



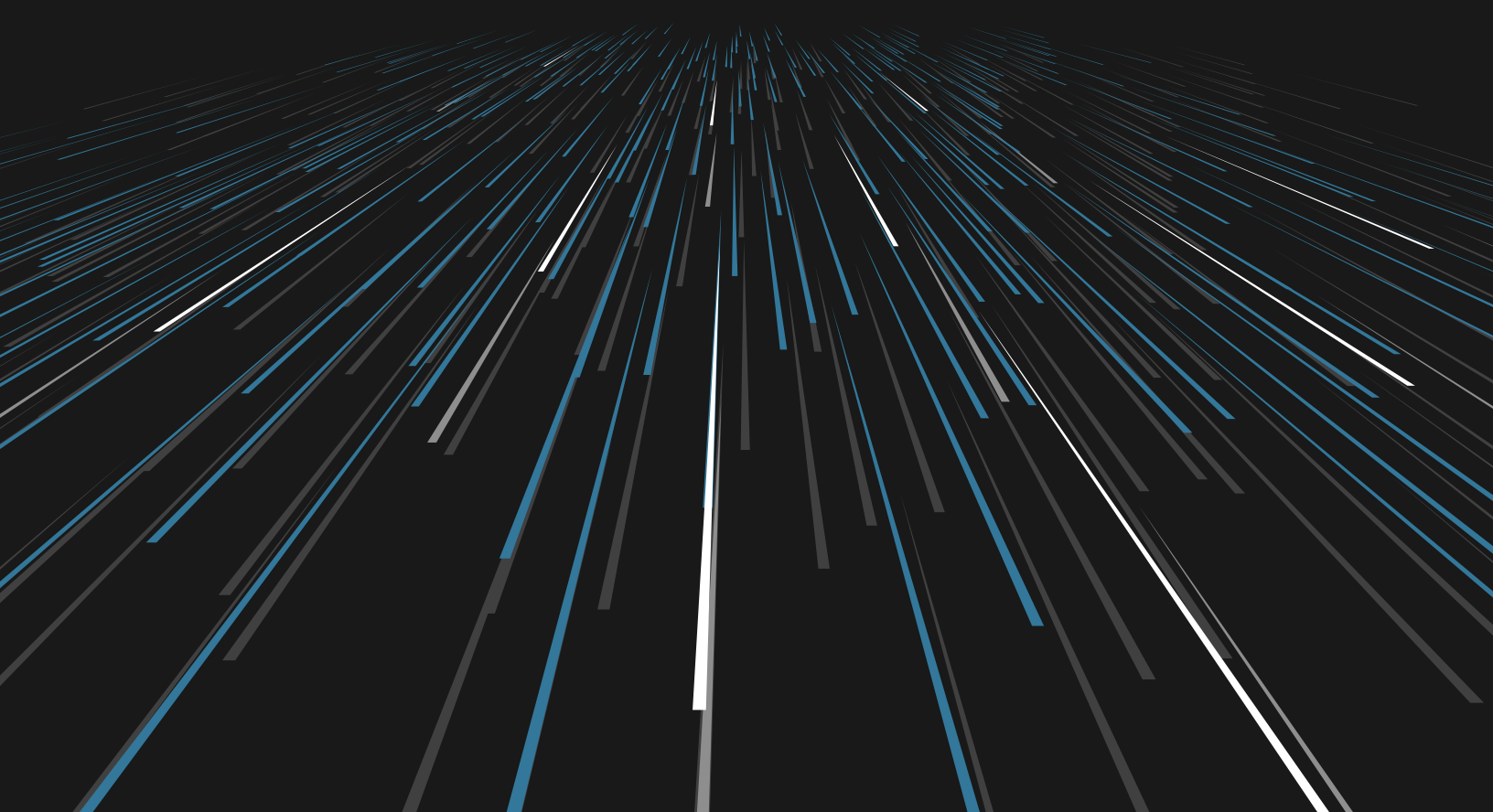
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Driving digital acceleration

The 2021 State CIO Survey

October 2021



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Executive summary

2021 was a year that continued to be dominated by the response to the COVID-19 pandemic. In this twelfth annual state chief information officer (CIO) survey, we received the perspective of 49 state and territory CIOs on the short- and long-term impact of the pandemic for state CIO organizations. We also received updates from CIOs on many of the traditional topics covered by the survey, including digital transformation, adoption of cloud, emerging technologies and legacy modernization. A major theme of this year's survey is whether the accelerated pace of state technology and digital services transformation over the past eighteen months will persist beyond the pandemic.

COVID-19 pandemic impact and transformation

In the 2021 State CIO Survey we asked a variety of open-ended questions about COVID-19 and how things have or will change because of the pandemic and what might remain the same. CIOs were introspective and have clearly learned a lot since early 2020. For CIOs, there is no going back to pre-pandemic business models. State CIOs told us that the pandemic has highlighted the value of technology and how it is critical to the delivery of government services and the productivity of state employees. CIOs also thought their role could become even more important in the workforce conversation as remote work policies and culture begin to change.

There were also a few CIOs who didn't think the CIO role has changed as much as perspectives have changed. One CIO told us, "The role has not necessarily changed but we have seen that people now understand that they are much more reliant on technology than they thought they were in the past." CIOs were very concerned about numerous workforce issues. Many CIOs cited increased retirements as well as recruitment and retention issues. But CIOs were also hopeful that a more flexible working environment will help in recruitment and retention and have, in some cases, even delayed retirements.

Digital services and emerging technologies

In this year's survey, with responses being collected a full year after the pandemic began, one answer overwhelmingly stood out as the biggest driver for state governments' need to digitize: "better online experience for citizens." The COVID pandemic demanded a rapid response by government to citizen needs. While a difficult time, it did provide a great opportunity to simplify and innovate. When CIOs were asked what digital services and work practices instituted during the pandemic they expect to retain, work from home and enhanced security and online services were the clear top choices. The practice least likely to stay was simplified procurement, suggesting the rules were relaxed purely to deal with an emergency, not for any long-term benefit.

There was a major shift in this year's survey versus the 2020 survey to the question "What emerging IT area will be most impactful in the next 3-5 years?" Low-code/no-code was the top selection with 31 percent of responses in this year's survey, which is almost double the second highest response (artificial intelligence/machine learning). This reflects the need to deliver point solutions rapidly in response to the COVID-19 pandemic.

Broadband and wireless connectivity

Without a doubt, broadband and the importance of connectivity has been one of the biggest issues thrust into the spotlight during the COVID-19 pandemic. While CIOs have not traditionally had broadband under their authority—in the 2020 State CIO Survey only 23 percent of state CIOs told us they lead strategic planning and implementation—most, if not all, now have some responsibility in the deployment and adoption of broadband in their states. CIOs told us that additional funding for broadband has increased implementation and there is now serious consideration of legislation to create new broadband councils and other related initiatives.

Legacy modernization

The modernization of legacy systems is another longstanding issue that was put on full display during the COVID-19 pandemic. While some systems were exposed for being out of date, others simply no longer met the business needs of the state. Consistent with our questions relating to emerging technologies, over 70 percent of CIOs reported use of low-code/no-code technologies to support legacy modernization.

COVID-19 pandemic impact and transformation

The [2020 State CIO Survey](#) was titled *The Agile State CIO* because state chief information officers (CIOs) were forced to act and adjust as information technology (IT) systems and services were front and center in response to the COVID-19 pandemic. So, what does the world of a state CIO look like now? Resilient.

In the 2021 State CIO Survey we asked a variety of open-ended questions about COVID-19 and how things have or will change because of the pandemic and what might remain the same. CIOs were introspective and have clearly learned a lot since early 2020. Specifically, we asked about how the pandemic will alter the role of the CIO and their organization.

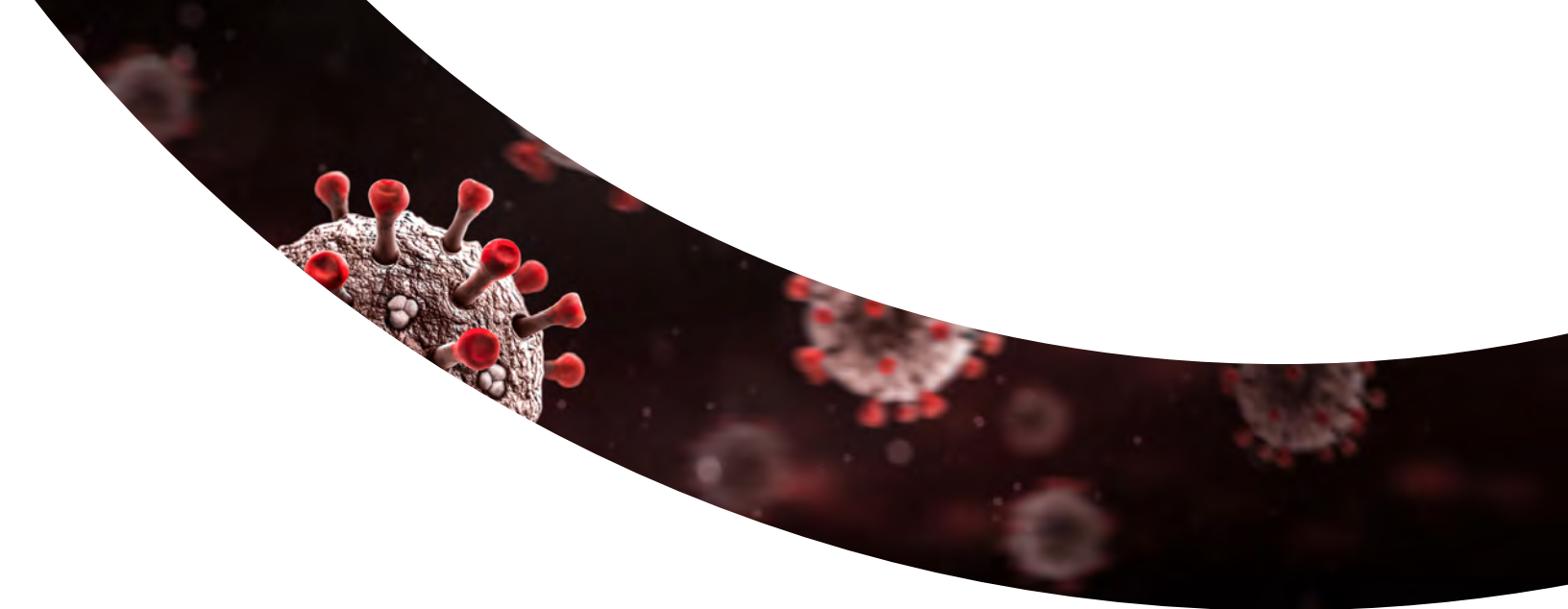
Many CIOs commented that the technologies implemented throughout the pandemic represent an inflection point as to whether these advances will be temporary or are here to stay. For CIOs, there is no going back to pre-pandemic business models. One CIO told us, “State technology was in the driver’s seat throughout the pandemic, and that dynamic will continue because it was so successful.” Another state CIO said, “There is a higher level of recognition of the critical role technology plays in the world.” Another CIO said, “COVID-19 response activities have highlighted the critical role technology plays in delivering modern solutions. We have also seen concrete evidence that technology is expected by the general public and important for communicating and engaging at scale.” And while this is evidence that CIOs think the role of the state CIO and technology will change on an external or public level, many others stated how the role might change internally.

State CIOs told us that the pandemic has highlighted the value of technology and how it is critical to delivery of government services and productivity of state employees. One CIO told us, “Maybe most importantly, the pandemic caused state leadership and business partners to see the value of technology and forced a new outlook on the importance of the role of CIO.” CIOs also thought their role could become even more important in the workforce conversation as remote work policies and culture begins to change.

There were also a few CIOs who didn’t think the CIO role has changed as much as perspectives have changed. One CIO told us, “The role has not necessarily changed but we have seen that people now understand that they are much more reliant on technology than they thought they were in the past.”

When asked how COVID-19 might impact the CIO organization in a post-pandemic environment, CIOs were very concerned about numerous workforce issues. Many CIOs cited increased retirements—that have already begun and will only increase—as well as recruitment and retention issues. But CIOs were also hopeful that a more flexible working environment (e.g., remote work) and culture - will help in recruitment and retention and have, in some cases, even delayed retirements. As one CIO told us, “Maintaining a healthy and vibrant culture will be a key challenge as we permanently adopt hybrid/remote work.” CIOs also told us that an increased emphasis on and budget for digital government will permanently change the CIO organization going forward.

In this section, we also asked specific questions about the pandemic. When asked about the current role of the state CIO in the state’s COVID-19 response and recovery efforts, 29 percent of CIOs said they serve on the governor’s pandemic leadership team. This is a decrease from the 38 percent response when we asked the same question in 2020, leading us to believe that, as the pandemic has receded, CIOs have returned to more traditional roles.



Based on the survey data, the adoption of emerging technologies accelerated in response to the pandemic. When asked about which automation solutions and emerging technologies were adopted, the top three responses were chatbots, automated fraud detection and voicebots. The financial impact of fraudulent claims from expanded benefit and entitlement programs to deal with the pandemic was severe, which led many states to adopt emerging technologies to combat fraud.

As we did in 2020, we also asked CIOs to rank their top five business processes, practices or investment changes they believe will continue post COVID-19 pandemic. State CIOs ranked the same top five this year that they did in 2020, but in a different order. While expanded work from home was number one in 2020, increased attention on digital government/citizen experience took the top spot this year by a wide margin. This is not surprising given the high level of citizen dissatisfaction and frustration with digital services offered by states during the pandemic.

Which automation solutions and emerging technologies adopted in response to the COVID-19 pandemic do you believe are here to stay?



Chatbots (virtual agents) for online citizen service inquiries



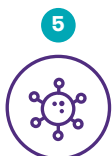
Automated fraud detection using predictive analytics



Voicebots to support call center interactions



Robotic process automation (RPA) to streamline business processes



Pandemic-related mobile apps for contact tracing/exposure notification



Pandemic-related mobile apps for vaccine certification



Automated body temperature scanners/sensors



Virtual/augmented reality

We also asked CIOs about modernization of enterprise business processes or systems and procurement processes put in place during COVID-19 that might stay post-pandemic. Most CIOs said they had recommended the modernization of an enterprise business process or system. They specifically cited those related to identity proofing; fraud detection; outsourcing the mainframe; unemployment insurance; motor vehicle registration; identity and access management; workflow and e-signatures; and single sign on (SSO). When questioned about procurement processes put in place during the pandemic/emergency orders that may be retained, many CIOs cited that, as emergency orders have expired, so have emergency procurement processes. However, a number of CIOs said that changes introduced during the pandemic will have a lasting impact on the acquisition process moving forward. Specifically, CIOs cited:

- Pre-approved vendor pools
- Master contracts
- Increased use of cooperative agreements
- Digitization and automation of procurement processes and procedures
- Streamlining of approvals and rapid purchasing
- Greater transparency in vendor management

Finally in this section we asked CIOs to reflect on the COVID-19 pandemic and discuss lessons learned or what they would have done differently. It is clear CIOs gained a lot of wisdom during the pandemic and here is a snippet of what they told us:

“The biggest take-away is that we can deliver solutions and services faster than ever before. There is a greater focus on working together as an enterprise and we have implemented platforms and technologies that support that.”

“We cannot underestimate the effect that worldwide issues and challenges have on our employees. Cultural reinforcement through ongoing communication is vital to surviving and thriving through these types of global events.”

“Breaking down silos that we had between agencies and within agencies to focus on the mission is important. Several people (regardless of agency) pitched in to achieve the goals of the pandemic. It was a great example of how we could pull our IT resources together to solve other challenges we face.”

Rank the top five business processes, practices, or investment changes that you believe will continue post COVID-19 pandemic?



Increased attention on digital government services/citizen experience
[#3 in 2020 survey]



Expanded work from home/remote work options
[#1 in 2020 survey]



Investments in broadband expansion/adoption
[#4 in 2020 survey]



Expanded use of collaboration platforms/remote meetings
[#2 in 2020 survey]



Increased priority and investment in legacy modernization
[#5 in 2020 survey]



Expanded cloud services/SaaS deployment
[#6 in 2020 survey]



Accelerated use of data analytics
[#7 in 2020 survey]



Changes to state government facilities, reduction of office space and configuration
[#8 in 2020 survey]



Investments in business continuity and operational resilience
[#10 in 2020 survey]



Broader adoption of artificial intelligence/automation
[#9 in 2020 survey]



Cybersecurity

Cybersecurity continues to be a primary area of focus for state CIOs as evidenced by its hold on the number one spot on NASCIO's Top 10 State CIO Priorities over the last several years. This year's CIO survey looked to explore how the COVID-19 pandemic has impacted the state CIO perspective on cybersecurity.

The rapid shift to remote work, coupled with the increasing adoption of new technologies, introduced increased risk for state systems. Despite this a heightened risk, when asked if they experienced any cyber incidents due to employees working remotely, only 20 percent of state CIOs indicated they had experienced an incident.

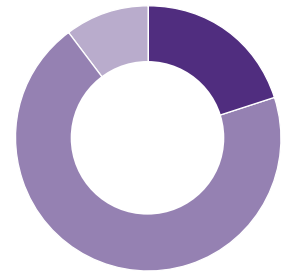
We asked state CIOs to share how the pandemic may have impacted their cyber priorities and investments. Unsurprisingly, many indicated that they have had to accelerate their cyber strategies and investments to quickly pivot to mitigate risk and meet the needs of their workforce and citizens. While cybersecurity has long been a priority for all state CIOs, several indicated that there is now an elevated focus on and appreciation of the importance on the topic due to the pandemic.

The pandemic created an imperative within state leadership to highlight that cybersecurity is a team sport. As one CIO noted, "It is important for security to be an enabler instead of an inhibitor – which is changing some of our processes and procedures." With the shift to an increasingly digital government and remote work here to stay, CIOs have evolved their approach to cybersecurity to further address the distributed environment and human element of cyber threats. This is evidenced in CIOs' responses when asked to consider which cybersecurity initiatives will receive more attention in the next two to three years as a result of the impact of COVID-19.

Looking to the future, we asked CIOs to share what they view as their top cybersecurity risk in terms of continuity of government. Overwhelmingly, CIOs indicated that ransomware was their biggest concern. While cybersecurity continues to get more attention in state government due to the pandemic, attackers continue to get more sophisticated. CIOs will continue to prioritize cyber hygiene, staying vigilant and being as proactive as possible.

Have you experienced any cybersecurity incidents due to employees working remotely?

- Yes 20%
- No 69%
- Other 10%



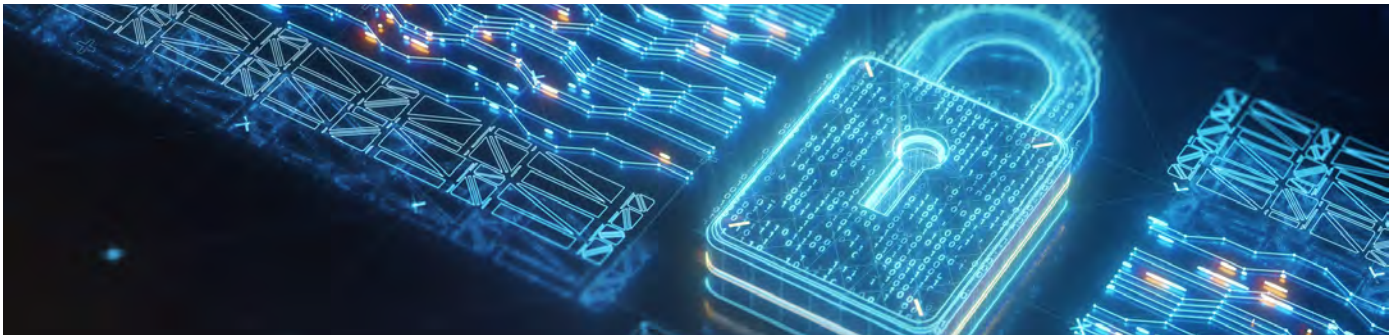
“While the priorities haven't changed, the focus and funding has increased, as well as state leadership's appreciation of the critical importance of security.”

Concerning the continuity of government, what is your top cybersecurity risk today?

- Ransomware attack **57%**
- Compromises to the software supply chain **10%**
- Agency use of shadow IT solutions or products **8%**
- Stolen identities/fraudulent claims for benefits (UI, SNAP, etc.) **8%**



Based on the impact of the COVID-19 pandemic, what cybersecurity initiatives will receive more attention in the next 2-3 years? (select all that apply)



Digital services and transformation

In last year's State CIO Survey, conducted in the beginning of the COVID-19 pandemic, we asked the question "What is the biggest driver to establishing digital services?" The answers were based on what the CIOs "expected" the drivers to be and were fairly evenly distributed. In this year's State CIO Survey, with responses being collected a full year after the pandemic began, we asked this question again. In contrast, one answer overwhelmingly stood out as the biggest driver for state governments need to digitize: "better online experience for citizens." Seventy-four percent of CIOs selected this response as compared to ten percent or less for all other options. This suggests that state CIOs were singularly focused on ensuring citizens and users could continue to interact with government during the pandemic.

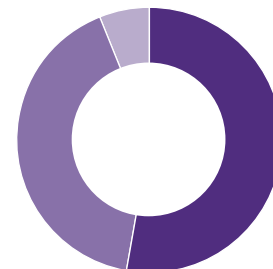
"While some services already had a high degree of adoption pre-pandemic, there was significant acceleration for others, particularly during the early months of the pandemic. Digital collaboration experienced a huge increase."

The answers to the survey question, "How has the COVID-19 pandemic impacted the demand for digital government services?" were in-line with the responses to the prior question on business drivers. Ninety-four percent of respondents said COVID has increased/accelerated the citizen demand for digital government services dramatically or somewhat, while only six percent said demand has stayed the same.

The COVID pandemic demanded a rapid response by government to citizen needs. While a difficult time, it did provide a great opportunity to simplify and innovate. But will this spirit of innovation stay? We asked "What digital services and work practices instituted during the pandemic do you expect to retain? (Select all that apply)," and three responses stood out. The top vote-getter of "practices expected to stay" was work from home at 85 percent, followed closely by enhanced security and online services at 82 percent. This suggests that flexible work arrangements and enhanced protections from cybercriminals is here to stay. The practice least likely to stay was simplified procurement, suggesting the rules were relaxed purely to deal with an emergency, not for any long-term benefit.

How has the COVID-19 pandemic impacted the demand for digital government services?

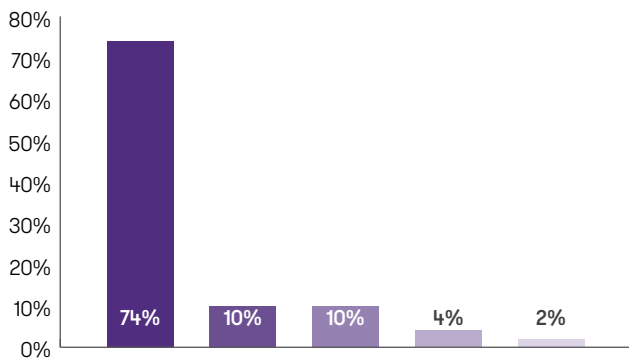
- Increased/accelerated dramatically **53%**
- Increased/accelerated somewhat **41%**
- Stayed about the same **6%**





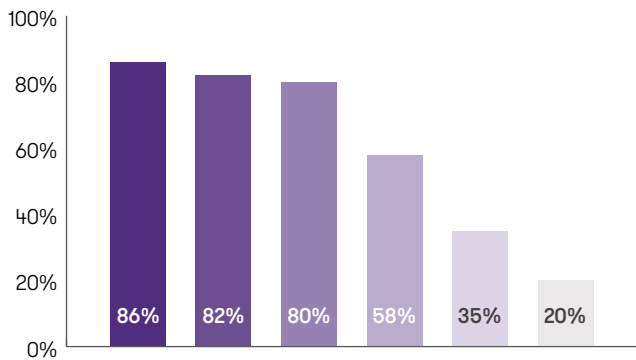
“10 years worth of deployments in 8 months”

What is the biggest driver to expanding digital services?



- Better online experience for citizens
- Increased public participation and engagement
- Optimizing operations and lowering costs
- Empowering frontline government employees to collaborate and increase productivity (employee engagement)
- Better collaboration among state agencies

What digital services and work practices instituted during the pandemic do you expect to retain? (select all that apply)



- Remote work as a regular rather than occasional occurrence
- Enhanced security and fraud detection around web-based services
- Deployment of additional web-enabled internal and external services
- Evaluate enabling tools and methodologies geared towards rapidly delivering services
- Greater emphasis on human-centered design and design thinking concepts to designing solutions
- Simplified procurement procedures to efficiently acquire services and products

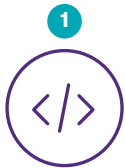
Emerging Technology

There was a major shift in this year's survey versus the 2020 survey in response to the question "What emerging IT area will be most impactful in the next 3-5 years?" Low-code/no-code was the top selection with 31 percent of responses in this year's survey, which is almost double the second highest response (artificial intelligence/machine learning). This reflects the need to deliver point solutions rapidly in response to the COVID-19 pandemic.

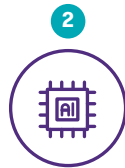
By contrast, there was very little change from last year's survey on "What is your preferred method for deploying emerging technologies?" The order of responses was the same, with encouraging pilot initiatives, agencies selecting their own and organizing demonstrations as the top three, in that order.

As working from home became the norm, and Zoom became a verb, we wanted to know "What were the most significant remote work technologies adopted during the pandemic? (Choose top 3)." Ninety-two percent of respondents were using collaboration platforms with 86 percent having enhanced video platforms.

What emerging IT area will be most impactful in the next 3-5 years?



Low-code/no-code



Artificial intelligence (AI)/Machine learning



Mass personalization /citizen personas



Robotic process automation (RPA)



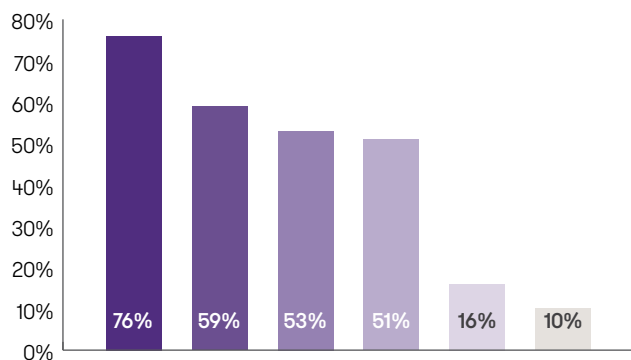
Internet of things (IoT)



Remote work technology

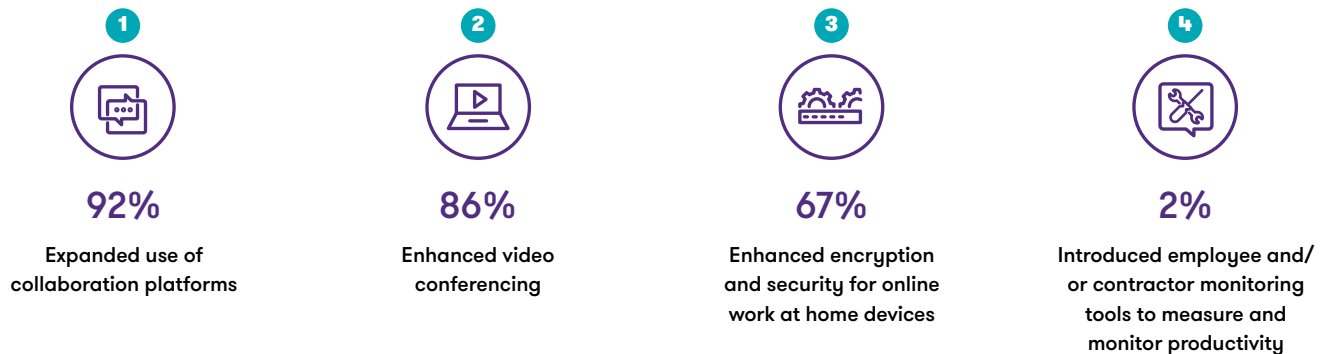


What is your preferred method for deploying emerging technologies?



- Encourage pilot initiatives among the agencies
- There is no single method. Agencies select technologies based on their needs
- Organize vendor demonstrations to showcase how emerging technologies can solve agency challenges
- Identify in enterprise architecture
- Established an innovation center
- Provide innovation funding to agencies

What were the most significant remote work technologies adopted during the pandemic?



Broadband/ wireless connectivity

We asked if states have a cross-agency broadband office and 59 percent said yes; 41 percent said no. CIOs with states who have one of these offices (most who aren't leading broadband efforts in their states) said their role mostly hadn't changed but, as one CIO told us, "I am much more connected now than in previous years." Finally in this section we asked about roadblocks for broadband deployment or implementation.

Without a doubt, broadband and the importance of connectivity has been one of the biggest issues thrust into the spotlight during the COVID-19 pandemic. While CIOs have not traditionally had broadband under their authority—in the 2020 State CIO Survey only 23 percent of state CIOs told us they lead strategic planning and implementation—most, if not all, now have some responsibility in the deployment and adoption of broadband in their states. We asked, "Now that broadband deployment or implementation has risen in state priorities, are there any new initiatives you are pursuing since last year's survey?" CIOs told us that additional funding for broadband has increased implementation and there is now serious consideration of legislation to create new broadband councils and other related initiatives.

What are the biggest roadblocks with broadband deployment or implementation in your state? (choose top three)



Topography



Coordinating funding approach



Affordability

44%	17%	15%
Accurate/current data and mapping	Understanding of the federal grant process and compliance	Carrier advocacy/incumbent protection
13%	9%	4%
Lack of public-private partnership opportunities	Lack of agency coordination	Understanding of the state grant process and compliance



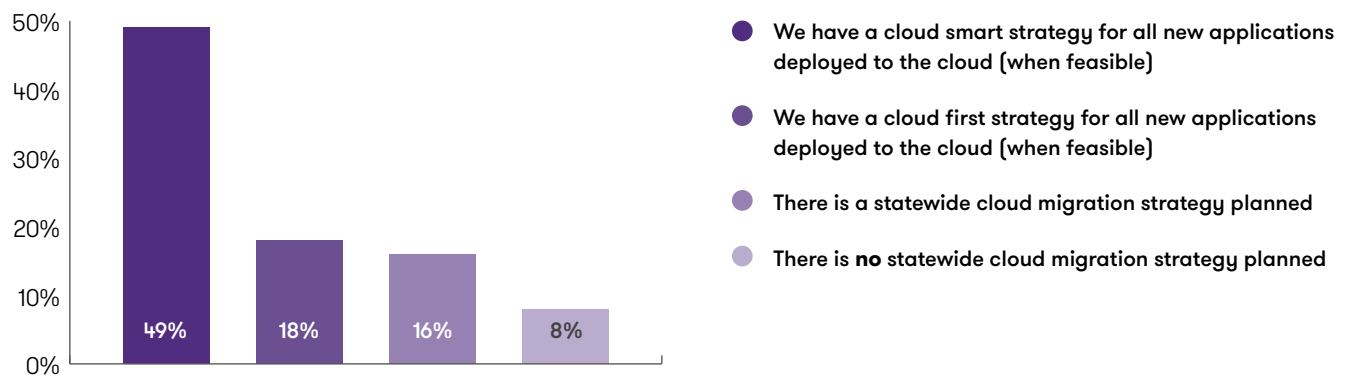
Cloud

The COVID-19 pandemic has accelerated the adoption of cloud solutions to support the growing shift toward a digital government. While CIOs agree that cloud services are a priority (it ranked number three in the 2021 State CIO Top 10 Priorities), not all states have had a straightforward path when “going to the cloud.” Knowing this, we asked state CIOs to share the most critical lessons they learned in moving to the cloud. State CIOs shared a range of valuable insight from which several themes emerged. As one CIO noted, “There is not a one-size-fits-all approach. Each application needs to be fully evaluated to determine how to best architect a solution.” CIOs emphasized the importance of understanding the total and ongoing cost and any savings, prioritizing security upfront, having the staff capabilities to manage cloud solutions and vendors and developing a cohesive strategy for migration. When deploying cloud solutions, several also shared it is important to work closely with the business side to assess readiness and build support.

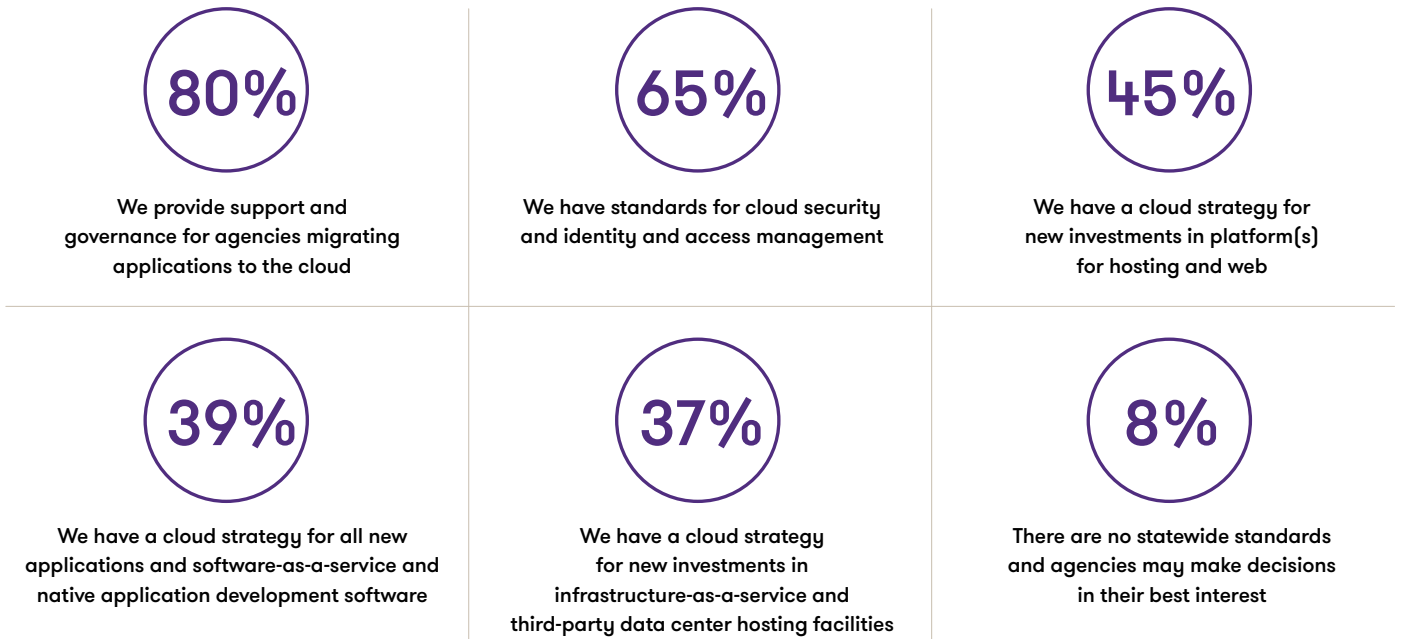
We asked several questions to get a sense of the strategies state CIOs are employing in their states’ migration to cloud services. There is a clear trend of states moving toward a cloud smart approach, where the deployment of cloud solutions is evaluated to determine which solutions fit the business case and mission needs, and away from cloud first, where cloud is the first option pursued. When asked if their organization has a strategy in migrating legacy applications to the cloud, 49 percent said they have a cloud smart strategy in place while only 18 percent said they have a cloud first strategy in place. Only eight percent of states had no cloud strategy in place. CIOs were also asked to rank their top three priorities in driving their cloud strategy forward. Scalability/flexibility ranked the highest (78 percent) while 57 percent ranked security and 43 percent ranked investment optimization highest.

“It is critical to have a workforce that is confident in the planning, solutioning, implementation and management of cloud solutions. Training and experience will build successes and foster cloud expansion as well as give a clearer picture of the total cost of the effort.”

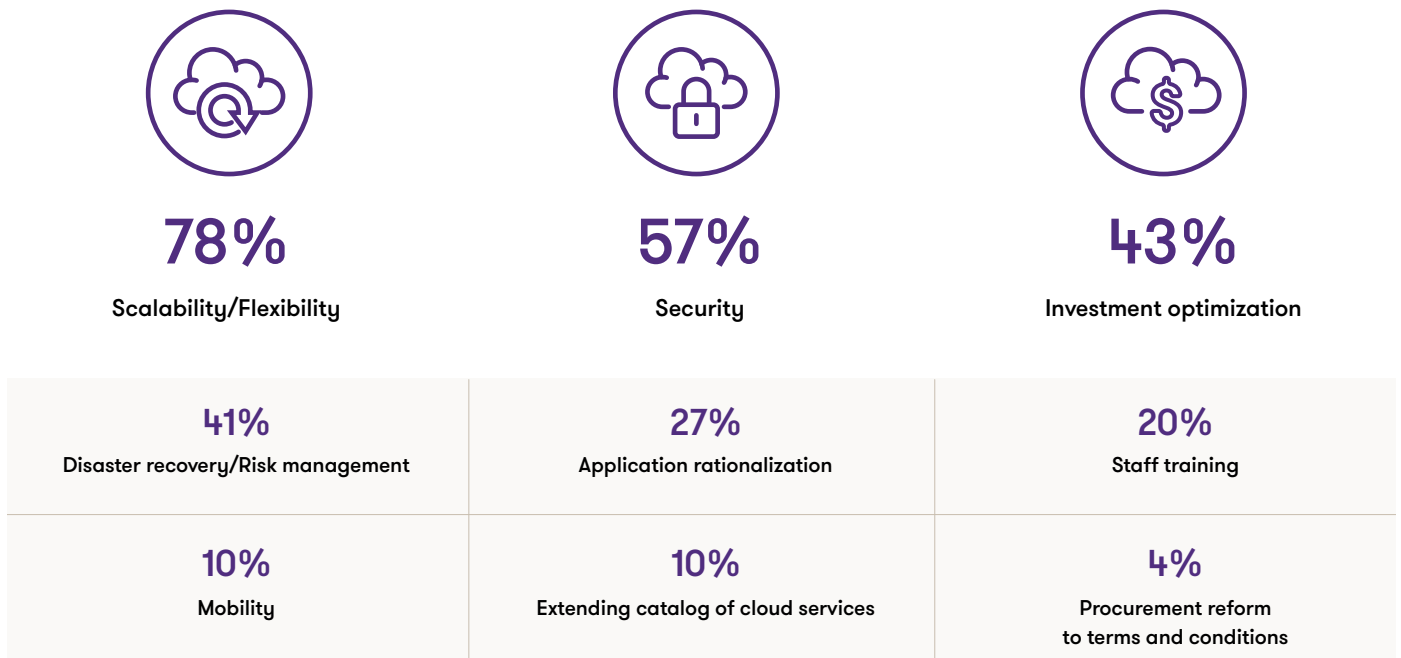
Does your organization have a strategy to migrate legacy applications to the cloud?



Which of the following are statewide standards and/or best practices for agencies to follow in your state?



What are your top three priorities in driving your cloud strategy forward?

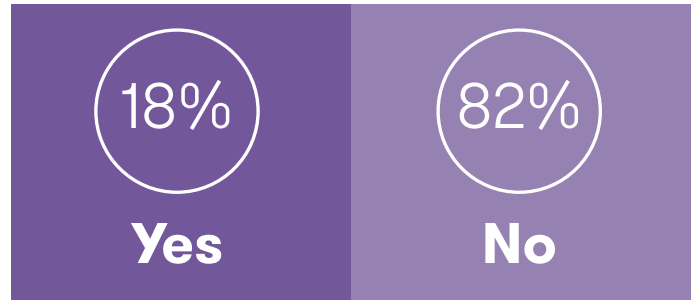


Budget and cost control

The COVID-19 pandemic resulted in a series of changes to IT funding, approval and procurement processes as emergency projects were started and completed on very accelerated timeframes. Most of these changes however appear to be temporary. Almost no CIOs reported any permanent changes in their procurement authority or processes, and 82 percent of CIOs reported no increases in budget to address new or increased remote work needs.

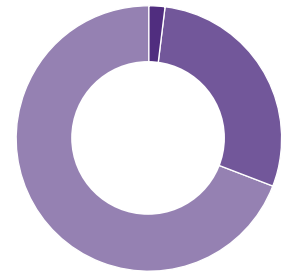
If there are enduring impacts to CIO involvement in IT budget and cost control from the pandemic, it appears to be in the level of involvement of the CIO in agency budget requests and in the monitoring of the technology implementation spending.

Has the CIO organization received a budget increase for the new fiscal year to support an increase in state employee remote work?

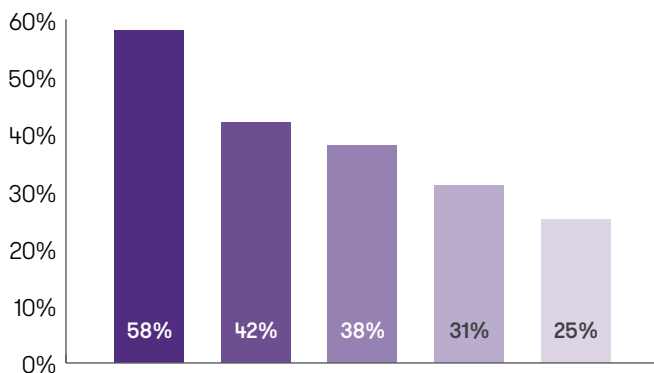


Does the CIO have broader discretionary authority to procure goods and services directly as compared to before the COVID-19 pandemic?

- Yes, permanently 2%
- Yes, temporarily 29%
- No 69%



Are the costs associated with technology implementations or systems being monitored more closely than in the past?



- Yes, the CIO's office is monitoring more closely
- Yes, the legislature is monitoring more closely
- Yes, the budget/finance office is monitoring more closely
- Yes, the governor's office is monitoring more closely
- No

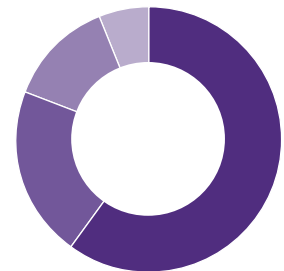


Identity and access management

Identity and access management (IAM) is another issue that has received a lot of attention in the last two years. The COVID-19 pandemic highlighted the need for a strong IAM program, both internally with increased remote work and externally with increased citizen digital services. In fact, when we asked CIOs if the COVID-19 pandemic had placed a greater emphasis on digital identity services, overwhelmingly the answer was yes for both internal and external services. The drivers for this increased demand vary but one CIO told us, “Increased services and fraud are driving the external demand.” We asked several other specific questions in this section.

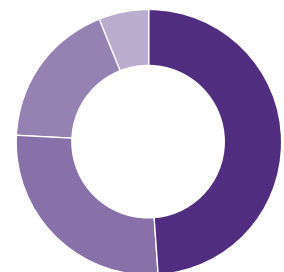
Please characterize the status of your enterprise-wide IAM solution (covering all agencies under governor’s jurisdiction).

- Partially implemented **60%**
- Planned **21%**
- Fully implemented **13%**
- No plans to implement **6%**



Please characterize the status of your citizen digital identity initiative.

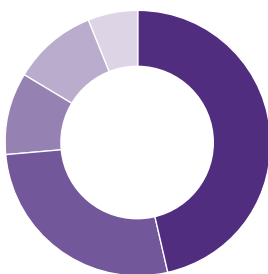
- Partially implemented **49%**
- Planned **27%**
- No plans to implement **18%**
- Fully implemented **6%**





What is the status of digital/mobile driver's licenses in your state?

- No plans to implement **46%**
- Planned **27%**
- Fully implemented and available to citizens **10%**
- Pilot project underway **10%**
- Under development **6%**



How is your enterprise-wide identity and access management program funded? (select all that apply)



Fee for use as-a-service (chargeback)



General fund



Federal grants / ARP funding



Capital budget funds



Dedicated appropriation



Grants funding (non-federal)

Legacy modernization

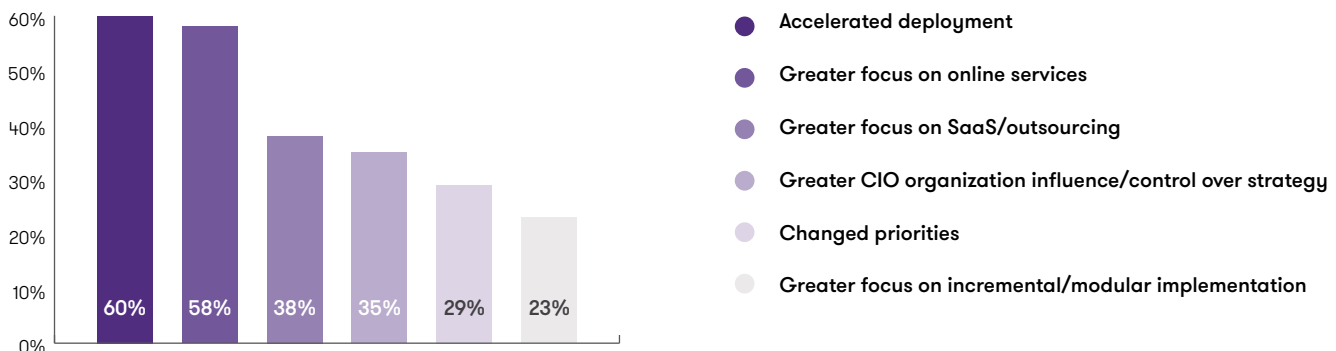
The modernization of legacy systems is another longstanding issue that was put on full display during the COVID-19 pandemic. While some systems were exposed for being out of date, others simply no longer met the business needs of the state. We asked a series of questions on this topic, with the most telling insight from CIOs coming when we asked about the most critical lesson learned in legacy system modernization. Some CIO responses were short but powerful: “Don’t delay;” “Patience;” and “Organizational change needs to be at the forefront.” Another CIO told us, “Expose the wound (legacy system). Exploit at the highest level to share risks of doing nothing.” Still another CIO said:

“The business/end users always want to over customize everything. It’s why we have so much legacy technology everywhere that is practically impossible to support. Getting the business to understand the need to standardize is challenging - everyone thinks they are special.”

In terms of prioritization of investment, CIOs indicated six main business lines that would receive significant capital investment for legacy modernization within the next two years.

We asked additional questions in this section and one important observation is 71 percent of states report using low-code/no-code technologies. In the Emerging Technology section of this survey, CIOs cited low-code/no-code as the top emerging IT area that will be most impactful in the next three to five years.

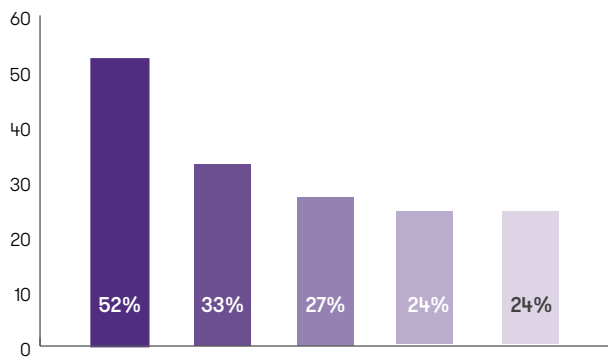
How has your legacy modernization strategy changed due to COVID-19 and the related stimulus and infrastructure funding?



Is your state using low-code/no-code technologies as part of its legacy system modernization strategy?

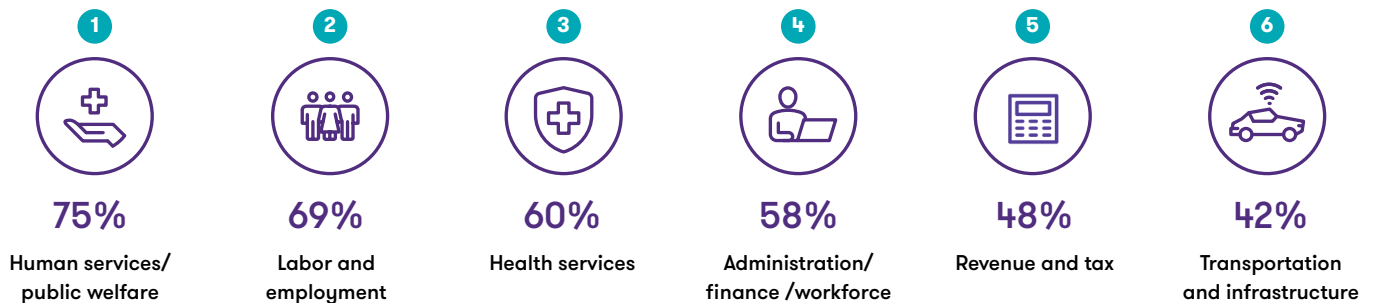


If yes, what management processes are in place? (select all that apply)

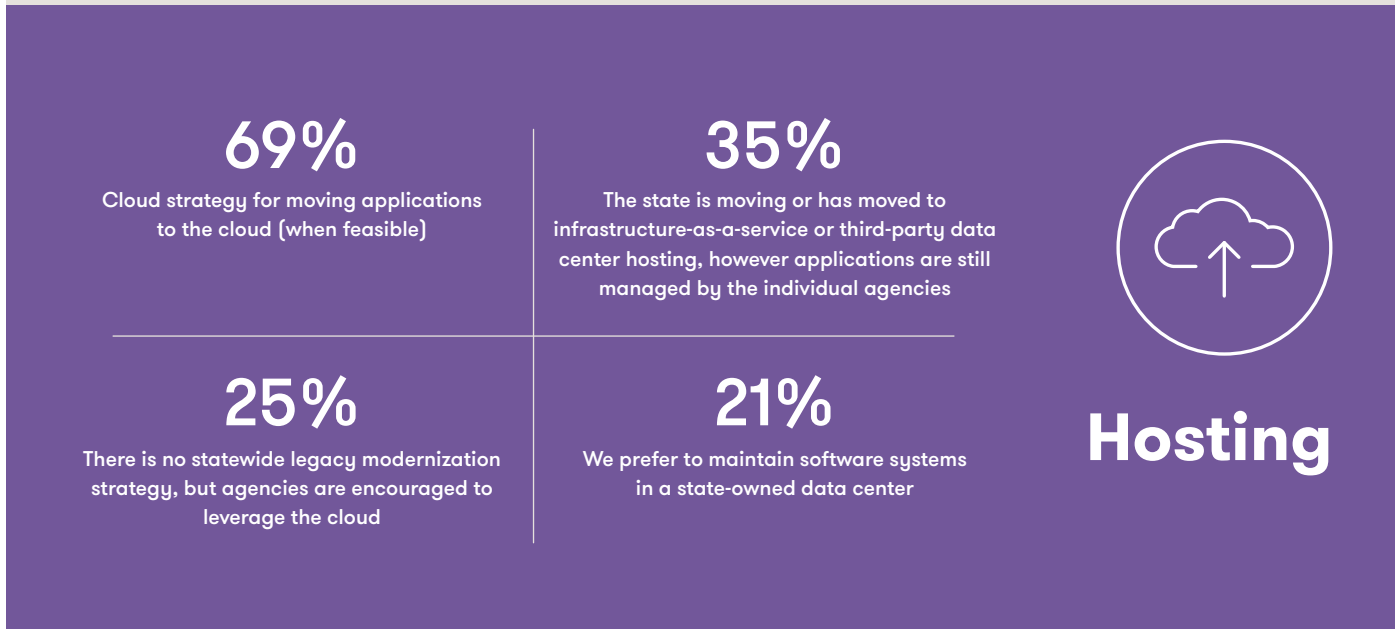
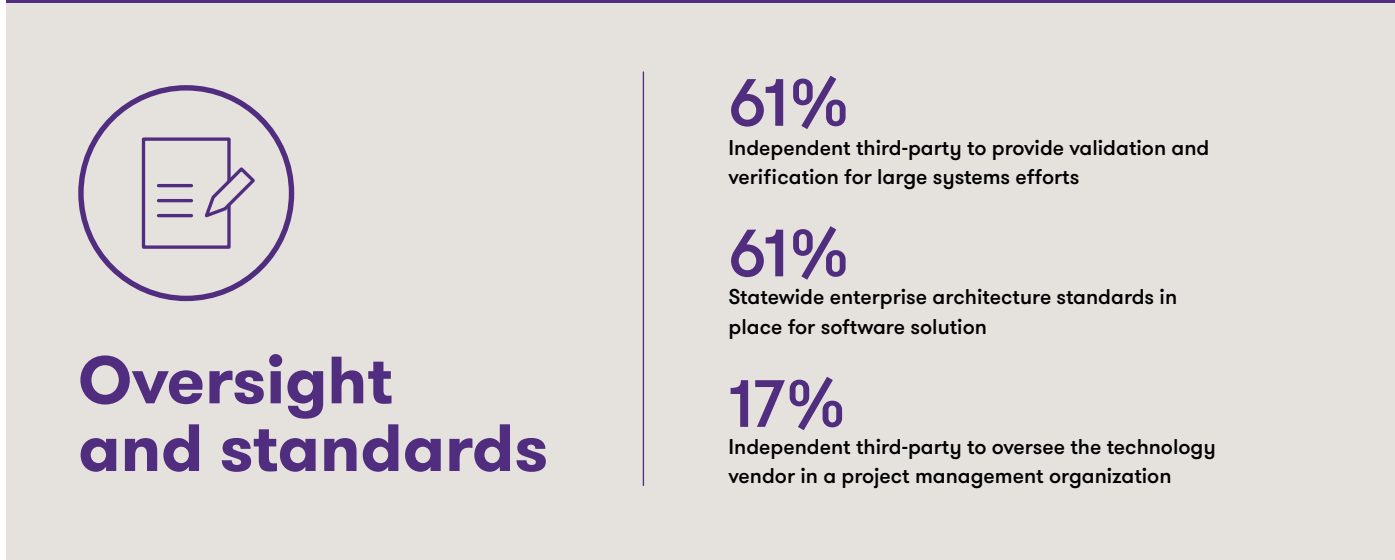


- Pre-approved list of low-code/no-code platforms that the state agencies can use
- Centralized and enhanced security through a standardized development platform
- The state agencies make their own investment decisions
- Empower business users to develop their own solutions while a central IT authority maintains control and operations over applications deployed to the cloud
- Encourage reuse of components, processes and functions through a statewide library

Which of the following major business lines will have significant capital investment (as defined in your state) for legacy modernization efforts in the coming two years?



What type of governance, guidelines, and/or policies does your CIO organization have in place for legacy systems modernization implementations? (select all that apply)





Conclusion

2021 has been another extraordinary year. The ongoing efforts to respond to and recover from the COVID-19 pandemic have served to significantly accelerate digital transformation. State CIOs have been at the center of this and are continuing to drive transformation efforts across numerous fronts, including digital government, remote workforce models, cybersecurity and broadband.

It remains to be seen whether the acceleration in movement to online services and remote work practices will persist. However, 2021 has certainly demonstrated how state CIOs can effectively shepherd states through a rapid phase of digital transformation. States will continue to look to the state CIO to leverage and build on the progress made over the past year.

List of states participating in the survey

State of Alaska

Bill Smith
Chief Information Officer

State of Arizona

J.R. Sloan
State Chief Information Officer

State of Arkansas

Jonathan Askins
Director and Chief Information Officer

State of California

Amy Tong
Chief Information Officer and Director

State of Colorado

Anthony Neal-Graves
Chief Information Officer

State of Connecticut

Mark Raymond
Chief Information Officer

State of Delaware

Jason Clarke
Chief Information Officer

State of Florida

James Grant
Chief Information Officer

State of Georgia

Calvin Rhodes
State Chief Information Officer and Executive Director (former)

State of Hawai'i

Doug Murdock
Chief Information Officer

State of Idaho

Greg Zickau
Chief Information Officer

State of Indiana

Tracy Barnes
Chief Information Officer and Director

State of Illinois

Jennifer Ricker
Acting Secretary

State of Iowa

Annette Dunn
Director and Chief Information Officer

State of Kansas

DeAngela Burns-Wallace, PhD
Chief Information Technology Officer

Commonwealth of Kentucky

Ruth Day
Chief Information Officer

State of Louisiana

Richard Howze
State Chief Information Officer

State of Maine

Fred Brittain
Chief Information Officer

State of Maryland

Michael Leahy
Secretary of Information Technology

Commonwealth of Massachusetts

Curtis Wood
Secretary and Chief Information Officer

State of Michigan

Brom Stibitz
Chief Information Officer

State of Minnesota

Tarek Tomes
Commissioner and Chief Information Officer

State of Mississippi

David Johnson
Chief Information Officer

State of Missouri

Jeff Wann
Chief Information Officer

State of Montana

Kevin Gilbertson
Chief Information Officer

State of Nebraska

Ed Toner
Chief Information Officer

State of Nevada

Alan Cunningham
Chief Information Officer

State of New Hampshire

Denis Goulet
Commissioner/Chief Information Officer

State of New Jersey

Christopher Rein
Chief Technology Officer

State of New Mexico

John Salazar
Chief Information Officer (former)

State of New York

Tony Riddick
State Chief Information Officer

State of North Carolina

James Weaver
Secretary and Chief Information Officer

State of North Dakota

Shawn Riley
Chief Information Officer

State of Ohio

Katrina Flory
Chief Information Officer and Assistant Director

State of Oklahoma

Jerry Moore
Chief Information Officer

State of Oregon

Terrence Woods
Chief Information Officer

Commonwealth of Pennsylvania

John MacMillan
Deputy Secretary for Information Technology & Chief Information Officer

State of Rhode Island

Bijay Kumar
Chief Information Officer/Chief Digital Officer

State of South Carolina

Keith Osman
Chief Information Officer

State of South Dakota

Jeff Clines
Chief Information Officer

State of Tennessee

Stephanie Dedmon
Chief Information Officer

State of Texas

Amanda Crawford
Executive Director and Chief Information Officer

U.S. Virgin Islands

Rupert Ross
Director and Chief Information Officer

State of Utah

Alan Fuller
Chief Information Officer

State of Vermont

John Quinn
Chief Information Officer and Agency Secretary

Commonwealth of Virginia

Nelson Moe
Chief Information Officer

State of Washington

William Kehoe
Director and Chief Information Officer

State of West Virginia

Josh Spence
Chief Technology Officer

State of Wisconsin

Trina Zanow
Chief Information Officer



About the National Association of State Chief Information Officers

Founded in 1969, the National Association of State Chief Information Officers (NASCIO) represents state chief information officers (CIOs) and information technology (IT) executives and managers from the states, territories and District of Columbia. NASCIO's mission is to foster government excellence through quality business practices, information management and technology policy. NASCIO provides state CIOs and state members with products and services designed to support the challenging role of the state CIO, stimulate the exchange of information and promote the adoption of IT best practices and innovations. From national conferences to peer networking, research and publications, briefings and government affairs, NASCIO is the premier network and resource for state CIOs. For more information, visit www.NASCIO.org.



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