



California Rethinks IT Priorities for Uncertain Year Ahead:

Technology offers solutions for secure, flexible, and resilient infrastructure, regardless of what the future brings.

A crippling pandemic, a volatile economy, and unprecedented wildfires: Throughout 2020, California public employees worked under extreme difficulties to deliver citizen services and keep back-office operations running despite an onslaught of challenges. Now, as they turn their attention to the year ahead, they are re-evaluating — and adjusting — IT plans for modernization and other initiatives.

Indeed, fewer than a quarter of government agencies in California are proceeding with all their projects as planned, according to a new survey from the Center for Digital Government (CDG). The survey, which polled more than 120 state and local employees in California on the impact of COVID-19 to their organizations, found only 22 percent of respondents said they are continuing to implement all projects as planned; 26 percent are moving forward with modified technology plans; and 21 percent are continuing with cost-justified plans.¹

While many agencies have revised their IT project strategies, they also recognize IT modernization is crucial to meet the urgencies of the moment and prepare for a resilient future. Survey respondents indicated that funding over the next 12 months will most likely be directed toward projects that support remote work (44 percent), improve cybersecurity (35 percent) and modernize legacy systems (34 percent).

Solutions that allow organizations to reduce IT expenditures for these and other projects are critical. Legacy infrastructure — with separate storage, storage networks, and servers — is ill-equipped to meet the changing needs of government. Traditional infrastructure creates and reinforces silos that impede comprehensive, long-term planning. These outdated structures add unnecessary complexity at every step, from procurement to deployment to management.

As government technology demands have evolved in recent years, legacy systems have become increasingly costly and burdensome. Public-sector IT teams spend far too much time and effort simply maintaining traditional infrastructure, rather than focusing on new services and applications that actually enhance service delivery for constituents.

That was all true even before the pandemic. But the disruptions of 2020 exacerbated those challenges, forcing IT and business leaders to work in new ways:

Complex citizen services. Digital citizen services are no longer a convenience. They are a necessity. To deliver them, organizations must meet shifting demands for bandwidth, processing power, data storage, and security controls — whether in on-premises, cloud, or hybrid environments.

Need for analytics and intelligent automation.

Organizations need advanced tools to make government more personalized, responsive, scalable, and secure. These tools enable organizations to automate internal workflows while better orchestrating and personalizing customer journeys.

Staffing shortages and limited IT skill sets. Nationwide, in April 2020 more than half of municipalities with populations of 50,000 or more were predicting employee furloughs, and 40 percent on average said they expected permanent layoffs in the immediate and long-term future.²

Budget shortfalls. California has been hit especially hard by the pandemic downturn, losing a much greater share of its tax revenue than most other states. From March to May, tax revenues in California fell 42 percent, compared to the national average of 29 percent.³ Given potential budget shortfalls over the next few budget cycles, 31 percent of respondents in the CDG study said deploying modern, less costly infrastructure makes sense for FY21.

FUTURE-PROOFING INFRASTRUCTURE

Many state and local governments have adopted hyperconverged infrastructure (HCI) to rapidly modernize infrastructure. HCI solutions provide the necessary agility, flexibility, and resiliency for governments to serve citizens, while also cutting costs and making life easier for IT and business staff. According to research by IDC, organizations can cut infrastructure costs alone by nearly 60 percent when they move to HCI solutions.⁴

HCI uses intelligent software to consolidate computing, virtualization, storage, networking, and security functions into flexible building blocks that can be used to quickly deploy services at any scale. Organizations can use advanced HCI solutions to modernize existing data centers and infrastructure; unify on-premises, cloud and hybrid cloud environments and choose the best environment for any given use case; meet the resource requirements of diverse workloads; and more easily manage change.

In the CDG survey, 35 percent of respondents said total cost of ownership (TCO) is very important in evaluating IT infrastructure decisions. HCI solutions help lower TCO by reducing capital expenditures on hardware, software, and licensing as well as operational costs related to maintenance, management, and IT staffing. Organizations also accrue savings related to physical footprint costs such as real estate and cooling.

Because HCI is software-defined and self-healing, it is more reliable, scalable, and resilient. It automatically allocates network, computing, and storage resources so organizations can flexibly cope with changing IT and business dynamics. If system anomalies, security incidents, malfunctions, or other disruptions occur, HCI can easily repair itself and automatically return to a stable, secure state.

Consider the example of San Mateo County in Northern California. Its technology infrastructure was outdated; its IT platform lacked scalability and was difficult to manage. Engineers spent too much time managing upkeep and daily tasks, without enough resources to focus on more strategic and customer-facing projects. By implementing an HCI platform from Nutanix, San Mateo obtained easily scalable infrastructure, reduced deployment time, and simplified storage management.

“Our goal is to do our job so well and so cost effectively that people are excited about embracing new technologies here in San Mateo County,” said San Mateo CIO Jon Walton. “We don’t have excuses anymore about why things are so expensive or why they take so long to implement. With Nutanix, compute and storage are the solution — not the problem that slows us down.”⁵

MOVING FORWARD

Key best practices will help organizations move toward a mature, practical HCI solution:

Identify the biggest business pain points and align IT goals and solutions to them. Document current states,

establish metrics and leading indicators of success, and track progress over time.

Obtain stakeholder buy-in. Seek input, set expectations, maintain transparency, make provisions for education and training, and keep open lines of communication.

Start with a single project (virtual desktop infrastructure, for example) and grow incrementally. Look for quick wins that demonstrate measurable returns and encourage further adoption.

Work with the procurement team to choose the most beneficial Capex/Opex consumption model. HCI vendors often partner with service providers that can host the HCI environment and thereby shift costs from Capex to Opex. Leasing is another option, allowing organizations to make a smaller initial investment and then scale up as needed.

Learn more about potential vendors. Talk to peers and ask vendors for referrals to other state and local government customers. Consider Net Promoter (customer satisfaction) scores and read industry reports by Forrester, Gartner and other analysts. Conduct a small proof of concept or have administrators participate in vendor “day-in-the-life” boot camps so they better understand the proposed solution’s capabilities and benefits.

The pandemic and other disruptions have pushed governments to rethink traditional operations and service delivery. They know IT modernization is crucial, but uncertainties about the future make it difficult to predict exactly what resources they’ll need. Organizations that adopt HCI solutions to make their IT infrastructure as flexible, scalable, and agile as possible will be more resilient, regardless of what comes.

This paper was written and produced by the Center for Digital Government Content Studio with input from Nutanix.

1. Center for Digital Government. IT Priorities Survey. August 2020.

2. <https://www.nlc.org/sites/default/files/users/user57221/NLC-USCM-Survey-Data-Infographic.pdf>

3. <https://www.npr.org/2020/08/03/895377375/california-has-lost-a-greater-share-of-revenue-than-most-states-due-to-covid-19>

4. www.tco-roi.nutanixbv.com

5. <https://www.youtube.com/watch?v=VpBGpNex16c>



Produced by:

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Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform delivers the agility, pay-as-you-grow economics and operational simplicity of the public cloud, without sacrificing the predictability, security and control of onpremises infrastructure. Nutanix solutions leverage web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution that delivers any application at any scale.