and earlier success across the span of their careers. We're kick-starting their lives."

Execution, however, requires a significant degree of technology. Because of the distributed nature of the program, classes are 100% "online," says Millar. Enablement begins with the provision of hardened, dedicated-to-the-program-only laptops for all of the students. Millar says his group gets it done "for just $460 per student" in two ways. First, these are no-non-sense "basic machines" that are purpose-built to meet the needs of the program and nothing more. "These are not the students' personal laptops—these are for school only," says Millar.

Second, the machines are centrally monitored and maintained. "So wherever they log on, what students see is filtered." Plus, "our help desk can take over the laptops remotely, to provide maintenance, software updates or whatever is needed." This not only makes for a more convenient and relatively worry-free student experience, the technology "is remarkably efficient, safe and cost effective," says Millar.

One of the biggest surprises so far: life coaching is more important than technical training. As Millar explains, "What employers really want are life skills: persistence, communication, collaboration. Workers with these attributes can learn what they need on the job." As a result, Millar is working to enhance the "softer" side of the program, enabled in large part by the assignment of a life coach.

Life coaching begins with technology. Students each have a coach that they meet with regularly—vir-tually—through tools such as video chat and text. But it continues with real-life programs such as a summer camp for aerospace and leadership training. "To the extent we can give these kids actual life experience," says Millar, "we can improve their motivation and employability."

Idaho PTECH began with eight schools and 90 stu-dents in the fall of 2014 and is adding another eight schools and 100 students this fall. To date, PTECH students have earned 415 college credits, successfully completing 94% of college credits attempted. Many are already finding job shadow and internship placements through the more than 20 Idaho industry partners. As the program moves through the development and testing stage, the focus remains on building a model that consistently and flexibly addresses student and employer needs.

The next section showcases early-stage success stories.

CLOSING THE "CITIZEN" EXPERIENCE GAP: DIGIGOV UNIVERSITY

The desire to transform is evident. "Government may be well behind the virtual, Internet-first companies like Amazon, Facebook or Google," explains Karen Conrad of OCSIT. However, "if you look at healthcare, human services and many other evolving areas, government isn't all that far behind."

Whatever the size of any gap, Conrad's agency is helping to close it. At the General Services Administration (GSA), parent to OCSIT, "we're embracing technology and all the ways it can improve efficiency and effectiveness." The agency, says Conrad, "uses [collaborative tools] like Google hangouts." Basic processes and applications are being delivered by the cloud, leading to "anytime, anywhere, any device accessibility." Finally, "we have a high percentage of people who are mobile or doing telework—it's a very modern, open, sophisticated and yet secure set of [technology tools] that give us tremendous freedom to pursue our mission."

Conrad acknowledges that the environment at GSA is not yet typical across all of government. But the executive sees evidence of a fast-forming wave of technology-driven transformation. Government agencies and their leaders and workforces may not operate under an emphatic profit incentive, but they do experience cost constraints, which can often be alleviated with cost-saving and efficiency-generating technology.

But even more important, says Conrad: government leaders "are passionate about their missions," meaning "they want government to be the best it can for citizens." The beauty of technology, says Conrad, is that it "can help agencies do more with less: they can significantly improve [if not transform] their efficiency and their performance."

Sharing knowledge
Assisting with such transformation is a key goal for OCSIT. Some of its key focuses include:

• More effective use of social media

• Using web tools in both a more workflow-focused and more citizen-centric way

• Accelerating cloud adoption, smartphone tools and mobile computing

Practically speaking, this means "working to identify, develop or acquire appropriate technologies," plus promoting and making such tools available through various "review, referral and certifications programs." A good example is the Federal Risk and Authorization Management Program (FedRAMP), where OCSIT, part of the Government Services Administration, works to certify various cloud providers and developers for specific roles in government.

Another key focus is on education. Here, DigitalGov University (DGU) is an online community facilitating knowledge sharing among government officials seeking the most effective means of leveraging technology. Using online articles, webinars and in-person events, the site, says Gwynne Kostin, director, Digital Government Division, "is one of our key platforms for helping agencies learn new ways of operating and new ways of delivering government services."

An intriguing aspect of the community "is that two-thirds of the content is user-provided." This is important, says Kostin, "because we view our role as being here to promote and amplify what others are doing. We want to be the catalyst, not the originator."

> **DigitalGov University (DGU) is an online community facilitating knowledge sharing among government officials seeking the most effective means of leveraging technology.**

It is also important "that agencies are able to tell their stories in their own words." Because no matter the technology or process being discussed, says Kostin, "there isn't ever a single right answer—people need to hear context because nearly all of these tools and strategies have to be adapted to the situation."

The site also issues a daily newsletter whose 55,000 subscribers exhibit "an extremely high 'open' rate," says Kostin. In addition, DGU offers webinars as well as live events, such as a summit in June 2015 that attracted "over 1,200 attendees." And while the site focuses on federal issues, much of the material is also relevant—and available—to state and local government workers and executives.

Viewing the whole of government, Conrad believes the greatest challenge is shifting the focus of government work from inward to outward. In the past, "we've always worked from the perspective of how each individual government agency is organized." But what the ecosystem of agencies really needs to do is migrate toward "infusing customer focus in everything we do."

That means "better coordination, more sharing of information and more of a focus on what people need and less on how government itself is organized." It's an enormous challenge, says Conrad. But the good news is that "I believe we're already making tremendous progress. Technology is transforming government in ways that is making a real difference. We're helping to accelerate the transformation."
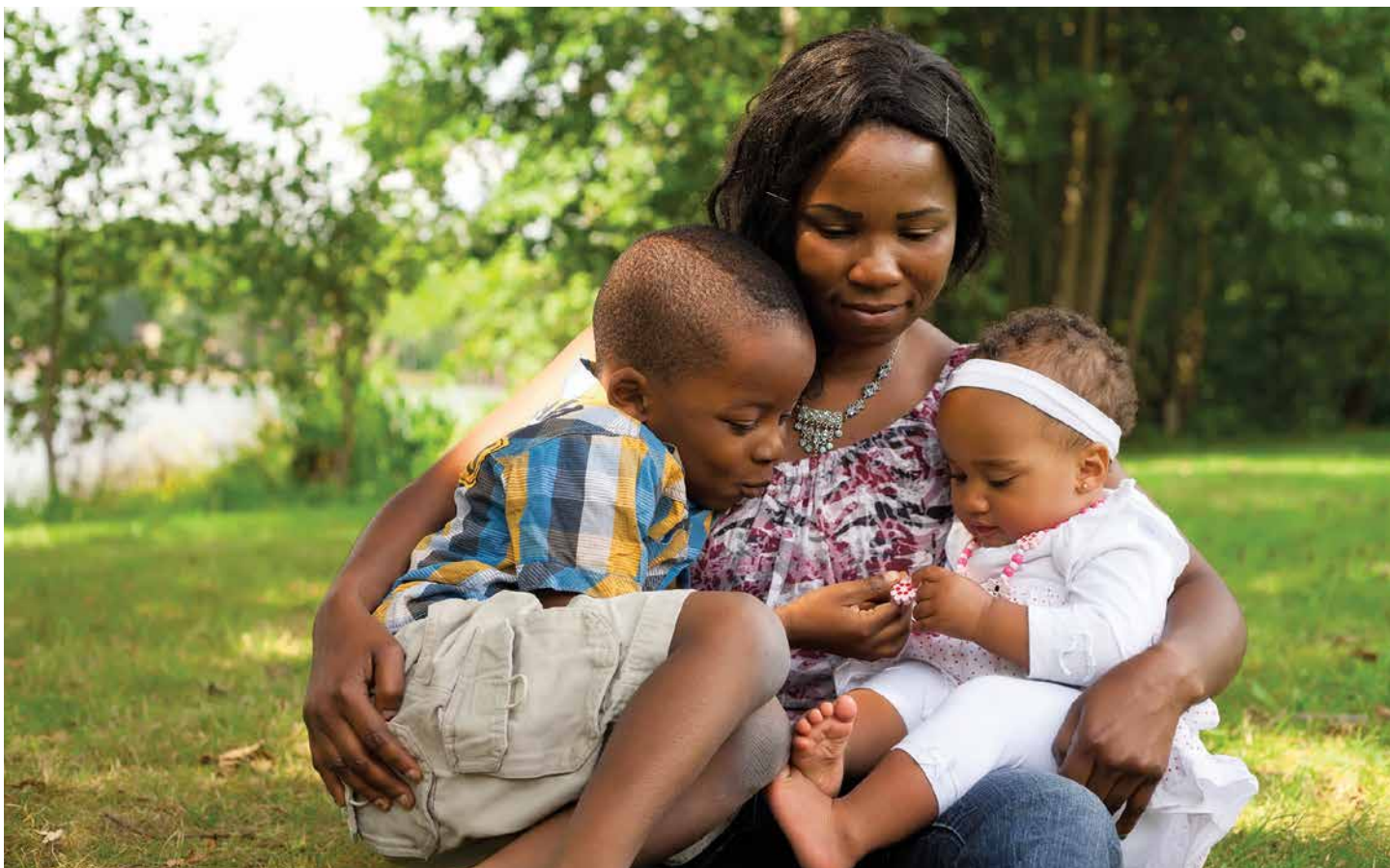
GETTING STARTED: BUILDING A FOUNDATION

One of the biggest challenges for human services providers is that each of their "clients"—a specific citizen or family—more often than not is also a client of a handful of additional government agencies. For example, says Bloomberg Associates' Gibbs, "someone in a [New York City] homeless shelter" may also be receiving food stamps, disability benefits, Medicaid—"or any of a wide range of services."

Traditionally, there is little coordination among the various government, not-for-profit and even charitable organizations that interact with each citizen. But for their part, more government agencies are waking up to the potential benefits of developing a comprehensive or "single" view of each citizen they serve. By understanding all of the agencies and services seeking to help each person or family, government can better understand the citizen experience and identify opportunities to be more efficient and effective in improving outcomes.

For reasons already discussed, most government agencies operate independently, including their use of software, databases, forms and metrics. There is little coordination. But seeing how technology is revolutionizing so many aspects of culture and the economy, citizens and forward-thinking government executives are demanding greater coordination.

So a key starting point for many is the building of some form of foundation from which to launch their focus on the customer experience and apply technology. This is the first major step on the way to reorganizing human services around the needs of citizens—a citizen-centric approach. Consider:

MARYLAND

Montgomery County, Md: Building a backbone

Legacy infrastructure and multiple silos can be genuine impediments. But as Uma Ahluwalia, director of the Montgomery County, Md. Department of Health and Human Services, explains, the fix does not have to be as radical as some might imagine. In fact, says Ahluwalia, "we are working on a number of solutions that we believe will deliver [breakthrough] results." Consider the work of Stuart Venzke, COO of this agency. Venzke explains that one of the group's most prominent initiatives today is integration of an IT backbone to connect multiple disciplines.

All other counties in Maryland operate separate departments for health, disability, crisis services, senior services, financial aid and the like. In Montgomery County, however, such services were consolidated long ago. Nonetheless, these groups are still required to use a wide range of state-mandated/operated systems, which creates data and operating silos.

So right now, says Venzke, "we are in the process of a modernization project." Basically, "we're putting in a front layer that will give us a horizontal view of our clients." What this means is that if a citizen is working with the county on more than one issue—such as homelessness, income, food, behavioral health or otherwise—"we will have a single, integrated view and can be more effective in providing needed services."

More important, says the executive, is that because this breaks down silos, "we will now, for the first time, have this enterprise view—a fantastic platform for

analytics." This means, he continues, "we can begin using analytics to drive learning at both the macro and micro level: we can make better decisions across the organization; we can provide better and more-targeted services to the individual."

For example, in the past, the county had no means of tracking metrics such as no-show rates for appointments. But under the coming vision, individuals "will receive text and phone call reminders." Plus, "since we will learn to anticipate no-shows, we can [better gauge expected volume], so there's more efficient use of our offices." Overall, says Venzke, "we believe a clearer focus on data will reveal more worthwhile, [outcome-focused metrics] along with a wide range of [similar] opportunities to [transform] our effectiveness."

....

"If a citizen is working with the county on more than one issue—such as homelessness, income, food, behavioral health or otherwise—we will have a single, integrated view and can be more effective in providing needed services."

— Stuart Venzke
COO,
Montgomery County, Md.,
Department of Health and Human Services

....

NEW YORK

New York's technology overlay

Note that the fix does not necessarily require an immediate or even complete technological overhaul. For example, as Gibbs explains, New York City is "using middleware and a common client index across eight or so federated city agencies." So when an agency enters information about a client such as a phone number, address or Social Security number, that information can be shared across agencies—with each having both a right and a responsibility to access such information. Each agency will still be using its traditional technology backbone, with shared information about each citizen or family translated by the middleware.

On the one hand, this can dramatically improve client pathways to government and overall citizen experience, "as there will be less need to fill out redundant paperwork." But even more significantly, government begins to build a clearer picture of any given human services client's broader relationship with the government. This, says Gibbs, "means we can be more efficient and effective in identifying potential needs and providing service." But such an example is only the beginning. There are many similarly technology-infused initiatives in New York and other cities, says Gibbs, that collectively are leading to a "transformation of government."

> "...even more significantly, government begins to build a clearer picture of any given human services client's broader relationship with the government. This means we can be more efficient and effective in identifying potential needs and providing service."
>
> — **Linda Gibbs**
> Principal,
> Bloomberg Associates

ALASKA

Alaska: Addressing unique challenges

The State of Alaska is especially well-poised to benefit from technology. As Albert Wall, division director of behavioral health, explains, while most people realize "Alaska is a very, very large state," few fully appreciate what that means for human services. "The bulk of our communities—you can't drive there. You must fly—and it won't be on a large plane." Most villages "are an hour and a half or more away from the nearest doctor or government office." As a result, says Wall, "we have to find ways to deliver our services to where people actually are, and to do that, we must use technology."

The state in many ways "is already a leader in technology," says Simon Taylor, Alaska's Financial Management Services–Information Technology Services business applications manager. This is particularly true in areas such as tele-health, where the remote nature of the geography makes many traditional checkups "impractical."

And it is also often true in human services. As Wall explains, "You may have a case of a small community of 80 or so where there's an individual with a psychological disorder needing state care. But there's no doctor or nurse with the right training. There might be a behavioral health aide, not licensed but educated." Similarly, Alaska operates a chain of retirement/nursing homes for state residents. But again, geography can often make it impossible to efficiently execute needed senior evaluations or routine checkups with residents. With resources so constrained by geography, getting the right treatment "requires technology."

Weather and distance also often leads to a relatively high number of "no shows" for scheduled appointments. If Alaskans must travel great distances to find their medical appointments canceled or the appointment times changed, it creates a significant challenge. Similar challenges exist across a range of human services, from juvenile parole check-ins to foster home assessments and updates. Again, says Wall, "without technology, we could not do this cost-effectively."

Though leading in remote delivery of services directly to clients, a key area where Alaska is less far along in its journey is in its IT backbone. In fact, says Beth Davidson, acting state health information technology coordinator, "We're right now at the start of a huge technology push." Initially this means moving

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>
> **— Albert Wall**
> Division Director of Behavioral Health,
> State of Alaska

toward shared infrastructure and shared services across the full range of health and human services agencies.

The goal, says Wall, "is create a consolidated, efficient, IT infrastructure with sufficient bandwidth." But the challenges are significant given "the number of agencies and all of the technologies in use." Going forward, Wall, Davidson, Taylor and others will be working together to upgrade, replace and integrate all of the state's health and human services technologies. Getting it done, says Taylor, starts with the "evolving and agency-driven IT governance process that enables cooperation between agencies and consolidation of IT services across the entire organization." In exercising this process, the governance team must evaluate and prioritize investments as well as identify and overcome roadblocks, allowing the state to offer more-efficient IT service delivery models, while agencies leverage those efficiencies to achieve business outcomes more effectively.

Tips for moving forward and a vision for the future: next section.

THE CITIZEN'S PERSPECTIVE STARTS WITH DATA SHARING AND INTEROPERABILITY: A COLLABORATIVE ROADMAP

The ultimate goal is to work from the perspective of the citizen. What services, from all agencies and other members of the ecosystem, does this citizen need? But the first steps in this profound shift from an agency-based to a citizen-centric perspective require cooperation across all agencies and programs—a tall order, to say the least. Nonetheless, such efforts are the key to truly transformative performance.

Some KEY IDEAS to consider when taking initial steps to bridge local, agency, state or federal lines include:[1]

Develop a toolkit.[2] A toolkit can provide information of use to other agencies beginning with exploratory discussions all the way through planning and implementation phases. The key focus of any toolkit: how to enable data sharing and systems interoperability. Compelling and useful information to share can include:

• *The rationale* What is the business case for sharing data, what benefits are achievable, and what sorts of data should be shared to improve outcomes?

• *Outlines of applicable legislation, laws and regulations related to data collection and sharing across core programs.*

• *Examples of how to address confidentiality requirements in line with existing federal, state and local laws.* This should include guidance on when information sharing is mandated, permitted or prohibited by statute or regulation; when a Memorandum of Understanding (MOU) is required by federal law; and instances in which agencies have broader options for creating data-sharing agreements.

• *Suggestions for making implementation successful.* One approach is the creation of a "program group" and a "legal group" for each agency involved. A program group focuses on determining what information may be necessary to share, who may access the information, and any policy and operational justifications for sharing such information. The legal group assists in determining the confidentiality of information—how it may be protected under applicable and agency requirements.

Create a capable, empowered, high-level governance model. One suggestion is to begin by creating a cross-agency data-sharing working group. Executive support and strong stakeholder management across agencies is vital to create lasting data-sharing partnerships. A toolkit can again provide strategies and sample structures for creating groups that will lead data-sharing and integration efforts both within and across agencies in both the short and long term.

Enhance planning, IT systems transformations or updates by creating specific requirements for interoperability and data interfaces. States have various options for technology modernization, including full system replacement, legacy system upgrade or upgrade of specific components. Agencies that are beginning system development have the opportunity to build in the time, resources and requirements to create effective interfaces and information exchanges. Legacy upgrades can progressively improve upon guidelines, governance and security measures. The toolkit provides useful samples and tools for use across the continuum of system transformation.

Address multiple levels of data security in all new and upgraded technology systems. Owing to the importance of maintaining client confidentiality and data security, states and agencies should assess the range of security options available, including access control, audit control, and integrity and transmission security protocols. Incorporate security requirements in all modernization projects, and ensure that project staff and vendors are familiar with the available tools and guidelines (such as the Information Exchange Package Documentation—IEPD—for HHS agencies).

Review successful examples. Seven states have obtained state systems interoperability and integration project (S212) grants. All have published reports of their successes and challenges in creating and implementing interoperability and shared service models—knowledge that should be leveraged.

Start with proof of concept. Begin in one service area; expand and refine as lessons are learned. S212 grant recipient California, for example, provides proof of concept for foster care use cases. This strategy provides a way to quickly begin implementing data-sharing initiatives while adapting to individual state and local needs and constraints in the long term.

It won't happen overnight. Agencies need to begin sharing information with one another and cooperating before truly citizen-centric profiles can begin to take shape, let alone become the organizing principle behind service delivery. But through steps such as those above, leaders can help initiate discussions and actions that will begin the migration to a more optimized and citizen outcome-focused approach to human services.

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[1]Abstracted from "New resources to spur health and human services data sharing and integration," KPMG Governing Institute, 2014 (http://www.kpmg-institutes.com/institutes/government-institute/articles/2014/09/acf-confidentiality-toolkit.html)

[2]ACF Confidentiality Toolkit (https://www.acf.hhs.gov/sites/default/files/assets/acf_confidentiality_toolkit_final_08_12_2014.pdf)

ACHIEVING THE FUTURE: METHODS AND MILESTONES ON THE PATH TO TRANSFORMATION

When it comes to harnessing technology in the pursuit of breakthrough performance against a renewed set of citizen-focused objectives, there is no question: government executives face tremendous obstacles. Nonetheless, leading agencies are already achieving transformational results. Encapsulating many of the examples, suggestions and lessons from above, here we present an indicative checklist of worthwhile and recommended actions, followed by five core strategic trends that when emulated, can help unlock the future of human services.

A TRANSFORMATIONAL CHECKLIST

Getting started can be daunting. Issues include everything from legacy software to a lack of interagency cooperation to scarce or absent resources. Once under way, new programs need the right sort of ongoing governance and metrics to measure progress and stay on track. Finally, gains must never be taken for granted: organizations must critically evaluate performance, seeking continuous learning and improvement. Combing through the 20-plus interviews conducted for this report, we've distilled key practical, strategic and tool-related recommendations. They include:

STRATEGIC IMPERATIVES:

1 Develop a vision.

As Boston's Franklin-Hodge explains, "We think of three pegs in our technology strategy: great tools in the hands of workers; great experiences and interaction [between agencies], the public and business; and the right data in the hands of the right people at the right times to get the best results." Note that this approach touches the key elements of the above framework.

2 Secure executive-level commitment.

"None of this goes anywhere," says Indiana's Baltzell, "without unwavering and visible support from the top." Baltzell is fortunate because "our governor is clear about our direction, making it a lot easier to get things done." Other executives from other agencies may need to do more work in terms of building a business case and obtaining senior buy-in.

3 Require cooperation.

Owners of silos need to be active participants in their dissolution. Still-more-senior executives—champions of the change—must make it clear that failure to cooperate is unacceptable. Meanwhile, an oft-cited objection to cooperation is that processes cannot be bared nor data shared for legal reasons. In practice, most such issues are overblown or can be addressed creatively or by the attainment of waivers. In the event of true loggerheads, agency heads can turn to their legislature for needed amendments.

4 Establish clear governance.

Who reviews and is able to approve which steps? When snags arise—they will—how are such issues escalated and resolved? Clear governance becomes even more important when a project involves multiple agencies. Give representation to all parties, and ensure their needs are being met without losing sight of the overall objective.

5 Focus on the mission.

Technology is not an end—it is a tool. Government executives should think about the challenges they face in accomplishing their mission and only then consider the ways that technology can play a role.

6 Revisit and rethink processes.

Government services are governed by rules. But many of the processes surrounding those rules were developed many years ago. Question everything: why is this done this way? Why can't it be done that way? Who might need to become involved to find a more effective approach? As Franklin-Hodge explains, "We are finding many places where the solution isn't all that complicated, it's just that no one has taken a hard look in a long time."

7 Choose the right metrics.

The mission matters, not the means. Do not evaluate effectiveness of a technology initiative based solely on the number of workers using a tool or the number of site visitors. Emphasize non-IT metrics, says Franklin-Hodge, "that show improvement against your agency's objectives."

Think behaviorally.

Working with ACF on its BIAS program, MDRC is helping to identify simple, human-focused measures that dramatically improve results. Placing learning on a smartphone, then developing highly customized games within needed applications is helping the State of Mississippi improve the experiences of the developmentally disabled. Meanwhile, the City of New York is using in-person observation of how clients interact with a mobile tool in order to build a more effective application. The point is, true transformation comes only when technology is implemented in the context of user experience. Do not automate current practices, but rather, reengineer processes in light of citizen perspectives and today's technologies.

Avoid reinventing the wheel.

A key goal of many states and municipalities is to leverage common tools and processes. A case management tool in child welfare services may be easily adapted to address the needs of a housing or senior care team. Speak with other agencies—both related/nearby and far beyond your jurisdiction. Also—use resources like DigiGov University to learn and share knowledge as well as FedRAMP to identify the most effective technologies.

Think about the back office...

Much has been said about citizen experience. But do not overlook the workforce experience: what tools do your front-line people need? What can you put into their hands that would make them more effective? Figure it out—then provide it.

...and the front office.

What is the experience for citizens? Are they forced to visit offices and waiting rooms or can they find and file forms online or from a mobile device? Do they have to re-submit basic data every time they interact with a new agency, or is core citizen information pre-filled? Can citizens readily track the status of their business with government, or do they have to wait for in-person or snail-mailed confirmations?

Think: mobility.

What tools and services could be made available on a tablet or smartphone that could dramatically improve worker effectiveness or citizen access or citizen experience? Recognize, mobile access is one of the most readily accessible and yet powerful tools in today's human services provision services toolkit. While there may be a security or data-sharing issue or two, such barriers are falling—and most can already be overcome.

Know your certifications.

Certain data sets have specific rules and requirements for data security and sharing. Human services activities often require working with data rules such as IRS 1075 (Internal Revenue Service), CJIS (Criminal Justice Information Service) or HIPAA (Health Insurance Portability and Affordability Act), to name the most common. Know your data—and make certain any technologies involved meet the specific requirements.

Consider the cloud...

The cloud can be a tremendous enabler for government. Benefits can include everything from reduced costs, reduced workloads for IT—enabling it to focus more clearly on the mission—greater scalability and faster applications development. Though many cite security concerns as a shortcoming, in reality, the cloud can be made more secure than what many agencies are currently operating.

...alongside additional leading-edge approaches and technologies.

As the private sector continues to innovate, so can government. Cloud adoption is just one example. In general, businesses are doing more to reduce their IT footprint while concentrating on their core focus. This leads to moves such as outsourcing or the adoption of software as a service (SaaS) or infrastructure as a service (IaaS) models. Fields such as biometrics also hold great promise for government, for example, as a means of identifying clients and reducing fraud.

Don't overthink the data.

The buzzword may be predictive data—and indeed, greater rigor can deliver breakthrough results. But in practice, many of the most valuable advancements in effectiveness are being achieved simply by building systems and processes that, as Franklin-Hodge suggests, "puts the right data in the right hands at the right time."

Iterate, advance, repeat.

Alan Millar of Idaho PTECH says that one of the most important elements of any new approach is to "iterate, advance, repeat." Innovation means observing, learning and continuously improving. Change is so much a part of his group's culture "that the joke around here is every six weeks, we're a new company."

5 CORE STRATEGIC TRENDS

While the preceding section provides a pragmatic checklist, this concluding segment consolidates a range of core strategic trends observable among leaders in advancing the provision of human services. In achieving their future visions—consider these as pathways to transformation—leaders today are thinking in terms of five key objectives:[2]

1 Create a unified, readily accessible portal to a wide array of related services.

Pioneers in transformation are developing "client pathways," a means of viewing access to human services programs from the perspective of the individual citizen. Traditionally, when a person calls upon the government, access is granted one service or agency at a time. But the transformational aspiration, the citizen-centric approach, is to enable evaluation and access to all relevant services at once. A family needing disability services will also likely need housing, income, food, WIC and related services. They should not need to apply separately to six, seven or more agencies; their needs should be assessed and addressed holistically. It is only from such a broad-spectrum approach that government can achieve optimum effectiveness in the provision of human services.

Similarly, citizens should not have to sit in waiting rooms, relying on public transit, missing work, leaving children unattended—and dealing with a host of related challenges. Access to all needed forms and applications should be made available online and ideally, even through mobile. Once in process or in a program, the interaction should continue to feature the efficiency and convenience of mobile, online or telephone interaction and/or compliance. The goal of government should be to transform citizen experience from stressful to streamlined—more in line with customer experiences with the private sector.

2 Focus on outcomes.

Inertial forces leave many government agencies relying on decades-old measures of effectiveness. How many clients are seen in one day? How many cases are under consideration? What was the total payout in services? Such measures can provide an indication of performance. But they do not always measure what truly matters.

Transformation-seeking agencies focus on still more meaningful outcomes from a citizen or constellation of collaborating agencies perspective, not that of a single agency. How quickly was a child able to be placed in foster care? How many are opting for top-rated daycare programs? How many families or individuals were able to avoid going to a homeless shelter? Government executives and workers should strive to define metrics that have a genuine impact on the agency's mission. Leaders ensure such metrics are generated and made visible digitally—becoming a persistent and prominent dashboard for focusing resources and evaluating performance.

3 Pursue intergovernmental integration...

For reasons already cited, silos are a prominent feature throughout government. Owing to their endemic nature, the removal of such barriers—not just those between state and federal agencies but also between local and county offices—can be remarkably challenging. But with each success, as more and more agencies show how cooperation yields breakthrough results, pressure for reform grows.

The private sector knows how to tear down such walls for the good of the "customer experience." Key steps include focusing on desired outcomes, securing and leveraging senior level buy-in, defining mutually agreed goals and then following through with appropriate governance and ongoing performance

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[2]These five elements adapted in part from "The Integration Imperative: Reshaping the delivery of human and social services", KPMG International, October, 2013.

evaluation. This can be the toughest part of the journey. But by focusing on the "citizen experience" as the key organizing principle, arguments to the contrary lose their merit.

4 ...while optimizing the roles of for-profit, NFP and charitable organizations.

Groups like CAMBA, Mobile Benefits, Idaho PTECH and others can play a critical role in the provision of human services. Where needing assistance or specialization, the private sector is quick to hire external providers or form hand-in-hand partnerships with "other" outside organizations. Transformational government requires the same: close coordination, planning and collaboration with all members of the ecosystem—key contributors to the well-being of communities and citizens.

Note that some of the most cutting-edge innovation will arise from external providers. In an age of fast-evolving technology, both for-profit and non-profit sectors are less constrained by legacy IT applications and architectures, legislated processes and risk-averse thinking. Moreover, these groups often work with a broad range of agencies and jurisdictions, giving them insight to a wider swath of innovations and best practices. Partnership and collaboration with such groups can be an invaluable pathway to breakthrough performance.

5 Consider communities, not programs.

A discrete offering in human services is one size fits all: here are the program requirements, here is how to qualify, and this is how benefits or actions are administered. But leaders in the transformation of government are noticing profound opportunities to custom-tailor solutions for specific circumstances. This might entail reconfiguring budgets or partnering with unfamiliar agencies to reinvent the service offering. It may also require working closely with a given community or region to identify additional "partners" and solutions to key problems. But such "place-based" approaches are a natural and desirable offshoot of all of the accompanying actions described in this report.

Recognize that a critical—and transformational—issue is the need to break down silos in a way that focuses on outcomes for citizens, families and communities in need. Programs—government, for-profit, not-for-profit and charitable—often overlap, leading to suboptimal investment, processes and outcomes. The true future of human services isn't a single agency doing its best to perform its own mission. Rather, it is an ecosystem of connected and collaborative members working together to optimize resources, coordinate processes and achieve breakthrough results.

To follow: a few concluding thoughts.

THE FUTURE OF HUMAN SERVICES

There is much to consider. But the fact remains, the future of human services requires that agencies adjust their focus, metrics and related process design in light of already available as well as fast-evolving technologies. Different agencies will of course face varying challenges and opportunities. Certain opportunities, like mobile and cloud adoption, may yield breakthrough performance at a relatively breakneck pace.

Ultimately, government needs to adopt a citizen perspective and then mold its operations and offerings—including collaboration with other agencies and players in the human services ecosystem—to deliver optimized outcomes.

SOME OF THE DIMENSIONS TO CONSIDER INCLUDE:

	PRESENT	FUTURE
Focus:	Agency-centric	Citizen-centric
Metrics:	Process-focused	Outcome-focused
Tools:	IT-needs design	User-centric, behaviorally based design
Collaboration:	Silos	Ecosystem
Processes/records:	Paper	Mobile/digital
Data:	Historical	Predictive
Citizen experience:	Offices/waiting rooms	Mobile/online/virtual
Applications:	Static	Dynamic
IT footprint:	On-premise	Outsourced/cloud

There is no magic formula and no precise development path. Not every agency will need to move the needle all the way to the right in every instance. The goal is optimization of citizen outcomes given available resources, not absolute adherence to any model. However, agency executives need to assess where they are today, identify and pursue their quick wins, but nonetheless aspire to and settle for nothing short of transformational.

CONCLUSION: TECHNOLOGY—YOUR MISSION DEMANDS MORE

From the GSA and OCSIT to the Administration for Children and Families; from the City of Boston, to the City of New York, to Montgomery County, Md., down to Texas then up to Alaska; from the provision of mobile access and game-ification of apps to predictive analytics: the list of success stories grows day by day.

There are numerous reasons to get moving. Start with the White House's Digital Government Strategy, directing agencies to seize technological opportunities. Consider your workforce, and the ways technology can improve both job performance and satisfaction—leading to still greater job performance.

Perhaps add rising cost concerns and growing pressure to do more with less. Or think about the growing gap between what citizens are experiencing in their commercial lives versus conducting business with your agency.

> ### Adopt a citizen, not an agency, perspective—and then start breaking down the barriers.

Finally, consider the ways technology's embrace can drive organizational performance—cases where homelessness is being prevented; children are living longer, safer and more secure lives; and students are gaining access to better jobs training and general education. Think also about how behaviorally focused tweaks in software and or processes—as simple as less paperwork, less text in a mobile app or a texted appointment reminder—can profoundly improve outcomes.

Adopt a citizen, not an agency, perspective—and then start breaking down the barriers. Think about groundbreaking and yet readily easy to implement technologies such as mobile. As momentum builds, consider additional opportunities in areas such as predictive analytics, customized/personalized applications, cloud or even biometrics.

Certainly, there are challenges. But as pioneers are demonstrating, persistence and a willingness to embrace innovation can go a long way toward erasing silos, legacy systems and related legal and bureaucratic obstacles.

Technology is not its own end. But as this report makes clear, it can and is being harnessed to achieve breakthrough results. Alternatively, anything less than optimized, up-to-date technology adoption means underperformance. So if you believe in your human services mission, you need to embrace digital transformation.

APPENDIX: TRANSFORMATIVE ATTRIBUTES—A SUMMARY OF CORE CASE STUDIES

KEY ELEMENTS

	INTERGOVERNMENTAL	INTERSECTORAL
Administration for Children and Families		X
Alaska (various agencies)	X	X
CAMBA (homelessness prevention)	X	X
City of Boston	X	X
Florida Department of Children and Families	X	X
Indiana (State of)	X	X
MDRC / Indiana Association for Child Care Resource and Referral	X	X
Mississippi Department of Mental Health (Talking Tiles)		X
Mobile Benefits Inc. (QuickWIC)		X
Montgomery County, Md., Department of Health and Human Services	X	X
City of New York	X	X
Office of Citizen Services and Innovative Technologies/18F (OCSIT)	X	X
Idaho PTECH (skills training)	X	X
Texas (various agencies)	X	X

(Note: not all elements applicable to each case study are necessarily noted—merely those discussed explicitly in interviews or otherwise clearly in evidence. Many agencies may actually feature additional attributes.)

A strategic model outlined in the above report points to five fundamental elements: client pathways, focus on outcomes, intergovernmental coordination, intersectoral coordination and place-based integration. Executives should also consider how their programs incorporate mobile capabilities as well as embrace a core focus on citizen experience. All can be critical aspects of a transformational approach to human services; their prominence in the initiatives covered within this report are summarized below.

PLACE-BASED INTEGRATION	MOBILE	CITIZEN EXPERIENCE	CLIENT PATHWAYS	FOCUS ON OUTCOMES
X	X	X		X
	X	X		X
	X	X	X	X
X	X	X	X	X
X				X
X	X	X	X	X
X	X	X		X
	X		X	X
	X	X	X	X
X			X	X
X	X	X	X	X
X	X	X	X	X
	X	X		X
		X	X	X

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