Government playbook: Accelerating modernization with managed and professional services
Approaching modernization in the public sector can often feel like being stuck between a rock and a hard place.

As government agencies look to continue expanding and refining constituent services with improved and digital infrastructure, they must also balance budget and the constant demand to do more with less.

Professional and managed network services can help ease that tension, lending agencies a wealth of expertise and resources to enable them to modernize quickly, effectively and cost-efficiently.

But what exactly are these services and how can agencies best tap into them to support their unique mission?

Here, experts from Verizon weigh in on how professional and managed services can bring to life modernization, innovation, resiliency and more for agencies across the country.

Learn more about how Verizon's managed and professional services can help your agency improve innovation, security, citizen experience and more.
## Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed services vs. professional services: what each can do for your agency</td>
<td>4</td>
</tr>
<tr>
<td>What exactly are citizen services? What are the potential benefits and outcomes? And how can these services improve customer and employee experiences, scalability, flexibility and readiness?</td>
<td></td>
</tr>
<tr>
<td>Combining professional services and managed services can make agency readiness a reality</td>
<td>7</td>
</tr>
<tr>
<td>When an emergency strikes, citizens depend on agencies to respond rapidly. Managed and professional services can help agencies pivot, scale and respond more quickly when services are needed most.</td>
<td></td>
</tr>
<tr>
<td>How to get the most from your agency's modernization efforts</td>
<td>9</td>
</tr>
<tr>
<td>By partnering with a managed and professional services provider, agencies can tap the tools and infrastructure they need to harness emerging technologies and deliver on-demand citizen services.</td>
<td></td>
</tr>
<tr>
<td>In challenging times, government agencies turn to technology innovation</td>
<td>11</td>
</tr>
<tr>
<td>With the help of a trusted partner, rapid digital transformation helps agencies pivot to deliver the storage, security and services constituents need during the COVID-19 pandemic and beyond.</td>
<td></td>
</tr>
<tr>
<td>Keep agency innovation at the forefront with managed network and security services</td>
<td>13</td>
</tr>
<tr>
<td>By adopting Verizon’s managed services, agencies can set the stage for and harness innovation, without the need to address challenges around staffing, security and infrastructure.</td>
<td></td>
</tr>
</tbody>
</table>
Professional services and managed services are two powerful approaches for meeting government agencies’ most pressing mission needs. However, a lack of clarity around these two terms doesn’t just prevent agencies from selecting the right solution; it can also hamper innovation, risk mitigation and efforts to apply technology to enhance citizen experiences.

On the most basic level, professional services provide project-based, detail-oriented, episodic services for business and technology needs. The goal is to help agencies address a specific challenge, such as enabling adoption of new technologies, or provide a solution, such as augmenting staff expertise in emerging technologies, within a defined timeline. While professional services are commonly procured for a dedicated project or output, their scope may range from initial planning and strategy design to deployment and continuous support.

Managed services, on the other hand, are defined by ongoing, long-term engagements that often provide a complete solution for delivering outcomes such as driving value, optimization or speed in automating components of an agency’s operations. Managed services could provide agencies with a more comprehensive way to tap into industry innovation while helping mitigate risk. In turn, citizens could benefit from advanced, more consumer-like services, and government agencies could benefit from increased security and resource optimization.

Along with innovative tools and time-tested processes, another key benefit of the managed services approach is providing capacity. When an agency purchases managed services, they are also buying infrastructure capacity and security solutions owned and operated by the managed services provider.

Additionally, managed services are an excellent way to pilot, test, trial and adopt new technologies more quickly as agencies don’t have to set up a full, in-house infrastructure.
The value equation

The reliance on professional services to define requirements and manage development is a long-seated approach government agencies take to defining how technology will enable their missions. The reliance on managed services is less entrenched and often only used for legacy IT needs. With increasing focus on agile development and increasing citizen (customer) value, agencies must consider how to engage the best the industry can offer across an array of traditional professional services and emerging managed service delivery models.

A perfect example is how managed services can drive innovation. Today’s agencies are under unparalleled pressure to keep networks up and running – enabling an increasingly high degree of remote work. Advances in networking technology can enable these emerging needs with the ability to scale on-demand when needed. A software-defined network, or SDN, can help by intelligently routing network traffic and increasing bandwidth for improved performance. However, deploying this powerful alternative to a traditional network can be a complex and time-consuming endeavor.

Enter managed services. By relying on a provider to plan, configure, implement, manage, monitor and secure an SDN, an agency could reap the benefits of reduced network costs, automatic provisioning and integrated security features, adding value to the organization without draining critical IT team members’ resources.

Speed of response

Managed services could also help agencies become more agile and able to scale rapidly to increasing pressures, often in the face of decreasing budgets. Now more than ever, agencies must pivot quickly to accommodate evolving constituent demands and respond to crises. Use cases range from setting up a virtual call center to help address surges in benefits administration to quickly provisioning cloud resources for mission-critical information sharing among multiple agencies.

Whatever the circumstances, managed services could increase the scalability and agility of technology systems so agencies could quickly stand up new services and ramp up computing resources, when it matters most. And as remote workforces grow exponentially, professional services ranging from technology planning to program management can augment these managed services by ensuring strategic alignment to organizational objectives.

Constituent satisfaction

Beyond enabling technology modernization, managed and professional services could also enhance customer experiences. That’s good news as today’s citizens expect consumer-grade interactions with government platforms and applications, including 24/7 access to information, critical services and support when, where and how they choose.

Consider, for example, a citizen applying for unemployment insurance for the very first time. Allowing this individual to connect with the agency via various modalities – from phone and email to artificial intelligence-powered chatbots and SMS – is critical to an agency meeting rising expectations of timely, efficient and digitally enhanced service delivery. Better yet, managed services provide these channels without IT teams incurring the risks associated with deploying new solutions.
A trusted partner

Certainly, a managed or professional services provider can help agencies select technology solutions that cater to their unique needs. But how do agencies choose the right provider?

Reaping value from a vendor partnership requires a trusted adviser with proven methodologies, in-depth industry knowledge and extensive experience. A provider should also offer a wide variety of cost and payment structures, including fee-per-transaction and monthly subscription options. These models allow agencies to shift from capital expenditures – costly, one-time investments amortized over years – to operational expenditures with operating funds that renew annually. This can free up agencies to alter budgets based on yearly allocations.

And finally, successful partnerships hinge on the roadmap agencies and their providers design collaboratively – blueprints for the future that identify disruptors and establish desired outcomes. Professional services teams are particularly adept at helping agency IT teams focus on how innovative technologies could integrate with legacy systems and prepare for future performance requirements.

It's clear there's an excellent case for combining professional services and managed services to drive optimal results. Understanding the value of these distinct yet complementary services could be your quickest route to greater innovation and better citizen services.
In times of emergency, citizens depend on agencies at all levels—federal, state and local—to respond rapidly, save lives and provide critical information. But those agencies often have to overcome their own challenges before they can mount an effective response.

Hurricanes and other natural disasters can destroy telecommunications and power infrastructure, preventing critical network access. And as we’ve seen most recently, a global pandemic, such as COVID-19, can force agencies to pivot rapidly from in-office workflows to remote work in order to protect their employees and serve their constituents.

The problem is most government agencies lack the IT infrastructure and capabilities to adjust quickly to changing demands and new ways of working. Moreover, in times of emergency and disaster, constituents rely on information and services from governments more than ever.

The solution: managed services and professional services. The differences between managed services and professional services generally are related to term and scope of work. Managed services are defined by ongoing, contract-defined, long-term engagements that help agencies with the day-to-day operations of certain elements of their IT infrastructure. Professional services, on the other hand, are commonly procured for a dedicated project—often to address a specific challenge or need—though their scope may range from initial planning and strategy design to deployment and continuous support.

**Meeting the mission with managed services**

Managed services are structured to help enable agencies to pivot and scale quickly. In the case of the COVID-19 pandemic, they have been widely used to provide offsite connectivity, expand network capacity and enable remote work—all without sacrificing security.
Here's another scenario where managed services could come in handy: A hurricane can severely damage cell towers, knocking out internet and phone services to thousands of people. At the same time, the ability to make or receive a phone call during a natural disaster is critical: People need to call 911, check on family and friends, and access real-time information such as evacuation routes. Even more critically, government officials – particularly first responders – must be able to use their devices, such as phones, during emergencies.

In a real-life example, when Hurricane Maria destroyed Puerto Rico’s telecommunications infrastructure, citizens found themselves without mail service. To help enable the delivery of potentially life-saving items such as prescriptions and medical supplies, Verizon deployed an agency-specific satellite solution to support voice and data communications for 52 damaged U.S. Postal Services locations.

Managed services can also help ensure the delivery of critical information. Case in point: Hundreds of thousands of people rely on the National Weather Service to provide timely, accurate weather alerts to protect lives and properties. However, gathering this information from the field during severe weather conditions can be challenging. A managed services provider, such as Verizon, can help by monitoring at-risk sites, providing emergency support and offering disaster recovery planning.

**Extreme conditions call for preparedness**

Whereas managed services help agencies and their constituents recover quickly from a disaster, professional services can be used for planning and prevention. A professional services provider could foster a network of partnerships among federal institutions, emergency management organizations, first responders, volunteers and other stakeholders to provide a wide array of resources and capacities that could be leveraged in a disaster.

Professional services providers can also help agencies prepare for emergencies by designing and deploying unified communications and collaboration solutions. These innovative tools let workers get the job done from virtually any location – functionality that has provided a lifeline to agencies and their remote workforces during the COVID-19 crisis.

**Two services are better than one**

An effective approach to agency readiness is to combine managed services and professional services. Managed services offer the scalability, network reliability and disaster recovery plans to help keep workers and constituents connected during emergencies. Professional services, on the other hand, allow agencies to prioritize network capabilities and IT resources, so that when disaster strikes a pool of professionals are ready to quickly implement failover solutions.

Together, these services also forge a formidable safeguard against cyberattacks. Agencies can be particularly vulnerable to cyberthreats during times of disaster. Fortunately, the expertise and experience of a dedicated professional services team, combined with the ongoing security monitoring and threat assessment activities of a managed services provider, can safeguard an agency’s networks and data.

There’s no way to precisely predict the timing or potential impact of an emergency. But with the proper support, agencies can respond rapidly in a crisis, helping support continuity of operations, delivery of citizen services and security of confidential data.
How to get the most from your agency’s modernization efforts

COVID-19 has created an urgent demand for critical government services. Now more than ever, government agencies must rely on automated workflows, scalable infrastructure and innovative ways to use communication channels. Legacy systems and outdated processes simply can’t handle the deluge of constituent claims and queries.

A global pandemic isn’t the only reason modernization is nearly a mandate for agencies at all levels. These days, constituents expect government websites to offer the same speed, security and ease-of-use as any smartphone app. This consumerization of technology is also redefining expectations in the workplace as employees increasingly demand access to immersive training modules, collaborative software and other cutting-edge technologies.

Data is another driver of digital modernization in the public sector. By consolidating data scattered across disparate silos and managing it centrally, agencies can harness the power of artificial intelligence (AI) and machine learning (ML) to reduce tax fraud, accelerate emergency response to natural disasters, and even battle cybercrime.

First, consider the hurdles

Despite these advantages, modernization is far from simple. “Ripping and replacing” antiquated systems is only the beginning. Additional hurdles include balancing digital transformation initiatives with an agency’s day-to-day operations – a task made more difficult with so many employees working remotely.

Skills shortages can also stall modernization efforts. According to the U.S. Department of Labor, more than 50 million Americans filed for first-time unemployment benefits between March and July 2020. As agencies have been inundated with claims, many have struggled to find workers with the necessary COBOL programming skills to keep legacy mainframe systems up and running.

There also is the challenge of change management. Certainly, modernization can help agencies reduce human errors, boost employee productivity, and deliver a better constituent experience. However, reaping these rewards requires designing best practices around new processes, communicating a new vision to employees and driving the adoption of sophisticated tools.
The upside of managed services

Fortunately, managed services can help agencies tackle these challenges while still helping to manage the impact of the COVID-19 pandemic. For one, engaging with managed services providers allows agencies to tap into a brain-trust of leading experts that spans disciplines and industries. The result is instant access to qualified professionals without the recruitment costs.

Another advantage of managed services: proven processes and best practices. Working with a wide array of businesses and systems allows managed services providers to test and validate best practices of business transformation through technology. Agencies can benefit by implementing these valuable lessons learned without incurring any risk.

Data silos and fragmented systems can prevent IT teams from identifying hidden problems such as network performance issues and cybersecurity vulnerabilities. The good news is that by taking a holistic approach, managed services providers can create a consolidated view of an agency's technology assets, helping IT teams gain greater visibility into the health of their digital infrastructure. This enables teams to keep tabs on how software components interact with each other, identify application dependencies, and create a master database so data is reliable, consistent and easily accessible.

Speed, scalability and innovation

AI, ML and internet of things (IoT) – these are all disruptive technologies that promise to reinvent age-old agency workflows. However, deploying these can be costly, and they often require specialized skills and experience to implement. Managed services providers can address these challenges by offering best-of-breed, cloud-based solutions without upfront capital expenditures.

For example, an agency can work with a managed services provider to automate its help desk processes. By deploying a combination of high-performance network capabilities, AI-powered chat bots and SMS tools, an agency may be able to cut its response time to pressing constituent queries substantially.

Equally as important as speed is a digital infrastructure's scalability. Almost overnight, COVID-19 created huge spikes in network traffic and an urgent need for remote accessibility to critical systems. By migrating IT workloads and services from internal data centers to cloud platforms, managed services providers can help agencies quickly ramp up operations and add new services to meet the evolving needs of constituents and employees.

Technology modernization and the role a managed services provider can play in its success extends beyond IT systems and best practices. By outsourcing time-consuming and complex tasks to a managed service provider, agency IT teams can focus on more innovative and meaningful work, such as better serving constituents during a global pandemic.

Preparing for the future

To be sure, there's more pressure than ever on federal, state and local agencies to gain the most value from their modernization initiatives. The COVID-19 crisis only raises the stakes, driving greater need for agency IT teams to rely on managed services for improved network performance, enhanced security, and better employee and constituent experiences.
In challenging times, government agencies turn to technology innovation

Government agencies have known for years that meeting the needs of citizens is no easy feat. Today, that truth is becoming increasingly clear. The coronavirus pandemic challenges agencies to deliver critical information and services to constituents faster and more effectively than ever before. For example, the state of New York alone saw a 16,000% increase in web traffic from those looking for information about unemployment applications during some peak weeks, according to the state's Department of Labor.

In the wake of a crisis, ensuring seamless digital experiences requires unprecedented speed, accuracy and accessibility. As a result, government workers need modernized technology to do their jobs quickly and efficiently. Failure to provide these tools not only impacts productivity, but it can also compromise an agency's ability to attract and retain top talent. Plus, as public sector employees continue to work remotely, the need for scalable infrastructure, cloud storage and security solutions only increases as agencies seek to provide the best services to their constituents even at a distance.

A need for speed and scalability

Of course, many government agencies were already on the path to digital transformation before COVID-19. A global pandemic, however, ups the ante, creating an urgency for government agencies to provide the technology required to meet a higher-than-usual volume of citizen requests. Consequently, many organizations have begun to rely on managed services to create positive constituent experiences—without burdening in-house IT teams.

Consider, for example, the importance of network performance. Shortly after announcing that all bars and restaurants would be restricted to serving takeout only, Oregon's unemployment claims system crashed from the sudden uptick in usage. Fortunately, with managed services, government agencies can accommodate unanticipated spikes in network traffic by changing server capacity as needed. Cloud resources are simply added or removed based on current demands without requiring any heavy lifting on the part of IT.
In addition to supporting surge requirements, managed services’ scalability allows government agencies to better prioritize traffic. In the wake of COVID-19, some agencies even configured their networks to treat online constituent claims with the same speed and urgency as 911-related traffic.

A data-driven approach to pandemic response

Creating top-notch experiences requires understanding – and anticipating – constituent and employee needs. For some agencies, that means predicting which mobile apps remote workers are most likely to use. For others, it entails accurately anticipating gaps in healthcare services. Data analytics promises to play an increasingly important role as government agencies deploy contact tracing apps to curb the spread of COVID-19.

However, data comes at a cost when it is not managed effectively. Siloed data, often scattered across disparate databases, can prevent government IT teams from gleaning meaningful insights. Managed services can help remedy this situation by centralizing vast volumes of data in a data center within a managed cloud network. By doing so, agencies can better parse their data to detect patterns in constituent behavior and preferences. For example, by conducting a series of qualitative and quantitative research studies, the Department of Veteran Affairs discovered specific hurdles constituents faced when navigating the VA.gov website. Armed with this data, the agency redesigned the site to create a more personalized and user-friendly digital experience.

From support to innovation

COVID-19 has forever changed the way people interact with companies and service providers. A study by artificial intelligence technology provider DeviceBits discovered an 86% increase in customer self-support sessions – when a person leveraged an AI-driven, web-based frequently-asked-questions components – from January 1 to May 31. What’s more, interactive sessions with chatbots increased by a staggering 98.5%.

Now, constituents and employees are demanding the same type of real-time, contactless interactions with government agencies. Managed services can help the public sector meet these demands. By monitoring and managing network security, a managed services approach ensures self-service applications stay up to date, properly configured and secure against cyberthreats. Agencies also rely on managed services’ reliable network performance and connectivity to keep online services up and running.

Beyond technology, a managed services team’s specialized expertise can be a catalyst for innovation. For example, an increasing number of government agencies are deploying federated identity management systems and enabling single sign-on solutions to enhance employee experience and boost productivity.
Government agencies often respond to challenging times by cutting spending, freezing hiring and managing with the tools they have on hand. But the opportunity to innovate in a crisis is often overlooked.

The COVID-19 pandemic is no exception. It’s challenging agencies to find new ways to deliver critical services and meet emerging constituent needs. That’s why now is the perfect time to implement solutions that are designed to streamline processes, accelerate response times and enhance constituent experiences and much more.

The following are a few of the transformative technologies that could help agencies deliver on their mission more efficiently and cost effectively – today and tomorrow.

**Chatbots.** In the early weeks of COVID-19, constituents flooded agency contact centers with questions about everything from unemployment insurance benefits to testing sites. For example, state offices in Arizona saw call volume increase from 400,000 queries per week to more than 1.5 million per week, Gary Hensley, chief operating officer of the Strategic Enterprise Technology Office for the State of Arizona, noted in a recent webinar. Chatbots, which can simulate written or spoken conversations, can help agencies accelerate response times by answering questions about a wide variety of topics. This can free agents to focus on more complex inquiries and help ensure that constituents get the answers they need in a timely fashion.

**Augmented reality (AR).** Once just a sci-fi conceit, AR is now one of the stars of government technology evolution. For example, public safety agencies are testing AR and computer vision to help enable faster, safer navigation through low-visibility areas. A perfect example is Qwake Technologies’ AR helmet device, C-THRU, which helps improve firefighters’ vision in smoke-filled buildings, while transmitting visual point of view, telemetry data and location coordinates to command and control, according to its website.

**Internet of Things (IoT).** Government agencies are increasingly integrating IoT devices into their operations. Use cases range from deploying environmental sensors along rivers to track water levels, to gathering deidentified cellular data to help optimize traffic flow and minimize congestion.
How managed services can help agencies adapt and evolve rapidly

When it comes to innovating, many agencies face infrastructure and staffing constraints. Fortunately, managed services can help agencies bypass these obstacles by evolving networks quickly and efficiently and providing ongoing troubleshooting and management. That means employees can stay focused on serving constituents and other critical duties. Managed services providers can also configure and manage new technologies on behalf of government agencies, helping them maximize network capacity and optimize technology performance.

Managed services can help agencies improve cybersecurity and guard against a wide assortment of cyberthreats, including denial-of-service attacks and ransomware. Unsecured IoT devices, in particular, can expose agencies to security vulnerabilities.

To help minimize risk, managed services providers can monitor and manage networks to stay ahead of threats while reducing the workload on in-house IT teams. Applications are kept up to date, properly configured and secure. At the same time, sophisticated authentication mechanisms help ensure that the right people have access to the right systems at the right time.

A valuable partner for tech-driven innovation

There’s always a learning curve that comes with deploying new technology. That’s why managed services are such an effective solution for government agencies. Highly trained specialists can create customized deployment plans, implement technologies, instill best practices, embed security capabilities and provide ongoing management or support. It’s a powerful combination of cutting-edge tools and specialized knowledge that can empower government agencies to expand services and improve operations when it matters most.

Learn more at verizon.com/publicsectorservices