2020 CIO Survey

State & Local Government industry insights

Government sector spending accounts for 30–50 percent of GDP in the vast majority of countries and exerts influence over many commercial industries. Governmental support and stimulus packages have been critical to communities and industries through the COVID-19 pandemic, but there is likely to be unprecedented and lasting impact on public debt and future spending capacity. However, it has been a complex picture, with the pandemic impacting different parts of the government sector in different ways leading to a mix of economic recovery paths for state and local governments with 33 percent in 'surge' mode, 20 percent in 'modified business as usual', 40 percent in 'transform to re-emerge', and 7 percent in 'hard reset'. Essentials such as digital healthcare, human/social services, defense, economic and stimulus spending have surged; infrastructure will bounce back quickly either because of its essential nature or its role in driving economic recovery; non-essential sectors such as elective healthcare and public transport volumes will take longer to recover; while harder hit sectors such as overseas development, airports, ports, and non-COVID-19 healthcare research are delayed indefinitely. National government will continue to influence state and local projects and priorities.

Looking forward, most governments will be undertaking the largest logistical challenge in the past 50 years as they mobilize and rapidly distribute a COVID-19 vaccine to their populations. At the same time, some capital projects will be delayed, but others are likely to be accelerated if they can help drive recovery and renewal such as 'shovel ready' infrastructure projects that will deliver rapid benefits to communities or business. Meanwhile, new and more remote working models mean that some assets and estate will no longer be needed, generating opportunities for cash release.

Depending on the speed and pattern of economic recovery, national and local government bodies are likely to face multiple challenges in an environment of slow economic growth and cash constraints. These include the pressure to rapidly redesign and roll out new, digitally enabled public services (such as virtual courtrooms and touchless driver's license bureaus); sourcing and procurement functions will need to be restructured and modernized; middle and back office transformation will be needed to meet constituent expectations and enable the public sector workforce for the working practices of the future; the ongoing growth in digital and connectedness will escalate cyber and privacy considerations; while sustainability and ambitious carbon reduction targets will be a significant priority.

From this list, it is clear what a key role technology must play in the new reality. CIOs in the government sector will need to drive the push for digital acceleration and operational transformation across the enterprise to achieve economies of scale and to create better connected public services that improve the constituent experience, develop performance metrics that measure progress for digital transformation, plan for changes to operating model, create greater operating efficiency, empower the workforce, and link up different departments through common platforms and the better use of data.

Administrative priorities & investment

With constituents increasingly expecting public services to be delivered to them through online digital channels by default, significantly more focus on human-centric design of public services enabled through end-to-end delivery across departments will be at the center of government strategy. Shared technology and data platforms that span governmental agencies and enable the delivery of joined up services to constituents are key priorities with states immediately trying to consolidate to one portal. This is likely to mean increased migrations to the cloud, the development of modern business and enterprise architectures, implementation of RPA and intelligent automation, and the adoption of agile methods for software development. There has been a 15 percent increase in IT spend in national government compared to a cross-sector average of 9 percent — a sign of how key technological transformation is to the future delivery of government services. IT organizations in this sector will need to demonstrate that technology investments are having clear, strategic impacts on the business as the affordability of transformation programs will be challenged. Priorities center around workforce enablement through collaboration platforms as well as gaining insights from data and achieving operational efficiency. Cloud, constituent experience and security are the three top investment areas for national, state and local governments.

Top three business issues that administrations are looking for the IT function to address
State & Local Government vs. overall

State & Local Government
1. Improving operational efficiency
2. Enabling the workforce
3. Improving constituent engagement

Overall
1. Improving operational efficiency
2. Improving constituent engagement
3. Enabling the workforce

Three most important technology investments
State & Local Government vs. overall

State & Local Government
1. Infrastructure/Cloud
2. Constituent experience and engagement
3. Security and privacy

Overall
1. Security and privacy
2. Constituent experience and engagement
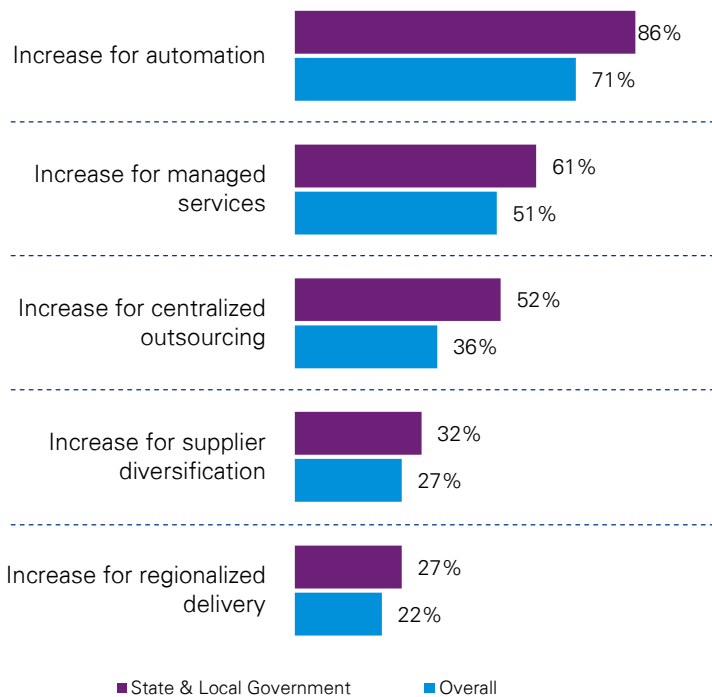3. Infrastructure/Cloud

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Strategy & operating model

Governments will need more agile, flexible operating models, allowing for efficiencies, faster evidence-based decision-making, and scenario planning. Digital Leaders in state and local governments have a significant advantage over their peers, far outperforming them in key areas including operational efficiency (67 percent vs 33 percent), constituent experience (58 percent vs 28 percent), employee experience (58 percent vs 29 percent) and constituent trust (50 percent vs 33 percent). A key aspect of the operating model that both national and local government bodies will need to closely focus on is their sourcing strategy. The pandemic pointed out weaknesses of being locally hosted versus cloud. There will be a pressing need to diversify sourcing that suffered disruptions through the pandemic, in order to make them more agile, modular, transparent and resilient. This could also be facilitated by shared service centers and a growth in managed services — expected by three-quarters of national government respondents and six in ten of state and local government respondents, far in excess of the cross-sector average of 51 percent. Hand in hand with this, government agencies will also need to review and bolster their scenario and contingency planning, as many standing arrangements were overwhelmed by the effects of the pandemic. In a period when governments will need to scale and monitor the administration of vaccines while trying to balance protecting their constituents and keeping their economies running, budgets are likely to be under significant strain, there will be a strong focus on evidence-based decision making supported by scenario planning. At the same time, resource constraints will create the increased need for service automation and efficient delivery with 86 percent of state and local government respondents looking to automation.

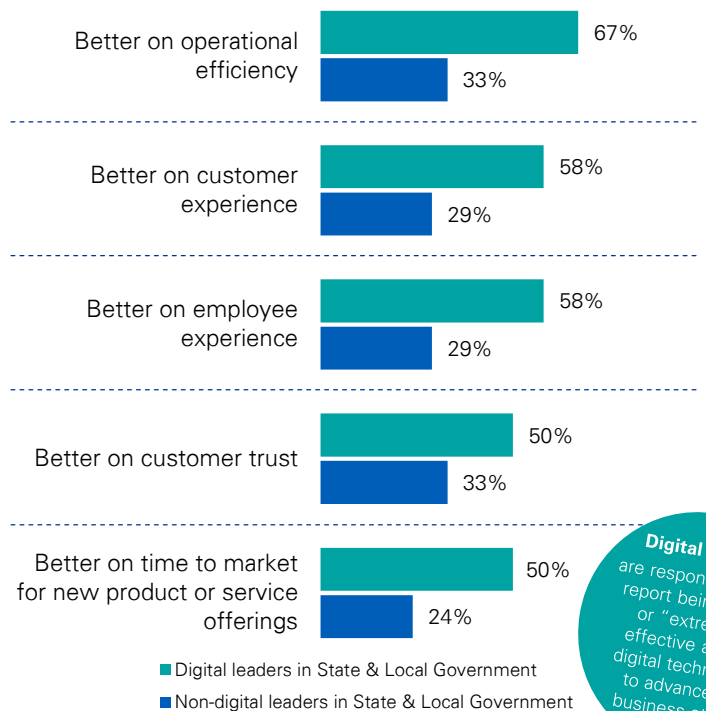## Expected change to service delivery model
State & Local Government vs. overall

Increase for automation	86% (State & Local Government) / 71% (Overall)
Increase for managed services	61% / 51%
Increase for centralized outsourcing	52% / 36%
Increase for supplier diversification	32% / 27%
Increase for regionalized delivery	27% / 22%

■ State & Local Government   ■ Overall

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Organizations performing better or significantly better than competitors on the following metrics:
*Digital Leaders vs non-digital leaders in State & Local Government*

Better on operational efficiency	67% (Digital leaders) / 33% (Non-digital leaders)
Better on customer experience	58% / 29%
Better on employee experience	58% / 29%
Better on customer trust	50% / 33%
Better on time to market for new product or service offerings	50% / 24%

■ Digital leaders in State & Local Government
■ Non-digital leaders in State & Local Government

Digital Leaders are respondents who report being "very" or "extremely" effective at using digital technologies to advance their business strategy

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Four economic recovery paths:
State & Local Government
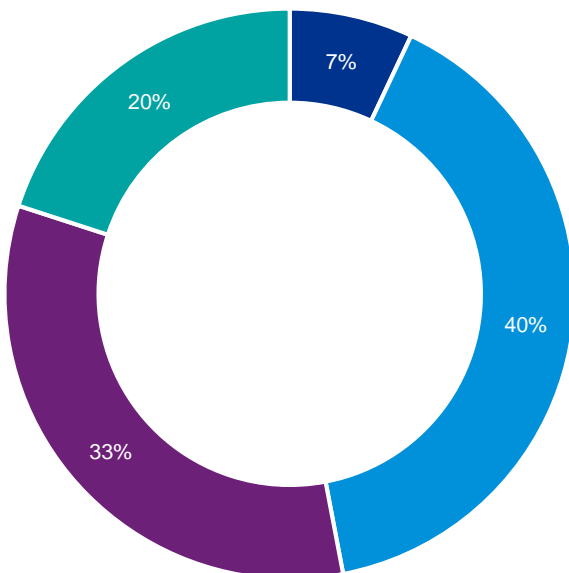
- 7% (Hard Reset)
- 40% (Transform to Re-emerge)
- 33% (Surge)
- 20% (Modified Business-as-usual)

■ **Hard Reset** — departments and agencies that struggle to recover from COVID-19 due to 'permanently' lowered demand for offerings, insufficient capital to ride out extended recession, and/or poor execution of digital transformation.

■ **Transform to Re-emerge** — departments and agencies that will recover but along a protracted path requiring reserves of capital to endure and transform operating models to emerge stronger and more in line with changed consumer priorities.

■ **Surge** — departments and agencies that scale post-COVID-19 as consumer behavior that was altered during the crisis is sustained in their favor. Investors sense their potential to lead and provide capital to scale aggressively during recovery.

■ **Modified Business-as-usual** — departments and agencies seen as daily essentials will suffer effects of the consumer shutdown recession but are expected to recover more quickly as consumer demand returns in similar volumes.

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Delivering value at speed

With few technology leaders in state and local governments wanting to risk change, digital leadership must be a mandate from the top down with a strategy that transcends governor cycles and provides an incremental approach. In order to deliver value at speed, state and local governments will need be agile – addressing technology debt and workforce bloat. With pressure to deliver more joined up and constituent-centric services, and so much to be gained from efficiencies in the back and middle offices, it is no surprise that large-scale investments in cloud and SaaS feature most widely in the sector. Intelligent automation is also beginning to spread, although this is more prominent in national government (14 percent) than local government (only 4 percent). Digital Leaders, once again, are in a much stronger position than their counterparts, enjoying a clear differentiation in the efficacy of their most successful digital offerings. This applies across all key metrics for state and local governments, including improving constituent satisfaction and experience (91 percent vs 33 percent), collecting valuable data (77 percent vs 34 percent), and increasing constituent loyalty (58 percent vs 18 percent).

Organizations that are 'very effective' or 'extremely effective' at pivoting and scaling digital channels to meet new constituent demands and expectations:
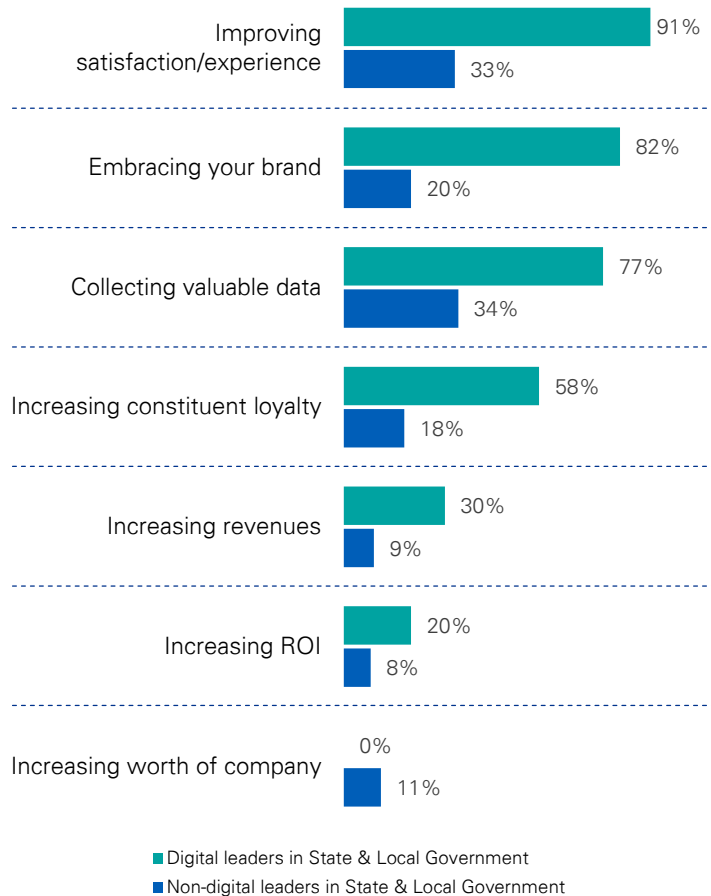*Digital leaders vs non-digital leaders in State & Local Government*

Very or extremely effective
- 31%
- 14%

■ Digital leaders in State & Local Government
■ Non-digital leaders in State & Local Government
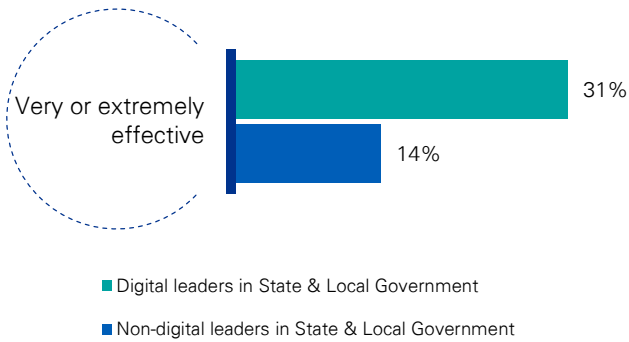
Digital offerings to constituents that were 'very effective' or 'extremely effective' at the following:
Digital leaders vs non-digital leaders in State & Local Government

	Digital leaders	Non-digital leaders
Improving satisfaction/experience	91%	33%
Embracing your brand	82%	20%
Collecting valuable data	77%	34%
Increasing constituent loyalty	58%	18%
Increasing revenues	30%	9%
Increasing ROI	20%	8%
Increasing worth of company	0%	11%

■ Digital leaders in State & Local Government
■ Non-digital leaders in State & Local Government

Large-scale implementations of emerging tech:
Digital leaders vs non-digital leaders in State & Local Government

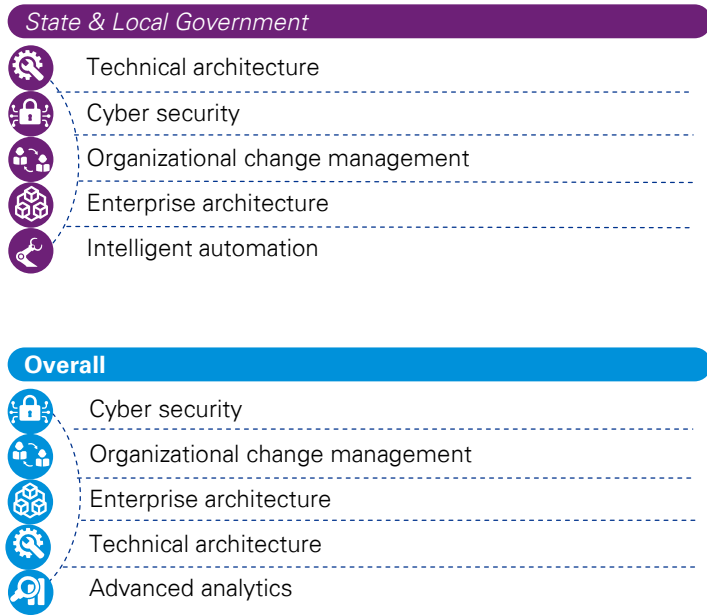|	Digital leaders	Non-digital leaders
Distributed cloud (IaaS, PaaS)	35%	15%
SaaS marketplace platforms	31%	19%
Artificial intelligence/Machine learning	8%	1%
Edge computing/internet of things	4%	3%
Intelligent automation	4%	0%
Blockchain/distributed ledger	0%	0%
Computing on demand	0%	0%

■ Digital leaders in State & Local Government
■ Non-digital leaders in State & Local Government
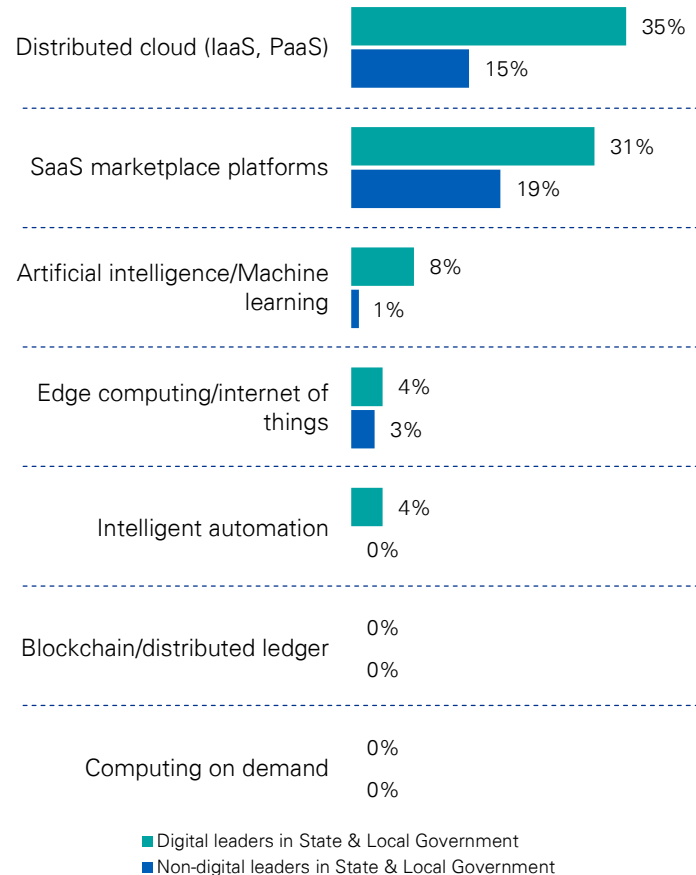
People & culture

One of the biggest and most visible impacts of COVID-19 on the government sector was the mass move to remote working. For a sector that was traditionally highly office-based with relatively low degrees of flexible working, this was a huge shift. Over a third (31 percent) of CIO respondents in the state and local government sector foresee the majority of the workforce working predominantly from home in the future — lower than the cross-sector average of 43 percent but still a truly significant proportion. To support this, cloud, connected IT systems and more flexible working patterns will be needed, including the redesign and realignment of health and safety, HR and employment policies and contracts. In common with other industries, cyber related skills are the most in-demand within national government IT teams, with cloud featuring at number two. For state and local government IT teams, technical architecture ranks at number one followed by cyber security. In the new reality of such change and rapid evolution, it is notable that career progression opportunities is seen as the second most important factor in engaging and retaining IT talent for state and local governments (behind strong culture & leadership) — coming in ahead of work location and remote work opportunities at number three.

Most in demand skills:
State & Local Government vs. overall

State & Local Government
- Technical architecture
- Cyber security
- Organizational change management
- Enterprise architecture
- Intelligent automation

Overall
- Cyber security
- Organizational change management
- Enterprise architecture
- Technical architecture
- Advanced analytics

Top factors in engaging and retaining key technology talent in the new reality:
State & Local Government vs. overall

State & Local Government
1. Strong culture & leadership
2. Career progression opportunities
3. Work location and remote work opportunities
4. Flexible work hours
5. Good remuneration

Overall
1. Strong culture & leadership
2. Good remuneration
3. Career progression opportunities
4. Work location and remote work opportunities
5. Training, development, & reskilling opportunities

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

58% in State & Local Government believe **COVID-19 created a culture** of inclusivity in the **technology team.**

More than four in ten in State & Local Government believe **promoting diversity** improves **access to skills, trust and collaboration, and engagement with the business.**

Proportion of enterprise that will remain predominantly working from home post COVID-19:
State & Local Government vs. overall

State & Local Government
30% Say half or more

Overall
43% Say half or more
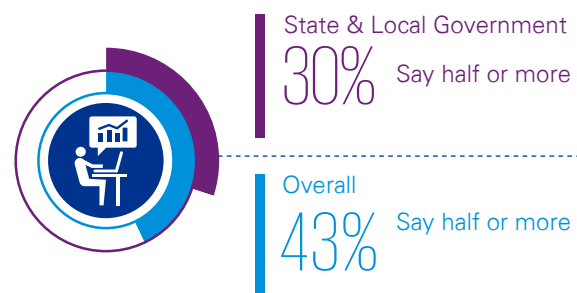
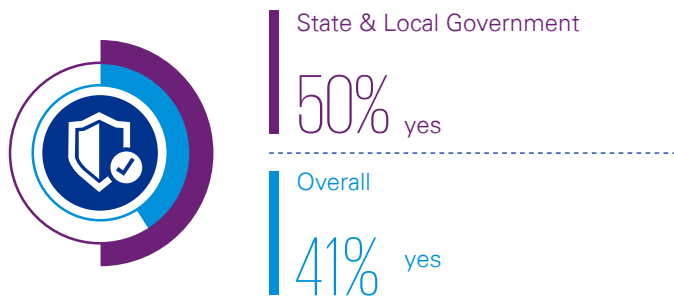Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

The rise of cyber

With COVID-19 causing the mass relocation of staff from corporate networks to home offices, bedrooms and kitchen tables around the world, organizations' attack surfaces also dramatically grew. As a result, more than five in ten organizations have experienced an increase in cyber security incidents. In the government sectors, there has been a particularly dramatic rise in spear phishing attacks (79 percent in state and local governments report an increase) and malware (68 percent). This is perhaps a sign that cyber attackers are aware of the government sector's relative inexperience with working remotely, making staff potentially more vulnerable to digital lures. Clearly, ensuring that staff are fully aware of online protocols and best practice is an ongoing priority. With the safety and security of governmental and constituent data so essential, it is a non-negotiable imperative to ensure that systems are robust and protected. Attacks are becoming ever more sophisticated, and state-sponsored cyber activity is on the rise: governmental agencies must continually raise their game and put cyber security at the top of their agendas.

Organizations that experienced an increase in security or cyber incidents due to remote working
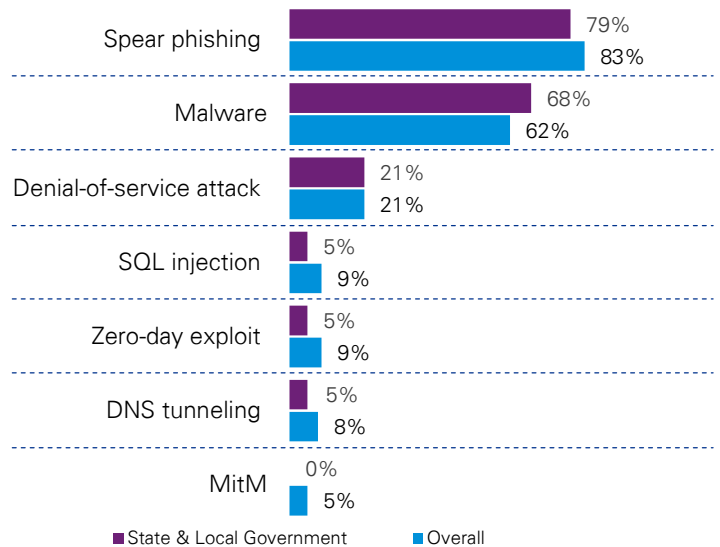*State & Local Government vs. overall*

State & Local Government

50% yes

Overall

41% yes

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Increase in types of attacks due to remote working:
State & Local Government vs. overall

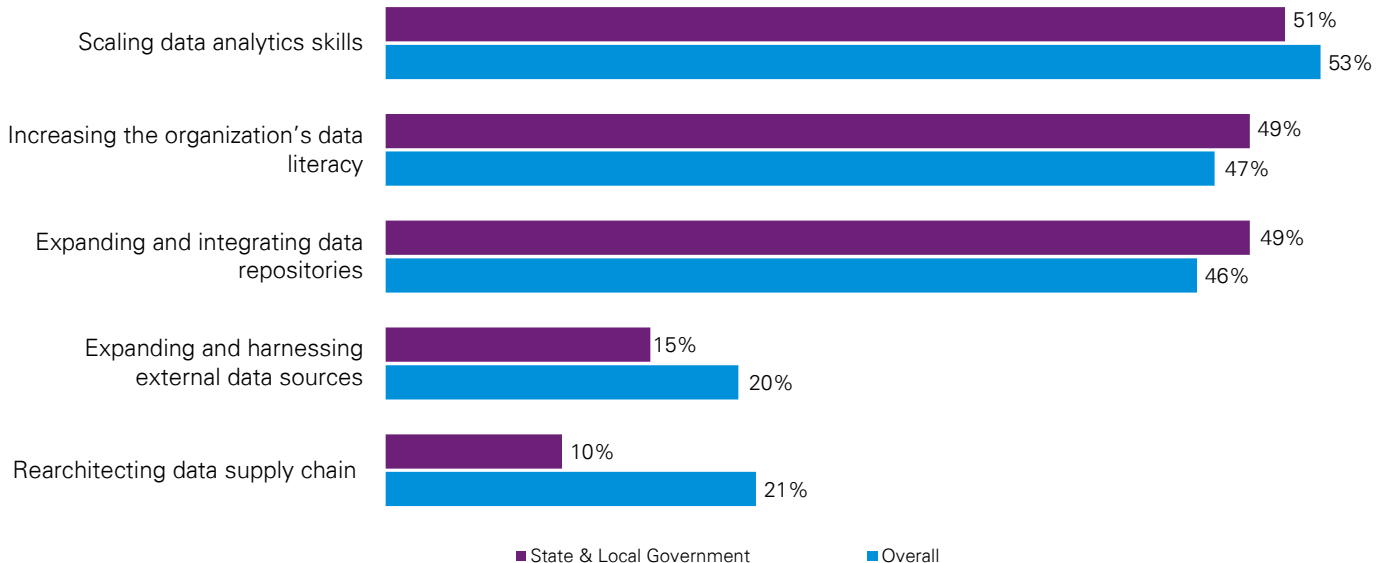| Attack type	State & Local Government	Overall
Spear phishing	79%	83%
Malware	68%	62%
Denial-of-service attack	21%	21%
SQL injection	5%	9%
Zero-day exploit	5%	9%
DNS tunneling	5%	8%
MitM	0%	5%

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

Analytics & insight

The machinery of government will turn more smoothly and efficiently if systems are connected and relevant data can easily be shared across departments and agencies. Increasing the organization's data literacy, establishing modern data and application architecture standards, and expanding and integrating data repositories are among the top priorities for the government sectors. Shared platforms are key, with secure central repositories as well as scaling data analytics skills in the organization. This will also remove the need for constituents to keep giving their data and personal information when contacting different departments and agencies — a common frustration that clouds the quality of the constituent experience.

Top priorities for organizations' data strategy:
State & Local Government vs. overall

Priority	State & Local Government	Overall
Scaling data analytics skills	51%	53%
Increasing the organization's data literacy	49%	47%
Expanding and integrating data repositories	49%	46%
Expanding and harnessing external data sources	15%	20%
Rearchitecting data supply chain	10%	21%

Source: 2020 Harvey Nash/KPMG CIO Survey, KPMG International

What now?

COVID-19 has changed the landscape. With technology more important than ever to organizations' ability to survive and thrive, the opportunity has never been greater for CIOs to work as strategic partners with the business. Eight in ten IT leaders in state and local government report increased collaboration between the business and technology teams — this relationship is something that CIOs must build on to ensure their organization's digital transformation success.

For CIOs in the government sector, there is a huge task to modernize and integrate IT systems, facilitate migrations to the cloud, enable more digital working for staff and more digital experiences for constituents, and at the same time bring operating costs down through enhanced efficiencies. The list is long, the pressure is high and budgets are squeezed: now is the time for IT leaders in government to prove their powers of innovation, determination and resilience as they lead their organizations in the new reality.

How KPMG can help

While KPMG firms are some of the largest providers of services to state and local governments globally, we take a boutique approach to client issues with a focus on flexibility, adaptability, and innovation. We recognize that there are many on-ramps to supporting IT transformation and we've tailored our services accordingly:

Transform the business

— Strategy and operating model
— Organizational design
— Enterprise architecture
— Portfolio planning
— Merger and acquisition
— Integration and separation

Run the business

— Scaling agile
— Product management
— DevOps tooling
— IT financial management
— IT service management
— IT asset management

Modernize and protect

— Cloud strategy
— Data center strategy
— Continuity and resiliency
— Workplace transformation
— Network modernization
— Cyber, risk, and compliance

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