Getting your department ready: A roadmap to digital empowerment

verizon✓

In this white paper you will learn...

- **Why continuous digital transformation is critical for enterprise success**

- **How digital-savvy organizations approach getting ready**

- **Why digital transformation is a play in five acts**

- **Why your organization must prepare for 5G**

- **The next steps in your digital journey**

What makes an organization ready for the future?

Is it efficiency? Connectivity? Innovative thinkers in the public sector understand that readiness is not static.

Teams need tools that help them work better. They need cyber defenses that help neutralize threats proactively. Sensors and software should help optimize decision-making. Solutions must live up to their name.

Readiness is constant, and being public sector ready never ends.

A personalized digital experience for constituents is a top priority for public sector leaders, with 83% of senior leadership surveyed identifying as "able and willing" to adopt intelligent technologies like artificial intelligence (AI) in order to improve the efficiency of their offerings.[1] Digital transformation is a continuous journey that helps elected leaders and department heads not only drive change within their organizations, but also across their entire communities.

By Gartner's estimates for endpoint installed base, 4.82 billion connected things were in use in 2019, and that total is expected to reach 9.25 billion by 2023.[2] With so many points of connection, and with 5G expected to provide unprecedented network speed and throughput, constituents' expectations of their community leadership will evolve and new threats proliferate. The task is to envision what experiences leaders want constituents to have in five or 10 years, and lay the foundation to get there.

Technology providers often focus only on their niche and rarely look at the big picture. While some may offer full-stack solutions, few know how to offer the level of interoperability needed to serve the missions of public sector organizations. Integrated solutions tailored to the public sector are not just important, they are essential.

Readiness touches every part of your organization, at every minute of the day, even after everyone goes home. Preparing for an always-on public sector is complicated, but with the right roadmap, deep, meaningful digital transformation is possible. Properly equipped, organizations can feel they not only can keep up with, but anticipate, the changes and challenges to come.

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[1] Accenture, Artificial Intelligence, Genuine Impact: Public Services in the Era of Artificial Intelligence, 2018.
[2] Gartner, "Forecast: Enterprise and Automotive IoT, Worldwide Figure 1-3," April 2020.

The rationale for ready

The case for digital transformation emerges from profound shifts in how technology is deployed and used across the public sector and society at large.

Cloud migration

Governmental organizations are migrating or have migrated from expensive and potentially vulnerable data centers to the cloud, sparked by the Data Center Optimization Initiative (DCOI), a federal project requiring agencies to shift to cloud-based infrastructure to better serve the public good, while increasing ROI for taxpayers. Almost 40% of governments expected cloud services to be a technology area where they would spend the greatest amount of new or additional funding in 2019.[3] Such shifts indicate a growing level of comfort with offsite storage solutions, but with adoption comes risk. Recent events have spurred sudden transformation of contact centers, office environments, payments, security and citizen requirements that require the cloud like never before.

Security

To bad actors, an explosion in the points of digital connection represents an explosion in opportunities for cyber intrusions, also known as "threat vectors." With distributed applications spreading across digital ecosystems, the surface area for cyber attacks is growing. In its latest Data Breach Investigations Report, Verizon analyzed 41,686 security incidents, of which 2,013 were confirmed data breaches spanning 86 countries.[4]

Of governmental organizations surveyed by Verizon, 82% said the risks associated with mobile devices are serious and increasing.[5] Meanwhile, nearly one-third of public sector organizations reported being compromised, and of those, one in five described the consequences as "major."[6] Poorly configured servers practically invite bad actors inside.

Customer experience (CX)

Accustomed to the growing ease and convenience of online tools and services, the public is also demanding better digital solutions from their government officials. Constituents expect the convenience, speed and personalization they already receive from the private sector.

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[3] Gartner Press Release, Gartner Predicts By 2023 Over Half of Government IT Workers Will Occupy Roles That Don't Exist Today, March 6, 2019.
[4] Verizon, 2019 Data Breach Investigations Report.
[5] Verizon, Mobile Security Index 2019.
[6] Ibid

Public sector employees expect services and solutions that can help them do their jobs correctly and efficiently. A recent survey of 388 government employees from federal, state and local levels found that increased productivity, improved safety and security, and better customer/citizen service were among the top drivers of digital transformation efforts.[7]

Despite these worthy goals, the same study found that nearly half of respondents believe their organization trails other departments when it comes to adopting new technologies for transforming business processes.[8] A majority of respondents lack confidence that their organizations have all the right ingredients to achieve successful IT transformation, with more than half identifying as only "slightly confident" or "not at all confident" that existing processes will enable them to complete the journey.[9]

Fortunately, opportunities for impactful digital experiences are increasing for government employees and the general public alike, thanks to the proliferation of innovative new technologies. Public sector thinkers should be looking at digital solutions that allow them to grow and stretch to achieve things they never could before. Again, it's not whether these changes are coming, but whether you're ready for them.

Key questions to ask your organization:

1. Are you using the right digital technology to improve constituent outcomes?

2. What gaps or inefficiencies could you tackle digitally?

3. How are you outpacing digital security threats?

4. How secure are the mobile devices being used by your organization for critical data and activities?

5. Could you improve constituent experiences with new digital tools?

[7] Government Business Council, Digital Transformation in the Public Sector, 2019.
[8] Ibid.
[9] Ibid.

Approaching ready

Government organizations that successfully tackle the essential work of digital transformation view their mission through three lenses: Connection, Protection and Constituent Experience.

Connect

Being ready to connect goes beyond Wi-Fi and wide area networks (WANs). It's a reset around what it means to meet the world beyond your walls — both physical and virtual. Whether you're migrating databases to the cloud or exploring how multi-access edge computing can help power new, immersive disaster preparation experiences, being connected is being ready to react.

Protect

Readiness to protect is top of mind at the federal, state and local levels. Government organizations have realized — at times painfully — that the reputational hazard of a data breach is far too great for security to be treated as just a line item on a budget. Left with clunky and ineffective apps and tools, government employees will find ways around those handicaps to get their jobs done — sometimes unfortunately outside of their agency's networks. This only makes the problem worse.

And while mobile devices might not always hold much proprietary data, they are increasingly used to access core business systems holding constituents' and employees' personal data and other sensitive information. The breakneck pace of digital innovation requires organizations to think about securing their operations in bold new ways that extend far beyond the firewall.
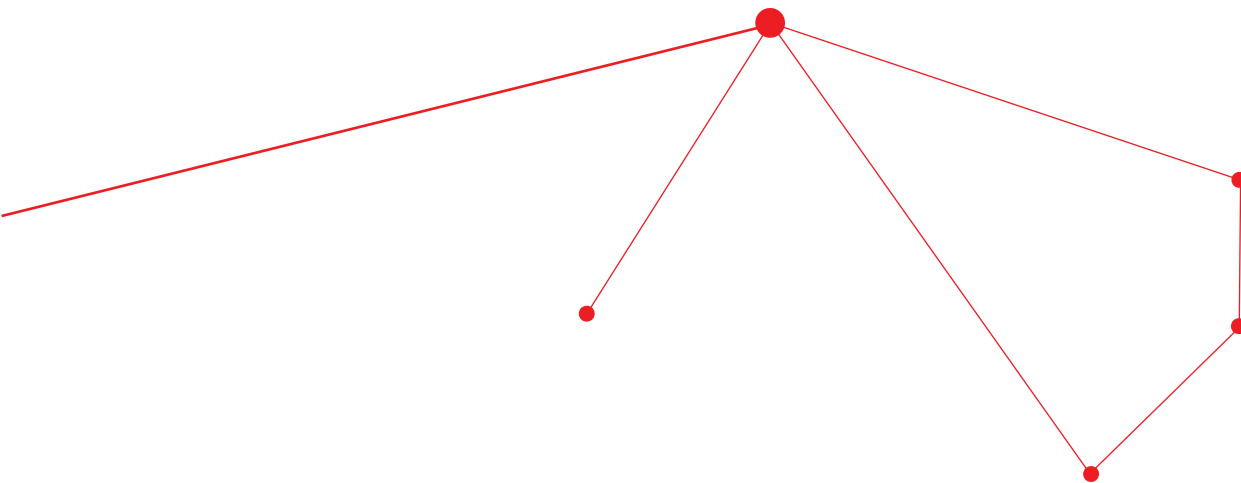
Constituents

Being ready for constituents is perhaps the most challenging and exciting work of all. Offering reliable and valued public service is table stakes. Offering that service with a strategy backed by sound, actionable intelligence — and with the ability to adjust both the strategy and even the service level in near-real time — is the new yardstick. And when agencies harness the power of 5G, transformative new ways of serving the public will emerge.

5G is more than the next generation of wireless connectivity. It's the seed of a revolution with the potential to transform both society and numerous industries in remarkable ways. From augmented and virtual reality to self-driving cars, remote telemedicine to a more robust Internet of Things, the viability of these life-changing technologies will depend on the ultra-low latency and lightning-fast speeds of 5G. Its wide-scale adoption will upend old models and drive previously unimaginable innovations. The doors that 5G is expected to open for society are predicted to be so profound that this network technology has been called the key ingredient for the Fourth Industrial Revolution.

The power to act

In anticipation of these massive digital shifts, leadership must start questioning their missions through the lenses of Connection, Protection and Constituent Experience. Only then will they be prepared to start asking some challenging but exciting questions of their organizations.

If you could bring virtual reality (VR) experiences to classrooms, how might you rethink K-12 lesson plans? How might your first responders' skill sets evolve if drones could arm them with critical intel from a flooded neighborhood en route to the zone? What if an Air Force mechanic could use VR tools to help repair landing gear hundreds of miles away? How might a well-deployed army of sensors connected through the Internet of Things (IoT) help inform safer, more intelligently designed intersections?

Any agency can consider these questions, but not all are prepared to act on them. That's why digital transformation must be a strategic journey, with clearly defined steps, states and milestones. Being ready means having the right insights — and the right partner — to help you strengthen operations, deepen relationships and safeguard your community.

The 5 states of ready

Start

The first step of digital transformation is to start — but where?

For some, this might mean overhauling and managing voice communications via a voice over IP (VoIP) solution. An integrated, reliable phone system lowers costs and streamlines mobility, video conferencing and online meetings. It also enables fast action and improves responsiveness to constituents and the workforce.

For other agencies, getting started might involve improving infrastructure security by way of surveillance solutions. Traditional video surveillance requires significant investment for proper camera installation, data storage and live monitoring. An Intelligent Video solution makes monitoring more affordable and efficient, recording high-quality footage that can be cloud-stored and analyzed in near-real time with edge analytics. From public spaces to critical facilities, Intelligent Video enables shorter response times and more effective interventions.

At this state of ready, government offices may also find it necessary to migrate from copper wireline to fiber to accommodate evolving global network infrastructure.

Solution spotlight

Departments ready for IT transformation need the right connectivity at the right time, and **LTE Business Internet** brings it right out of the box. LTE can be leveraged for mobile public safety command centers, as well as large planned activities such as rallies and sporting events. For teams looking to maximize their budgets and catapult their digital capabilities, **Comprehensive Hybrid Connectivity** provides a highly agile and programmable connected platform comprised of: trusted and reliable MPLS, public internet, and ethernet services interconnected by SD-WAN and secured through mobile secure gateway. And for public safety departments and the military, **Push to Talk Plus** provides two-way-radio-type communication at the touch of a button, for when rapid response is essential.

Adapt

This is the kind of behind-the-scenes work that may never be noticed by the public — and that's precisely the point.

The changes at this stage help agencies make their IT more agile, secure and efficient, driving better performance from every level of the organization.

Organizations must prepare to migrate data to the cloud, where software-defined networking in a wide area network, or SD WAN, can bring together distant and disparate assets more efficiently and securely. Since management is centralized, orchestration of an entire network is easier — from provisioning to maintenance to upgrades.

The rise of cloud and mobile technologies is driving the demand for a better-performing WAN. As your organization races to securely deliver real-time intel to more people in more places on more devices, the need for bandwidth on demand is skyrocketing. Traditional WANs — typically built on aging protocols, rigid routes and racks of hardware-intensive appliances — are simply not flexible enough to keep up.

With an SD WAN in place, your teams shouldn't be burdened with ongoing network maintenance. A suite of Managed Network Services can help your network adapt on the fly to changing service levels and bandwidth demands using software-defined policies. Layering on top a smart suite of WAN optimization services can help improve the performance of the most demanding apps, whether in-house, externally hosted or in the cloud.

Solution spotlight

Remote work was expanding before a significant percentage of the public sector was forced to work from home. As departments have adapted to a distributed model, they've needed to care for connectivity and what will keep their departments functioning optimally. **Secure Gateway Service** grants teams secure access to critical information and apps, virtually anywhere. Combined with a suite of **Continuity Solutions** — from virtual meeting apps to flexible, scalable dedicated internet services — public sector organizations are better prepared to meet unforeseen challenges.

Elevate

Here, data captured at scale starts powering decisions that drive better outcomes.

For government bodies that must consider supply chains and the delivery of services to their constituents, a next-generation fleet management solution can drive better efficiency, increased productivity and improved safety for vehicles and drivers. Sophisticated mobile resource management software can help produce significant efficiencies at the pump and on the road.

For procurement officers, establishing a secure chain of custody is crucial to combatting wastage, minimizing costly write-downs and delivering on time with peace of mind. A truly intelligent supply chain is one that reduces blind spots at every plot point and accounts for every set of hands a shipment or software passes through along the way. Insight from IoT sensors can capture crucial data, powering decisions that result in more on-time deliveries and more efficient shipping schedules, and with 5G-powered computer vision, these processes can become even more precise and scalable.

Solution spotlight

A cloud-based video conferencing platform like **BlueJeans** can help securely elevate the communications of small public sector teams as well as large municipalities. Whether the goal is setting up a one-on-one with a team member, a virtual town hall with constituents or a real-time planning board meeting, BlueJeans enables people to truly engage, directly participate and share their voice. A robust set of **Professional Services** can further modernize a department, with apps and services designed to help agencies and departments of all sizes automate digital tasks — from threat detection to network virtualization — intelligently and strategically.

Innovate

Organizations that are ready to innovate aren't just reacting to the world around them — they're shaping it.

Innovation goes beyond improving operations, extending into ways your department can embrace new, innovative methods of getting the job done.

As organizations evolve, leadership will be equipped to determine what their constituents and workforce value most, and orient their digital transformation around that north star. Increasingly, preparedness in the public sector will be demonstrated not by how well your organization reacts to the needs of constituents and your workforce, but how well it anticipates and addresses them before they're even expressed.

To that end, many municipal governments are investing in Digital Kiosk solutions to inform, engage and alert the public. By providing essential information — transit schedules, walking directions, guides to nearby shops and restaurants — these kiosks have quickly become invaluable resources to residents and visitors alike. Beyond improving communication and supporting local businesses, they also help ensure public safety by offering rapid, reliable connection to emergency services.

In time-critical emergency response situations, essential data is often siloed or scattered across unlinked dispatch records and databases. A Real Time Response System connects disparate data sets to enhance

situational awareness. Integrating multiple sources into a single operating view increases communication and collaboration among sectors and shifts your stance from reactive to proactive, heightening planning, readiness and response potential.

Solution spotlight

Like few technologies before it, **5G** will unlock innovation in the public sector, allowing departments to operate at the speed the work demands. The fifth generation of wireless connectivity will eventually become an essential ingredient for driving IT modernization, and a key enabler not just of hyper-fast communications, but of real-time intelligence gathering, immersive education and training experiences, and of a more efficient, more responsive public sector as a whole.

Disrupt

Government agencies at this stage will begin to adopt the latest technologies to design truly revolutionary operational models.

For these communities and their leaders, the goal is not simply to increase public safety, battle readiness or municipal efficiencies, but to make comprehensive improvements that revitalize cities, attract new businesses and investors, protect the nation and elevate the quality of life for all constituents.

As 5G paves the way for an all-new era of connectivity, the demand for smart-city services — from healthcare to transportation to energy security — will skyrocket. 5G can fundamentally change the way many governmental agencies approach infrastructure improvements, utility management, military readiness and more. From electrical grid upgrades to better Wi-Fi throughout public areas, cities will become more responsive to the needs of its populace, and more active agents in their own maintenance, upkeep and growth.

5G-enabled technologies could also transform the classroom experience, from kindergarten to college. Augmented and virtual reality may soon become key components of every student's curriculum. These immersive experiences can heighten engagement, increase hands-on learning opportunities and virtually eliminate the geographical and socioeconomic barriers to quality education.

Solution spotlight

As applications and processing power move to the network edge, the most visionary and disruptive technology breakthroughs in the public sector — whether in defense, public safety, education or healthcare — are poised to be powered by **5G Edge**. Combining Verizon's 5G Ultra Wideband network with AWS cloud services, 5G Edge can help agencies use artificial intelligence to merge images and data from various sensors for near–real-time insights. The combined power of 5G and edge computing also can potentially make promising technologies viable at scale, such as vehicle-to-vehicle communications — which can be used to allow first responder vehicles to communicate with each other and with civilian vehicles to secure safe passage — while enhancing overall traffic management.

Start

Transformation never stops. Keep moving.

Starting your journey

Clearly, digital transformation doesn't happen in a vacuum, and communities that undertake it should not have to go it alone. The work demands the expertise and objectivity of a nimble partner — one who can make a quick, pragmatic assessment of the landscape, apply solutions and stay on board to see them through — all with your mission outcomes in mind.

This work requires data-derived intelligence and deep knowledge of public sector verticals. Powerful applications must simplify processes, not complicate them. Next-gen networking has to connect an organization's IoT solutions. The traditional security model must be updated to meet tomorrow's challenges. Government agencies need threat intelligence and industry research to be gathered and presented in a way that puts their organizations on proactive footing.

Ultimately, this work requires a partner that not only knows the network, but that is the network.

How Verizon can empower your department

Verizon works relentlessly to understand customers' needs. We reach across divisions and silos, helping organizations at every step to apply tomorrow's technology solutions to today's most pressing challenges.

We live for this — teaming with organizations of all types and sizes to deliver transformative change, and make innovation an integral part of their operations. Working collaboratively with our clients and their teams across functions, we help to efficiently and securely integrate digital into clients' operations.

At Verizon, our goal is to deliver the promise of the digital world by enabling people, businesses and society to innovate and drive positive change. When our mission aligns with our client's mission, amazing things happen.

Federal, state and local agencies choose to partner with Verizon because we possess the right technology and expertise to transform their departments, helping them move from legacy analog organizations to nimble, digital disruptors.

People think of us as a phone company. Our customers think of us as a technology partner. Let us show you why.

Talk with one of our product specialists.

Federal

1-877-297-7816
Contact a rep.
Find an account rep.

State & Local Government

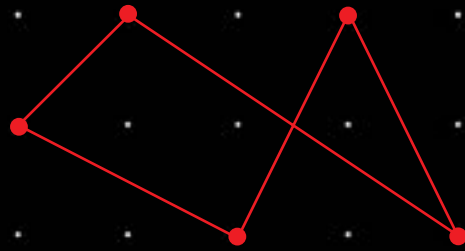1-877-288-9473
Contact a rep.

Public Safety

1-877-288-9473
Contact a rep.

Distance Learning

1-800-317-3841
Contact a rep (K-12).
Contact a rep (Higher Education).

**Where are you
on your journey?**

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