

It's so easy to get used to inefficient processes and technology, whether by figuring out workarounds or simply lowering your expectations. You might call it operational gaslighting.

But "good enough for government work" is such a bogus rap. Anyone who has worked in government knows that people are passionate about doing a good job. Sometimes we all just need a few pointers or a nudge in the right direction.

That was the goal of a recent GovLoop virtual event, during which subject-matter experts from government and industry shared insights on how agencies can take steps toward achieving operational excellence, to the benefit of their employees and the constituents they serve.

Their recommendations include:

- Invest in the Future of the Government Workforce
- Adopt a Continuous Modernization Mindset
- Redefine the Hybrid Work Experience
- Get Your Modernization Priorities Straight
- · Ditch the Data Silos for Good
- Add People to the Tech Equation
- Invest in the Future (But Stay Light on Your Feet)
- Get Serious About the Software Supply Chain

You can check out the full virtual summit here:

Session 1: Empower People

Session 2: Empower Strategy and Technology

Invest in the Future of the Government Workforce



Greg Chavarria, City Manager, Fort Lauderdale, Florida



Tools. Processes. Training. As mundane as those sound, they are the levers of innovation for government agencies trying to improve their operations and services and to meet new mission requirements.

And yes, those mission requirements are changing. For example, constituents want to connect in new ways, including through various social media channels, said Greg Chavarria, City Manager of Fort Lauderdale, Florida. They also expect more transparency in government operations.

How can agencies keep up? Chavarria suggested three priorities.

Invest in Digital Skills Training

Public engagement is not just about maintaining social media accounts. It's about establishing a real digital presence that serves constituents, business owners, potential new businesses and visitors, said Chavarria. "We have to find ways to adapt and be agile in our delivery, and certainly just innovate ... how we connect with others as well," he said.

And that likely requires training employees to use a variety of tools in areas such as cybersecurity, analytics and automation. The good news is that providing this training can help agencies improve employee recruitment and retention.

Embrace Continuous Learning

The catch, of course, is that technology is always changing, which means training can't be one-and-done or periodic. Agencies must develop a discipline of continuous learning. That means having quality curriculum and facilitators and building a culture of learning by offering workshops and mentorship programs, and by allocating time for professional development.

"I think by doing that, people will feel valued," Chavarria said. "People will also embrace change, and they will certainly be open to innovation."

Partner More With Industry

Although developing internal know-how is important, Chavarria said agencies might need to tap into contractors' expertise if they want to keep pace with changes in technology. "We can certainly leverage their skill sets and experiences to make our workforce better, to make our government processes efficient and ... to improve our abilities to connect with our constituents," he said.



Adopt a Continuous Modernization Mindset



Damien Eversmann, Chief Architect for Education, Red Hat



A drawback to the traditional "big bang" approach to modernization is that it is inherently disruptive, bringing inordinate stress to all the people, processes and systems involved.

A better process is what you might call "continuous modernization," said Damien Eversmann, with Red Hat, which provides enterprise open-source solutions and tools.

Rather than trying to change everything everywhere all at once, you may look to make small tweaks and changes as you go. In this way, you make change part of the culture and even unexpected change will feel less disruptive, he said. Eversmann highlighted three dichotomies that frame the continuous modernization mindset:

Change as Norm vs. Change as Rule

One university study found that students were more likely to conserve water if they were told the benefits of conservation (e.g., it helps with campus beautification projects) than if told that conservation practices were simply required, Eversmann said. In the same vein, you want employees to understand the benefits of continuous change, rather than just expecting them to go along with it.

Robustness vs. Resilience

People often talk about the value of resilience in the face of change — that is, the ability to return to normal after disruption. But a better goal is robustness, Eversmann said. "Resilience is branches growing back from a tree after a storm," he said. "Robustness is branches flexing and weathering a storm." Again, when change is part of the culture, people will become more adept at weathering disruption.

Objectivity vs. Subjectivity

One reason people resist change is that they fear losing their "pet" projects. That subjective response, while understandable, often doesn't serve the needs of the organization. When people have a mindset of continuous modernization, they take a more objective view of what needs to happen, Eversmann said.







Redefine the Hybrid Work Experience



Tyler Osgood, Technical Solution Architect, Cisco Systems



Ket Hum, Collaboration Sales Specialist, Cisco Systems



Dan Klanderman, Director, Unified Communications and Collaboration Practice, Iron Bow Technologies

It's an increasingly common scenario: Four or five of seven team members at a project meeting are in the office, but the others working at home, resulting in frequent disruptions as people talk over one another or connections drop.

With hybrid work looking like a long-term deal, something's got to change, and technology must be a big part of that. Subject-matter experts from Iron Bow Technologies and Cisco suggested some ways to create a more seamless hybrid environment.

Ensure People Are Heard and Seen

During remote work, many agencies made do with existing video solutions that were not up to the task, as quickly became apparent. That's not a good long-term strategy.

"It's really important to empower users with the appropriate technology so that they can optimally hear, be heard and be seen," said Dan Klanderman with Iron Bow, which provides IT solutions to the government. "This may mean providing them with devices which are of higher quality than what is included in their personal device, such as the camera, speaker and microphone."

Get Ready for Al

Fortunately, artificial intelligence (AI) is poised to transform hybrid work solutions, said Tyler Osgood, with Cisco, which provides networking, cloud and cybersecurity solutions.

For example, Cisco's new Real-Time Media Model will enhance audio and video quality in Webex. It also will make it possible to capture information on users' speech and gestures as part of meeting transcripts and summaries. "By uniquely fusing together AI for text, audio and video, Webex users will benefit from rich real-time insights," Osqood said.

Think Beyond Connectivity

But high-quality video and audio are not always enough to make hybrid meetings productive. Let's say the meeting involves brainstorming or sketching out a timeline on a whiteboard. "We need digital whiteboarding capabilities if we're going to be inclusive of others," said Ket Hum, with Cisco.

Such solutions create a more seamless hybrid work experience, he said. "As a user, I want to have the flexibility to come into the office if I want or work from home if I want — but I want the collaboration solution to support both."





Get Your Modernization Priorities Straight



Tina Donbeck, Vice President and Chief Information Officer, U.S. International Development Finance Corporation (DFC)



For the past four years, DFC has been a laboratory for modernization. It was established in 2018, bringing together the capabilities of two older development finance institutions. The older agencies had old technology that needed to be addressed, and quickly.

Tina Donbeck with DFC shared three lessons in how to get modernization on track.

Start With Your Biggest Pain Points

Donbeck served in the Marines and remembers learning how to respond to a battlefield casualty: Stop the bleeding, restore the breathing, protect the wound and treat for shock. That approach also works with technology, she said.

When starting on a modernization project, "you have to assess where are the most critical areas of need to move your organization into the future, ... and where you can make the biggest impact the most quickly," she said.

Look for People Who Want to Grow

Managers often talk about the challenge of finding people with the right skill sets. But it's not enough to hire a person with the requisite certifications and technical wherewithal, Donbeck said. You need people who have a growth mindset — "people who want to remove barriers, who want to try new things, who're not set in old ways."

Agencies also should look for people with an agile mindset, able to respond quickly to new challenges, she said, "people who also believe that change is a good thing."

Be a Cheerleader

Yes, sometimes a leader must push their team to take on more work or to hit hard deadlines. But it's also to help them embrace the challenge, said Donbeck. She said employees are more willing to take on challenging work when managers set clear priorities, remove barriers and become their biggest cheerleader.

"At times I've given my folks what probably seem like unrealistic deadlines to do a lot of this modernization activity," Donbeck said. "And they really see it as a challenge, and it's exciting to watch them when they accomplish it."





Ditch the Data Silos For Good



Darryn Graham, Chief Architect, Software AG Government Solutions



Fabien Sanglier, Chief Solutions Architect, Software AG Government Solutions



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Agencies have spent the better part of the past two decades integrating point-to-point solutions to address point-in-time problems. But as agencies have continually introduced new systems while also expanding to cloud, mobile and edge environments, they've lost the ability to easily access large swaths of data.

Many agencies have attempted to work around this "chaos of connectivity" by deploying integration platform as a service (iPaaS), a cloud-based platform for managing links between various software as a service applications. But iPaaS often is unable to scale mission-critical integrations, resulting in multiple platforms. What agencies need is a platform that offers a unified view of all their integration patterns, including data, applications and application programming interfaces (APIs) — in short, connecting the entire enterprise. That's the idea of Super iPaaS, said Darryn Graham of Software AG Government Solutions.

Here are three steps toward making that work.

Use a Common Interface Across the Platform

"The first step is ensuring that you're getting unification across all of your data integrations," Graham said. Agencies need to be able to reach into on-premises systems, such as mainframes or enterprise resource planning systems, as well as new applications and APIs in the cloud.

Conduct Full Integration With Applications, Data and API

A unified solution, as opposed to traditional iPaaS, allows agencies to launch new applications and services without making substantial changes to their tech stacks or introducing new security risks. Integrating all the enterprise systems into a single-pane-of-glass interface offers the ability to tap into current and historical data, regardless of where it resides.

Implement Cloud-First, Hybrid Integrations

During modernizations, it's important to be thorough, but migrating systems is not always easy. Yet with Super iPaaS, you can take a piece-by-piece approach, said Fabien Sanglier, with Software AG Government Solutions. Because Super iPaaS integrates on-premises assets with cloud systems and everything in between, agencies can modernize older systems and then move toward a full cloud approach.



Add People to the Tech Equation



Winston Chang, Chief Technology Officer for Global Public Sector, Snowflake



Winston Chang is a CTO at Snowflake, a cloud-based data platform provider, so you might expect that he would be bullish about how technology can help organizations keep pace with change. And he is, but he argues that technology must work in concert with the workforce. "Otherwise, I'll be honest, it's pointless," Chang said.

Here are some basic principles for developing a strategy that links investments in both IT and workers.



Use Tech to Amplify Your Talent Pool

Many people worry that AI and other automation tools will replace human workers. But the fact is, most organizations can't find the talent they need, and some experts believe this labor shortage could last another 20 years, Chang said.

So, the real question is, how can technology help empower the workforce? "For me, the best leaders are always thinking about how technology empowers their workers, empowers every person on their team to do more and to do better and focus better," said Chang.

Practically speaking, that requires more collaboration and coordination between the technology department and human resources, he said.

Get Your (Data) House in Order

The biggest driver behind many modernization initiatives is the need to get more value out of data, but even the most advanced data platform can't do all the work for you.

In particular, before they can take full advantage of a platform like Snowflake's, agencies need to establish strong data governance policies and processes, said Chang.

A data platform is like "a great vacuum, or a really good solvent for cleaning: It doesn't alleviate the fact that you still have to go clean your house," he said. "Technology is there to support, but the agency itself has to do the hard work."

Build Flexibility Into Your Architecture

Agencies also might need to rethink how they approach their IT architecture. Although they need to maintain a basic architecture, they should build in more flexibility, making it easier to take advantage of emerging technology, said Chang.

"We have to be able to bolt things on, to change things — to still maintain a core, but to know that it can adjust," he said.

Invest in the Future (But Stay Light on Your Feet)



LeAnn Oliver, Director, Office of Corporate Business Systems, Department of Energy (DOE)



There's so much buzz around technology these days that it can be daunting to sort through all the noise and figure out what matters. But it's got to be done, said LeAnn Oliver of DOE.

"It's essential that we keep up with developments in technology, especially cybersecurity and AI," she said. If you get too far out of sync, eventually it will catch up with you, she said.

She offered some advice for helping your agency keep pace.

Commit to a Long-Term Vision

The most important thing you can do, Oliver said, is to have a strategic roadmap laying out your goals for the next three to four years. "You need to have the discipline that allows you to think about what kinds of things you need to do and put everything on the roadmap," she said.

The road map can be especially helpful during the budgeting process. When faced with tough decisions about what to fund, it can help you prioritize and think through the trade-offs you need to make with each decision.

Keep the Downsides of AI in Mind

Clearly, AI is an important technology, but it's important not to lose sight of possible pitfalls, Oliver said.

Keep up to date with Al's potential security risks— and keep them top of mind at your agency. "It's hard to prove that investing in it kept something terrible from happening, except that we do know that if you're not careful, terrible things can happen," she said.

Keep Up With Tech Trends

Tracking developments in the IT market can be difficult when things change so quickly, but it's worth the effort, Oliver said. For example, if you know a new generation of technology is coming out next year, you can postpone a given initiative on your road map and avoid wasting an investment this year, she said.

One of the best ways to stay on top of developments is to get out of the office, she said. "We need to make sure we send the appropriate people to the appropriate conferences and training, so they know what's coming down the pike."



Get Serious About the Software Supply Chain



Brian Fox, Chief Technology Officer, Sonatype



Developers don't write software these days, so much as they compile it. "A modern application typically consists of 80% to 90% of software components that your developers didn't write," said Brian Fox, co-founder of <u>Sonatype</u>, whose products help control open-source risk.

The software supply chain includes frameworks, user-interface components, logging tools, and a range of other nuts-and-bolts elements, all shared via repositories. With all these components under the hood, "we need to be talking about the software supply chain," Fox said.

Here's how you can improve software supply chain security.

Understand the Scope of the Danger

There is ample data to demonstrate that bad actors are deliberately making harmful tools available for use by unsuspecting developers. "There were 250,000 components last year that were fraudulent, that were put into these repositories and designed to cause harm," Fox said.

In this environment, program managers need to be at the top of their game when it comes to security. If a developer includes a faulty element in an application and opens a security liability, "you don't get a pass," Fox said.

Keep Malicious Code Out of the Repository

Don't count on your developers being vigilant about the software they download. Instead, protect the software repositories like you do any other valued resource.

The <u>Sonatype Repository Firewall</u> can serve as the first line of defense when managing open-source components. The firewall "can sit on multiple different repository managers, ... and it analyzes those components as they come through," Fox said. "When it finds one that has a known malware in it, it blocks it."

Make the SBOM a Standard Practice

Developers can begin to address the risk with a thorough Software Bill of Materials, or SBOM: a list of all the ingredients going into the software. The importance of an SBOM was highlighted in the May 2021 Executive Order on Improving the Nation's Cybersecurity and subsequent guidance.

The vendor community can help here, too. <u>Sonatype's Lifecycle</u> product, for example, supports effective component lifecycle management. The tool "is able to assess the components that are in your software... empirically, by analyzing what's actually going on inside your systems," Fox said.





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Special thanks to the sponsors who made this event possible: Cisco, IronBow, Snowflake, Software AG Government Solutions, Sonatype and Red Hat



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