Making IT Modernization a Reality for Agencies
Introduction

Government agencies are facing ever-increasing challenges to modernize and engage with citizens and stakeholders through digital channels. But you can’t just flip a switch to become a digital government. Change like that takes new tools, new processes and a new way of thinking. Essentially, you need to transform the way you work. But with regulations, security concerns and diminishing resources, that can be easier said than done. That’s where secure cloud content management and IT modernization can help you and your agency. Cloud content management is the combination of centralized, cloud-native content services with advanced security and governance.

To better understand how agencies are addressing these issues, GovLoop partnered with Box to bring together government leaders and IT modernization professionals for a recent interactive discussion on the topic. In the following pages, we highlight key themes and new initiatives that were discussed during our October 2018 event, “Cloud Content Management at the Center of Government Modernization Excellence.”
There are points in human history when a technology’s value made it absolutely necessary. The car. The computer. The internet. These tools were so advantageous, people couldn’t avoid adopting them.

Cloud computing and artificial intelligence (AI) seemingly have that potential. But the federal government is struggling to modernize with these technologies at the private sector’s pace. The result is citizen experiences that trail those they receive from commercial businesses.

Ron Bewtra, the Justice Department’s (DOJ) Chief Technology Officer, said that the federal government can’t continue delaying IT modernization.

“These boat anchors are dragging us down,” he said of legacy applications. “We cannot be using it as an excuse. Let’s get into modern, mature, secure systems that are actually meeting our customers’ needs.”

Bewtra acknowledged that modernizing government IT is difficult, but he also argued that institutions have made similar technological leaps in the past.

“Go back to the Industrial Revolution,” he said of the rise of mechanical manufacturing between the 18th and 19th centuries. “People didn’t understand what was going to happen. It changed how we lived and worked.”

Bewtra said that agencies should re-examine how they see their IT infrastructure by shifting their focus from the technology to the people using it.

“It’s not a focus on systems,” he said. “It’s a focus on users and data. What we’re seeing is this idea that we’re going to sit down with the end-users. You’re trying to shape systems based on the requirements that you have.”

Bewtra was describing human-centered design. This framework includes humans in every stage of problem-solving. Bewtra added that the federal workforce must use this process to modernize government IT.

“The one thing we’ve seen inside the federal workforce is that this has never slowed us down,” he said of innovation. “They’re going to be the ones to help us complete this transformation. We’re at a place of opportunity, and we’re up to the task. I would not be looking at all these things with a wary eye.”

Bewtra encouraged agencies to start small with IT modernization by evaluating their essential functions and data safety.

“You have to look at the organization and the cyber risks, the operational risks,” he said. “That’s where you prioritize. We have to treat this not like a commercial venture but like the trusted defenders of public data that we are.”

Bewtra also said that the federal government should attract talent from the private sector by focusing on the purpose its agencies serve.

“Look at all the innovations that are coming out there,” he said. “We have to figure out how to get to those innovators and help them disrupt our business.”

**TAKEAWAYS:**

- Agencies should re-examine how they see their IT infrastructure by shifting their focus from the technology to the people using it.
- Start small with IT modernization by evaluating essential functions and data safety.
- Agencies should look to human-centered design processes to help move modernization along.
We all tend to hang onto items that no longer get the job done. Maybe you have a wobbly stool at your kitchen counter or a TV remote with a sticky power button.

Now think bigger than that – an entire government’s aging hardware that stores classified data, powers applications and services citizens.

Upgrading is never easy, because the old – even with all its nuisance – comes with a given familiarity. But eventually, that switch is necessary.

Government IT departments are facing the exact challenge of when, what and how to upgrade as their applications become growingly outmoded and user experience suffers.

“It’s not easy to just rip out your mainframe and replace it with another thing because all of your business policies are tied to it,” said Sonny Hashmi, Managing Director of Box for Government.

Currently, legacy systems siphon off 70 to 80 percent of agency IT budgets, and federal agencies spend 10 times more than the private sector on maintenance. Legacy systems also are vulnerable to security breaches, an increasing concern in government when dealing with data.

Hashmi explained that governments have to transition to both a digital workplace and digital business, where workflow technologies create a product that matches user expectations.

“You can’t do one or another. You can’t be the digital-first agency for when citizens interact with you, but behind the scenes you’re still sending faxes to each other,” Hashmi said.

He said of the main challenges government IT departments face, user and citizen engagement, technology modernization and cybersecurity are focus areas.

Most organizations still deal with fragmented data and applications, with little coordination between siloes, Hashmi said. By integrating cloud content management, agencies can harmoniously merge applications – with providers like Box offering over 1,400 different integrations.

With Box, you get a single place to collaborate, manage and secure all of your content and processes — while maintaining compliance and adherence to standards such as FedRAMP, ITAR, DoD SRG L4 and IRS-1075. And by integrating seamlessly with the apps you already use, Box provides a single, secure content layer to accelerate your path to the digital workplace.

In the cloud, tools can parse and analyze previously unused data with artificial intelligence. Technologies such as facial and voice recognition have furthered the potential for real-time data feedback. Instantly, this conversion improves user experience.

Integrating data also enhances security, by locking data in one location and restricting permissions so that people can only use what they can access.

Several prominent organizations have already explored the potential of integrated cloud services, including the Forest Service, which was able to deliver live maps and communication to field workers and volunteers during forest fire season.

“If you bring these [applications] together, you can actually improve productivity,” Hashmi said.

TAKEAWAYS:

☑ Governments have to transition to be both a digital workplace and digital business.
☑ By integrating cloud content management, agencies can harmoniously merge applications.
☑ In the cloud, tools can parse and analyze previously unused data with artificial intelligence, creating a user-friendly experience.
At some point in our professional careers, we've all complained about outdated systems and processes that make our jobs harder. But allowing this type of mindset to fester at an agency comes with a high cost. Depending on the agency's mission, it could mean declining citizen services, communication barriers between staff and wasted time, money and efforts.

These are among the challenges that agencies must confront as they embrace IT modernization and ensure that employees at all levels are heavily invested in those efforts. Leaders from both federal and local governments are using practical tips on how they are pressing past barriers to IT modernization. Those who shared thoughts with GovLoop included:

- **Chris Tonjes**, Chief Information Officer, Office of the Attorney General for the District of Columbia
- **Dorothy Aronson**, Chief Information Officer, National Science Foundation (NSF)
- **Thomas Sasala**, Director, Operations & Architecture, Headquarters, Department of the Army, Office of the Chief Information Officer and Chief Data Officer
- **Renata Maziarz**, Executive Director for Data Transparency, Bureau of the Fiscal Service, Department of Treasury

At NSF, Aronson said her team uses the small-steps approach to make incremental improvements and new investments, rather than throw money at aging systems.

Aronson added that “getting the voices of the people” is one of the biggest challenges of IT modernization. “The same people who complain about the system need to help us understand what they need,” she said.

To get their feedback, NSF often asks for volunteers, who are also potential users of the technology. This is a starting point to get them engaged and involved in driving change. To better understand users’ needs before implementing solutions across the agency, NSF devises a game plan for engaging with different types of users.

The Treasury Department’s Bureau of the Fiscal Service is taking a similar approach. Maziarz noted that the agency is keeping in mind lessons learned from implementation of the 2014 Digital Accountability and Transparency (DATA) Act, which required the federal government to use a single data structure for spending data and make that information searchable and transparent. This effort required modernizing both technology and processes.

These leaders acknowledge that everyone is at different stages of IT modernization. As the CIO of D.C.’s Office of the Attorney General, Tonjes shared how the city addressed its infrastructure crisis.

He had a very narrow mandate to modernize the city’s method for managing cases and documents. His team literally had to strip everything down and start over. “We had to decide what to do for file service [and] management. There was a data center in [the] building that flooded several times and didn’t have redundant power or cooling,” he said.

His team had to get the lawyers on board who would be using the new system because the old one was 15 years old and used obsolete technology. From an IT perspective, staff were encouraged to recommit to customer service or encouraged to learn it. Tonjes also encouraged people to set aside inefficient processes.

For the Army, IT modernization is more nuanced and includes warfighting and intelligence-gathering missions of the Defense Department. “For us, modernization comes in a number of forms,” Sasala said. That includes advanced research and development, traditional IT modernization or continuous evolution, and modernizing business systems, such as HR.

**TAKEAWAYS:**

☑ **Culture eats strategy for breakfast.** For example, you have to go down to the level of the procurement person entering data into the system and help them understand how critical that data is and how it will be used to make decisions.

☑ **Process and incremental progress are key.** Tackle small things and show successes along the way.

☑ **Partner with IT.** Show them the value of what the business is trying to accomplish by using data.
Leading in IT Modernization

Leading change is no small feat. Leading a major technology change that impacts nearly every employee in your organization is an even taller order. And if you take into account that you’re doing this as a woman, when almost 80 percent of the IT workforce is male, you are really up for a challenge.

To further explore this topic, Box Chief Operations Officer Steph Carullo sat down with women leading technology change, including:

- Naina Leo, Executive Vice President, NetImpact Strategies
- Renee Wynn, Chief Information Officer, NASA
- Dr. Sae Schatz, Director of the Advanced Distributed Learning Initiative, Deputy Assistant Secretary of Defense for Force Education and Training

They shared their stories of leading modernization projects and personnel within the public sector. Across their comments, four major themes arose that helped them successfully lead change in government.

1. DEFINE YOUR MISSION.

Their first piece of advice was to understand the mission you’re pursuing. When it comes to buzzwords like modernization and digital transformation, there is no end to the definitions you can use to describe them. To effectively implement these ideas, you have to start by defining what modernization means for your specific agency.

At NASA, for instance, Wynn explained that modernization doesn’t mean ripping out every piece of legacy IT and replacing it with new systems. There are satellites built in the ’70s that are still fully functional and would be extremely costly to replace. For her team, modernization means understanding how each technology supports NASA’s unique mission, rather than simply looking at the age of a system.

2. LISTEN.

While having a clear goal can help guide modernization efforts, the alignment of change and mission outcomes isn’t always evident to non-IT leadership. That’s why our panel agreed that it’s important to gain buy-in and understand how any change might impact the entire organization.

The key to doing that? Listening.

This may seem like the easiest step, but Schatz warned, “These can be tough conversations. They’re going to beat you up at first, and you’ll just have to take it as the leader of change.” But she also said these conversations are worth it because “then you get to listen and ask questions.”

Effective modernization requires buy-in from more than just IT leaders.

3. IDENTIFY CHAMPIONS.

Of course, as the leader of a large organization, it can be very difficult to meaningfully engage with every employee. Another recommendation from our experts regarding buy-in was to find champions throughout the organization to help facilitate change.

“When you find people who are willing to go on an innovation journey with you, focus on them,” Schatz said. When you find people who are engaged with your project and understand the reasons for change, encourage them to use their voice.

4. FOCUS ON PAIN POINTS.

Finally, Schatz, Leo and Wynn said they’ve found it easiest to enact change when they focus on how a new process or technology will address a specific employee problem or pain point. For instance, a move to cloud might make their email run more smoothly or make data retrieval quicker.

Ultimately, this panel of women in IT leadership had one major piece of advice: Approach IT modernization as a change leader.

“Anything that’s about change – which, frankly, everything in my business is about change – begins with people,” Wynn concluded.

TAKEAWAYS:

- Your agency must start by defining what modernization means for its specific needs.
- It’s important to gain buy-in and understand how any change might impact the entire organization to prove ROI.
- Closely follow innovations in the private sector to ensure strategies are keeping pace.
Modernization can be daunting, especially in government, where risk aversion dominates decision-making. The possibility that something could go wrong inhibits many agencies from making the leap, regardless of the benefits that can be reaped.

But despite the risk-averse mentality, there are still agencies that have found success in modernization.

To provide insight into the mindset and approaches needed for successful IT modernization, GovLoop's Christopher Dorobek talked to:

- Bobby Saxon, Chief Technology Officer, Center for Consumer Information and Insurance Oversight, Centers for Medicare and Medicaid Service
- Airis McCottry Gill, Director of Management, Planning and Analysis, Veterans Experience Office, U.S. Department of Veterans Affairs

Both Gill and Saxon made clear the role of a customer-centric approach when beginning IT modernization. Emphasizing customers in the modernization process gives agencies a clear path to follow, especially if they are unsure of the next step to take.

“Don’t make assumptions,” Gill said. “We don’t have all the answers. What do our customers need and want? We want them to have a wonderful experience. We use human-centered design to go to our customers and find out what’s going well and what’s not.”

Saxon agreed, acknowledging that the entire process should be based around making the experience better and more efficient for customers. Saxon is the CTO of Healthcare.gov – this role means that he is certainly no stranger to centering his approach on the needs of customers.

He also suggested that focusing on process management and maintaining a culture that facilitates IT modernization are both crucial to making it become a reality.

“Modernization has nothing to do with IT,” Saxon said. “It has to do with process improvement. How do we take IT and make our processes better so our customers have a better experience? We spend a lot of time inside our organization managing the culture so that we can continuously evolve the system.”

Saxon has spent plenty of time pushing for modernization, receiving pushback throughout the process. He explained that his agency had been dipping its toes in cloud for years, but never fully committed. Now, they’ve finally taken an all-in approach.

“We’re in the midst of a modernization to the cloud right now,” Saxon said. “It’s been an aggressive move on our part to get it accomplished. It was surprising how little our end users understood what the cloud actually meant. I spent a lot of time communicating and collaborating with business owners to explain what the end result would mean to them.”

The final push to cloud was made possible due to the communication-friendly environment that Saxon described. As he said, IT modernization isn’t as centered on IT as you might think.

Gill supported the idea that having a collaborative environment, especially with customers, is the best way to make the final push toward implementing modernization.

“Share your thoughts,” Gill said. “Share your experiences. There are so many perspectives that we wouldn’t have taken into account. Having those various perspectives has been critical to moving forward. Talk to customers, let them know that their feedback is key to moving forward as well.”

**TAKEAWAYS:**

- Emphasizing customers in the modernization process gives a clear path to follow for agencies unsure of the next step to take.
- IT modernization isn’t as centered on IT as you might think – culture, collaboration and communication are key.
- Involve business owners early on and make sure it’s clearly communicated to them what benefits they will see.
A New Era of IT Modernization

What does IT modernization mean to you? What is your take on IT modernization?

Those are the questions industry leaders are thinking about when it comes to digital transformation through the cloud.

- **Ted Girard**, Vice President, Public Sector, Okta
- **Seth Engel**, Senior Product Marketing Manager, Public Sector DocuSign
- **John Hickey**, Chief Operating Officer, August Schell
- **Lance Adams**, Federal Sales and Business Development, Intellective

The group shared their thoughts on where they see IT modernization going from their viewpoint in working with government agencies.

The IT industry has a lot of definitions for IT modernization, Hickey pointed out, so a successful starting point can be simply understanding what the definition of what IT modernization actually means to you. Hickey said the main question is this: “Can we gain the ability to provide architectures and leverage some of the commercial scale that supports it, resulting in operating IT more effectively at a cheaper cost?”

Girard pointed out that IT modernization is also about being able to take advantage of megatrends, like big data, mobile and cloud, while delivering efficiencies and security. “And the challenges are shifting,” he said. “Today it’s all about the access to the data. The perimeter of the data centers is changing; it’s all over the place and it’s not easy to protect that amount of data, as it’s all over. Data is everywhere, and that can make IT modernization difficult.”

Engel said IT modernization in government isn’t just about the data or technology, however; it’s also about re-evaluating business processes and ways of thinking that may have become outdated. “For example, there are 20,000 forms across federal government,” he said. “Surely they’re not used all the time. As we modernize, how can we create a way to get rid of these old manual processes? It’s rethinking how we do business, not just the technology.”

The panelists also agreed that government agencies are facing ever-increasing challenges to modernize and engage with citizens and stakeholders through digital channels — but they can’t just flip a switch to become a digital government. Change like that takes new tools, new processes and a new way of thinking. Essentially, they need to transform the way you work.

But with regulations, security concerns and diminishing resources, that can be easier said than done.

“One of the biggest challenges in IT modernization is security in general,” Hickey said. “As you look to modernize, look at what efficiencies you can find and secure the information you are trying to protect. But don’t try to take on everything at once.”

That’s where cloud content management can help you and your agency. Cloud content management is the combination of centralized, cloud-native content services with advanced security and governance.

“When moving toward IT modernization, organizations still face the same challenges in terms of content,” Adams said. “There’s an overabundance of content sitting in the same systems that are often siloed. Here at Intellective, we work with Box to bridge that gap so content can be shared more easily and more securely.”

Clearly, IT modernization in government is not slowing down. Getting your agency cloud-capable and ready can seem like a daunting challenge. But using secure, innovative cloud solutions that can integrate with other systems can save agencies time and worry over performance, compatibility and security.

**TAKEAWAYS:**

- A successful starting point can be partnering with a vendor that gets the mission-related needs that are driving you to modernization.
- IT modernization is also about being able to take advantage of megatrends, such as big data, mobile and cloud, while delivering efficiencies and security.
- IT modernization in government isn’t just about the data or technology; it’s also about re-evaluating business processes and ways of thinking that may have become outdated.
Conclusion

From workforce to budget, training to rigorous regulations, government agencies face a multitude of challenges when they set out on a modernization path. But it can – and must – be done. Modernization is necessary to deliver enhanced security, functionality and efficiency to government employees and the citizens they serve.

Looking forward, approaching IT modernization from a business perspective will be key to successful initiatives. Agencies must bring in all the stakeholders involved and lay out the value proposition. From the public to private-sector partners to the agency’s workforce, everyone involved in an IT modernization plan must be transparently informed so they can provide input to allow innovation to thrive.

ABOUT BOX

Box brings disparate parties together across the public sector to collaborate more effectively, to share data and to secure sensitive information.

With over 54,000 businesses and more than 37 million users on the Box platform, Box is the standard for cloud-based teamwork and high-security content management.

Box serves government agencies by enabling controlled access to critical content on any device, improving process efficiency and reducing operational costs.

Box leads cloud solutions in security, reporting and audits. User access is managed effectively with robust admin controls. Integrations for third-party mobile device management and data-loss prevention are built right into Box. Enterprise-caliber security features safeguard the most sensitive data while maintaining regulatory compliance, making Box a trusted service.

Learn more here: https://www.box.com/industries/government

ABOUT GOVLOOP

GovLoop’s mission is to inspire public sector professionals by serving as the knowledge network for government. GovLoop connects more than 270,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to the public sector.

For more information about this report, please reach out to info@govloop.com.

govloop.com | @govloop