Top 5 Foundations of Federal IT Digitization

5

As the Trump administration selects the next leadership of federal departments and agencies, an ongoing transition continues with the digitization of federal IT. A new cadre of technology leaders will step in to oversee the protracted process of federal digization. This process isn't only a technological upgrade of agencies' equipment and services--it's a transformation in the way agencies go about delivering services and fulfilling their mission. While significant improvements can be made incrementally, agencies should keep the big picture in mind. Security, IT modernization, analytics, customer experience, and next gen workforce are all critical and interconnected components of accelerating federal digization.

1

Security

According to a January 2016 GBC survey, federal employees cited improving cyber security as both the top driver and priority for IT modernization in the government.[1] Security isn't only a concern for federal employees, but for public users as well. In May 2015, the IRS announced that hackers had stolen the financial information of 334,000 user accounts, just one year after separate attacks on OPM compromised sensitive information contained in background checks and security clearances for federal employees and applicants. Threats to federal data and IT operations come from a range of sources including nation states, terrorist groups, individuals, and insiders who target vulnerabilities within government systems. In some cases, the adoption of new technologies may only increase these vulnerabilities. While efforts at improving federal cybersecurity are far from complete, the government has taken positive steps to ensure greater safety in the digitization process with programs like FedRAMP, which provides a standardized assessment and monitoring process for federal cloud services and infrastructure.[2]

2

Application and Infrastructure Modernization

The issue of legacy systems is a massive challenge that continues to plague agencies across the federal government. Federal employees are often forced to use outdated and error-prone applications that limit their ability to fulfill their agency's mission. A May 2016 GAO report noted, for example, that the Department of Veterans Affairs (VA) and other agencies still have critical systems running on COBOL, a programming language designed in the 1950s.[3] Budget constraints are frequently cited as one of the largest barriers to application improvement in the government, but the lack of resources results from one major culprit: the sustainment of legacy IT systems. GAO reported that in 2015, spending on operations and maintenance accounted for 76 percent of federal IT spending,

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Federal Issue Brief
Government Business Council
February 1, 2017

Underwritten by

CISCO

compared to just 24 percent on development, modernization, and enhancement efforts.[4] Agencies need to prioritize resources towards the development and adoption of new technologies and systems that meet their mission objectives.

3 Analytics and Big Data

Advances in IT over the last decade have created a flood of data from a range of different sources. While data collection in the past relied on more controllable sources such as structured surveys, today's data is harvested from innovative channels like social media. The benefits of this mass of information have yet to be fully tapped. Data analytics allows for data collected by the government to be transformed into valuable information that can better inform federal decision-making, improve customer experience, and increase operational efficiency. Some agencies have recognized the value of analytics; the Office of Science and Technology Policy (OSTP) created a "Data Cabinet" that allows government data managers to come together and share challenges and best practices.[5] Increasing data collection and analysis can improve services across the federal government, but to be most effective, agencies must enhance collaboration and data-sharing efforts.

4 Customer Experience

The customer experience is a priority that must be addressed in federal IT modernization. Federal agencies' customers aren't only members of the public; they can be any entity that an agency interacts with including its own employees, other agencies, and organizations in both the public and private sectors. Regardless of who you're referring to, customers of the federal government face similar problems from outdated websites and legacy software to frequent crashes and glitches. The government is increasingly taking steps to address these shortcomings. The U.S. Digital Service (USDS), a "startup at the White House," was formed in 2014 to "deliver better government services to the American people,"[6] while the VA established the MyVA initiative to transform, modernize, and improve the customer experience at the Department.[7] Agencies, however, should also recognize the benefits of partnering with the private sector to channel innovation within their offices.

5 Next Generation Workforce

USDS operates in a work environment that has more in common with a private sector tech startup than a federal agency.[8] However, federal organizations shouldn't only be adopting best practices from the private sector, but hiring employees from it to spur greater innovation within the government. To successfully recruit from the private sector, agencies need to create a workplace atmosphere that the nextgen tech workforce actually wants to work in. Incentives should be created to compete with hiring by the private sector. Increasingly, agencies are hiring chief innovation officers who can foster that atmosphere that spurs growth and appeals to potential employees in the tech industry.[9] Hiring innovators and experts such as chief data officers can ensure a lasting transformation and modernization of federal IT.[10]

Final Considerations

While federal IT leaders have made significant progress, opportunities exist to accelerate the digitization process. A complete overhaul isn't necessary to accomplish IT transformation in an agency; however, taking a big-picture approach that recognizes the interconnectedness of each foundation can accelerate and broaden the benefits of digitization. Updates to federal applications and infrastructure, for example, can't take place without first considering the security implications of those changes, while improvements to the customer experience of the government's digital services can't be made without recruiting and equipping a skilled IT workforce. Taking a comprehensive approach to digitization will allow federal agencies to deliver more effective government services to more customers.

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