A guide for CIOs on accelerating modernization

Modernization. Innovation. Future-proof. These are just some of the latest buzzwords in federal IT. Agencies are busy with plans to update aging IT systems, relying on guidance and responding to rules from the Office of Management and Budget and the General Services Administration. The pressure is on to demonstrate progress – but what happens when massive government systems need to undergo drastic change?

Unless they consider the implications for business processes, the government workforce, and existing systems, leaders trying to modernize could find themselves struggling to gain momentum.

Legacy IT bogs down transformation efforts

Investing in modern systems is hard – because IT not only has to source and fund new technology that works, but also plan for a smooth transition away from legacy systems and old ways of doing business. Often times vendors will focus on the former, without aiding agencies in making a plan for the latter.

Agencies need to update their systems because legacy IT hampers government's ability to truly modernize and leaves it increasingly vulnerable to ever-evolving cyber threats.

If plans for legacy IT are not made up front, agencies risk cost overruns, missed deadlines, and frustrated staff and customers. When performance and uptime are also threatened, leaders face challenges in getting their teams, and the public, on board with modernization initiatives. This causes them to ask themselves: why upgrade if existing systems work sufficiently, and if any potential benefits of innovation are overshadowed by the headache of an overhaul?

Agencies need to update their systems because legacy IT hampers government's ability to truly modernize and leaves it increasingly vulnerable to ever-evolving cyber threats. In other words, the cloud, artificial intelligence, and mobile applications hold promise – but will only pay off if the infrastructure supporting them is sound. In order to succeed, modern government depends on the foundation of a strong network, tough security, and a flexible cloud architecture. Only then can agencies start to innovate and really deliver compelling digital experiences for employees and citizens.

Agencies that fail to address legacy infrastructure will remain stuck, unable to chart a path that leads to data-driven decision-making and improved performance and response time. They will also find it difficult to attract the right talent, as potential hires increasingly rely on and value digital services that help them do their jobs. Without top talent, agencies may fall further behind on their innovation goals.



Vision, collaboration, and prioritization are key to modernization planning

Considering the myriad priorities they're facing – modernization goals, strict requirements, shrinking budgets, and legacy IT transition – it's no wonder that some agencies are not moving toward modernization as quickly as predicted. There is a lot of pressure to move quicker and get it right the first time which can lead to jumping in without a clear vision of what the full modernization project looks like.

How can agencies build a strategy for handling legacy infrastructure, and then have the flexibility to chart a path to modernization in an agile manner? This is where an industry partner can become an advisor and help guide agency CIOs by bringing modernization experience, a vision for the road ahead, and a knowledge of common roadblocks that come with modernizing legacy systems, launching new applications, and implementing new processes and solutions. In addition, the right provider equips agencies with both the technology tools and expertise needed to collaborate with important stakeholders.



First, CIOs need to work with technology and business stakeholders throughout the agency – from leaders in finance and acquisition to human resources, information security, and legal – to define pain points, priorities, and goals. Executives must collaborate to ensure teams throughout the organization are aligned when defining what modernization looks like and how it will be measured, while acknowledging how the status quo will change. Because delays and deployment challenges are often discouraging for teams, it's important to manage expectations for IT modernization efforts and prepare for the unexpected – whether it involves security, adoption, migration, or integration.

The key to designing systems that are scalable and flexible in the long term is the network, which should be the foundation for digital transformation.

While a significant portion of IT budgets may be spent on keeping legacy systems up and running, there needs to be enough money allocated for modernization and digital transformation initiatives. Prioritizing the highest areas of need with a vendor can help agencies make the most of their budget and help the CIO and other leaders understand and support potential changes in old business processes and funding models. Fostering a "modernization mindset" among employees and other leaders in the agency is essential.

Moving into IT project planning and execution, the ideal approach is an agile one: rigorous project management that is based on quick sprints with flexible teams, addresses roadblocks early, and builds on constant improvements. Often, large organizations enact sweeping changes after significant planning and testing, but this process can take longer than expected with more unforeseen roadblocks. The best results happen when agencies can focus on quicker rollouts with feedback that allows for iterations after each release.

In practice, government organizations may need to tailor their agile approach to make sure crucial services remain up and running for citizens, but the mindset should be the same as in corporations: innovation is not a one-and-done deployment. It is a sustained effort over time, with adjustments along the way.

The key to designing systems that are scalable and flexible in the long term is the network, which should be the foundation for digital transformation.

Establishing the foundation for transformation with a trusted partner

Government CIOs are balancing priorities for maintaining legacy services and uptime while pushing forward on modernization. But they face challenges in shifting from legacy services to modern technologies, as leaders must account for talent recruitment, changing business processes, and the need for the right solutions and services that benefit millions of people.



The network is the foundation of digital transformation. The network includes connectivity, cloud, and security solutions. Therefore, it is essential for agencies to start their digital transformation not with advanced apps and capabilities, but with foresight into the network that will enable them. A trusted partner will bring knowledge of how to define end goals, how to plan a successful path forward and help identify and design a suite of solutions that allows organizations to get there.

With decades of experience working with government customers, CenturyLink is a trusted partner for agencies looking to innovate. CenturyLink works closely with federal leaders to understand their specific challenges and requirements – whether it's faster, more intuitive platforms for end users, or enterprise-class security for critical systems. CenturyLink understands the challenges of legacy IT systems and, more importantly, wants to help agencies solve these challenges and provide them with support across their transformation journey.

Committed to the belief that transformation is a sustained effort over time, CenturyLink collaborates with agencies not only to develop solutions that work today, but also set them up for long-term success as technologies evolve.

Federal agencies, educational institutions, and defense departments alike turn to CenturyLink to access a portfolio of services that work together, encompassing IT, voice, data, security and managed services, along with CenturyLink's deep government expertise. For example:

- With CenturyLink, the U.S. Department of Defense Education Activity is providing a secure network that will support thousands of children of military families as they learn – on desktop computers, printers, mobile devices, and video collaboration tools
- The U.S. Department of the Interior is partnering with CenturyLink to modernize the core of its network.
 Together, they are also implementing security solutions that meet strict government security requirements, and adopting cloud connectivity and Wi-Fi to further drive DOI's mission

Modernization efforts at the government scale are often slow and painful – but they don't have to be. The crucial first step is identifying priorities and pain points, and then creating a strategy for legacy technology transformation. From there, agencies partnering with CenturyLink can



dive in right away with an innovative and iterative, yet comprehensive, approach.

CenturyLink's position on GSA contracts, including Alliant 2 and EIS, allows agencies the flexibility to adopt hardware, software, and IT systems that support their specific modernization needs, further accelerating the process. CenturyLink's breadth in providing cybersecurity services that are backed by the Department of Homeland Security and cloud services also provides government leaders the assurance that their networks remain protected and adaptable for the future.

CenturyLink combines a modern approach to IT with a record of providing quality services to the public sector. Proudly serving more than 1,000 government customers today, CenturyLink helps agencies lean into digital transformation with low risks, low costs, and high rewards.

Let CenturyLink help you chart a viable path to agencywide modernization.

Learn more at:

centurylink.com/public-sector/federal-government.html

