



Delivering the digital state

What if state government services worked like Amazon?

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What citizens want

Say you've been laid off from your job and want to apply for unemployment benefits. You log into your state's web portal, which welcomes you by name. A note on the left of the screen reminds you you're due to renew your driver's license in July; another asks if you want to rent a cabin in a state park, as you did last year.

SKIPPING those items for the moment, you type in your request and are immediately sent to the page for claiming unemployment benefits. You click on "apply for benefits" and up pops a form displaying your name, address, and contact information, as well as details on your employer the state captured from your income taxes. You check the fields for accuracy, enter your separation date, and you're just about done.

When the transaction is complete, the system asks if you want to go next to your state's health insurance exchange, in case your job loss left you in need of a new policy.

Many commercial online services offer this kind of customer experience—so many that we typically take fast, frictionless transactions for granted. Nobody is surprised that TurboTax offers to pre-populate your tax forms for easy filing. So why don't most state governments offer anything similar? Citizens certainly want them.

Consumer surveys indicate that satisfaction with government services has fallen to an eight-year low.¹ Recent Gallup polls show that Americans continue to name *dissatisfaction with government* as the nation's second most-important problem, after *the economy*.²

In our digital government survey of state and local government officials, 73 percent believed their organization's digital capabilities were behind those in the private sector.

Many government officials, moreover, are entirely aware of this dissatisfaction. In our digital government survey of state and local government officials, 73 percent believed their organization's digital capabilities were behind those in the private sector.³ In another recent survey, state IT personnel and decision makers identified the most critical areas needing better digital capabilities; these included health and human services, motor vehicles, employment, public safety, licensing, renewals, and permitting.⁴

Clearly, there's a huge gap between the service state and provincial governments offer today and that provided by companies such as Amazon, eBay, Uber, and Airbnb. To provide the same seamless experience these companies do, a state government would need a robust digital platform offering the equivalent of one-stop shopping, making a range of functions available in a few clicks. This government platform would "know you" based on past transactions, and anticipate your needs. It would be able to navigate the breadth of content to connect you with the right service or the answer you seek.

Most states can't do that today, largely because of the way in which they organize and govern digital technology: with databases that can't communicate with one another, limited information sharing, and overly complex rules and protocols. The 2017

Center for Digital Government survey identified some of the most significant obstacles: legacy systems, lack of qualified staff, poor procurement processes, security issues, inadequate funding, and current employee practices.⁵

To deliver the customer experience their citizens want, states need to focus on three crucial elements:

1. An ***end-to-end digital experience*** developed from the customer's point of view, accessible anywhere, anytime, and from any device.
2. A ***unique, uniform digital ID*** that grants agencies access to the appropriate data and services.
3. Mechanisms that allow agencies to ***share data*** across the state enterprise.

Why transform digital services?

AS with any mass provider of goods and services, a government can't provide great citizen service without an integrated, digital workflow. Citizens want outstanding digital service from their government for the same reason they want it from an online retailer, bank, or travel booking site: It makes their lives easier. The less time people must spend searching for information or filling out forms, the more time they can spend getting on with their lives. Citizens increasingly want—and *expect*—the same service from government they receive from online retailers. Failing to meet that expectation can become synonymous with poor government service.

Well-designed digital government services also give citizens new opportunities. Say you've heard about a government program that helps pay your home heating bills. When you enter the typical government services portal, you might find a page where you can sign up for heating assistance. But if you entered a truly customer-centric environment, the system would know that people who can't pay their heating bills might *also* need help buying food or finding transportation to medical appointments. Once you sign up for the heating program, the system might offer you several other opportunities and

even pre-qualify you for some programs based on the information you've already provided.

Digital transformation, however, also benefits governments themselves. Self-service digital tools allow government organizations to devote fewer resources to call centers, field offices, and other labor-intensive customer service operations. But this is true only if customers take *advantage* of digital tools—if they find them easy and effective to use. By understanding their customers, government entities can avoid spending money on features and tools their customers will never use, or messaging that misses the mark.

Digital transformation also can enhance mission effectiveness. Well-designed digital services encourage customers to engage with the public sector in ways that help government achieve its own goals. In 2012, the government of New Zealand formed Better for Business, a group of 10 agencies that work together to improve their policies and service design to make it easier for businesses to engage with the government. By 2020, Better for Business aims to reduce the business cost of dealing with the government by 25 percent, and to achieve key performance ratings comparable to those earned by leading private companies.⁶

With effective digital tools, for example, a government can encourage higher voluntary tax compliance, discourage benefits fraud, and get more people to participate in work training.

Digital transformation also provides new opportunities to “nudge” citizens—to influence their behavior in ways that promote broader societal goals. With effective digital tools, for example, a government can encourage higher voluntary tax compliance, discourage benefits fraud, and get more people to participate in work training.⁷

The New Mexico Department of Workforce Solutions, for instance, uses behavioral tactics to nudge unemployment insurance claimants toward honest responses. When the system spots an answer

that doesn’t fit the usual pattern or range, it triggers a pop-up message emphasizing the importance of providing correct information. Administrators tested a dozen different messages, and because claimants must certify each week, quickly learned which were most effective. In the year after the smarter system went live, improper payments fell 50 percent and unrecovered overpayments fell by almost 75 percent, saving the state nearly \$7 million.⁸



Falling short of rising citizen expectations

A GAIN, many government officials understand that their current services fall short of what most customers want. Here's what the Obama administration said in the US federal budget for fiscal year 2015:

The American people deserve a government that is responsive to their needs. Citizens and businesses expect government services to be well-designed [and] efficient Despite some important strides to improve customer service over the past 15 years, too many federal government services fail to meet the expectations of citizens and businesses, creating unnecessary hassle and cost for citizens, businesses, and the government itself.⁹

Government officials also understand that digital capabilities are essential to delivering outstanding customer service. In our Deloitte survey of 1,200 government officials from more than 70 countries, 78 percent said digital capabilities allow their employees to work better with citizens. Eighty-two percent said that improving the customer experience and increasing transparency are prime objectives of their organizations' digital strategy.¹⁰ And some states are heeding this demand; consider Connecticut's *OpenCheckbook*, for instance, which is designed to provide real-time information on state payments to improve financial transparency.¹¹

Unfortunately, even when government officials understand the connection between digital capabilities and customer service, many have not been able to translate their knowledge into action. In a 2017 study by Deloitte and the Massachusetts Institute of Technology's *Sloan Management Review*, more than 80 percent of public sector respondents said digital business is important for organizational success. Yet, 42 percent *also* said their organization *lacks a clear and coherent digital business strategy*, and 58 percent described their organization as *slow adopters or nonparticipants*.¹²

Our 2015 survey of members of the National Association of State Auditors, Comptrollers and Treasurers (NASACT) also found that government officials are not aggressively pursuing digital strategies. Less than one-quarter of respondents said *citizen demand* is a primary driver of digital transformation within their organizations. Even among agencies that do seek to provide digital services in response to customer demand, few said they engage significantly with customers to co-create these services. In other words, customers were often on their mind, but rarely involved in service design.¹³

In constituents' eyes, good digital government is synonymous with good government. It was this realization, perhaps, that motivated governors from eight states to mention *improved digital citizen services* as an important objective in their 2016 "State of the State" speeches.¹⁴

The three pillars of digital transformation

HOW will state governments work toward digital transformation? As noted earlier, we believe their success will depend on three essential components: 1) an end-to-end digital experience; 2) a unique, uniform digital ID; and 3) the ability to share data across the state enterprise. Each has been pioneered in the commercial sector, allowing governments to borrow from proven strategies.

An end-to-end customer experience

A state government's ability to execute its mission effectively depends on its ability to deliver an effective customer experience to businesses, citizens, and its own employees. When customers find a digital service too complicated or inconvenient, they may use it incorrectly or infrequently—or refuse to use it at all.

A uniform environment. Think of a theme park. Once you pass through the gate, you're enveloped by its look and feel. You see the same logo and signature colors everywhere. Your admission bracelet gets you on any ride you want. Throughout the park, you'll find the same map to guide you; staff members wearing identical uniforms are there to answer your questions.

The Australian state of Victoria plans to offer a kind of service "theme park." Called Service Victoria, it's a central organization created to provide services currently offered by a variety of different agencies. Although 65 percent of Victoria residents say they want to deal with the state electronically, as of mid-2017, customers could choose the digital option for only 1 percent of all government transac-

tions. But that should change with Service Victoria. More than one-half of the project's AUD 81 million budget will go toward a new technology infrastructure that will support activities such as renewing drivers' licenses, registering births and deaths, and obtaining fishing licenses. The government expects to release its first set of digital services under the Service Victoria brand by the end of 2017.¹⁵

A seamless experience. Citizens don't care about organizational charts, and they certainly don't want to spend time hopping from one agency's website to another, trying to find out who can help them. They want to get their questions answered or their transactions completed in a few simple steps. They're like shoppers who've grown tired of visiting a different store for each item they need. Why drive all over town when you can go to Walmart—or, better yet, to Amazon or Overstock.com?

BECU, a credit union based near Seattle, kept the seamless customer experience in mind when it developed a digital strategy encompassing all four lines of its business: consumer, small business, wealth management, and mortgage. BECU's new digital vision has improved the member experience while responding more accurately to marketplace needs.¹⁶ Today, membership in BECU is growing, as is the volume of members' self-service transactions.¹⁷

Like the best e-commerce sites, a seamless digital service environment wouldn't greet you by asking, "Where do you want to go?" Instead, it would ask, "What do you want to *do*?"—and it would take you where you can accomplish it. Want to register to vote? You shouldn't need to know the name of the agency that handles that. The system would take you to the right place.

The goal of creating one seamless environment clearly presents a leadership challenge to most states, which still operate largely in silos, with limited cross-agency governance.

For people in the Australian state of Queensland, the service “mall” is One-Stop Shop, a program developed to satisfy citizens who expect government transactions to resemble their other online transactions. The service debuted in 2014 with 40 digital services; today it offers more than 400.¹⁸ Queensland has made a point of asking citizens what digital services they want and how they should work. In response to customer requests, for example, Queensland added a “tell us once” change of address service, employing a single form to update records across multiple services. Customers also can use a single tool to send complaints or feedback to any agency, without needing to know how to reach the relevant government employees.¹⁹

The most unified, seamless service in the world won't really please its users unless it's built on a deep understanding of what they want.

Customer experience is more than customer service. The most unified, seamless service in the world won't really please its users unless it's built on a deep understanding of what they want. The first step in any state digital project should be to explore and pinpoint the needs of the people who will use the service, and the ways in which it could fit into their lives. Whether users are citizens or government employees, policy makers should include real people in the design process from the beginning. The needs of users—not the constraints of government structures—should inform technical and design decisions. Governments should continu-

ally test the products they build with real people to stay focused on what's important.

This requires governments to understand the difference between customer service and customer *experience*. Consider a customer purchasing a book. The experience begins the moment she contemplates buying it and continues until she's read it and, if it's good, recommends it to her friends. Customer service, on the other hand, is narrowly focused on the actual transaction: “Was the book in stock?” “Was the salesperson friendly?” “Was there a line at the register?”

When government agencies assess their performance by focusing primarily on their own process measures such as speed and accuracy, they risk being misled. Narrow improvements to customer service may not be enough to improve customer satisfaction, which reflects the *entirety* of the experience.

As they seek to improve the customer experience, governments should rethink their strategies for gaining customer feedback. Beware of untested assumptions. For example, if you're rushing to build a mobile app, be aware that there's such a thing as app fatigue; many people now prefer a mobile web experience. Similarly, if you plan to invest heavily in creating user accounts, such as online banks have, understand that most online retail transactions are completed in “guest” mode.

The only way to know for sure what customers want is to send designers into the field. In fact, a whole discipline concerning customer experience has emerged from ethnographic research and behavioral science (also known as design thinking and human- or user-centered design). Design thinking seeks to understand the personas, the service journey and the “moments that matter”—points where a favorable or unfavorable perception can be amplified. Nothing can replace the insights gained through experiencing firsthand what customers encounter—the highs, the lows, and everything in between.

The US Citizenship and Immigration Services (USCIS) followed these principles when it used customer feedback to inform two efforts, a project to optimize its website for mobile users and another to improve its responses to questions. USCIS has used

customer personas and customer journey mapping to better understand the varied needs of the people who use its services.²⁰

The Texas Health and Human Services Commission (HHSC) also used extensive customer research in designing a mobile version of an online service that aggregates eligibility for numerous federal and state benefit programs. Designers thought applicants would find it useful to be able to submit verification documents with a smartphone photo. But rather than simply run with that assumption, they visited service centers to talk with applicants. There, they learned that most benefit applicants had smartphones, but their devices often lacked advanced capabilities. They also learned that applicants knew how to get the most from their phones.

“Many users were used to conducting their business on mobile devices instead of personal computers, making them sophisticated users,” explains Stephanie Muth, the HHSC deputy executive commissioner who spearheaded the project. Armed with such insights, the design team created an app that was downloaded 300,000 times within its first few months.²¹

Create enterprise-wide identity management

Imagine you were browsing an online retailer for a few items: a book, a pair of shoes, and a new case for your smartphone. You log in and the experience is relatively smooth, but after you find the book and move on to the shoes, you are asked to register anew as if you’d never registered the first time. Mildly annoyed, you fill out the registration form and carry on—until the same thing happens when you search for phone cases. And then *again* when you try to check out. By the time you’ve paid, you’ve had to register and authenticate yourself *four times*. And, weirdly, each time the process is just a little different. Even if you’re pleased with the products and prices, you may find yourself annoyed at the over-

all experience—and at the company that made you jump through these hoops.

While such experiences are rare for online shoppers, they’re familiar to anyone using online government services.

Most governments rely on a sprawling patchwork of systems to identify and manage information about people, using everything from passwords to smart cards to biometrics. At the same time, the data must be tagged so that only the right users have access. Unfortunately, these elements rarely come together in a way that seems convenient or logical to the end user, whether it’s a citizen, a business, or even a public employee. Citizens typically can’t file their taxes without re-entering information several times; agency employees are often locked out of buildings they should be able to enter because ID cards are handled building by building, or regionally. These disconnects can be frustrating at best and crippling at worst.²²

While private-sector companies also face some of these silo challenges, they’ve solved them through enterprise identity management, making such hurdles relics of the past.

While private-sector companies also face some of these silo challenges, they’ve solved them through enterprise identity management, making such hurdles relics of the past. Their stubborn remnants are found largely in the public sector.

Several governments, however, are leading the way toward a better standard for identification management.

ESTONIA'S X-ROAD

Estonia probably has the world's most advanced digital government. As a nation that regained its independence in 1991, it built many of its IT systems from scratch. Because of this, Estonia was able to tailor nearly every aspect of its government to the online world. It's all linked by a data exchange system called X-Road, which provides a highly robust model for digital identity.

The cornerstone of X-Road is the Estonian ID card, widely considered the most sophisticated of its kind. Estonian IDs serve both as physical documents, incorporating a photo and biometric data, and as digital identifiers. The card features an on-board chip that verifies identity and provides a digital signature protected by a four-digit personal identification number (PIN). Every Estonian can provide strong identity authentication in person or at a distance. And since they can easily prove who they are, they can conduct business with the government or the private sector much more efficiently.

Transactions that in other countries might require a trip to the bank or tax office can be conducted securely online. Using only their ID cards and PINs as credentials, Estonians can register a corporation, vote in national elections, and sign legally binding documents from their computers. It's seamless and efficient, and citizens are never asked for the same information twice. (In fact, Estonian law prohibits the government from making duplicative requests.)²³

MICHIGAN'S MILOGIN

In Michigan, the MILogin identity management system allows users to access state information and applications, including private data, from multiple agencies with a single sign-in. The system uses tools such as credentials verified by a third party, strong passwords, and multifactor authentication to protect the user's identity, with specific requirements determined by the agency that owns each application. MILogin started with the Michigan Department of Health and Human Services (MDHHS), which asked the state's Department of Technology, Management and Budget (DTMB) for

a way to manage users' identities in a single location. Recognizing the value this strategy offered for all state agencies, DTMB turned the request into an enterprise-wide project. As of September 2017, more than 60,000 state employees and contractors, 100,000 Michigan citizens, and 700,000 business entities had registered for an account. MILogin users can now access more than 170 state applications from multiple agencies, including about 20 Medicaid software applications that contain regulated and highly sensitive personal health information. Michigan eventually plans to make the login for MI Bridges—used to gain access to applications for MDHHS benefits—part of MILogin as well. That could raise the number of citizens using MILogin to as high as 2 million.

BC SERVICES

British Columbia uses its BC Services card to identify and authenticate citizens for access to all digital government services. This chip card replaces an earlier ID that provided access only to health care services. To gain access to a service, the user taps the card on a card reader, which uses the chip's unique ID to validate the user with the service provider.²⁴ The BC government also provides an app that turns an Android phone into a card reader.²⁵ As of July 2016, the provincial government had distributed about 3.4 million BC Services cards. It expects to put them in the hands of all 4.5 million BC residents by the end of 2017.²⁶

MYGOVID

In Ireland, thousands of users can access a range of government services through MyGovID, a secure online identity system. Once registered, users can access services across multiple government agencies, such as appointment booking, job-seeker support services, and personal tax services, without re-verifying their identities or reentering basic details. Registration is simple and involves multifactor authentication for added security. Launched as the only digital identity platform for all citizens, MyGovID recently won an Irish World Class Innovation Award for the public sector.

Executing enterprise-wide master data management

Imagine never having to retype your address on another signup form. If government departments used the same systems and shared data, many time-consuming and repetitive tasks would vanish. Customers would gain an “account-like” experience with their government; information and electronic artifacts would be provided once and shared across agencies as required and as allowed by the customer, while adhering to privacy statutes. This is a *de facto* standard for most commercial organizations, and again, customers have come to expect it.

If state governments followed the same model, citizens with a single digital identifier could go online to pay taxes, obtain health care coverage, apply for small-business loans, register a corporation, vote in national elections, and sign legally binding documents without reentering the same information repeatedly.²⁷ Onscreen forms would come pre-populated with data various government agencies have collected in the past, leaving the citizen only to verify old data and provide new information as needed.

To achieve this, governments need better data-sharing mechanisms. That might involve centralizing IT services so that all agencies use an integrated suite of applications—but this isn’t the only possible model. Another would be to create a central repository from which all the agencies draw data as needed for their own activities. Or a government could create links through application programming interfaces (APIs) that allow different systems to share data.

Most government organizations are still in the early stages of integrated data management. Here are some leaders:

FEDERAL COMMUNICATIONS COMMISSION

The Federal Communications Commission (FCC) is taking incremental steps toward a fully integrated IT platform. In 2013, with 207 legacy systems in place, many of them near-obsolete, the FCC could barely keep up with a barrage of online comments from the public and directives from



Congress. Rather than trying to replace all its systems, the FCC found a way to let them share information in the near term, while it took the time it needed to streamline and integrate its IT processes.

“[T]he idea was, let’s have a single common data platform that has all the data from the legacy systems, and over time, use modular elements of commercial cloud platforms to deliver reusable, remixable processes for the FCC,” says former FCC CIO David Bray, who launched the initiative in late 2013.²⁸

The FCC team used modular pieces of code that can be used and reused to interact with the common data platform. It’s a governmental variation on the plug-and-play model adapted for cloud computing. Instead of building big, heavy applications that commingle code and data, the agency chose to develop smaller, lightweight modules of code that can tap a more permanent “data lake.” By separating data and code, Bray realized, the FCC could more easily “remix” the code to meet congressional demands. The system costs far less to maintain while making the agency much more nimble and responsive.²⁹

NATIONAL INFORMATION EXCHANGE MODEL

The National Information Exchange Model (NIEM), created after the September 11 attacks, facilitates information sharing among law-enforcement and homeland-security organizations. Begun as an initiative of the US Department of Justice (DOJ), NIEM morphed into a joint approach when the Department of Homeland Security (DHS) and then later the Department of Health and Human Services (HHS) came on board. In essence, it's a protocol for sharing information between normally siloed departments.

"No one was really sharing information, even within the federal law-enforcement community," explains Van Hitch, the onetime DOJ CIO who founded NIEM. "In the past, the primary way to share information was to set up a task force with members from all relevant agencies."³⁰

At its core, NIEM is a protocol that sets some standard definitions for key data fields—"person," "location," "activity," "item," and so forth—as well as for message types that can be adopted across different jurisdictions and departments, allowing for rapid, widespread data access and sharing. It's like a data dictionary with thousands of data fields and individual chapters specific to sectors using NIEM, such as justice, transportation, homeland security, and social services.

All 50 states, at least 16 federal agencies, and even many foreign governments have adopted the NIEM standard. NIEM has, for example, enabled Canada and the United States to avoid the headache of trying to build an integrated system that would coordinate data about people crossing their common border. Engineers used the program to con-

nect the countries' legacy systems through a common approach.

Numerous state and local jurisdictions also have adopted the NIEM standard to coordinate information and action in a wide variety of areas. For example, Massachusetts uses NIEM to share information related to gangs and gang activity among state and local law-enforcement agencies. New York City, meanwhile, uses the program to allow residents to sign up for social service programs.³¹

MICHIGAN

In addition to MILogin, Michigan is taking other steps to create an integrated, citizen-centric service platform. Among these is an initiative to foster data collaboration. In 2014, DTMB began developing an "Open First" data policy to foster data sharing across the enterprise. The policy includes identifying master data across all state agencies; establishing a chief data steward in each state agency; and reducing the time and resources needed to share data by 50 percent. Work has begun to establish governance structures that will allow the state to use data and analytics to drive policy making and service delivery.³³

BRITISH COLUMBIA

The province of British Columbia has created common standards to make it easier for provincial ministries and agencies to share data. The province's Data Custodianship Guidelines were developed by a DataBC Council of data custodians from each ministry.³⁴ British Columbia also has created the Centre for Data-Driven Innovation, a central repository where government entities can securely access government data for use in research, analytics, and other initiatives.³⁵

Road map to a digital transformation

GIVEN that the goal is clear, how do you get there? The road map will be different for each state, but five strategic principles can help guide the journey.

Use design thinking principles

The first step is to learn to *think like the customers* who use government services, both citizens and employees. Traditional methods for designing digital government services focus on the government entity and the process. They ask, “What digital processes do we need to accomplish our goals?” But that’s not the right question. Instead, you should ask, “What do my customers want, and what processes do we need to accomplish *their* goals?”

Commercial organizations do this all the time. They seek relentlessly to understand and improve the digital customer experience using *design thinking* to reimagine the experience from the customer’s perspective.

Design thinking has become mainstream in the private sector. JC Penney used it, for example, when the company decided to offer a new smartphone app for the holidays—with only 12 weeks of lead time. Working with a consultant team including experienced creative designers, developers, and digital retail experts, JC Penney searched for new ways to solve persistent problems, keeping its customer base firmly in mind. The new app, released that October, includes easy-to-use product searches, lists, and filters; quick navigation and an easy path to purchase; and customized merchandise recommendations.³⁶

Work conducted according to the principles of design thinking is highly iterative, based on real-world research into the human needs behind the problem they’re trying to solve or the service they’re building. They brainstorm to generate ideas and do a great deal of sketching, prototyping, and testing.³⁷

The 18F office within the US General Services Administration (GSA), which helps federal agencies deliver digital services, has adopted a design-focused approach since its inception. They use a technique called protosketching: In three hours or less, designers and developers build a rough prototype by sketching in code as well as on paper. Even if the protosketch is imperfect or outright unusable, it gives teams and clients something concrete to examine and elevates the discussion to issues of data, design, and function.³⁸

The United Kingdom’s Government Digital Service (GDS) mirrors 18F’s approach, articulating its vision through 10 concise design principles:

1. Start with needs (*user* needs, not government needs).
2. Do less.
3. Design with data.
4. Do the hard work to make it simple.
5. Iterate. Then iterate again.
6. This is for everyone.
7. Understand context.
8. Build digital services, not websites.
9. Be consistent, not uniform.
10. Make things open: It makes things better.³⁹

Whenever you see an organization that excels at digital design, you’ll find it builds a user focus into every step of its projects. With genuine insight into user needs, you can make design decisions that meet their needs *and* your business goals.



Establish a state digital studio

States should have a central point to orchestrate the digital vision. Many commercial organizations—and some government leaders—have put developing a creative “digital studio” at the center of their digital transformation. The studio provides web development, design thinking, and prototyping capability.

A whole industry has cropped up to do this; it’s a model that supports the interactive, creative approach of design thinking. So, if you’re going to take this approach, you need to work with a studio. While you can contract for one, build it all in-house, or take a hybrid approach, we recommend creating at least a core in-house group. This digital studio can become a catalyst for innovation and a great place to work. And you can make it a shared service available to all agencies that need its skills.

One of the first governments to set up an enterprise-wide design studio was the United Kingdom, which founded its Government Digital Service (GDS) in 2011. GDS soon evolved into a cabinet office and inspired other governments to form orga-

nizations based on its practices, including the US Digital Service and 18F in the United States, the Australian Digital Transformation Agency, as well as a proposed Canadian Digital Service.⁴⁰ Hong Kong, Singapore, and Thailand have established similar organizations.⁴¹

When smart organizations develop digital studios, they often make their resources available to all departments and agencies. For example, the city of New York is creating a master service agreement (MSA) for several digital studios to provide design thinking services to city agencies.⁴²

Get the governance right

Our research shows that, for a state government trying to meet its citizens’ needs, a website isn’t enough. A set of mobile apps isn’t enough. A portal leading to a variety of independent agency services isn’t enough.

In many cases, each services agency has its own website, with its own look and feel and its own back-end infrastructure. No central organization has the authority to launch initiatives and set standards for the whole enterprise, or to get agencies working together toward the common goal of better customer service.

Such environments produce fragmented, confusing customer experiences. When a citizen visits the page for their state health department, the system there doesn’t know that the same person recently visited another page seeking information on disability benefits. And the citizen’s experience on that page tells her nothing about navigating the Health Department’s other services.

This uncoordinated approach is a recipe for frustration. It generates the problems citizens repeatedly cite when complaining about digital government. The website is poorly organized; search functions return useless information; answers are poorly organized and unclear; and different sites, or different portions of the same site, provide conflicting information.⁴³

The state, meanwhile, loses out on the benefits of increased efficiency. In a siloed government,

agencies workers have no idea that colleagues in other offices are working on related problems with the same customers. And in a state where citizens can't use digital self-service tools to conduct business, employees spend more time providing customer service on the phone or in-person, driving up operational costs.

So whether a government creates a digital studio in-house or contracts for these capabilities, it *should* rethink its governance structure to reap the full benefits. With a different governance structure, a state could eliminate the obstacles that drive citizens crazy when they try to use digital services. The state could create a way to manage identities across government functions. The digital platform then could provide a single view of each customer, built from data collected in transactions with multiple agencies.

In commercial organizations, the chief marketing officer (CMO) is usually responsible for the end-to-end customer experience. Governments should consider how to replicate this function, creating blueprints for cross-departmental coordination. Several federal agencies including the Census Bureau already have chief customer experience officers.

Sometimes, in-house digital studios can play a governance role, developing policies and infrastructure that apply across the whole government. In the United Kingdom, for example, GDS has created a data group to oversee how the government collects, manages, and employs data. Its work includes an initiative to build a common data infrastructure, making data available to functions throughout government with APIs. GDS also has created a Data Leaders Network and a steering committee to develop policies and governance structures for managing and sharing government data.⁴⁴

Adopt an iterative approach

A government seeking to transform its digital services doesn't need to complete the entire metamorphosis in a single, giant leap. Just as design thinking encourages incremental, iterative processes, the journey toward customer-centric digital ser-

vices can proceed in small steps. It's possible, and perhaps most practical, to start the transformation on a small scale and then grow.

Start with really good customer insight. Customers will tell you what they need and where their biggest problems are.

Prioritize cases based on factors such as value to the customer and complexity of implementation. Then start at the top of the list, with a project that is relatively easy to implement, but promises to make a real difference for its users. Rack up one success, and you'll have an easier time gaining buy-in for your next project.

BusinessUSA, for example, whose goal is to digitally connect businesses with government assistance services, started by connecting siloed agencies. The federal government launched this portal in just 90 days, but it was only the start. As the portal generated user feedback, the project team kept making improvements.

Start with really good customer insight. Customers will tell you what they need and where their biggest problems are.

The secret to digital initiatives is to have a clear "north-star" vision in terms of customer experience and the necessary technologies and governance. It's where you're headed, and each iterative release takes you one step closer.

Finding the ROI

Gaining strong leadership support for digital transformation can be difficult, because traditional metrics don't always provide a business case for it.

In a retail business, when you make your customers happy, their pleasure translates into dollars. With government services, that's not always the case.

Mature organizations find ways to measure their digital returns on investment using common private-sector practices. A few years back, Amazon started to invest heavily in innovations such as its Prime delivery services, the Kindle tablet, and media services. These programs provided slim margins and depressed profits. But, as Amazon CEO Jeff Bezos explained, the strategy behind those offerings was based on a customer focus and a long-term view of success. For example, Amazon considered *usage* of the Kindle, rather than e-book sales, to be the best metric for measuring its success.⁴⁵

Digital transformation, however, does provide some ROI in the traditional sense. As a government uses design thinking to improve the customer experience, it not only reengineers its customer-facing processes, but also the back-end processes that support them. The result could be a better designed set of workflows and IT systems, or policy improvements that better align government practice with citizens' needs.

The Intellectual Property Office of New Zealand (IPONZ) has transformed itself into the world's first 100 percent digital intellectual property (IP) office.⁴⁶ Businesses can file patent applications, monitor their progress, and update their contact details online. Businesses and IPONZ staff track a case through a single "inbox." The shared window makes the process transparent and predictable for busi-

ness, while reducing transaction costs.⁴⁷ With more time to examine IP rather than simply administer, IPONZ employees can respond more quickly and accurately. More than 98 percent of applications receive a response within 15 working days, and 99 percent of decisions to grant or deny IP are upheld.⁴⁸

Getting there from here

Success in the digital age ultimately depends on how state governments execute each of the three pillars for digital transformation (a seamless, end-to-end experience; a uniform digital identity; and data sharing across the enterprise). Well-designed digital services designed around the user, and powered by systems built iteratively, tested rigorously, and operated in response to changing customer needs, will be truly transformational.

This kind of innovation should become commonplace in state government. The key is to exploit the capabilities of good design, data sharing, personalization, and adaptation. The most digitally adept state governments will *imagine* the future by meshing their business goals with user-centered experience design and a good understanding of current technologies. They can *deliver* the future by adopting agile methods, breaking away from the sluggish pace of waterfall change. And they could *run* the future with a culture of continuous feedback and analytics-driven insights.

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