



About NASCA

Founded in 1976, the National Association of State Chief Administrators (NASCA), is a nonprofit, 501(c)3 association representing chief administrative officers (CAOs)—public officials in charge of departments that provide support services to other state agencies. NASCA provides a forum for CAOs to exchange information and learn new ideas from each other and private partners. NASCA's mission is to help state CAOs and their teams strategically transform state government operations through the power of shared knowledge and thought leadership.

McKinsey & Company

About McKinsey & Company

McKinsey & Company is the world's leading strategic management consulting firm, deeply committed to helping institutions in the public, private, and social sectors achieve lasting success. For almost a century, McKinsey has served as the most trusted external adviser to governments and private sector companies in the United States and across the globe, helping them solve their most pressing problems, and enabling them to achieve distinctive, substantial, and lasting improvements in their performance. McKinsey's governance as a private worldwide partnership ensures its independence and objectivity.

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Dear NASCA members,

State chief administrative officers (CAOs) are uniquely positioned to play a significant role in transforming the way state governments provide services. Together with our corporate partner, McKinsey & Company, NASCA conducted its second annual *Business of Running State Government Operations* survey of CAOs to identify and prioritize key issues, determine trends, and understand the perspectives of these state leaders.

NASCA conducts research with the following goals:

- recognize the role CAOs have in driving state government
- · operational excellence
- curate and disseminate best practices, success stories, and case studies in state government operations
- assist CAOs with the strategies and resources necessary to modernize state government operations

The study proposal, question development, and peer communications were led by NASCA's Programs Committee, which comprises state CAOs and corporate partner volunteers. We appreciate the leadership and guidance of the Programs Committee. In addition, we thank our state members for the significant time they invested and insightful comments they provided in this survey. Finally, we are grateful for the extraordinary support and resources McKinsey & Company provided in helping us design the survey, analyze the results, and prepare this publication.

Thank you,

Dan Kim

NASCA Programs Chair

Director of the Department of Administrative Services, State of California

Executive summary

The priorities of a state's chief administrative officer (CAO) are numerous and varied—managing critical state functions; providing services and support to other agencies; driving innovation and change; managing budget constraints; and continuously improving administrative strategies, initiatives, and processes. To help CAOs achieve their missions, the National Association of State Chief Administrators (NASCA) and McKinsey & Company partnered for a second year to produce the *Business of Running State Government Operations* survey on key issues affecting CAOs today. Survey results are published in three separate papers, which focus on digital government, real estate and facilities, and risk. Unless otherwise cited, the survey is the analytical base for all exhibits in the paper.

In the 2018 Business of Running State Government Operations survey, 60 percent of CAO respondents said that digitization and automation would be critical to their success in the coming year. The 2019 survey dove deeper into the value that digitization can bring to state governments and addressed whether that value is being realized.

According to respondents, there is widespread acceptance of the value of digitization, with 60 percent of CAOs reporting that they have a digital strategy in place. Many of those CAOs, however, report mixed success in implementing strategic plans, and they face challenges in increasing utilization of digital tools within their agencies and throughout their state governments.

This paper explores the CAO's role in driving digital adoption, as well as innovative and exciting steps being taken to accelerate the use of digital tools. More specifically, the paper finds the following points:

- Despite the importance of a state-wide digital strategy and the critical role of leaders, funding, and performance-management systems in executing digital transformations, only 60 percent of states have a digital strategy.
- CAOs sit at the intersection of IT, finance, procurement, and HR. From this position, they
 can play a unique role in leading and implementing statewide strategies. Some of the tools
 they have available for this include agile procurement processes for IT procurements and
 facilitating and enabling cross-agency collaborations.
- Those initiatives need dedicated leadership, governance, and financial resources to be successful, all of which are challenges for the CAO to obtain.

- In their own agencies, CAOs see the value of digitization, but many activities are still paperbased and adoption of new tools is slow.
- Some CAOs are leading the way and finding creative means to overcome barriers, such as strengthening top-down support, doubling down on analytics, centering the conversation on the effect of digital on customer satisfaction, engaging in digital skill-building programs, and promoting broader mind-set shifts.

As CAOs work to close the gap between strategy and implementation, there is an opportunity to share best practices and lessons learned from several initiatives to improve digital excellence across the country. The 2019 survey captures existing efforts and solutions, setting a baseline for continued discussions and innovation among the community of CAOs.



About the survey

The Business of Running State Government Operations survey was conducted with NASCA state members and focused on their challenges and priorities in real estate and facilities management, digital government, and risk management. The purpose of the survey is to provide government leaders with a robust set of data and insights they can use to compare state practices and inform forward-looking strategic decisions.

Methodology

The survey questions drew from subject-matter experts on digital government, as well as NASCA state members' experiences. NASCA convened a working group of members who are chief administrative officers (CAOs) to vet the questions to ensure CAOs' responses could yield relevant and actionable insights for NASCA state members.

The respondents

Thirty-three (33) NASCA-member CAOs participated in the survey, though not all respondents answered each question (Exhibit 1). While CAOs were the primary participants, some deputies and other officers also participated. This paper refers to all respondents as CAOs.

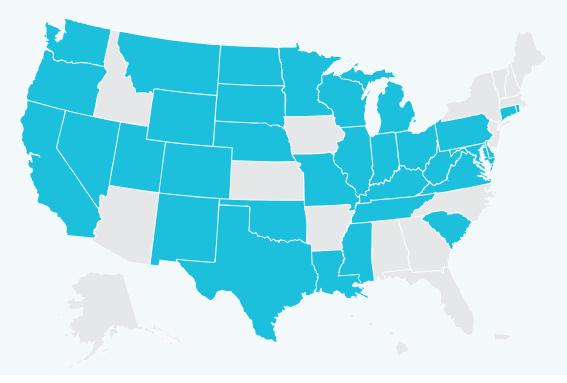
Anonymity

To preserve the anonymity of survey respondents, answers are not attributed to specific individuals or states.

Exhibit 1

Thirty-three NASCA-member CAOs participated in the survey.

States represented in the survey



Strategic approaches to digitization

Digitization is the use of new technologies that transform how people interact. Government officials are utilizing digitization to assist in their roles. Although technologies enable digitization, the concept is broader than IT updates that incrementally improve government systems and processes. CAOs are critical to state digitization efforts. This paper explores the role of the CAO in promoting a statewide digital strategy and implementing digital initiatives across the state and within their own agencies.

CAOs are uniquely well positioned to accelerate digitization statewide. As heads of agencies overseeing massive shared-services platforms, CAOs have a statewide audience as they role model best practices in digitization and build support for a statewide digital vision. While part of that vision should be citizen-centric, digitization drives outcomes for internal customers (for example, employees) of governments as well (Exhibit 2).

Exhibit 2

Public sector benchmarking analysis quantified benefits of digitization to governments across the globe.



Satisfied customers are 8x more likely to trust government



Satisfied customers are 9x more likely to agree that the agency is achieving its mission



A common purpose—such as customer experience—is a prerequisite for a healthy organization. Fifty percent of an organization's long-term success is driven by its health



Dissatisfied customers are 2x more likely to express dissatisfaction publicly via social media



Dissatisfied customers are 2x more likely to reach out for help 3 or more times, increasing agencies' cost to serve

Source: Public Sector Journey Benchmark Survey 2018; data from Canada, Denmark, France, Mexico, United Kingdom, and United States

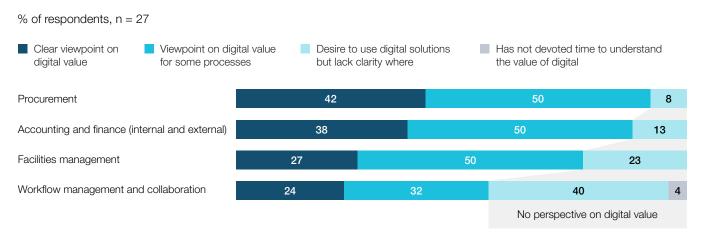
There is wide recognition among CAOs that digitization is valuable. CAOs view digitization as a means of providing secure and reliable services, increasing transparency in internal and external processes, enhancing citizen experience, and accelerating change in their agencies. Many CAOs have a clear perspective on digital value for processes managed by their agencies (Exhibit 3).

While the structure and extent of states' digital approaches vary, there is significant opportunity for advancement in most states. A digital program's maturity can be assessed based on four factors:

- strategy
- leadership
- funding
- performance management

Exhibit 3

Most CAOs have a clear perspective on digital value for some, but not all, processes.



Note: Figures may not sum to 100, because of rounding.

Currently, only one-third of states that have a statewide digital strategy also have an established digital officer (either in the CAO's organization or in a different senior position) and spend more than 5 percent of their budgets on digitization.

Developing a successful digital strategy

The most successful digital transformations are based on a dynamic digital strategy.

Sixty percent of states have a digital strategy in place, with plans to increase the efficiency and effectiveness of their digital initiatives. The content of these strategies varies by state, but CAOs list cybersecurity, cloud-based solutions, enhancing citizen experience, and overall improvement of digital knowledge, systems, and services as priorities. An additional 10 percent of states that have a digital strategy in place are unsure if the strategy applies to all their needs, likely due to its age or scope. The remaining 30 percent of states do not have a statewide digital strategy at all (Exhibit 4).

Statewide digital strategies are important for creating maximum value from digital investments and ensuring an efficient shift to modernized processes. With limited resources available and many opportunities for collaboration across agencies and departments, states require an overarching vision and plan to rein in costs, manage risks, and ensure all agencies use systems that work together rather than multiple discrete platforms.

States that do not yet have a digital strategy should consider developing one through a collaborative, statewide effort. The most effective digital strategies are bold, innovative, and dynamic. Given the fast pace of change, incremental strategies are unlikely to realize the full value of digital investments. It is also important for states to adopt a learning mind-set regarding their digital strategies; having the flexibility to re- or de-prioritize digital initiatives is critical to digital success.

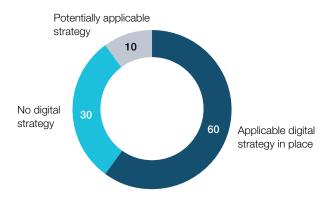
¹ State CIO as communicator: The evolving nature of technology leadership, National Association of State Chief Information Officers, October 2018, nascio.org.

² Tanguy Catlin, Laura LaBerge, and Shannon Varney, "Digital strategy: The four fights you have to win," *McKinsey Quarterly*, October 2018, McKinsey.com.

Exhibit 4

Thirty percent of states do not have a statewide digital strategy.

% of respondents, n = 27



Identifying a knowledgeable change leader

One of the defining factors in the success of a digital transformation is whether it has a knowledgeable change leader, such as a chief information officer (CIO) or chief digital officer (CDO).³ Sixty percent of states have a statewide CIO or CDO who is responsible for promoting their digitization strategy, although that responsibility is often shared with the CAO or a committee of senior leaders (Exhibit 5). **CAOs who oversee IT but do not have an existing leader responsible for implementing a digital strategy should consider adding a CIO or CDO to their teams.** A CIO or CDO can complement the CAO role by focusing on IT needs from a strategic lens that considers technology, procurement, security, and internal and external customer demands. The typical profile is someone with in-depth knowledge of digital systems, familiarity with the mission and constraints of digitization in government, and the trust and authority to build statewide alignment with the digital vision.

CAOs who oversee IT but do not have an existing leader responsible for implementing a digital strategy should consider adding a CIO or CDO to their teams.

Funding levels for digitization

Almost all CAOs allocate funding to digital efforts, independent of an overarching digital strategy. This funding should be aligned with overall digital strategies; a misalignment can impact a state's ability to remain flexible and innovative in the face of changing technology. Where CAOs do not have a clear view of the statewide digital strategy, they need to push for more awareness, particularly to ensure budgets and policies are in line with objectives.

There is wide variation in CAO budget allocations for digital efforts (Exhibit 6). Almost 70 percent of CAOs allocate 1 to 9 percent of their budgets to digitization and modernization, while 30 percent of CAOs allocate more than 10 percent of their budgets to digitization. There is often a correlation between higher budget allocations and

³ "Unlocking success in digital transformations," October 2018, McKinsey.com.

Exhibit 5

Sixty percent of states have a statewide CIO who is responsible for the digital strategy.

% of respondents (multiple answers permitted), n = 27

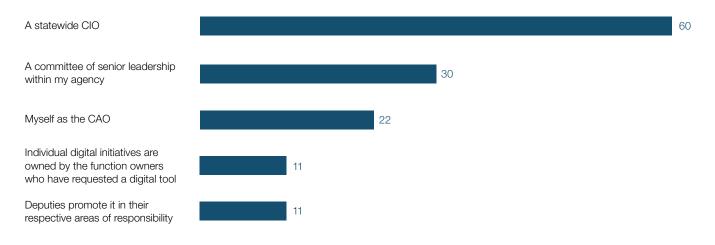
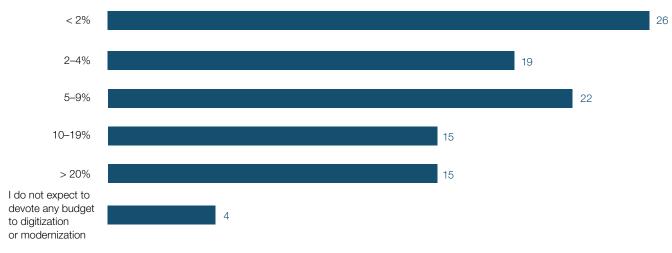


Exhibit 6

There is wide variation in CAO budget allocations to digital efforts.

Amount of budget allocated, % of respondents, n = 27



Note: Figures may not sum to 100, because of rounding.

Lessons managing agile digital strategies from the private sector

In the private sector, the most successful digital performers set, implement, and adjust their strategies and corresponding initiatives continuously and rapidly.¹ By maintaining a fail-fast-and-learn mind-set, these organizations cultivate an environment that empowers employees to share challenges, test viable options, and find the most effective and efficient solutions to meet strategic priorities.

On at least a monthly basis, these top performers analyze data from multiple sources to identify unmet digital needs, dedicate senior leaders' time to learning about digital technologies, and share rapid test-and-learn findings across the organization. These steps help to ensure top-down support of the strategy and alignment across the organization.

In addition, every quarter, these top performers assess their business models for new digital productivity opportunities, reallocate funding across business units, and use a rigorous process to identify and defund underperforming initiatives.

the existence of a digital strategy—almost 90 percent of states where CAOs allocate more than 10 percent of their budgets to digital efforts have a digital strategy.

Looking ahead over the next five years, most CAOs do not expect their state's funding landscape for digitization and modernization efforts to change significantly, and they anticipate maintaining their current digital funding allocations. As states develop and refine their digital strategies, they may need to change their anticipated digital funding allocations in order to realize the full digital value.

Additional insights from the National Association of State Chief Information Officers (NASCIO) on performance metrics

Many states are facing budgetary pressures that impact how they conduct performance evaluations.¹ A majority of the digital initiatives of chief information officers (CIOs) are evaluated on cost savings to the state and improvements in project and service delivery, rather than metrics that CIOs find more meaningful, including

reduction in risk to the state and successful implementation of digital initiatives against a digital strategy.

¹ "A winning operating model for digital strategy," January 2019, McKinsey.com.

¹ State CIO as communicator: The evolving nature of technology leadership, National Association of State Chief Information Officers, October 2018, nascio.org.

Developing a performance-management system

Performance management is a critical element in an agile digital strategy. A rigorous performance-management system can help states identify which initiatives are furthering their state's strategic goals, which initiatives need to be altered, and which initiatives should be deprioritized or defunded.

Most CAOs are already using performance metrics to measure the success of digitization programs in their states. More than 80 percent of CAOs prioritize improved quality and customer experience in gauging the success of digital initiatives (Exhibit 7). CAOs also consider overall savings in cost and time and legal and risk compliance factors to determine the success of a digital initiative.

Exhibit 7

CAOs cite improved quality and customer service as the two most important digital performance metrics.

Success metrics ranked, 1% of respondents, n = 27



Note: Figures may not sum to 100, because of rounding.



Implementing statewide digital strategies

Although the value of digitization is clear and, in many cases, codified in a statewide digital strategy, CAOs report that implementation is often a significant hurdle. They cite many challenges, including aligning internal stakeholders, the need to ensure that a technology solution will last long enough to justify spending taxpayer dollars, achieving economies of scale to maximize the value of digital solutions, and finding enough time to focus on promoting long-term change. However, some CAOs have taken steps to overcome these challenges and are making headway on processes and partnerships to advance their state's digital mission by developing initiatives such as senior official governance committees, engaging in longer-term strategic planning, and adopting statewide analytic capabilities to evaluate and address digital gaps.

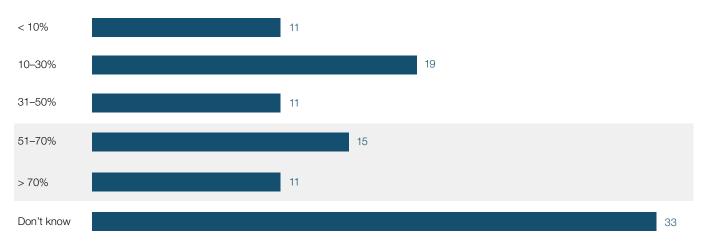
Facilitating digital government through agile implementation

CAOs play a key role in enabling their states' digital strategies by developing the necessary processes to support statewide digital initiatives. More than 60 percent of CAOs are responsible for designing statewide processes for activities such as procurement, facilities maintenance, financial reporting, and performance management. For example, almost 50 percent of CAOs support agency digitization efforts with agile IT procurement processes that allow for testing, pilots, and project phasing that is not possible in traditional procurements. Even so, 25 percent of CAOs report that more than half of digital procurements require additional time, funding, or change orders beyond what was initially approved, indicating an opportunity to further improve the procurement process to meet the unique needs of digital projects (Exhibit 8).

Exhibit 8

It is common for digital procurements to require additional time, funding, or change orders beyond initial approvals.





The Commonwealth of Virginia is pioneering a multi-supplier model for IT services

Virginia

"We call this effort the Information Technology Infrastructure Sourcing Program (ITISP) which provides a central connection between seven service tower suppliers. It does this by using the Information Technology Infrastructure Library (ITIL) common service framework and by managing the integration points through service-level agreements and operational-level agreements. In the first year alone, we expect to

implement 40 new IT services with an expected reduction of approximately 6 percent annual reduction in overall costs (around \$20 million per year). The new services model has much more visibility and has the ability to inject innovation built in."

 Dr. Keyanna Conner, secretary of administration for the Commonwealth of Virginia

Building statewide alignment

CAOs play a key role in partnering with other state agencies and elected leaders to promote alignment on digital strategy. In fact, all CAOs partner to some degree with other leaders to promote efforts in digitization. These statewide partnerships can help states achieve economies of scale in their digital approaches, leading to cost savings and greater impact. While debriefing the survey results, some CAOs noted that agreement across stakeholders is one of the best ways to expedite otherwise lengthy approval timelines. **Having IT governance in place to facilitate productive and efficient**

NASCA-endorsed recommendations on IT procurement

In 2018, NASCA endorsed NASCIO's call for improving the IT acquisition process. The recommendations include the following:

- "Working with all parties—including those from the private sector—to establish a process that increases flexibility and communication"
- "Using iterative/non-waterfall procurement methodologies when appropriate to improve procurement cycles, add flexibility and reduce risk"

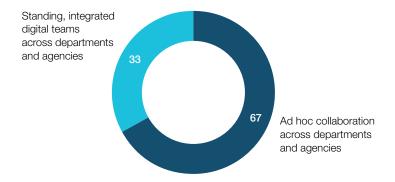
collaboration is key to cross-agency success. In addition, in large digital projects such as enterprise resource planning implementations, states may find it helpful to have a process in place to staff a cross-agency project management office. Despite this, two-thirds of CAO collaboration across other departments and agencies is conducted on an ad hoc basis rather than through standing, integrated digital committees (Exhibit 9).

Additionally, nearly half of CAOs report a lack of alignment on digital initiatives between agency leadership and their subordinates at the department level. This typically points to a divide between strategic and operational priorities. Establishing a statewide digital working team led by the CAO can facilitate statewide alignment and reduce coordination time. One way of accomplishing this would be to develop data-sharing agreements between agencies before those agencies can migrate their data to shared platforms. A digital task force can manage this type of coordination.

Exhibit 9

Only one-third of CAOs have formal mechanisms in place for digital collaboration across departments and agencies.

% of respondents, n = 27



¹ A view from the marketplace: What they say about state IT procurement, National Association of State Chief Information Officers, October 2018, nascio.org.

Statewide alignment and collaboration in Pennsylvania to create a shared data platform for all resident services

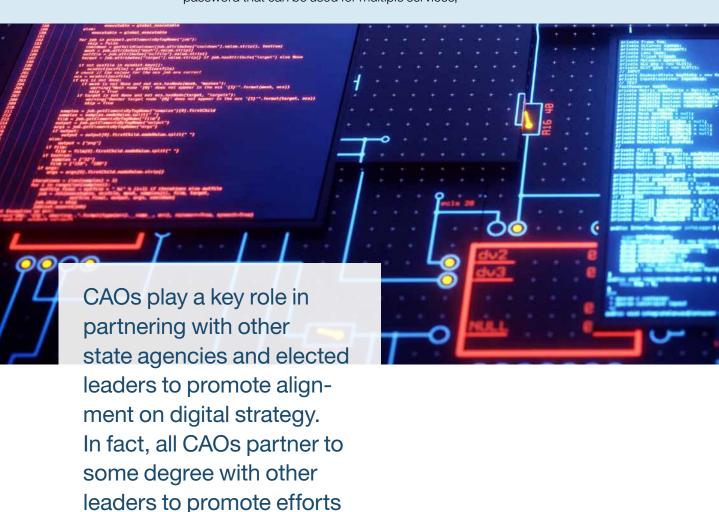
Pennsylvania

in digitization.

Pennsylvania is migrating a number of online services into a one-stop shop for residents. The single, secure account will be known as Keystone Login. The online profile is already in use at the Department of Community and Economic Development, Department of General Services, Pennsylvania Commission on Crime and Delinquency, and the office of administration. "Keystone Login is more than a username and password that can be used for multiple services;

it is a suite of modern identity verification tools that can provide additional levels of security based on the type of service being accessed," said Secretary of Administration Michael Newsome. "Keystone Login will provide added convenience to our customers and allow us to strengthen our overall security."

¹ "Governor Wolf announces new plan to transform state government customer service experience," Commonwealth of Pennsylvania, July 24, 2019, governor.pa.gov.

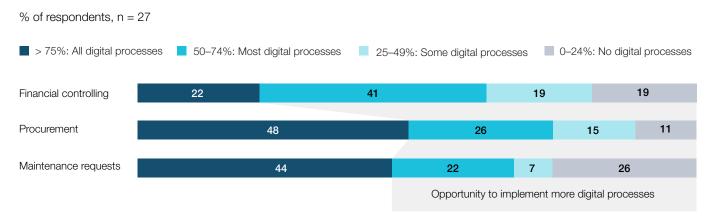


Within the CAO's agency: Implementation and utilization of digital tools

CAOs can build support for a statewide digital strategy by role modeling effective digital tools within their own agencies. However, the gap between vision and implementation of digital tools at the state level is also a challenge within CAOs' direct areas of responsibility. Most CAOs have a perspective on how digitization can improve their agencies' performance, but implementation of technology is limited. This gap exists in procurement, finance, and facilities management, as well as other core CAO responsibilities (Exhibit 10).

Exhibit 10

Most internal processes are still paper-based or require manual steps.



Across these three key functions at least half of all states still include some manual steps, and, depending on the function, anywhere from 11 to 26 percent of respondents say their processes are entirely paper based. Given that many states place a lower priority on digitizing administrative processes than citizen-facing services, CAOs must develop a business case for innovative digital approaches.

Even though digital approaches and tools are overtaking paper-based processes in core areas (for example, procurement, financial controls, and facilities management), they are not utilized consistently across other important recurring processes and transactions. The overall rate of digitization across state transactions is less than 50 percent, with somewhat higher utilization for frontline versus administrative processes (Exhibit 11).

The survey results show that the existence of a strong digitization program (including a strong digital strategy, responsible digital leader, and integrated digital teams across the state) is only a slight indicator of higher utilization of digital tools. To increase digitization, CAOs must develop innovative approaches that enable them to overcome implementation barriers such as budget and capacity constraints and low organizational prioritization. By exchanging ideas and best practices with each other, particularly those who already have innovative approaches to digitization (Exhibit 12), CAOs can begin to maximize digital value.

Exhibit 11

Digital tools are used more often for resident-facing transaction processing than administrative processes.

% of respondents, n = 27

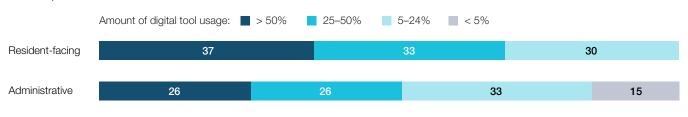
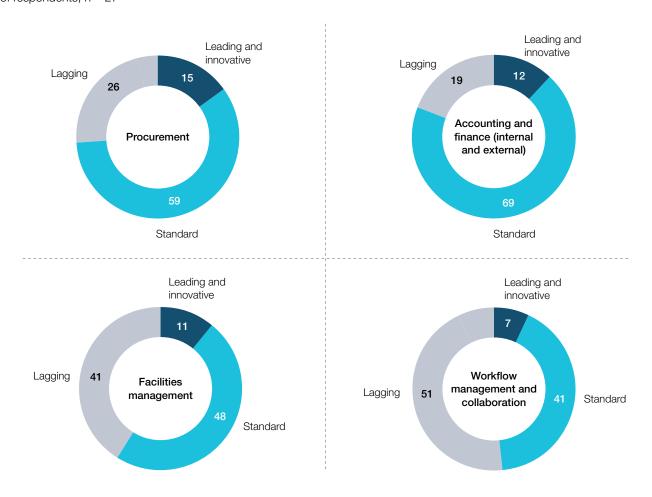


Exhibit 12

Some CAOs already have innovative approaches to digital transactions.

% of respondents, n = 27



Note: Figures may not sum to 100, because of rounding.

The road map to digitization

States are already implementing many new and innovative initiatives designed to improve adherence to and prioritization of digital strategies, often in partnership with internal and external experts. Free-text responses in the survey pointed to five guiding principles CAOs are following to increase innovation and utilization of digital tools: instituting top-down leadership decisions, using data analytics, improving citizen experience, building digital skills, and shifting behaviors and mind-sets.

- Strong top-down decisions can promote alignment and increase organizational focus on digitization. Initiatives currently being pursued in this category by survey participants include the following:
 - developing a digital transformation group
 - launching a cabinet-level IT-governance committee
 - seeking legislative support for the CAO to have more authority in the IT request for proposal evaluation committee
- 2. Increased use of data analytics can help identify opportunities for further digital investment, as well as initiatives that can be deprioritized due to a lack of clear outcomes. Initiatives currently being pursued in this category by survey participants include the following:
 - conducting agency-wide gap assessments
 - improving the use of metrics and dashboards
- 3. Improving citizen experience through digital tools can help promote demand for digitization in government, leading to broader statewide commitment to digitization. Initiatives currently being pursued in this category by survey participants include the following:
 - deploying statewide scanning tools compliant with the Americans with Disabilities Act (ADA)
 - reducing the Human Rights Commission (HRC) case backlog by using technology platforms
 - reforming hiring to enable online applications
 - creating a virtual job fair
- 4. Building digital skills throughout state government can help overcome capacity-related barriers to digitization and promote enthusiasm for digitization among employees. Initiatives currently being pursued in this category by survey participants include the following:
 - reassessing digital staffing and skill gaps
 - implementing programs to recruit and retain employees with digital know-how
 - implementing training programs to increase digital acuity
 - using in-house resources for technical tasks such as data migration

Illinois used technology to reduce the Human Rights Commission case backlog

Illinois

"The Human Rights Commission (HRC) had a backlog of more than 1,000 cases, with resolutions taking as long as two or three years. The Illinois Department of Central Management Services' Bureau of Administrative Hearings worked with the HRC and the Illinois Department of Human Rights to improve the process. By leveraging technology platforms, applying more

efficient processes, continuously monitoring, reporting, and adapting performance, and increasing staffing levels as needed, we reduced the backlog by 44 percent in just 6 months."

 Janel Forde, Director, Illinois Department of Central Management Services

e-Estonia: How a platform for government-wide data sharing digitized an entire country

Estonia digitized its entire country through e-Estonia—a digital transformation spanning all areas of government service.¹ Two decades ago, citizens in this former Soviet Republic did not have access to the internet. Today, 99 percent of government services are handled online. The cost-savings and efficiency gains Estonia has realized through digitization are estimated at 2 percent of GDP.² At the core of Estonia's digitization is a secure data-sharing platform for all its government agencies, which

is also accessible to vetted companies. This data platform enables the "only ask me once" principle—any data that has been submitted at some point to the Estonian system (for example, a home address), will auto-populate on subsequent forms.

1 "About us," e-Estonia, accessed on August 27, 2019, e-estonia.com.
 2 Nathan Heller, "Estonia, the digital republic," New Yorker, December 11, 2017, newyorker.com.

- 5. Finally, CAOs are working to shift behaviors and mind-sets in their organizations and states to create a more dynamic digital culture. Initiatives currently being pursued in this category by survey participants include the following:
 - · establishing an innovation fund
 - shifting the focus to outcomes rather than inputs to improve efficiency

By pursing innovative digital strategies, CAOs have an opportunity to support digital transformations at scale in their states, driving greater efficiency in internal processes and service delivery and improving quality of life for employees and citizens.

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