

# Agile for Everyone:

## How to Improve Everyday Work Processes



# Contents

- 3 **Executive Summary**
- 4 **Snapshot: Agile in Government Today**
- 7 3 Ways to Accelerate Business Outcomes in the Age of DevSecOps
- 11 What Software Developers Need to Be Productive Now
- 12 **Agile Techniques and Keywords**
- 15 3 Ways DevSecOps Can Improve Cybersecurity Practices
- 16 **Apply Agile to: Leadership**
- 19 3 Ways to Prioritize Feedback for Agile Teams
- 23 Preparing Your Business Processes for a Post-COVID-19 World
- 24 **Apply Agile to: Acquisition**
- 27 3 Reasons to Shift From Monolithic to Modular Data Centers
- 28 **Apply Agile to: Customer Experience**
- 31 Retaining Visibility in a 100% Remote Work Environment Apply
- 32 **Apply Agile to: Human Resources**
- 35 Moving From Tools to Cultural Changes With DevSecOps
- 36 **Apply Agile to: Legacy IT**
- 39 3 Tips for Modernizing IT With Business Requirements in Mind
- 40 **Agile vs. Not Agile**
- 43 What's Your Plan for Managing Agency Operations Post-COVID-19?
- 44 **What's Next?**

# Executive Summary

**W**hen I left our GovLoop office in mid-March for a few days of planned time off, I waved goodbye to my colleagues — fully expecting to see them the following Monday.

A day into my staycation, I got word that employees were directed to take their workplace necessities home with them. GovLoop wasn't taking any chances with the rising number of COVID-19 cases in the United States, especially since the entire team could work remotely.

But we had never done that before. Could we maintain the camaraderie and workflow virtually that we had in a traditional office setting? One thing was clear: We had to adapt.

I didn't realize this initially, but we embraced an agile way of thinking and working almost instinctively. It wasn't without trial and error. We took an iterative and collaborative approach to test what worked and what didn't — from meeting structure and cadence to our review process for internal projects and online collaboration.

I know that our story isn't unique. Chances are you're using aspects of agile in your personal and professional life — maybe without realizing it.

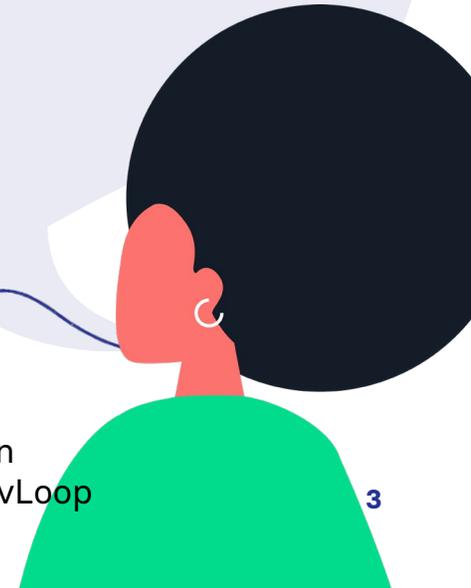
But agile is a loaded word that means different things to different people. **For the purpose of this guide, we define agile as an iterative, incremental and highly interactive way of working.** Although Agile as a methodology is capitalized, we will use a lowercase "a" throughout the guide when referring to agile practices, methods and mindsets, solely for the sake of consistency.

"Agile principles have relevance beyond software development," as the [Agile Government Handbook](#) notes. "When an organization adopts agile, it fundamentally changes its culture to be more collaborative and responsive to change."

Agile can apply to policymaking, leadership, workflows, your daily schedule and really any process — even cleaning your house and reconfiguring office spaces.

In the following pages, you'll hear from a diverse group of government professionals who use agile practices to enhance employee training, combat mass shootings, improve the delivery of social services and more.

Let's dive in.



*Nicole Blake Johnson*

Nicole Blake Johnson  
Managing Editor, GovLoop

# Snapshot: Agile in Government Today

Agile isn't a new concept in government, but there's still some confusion around what it is and what it is not. The General Services Administration's (GSA) digital consultancy group, 18F, describes agile in plain language and gets to the heart of what it means:



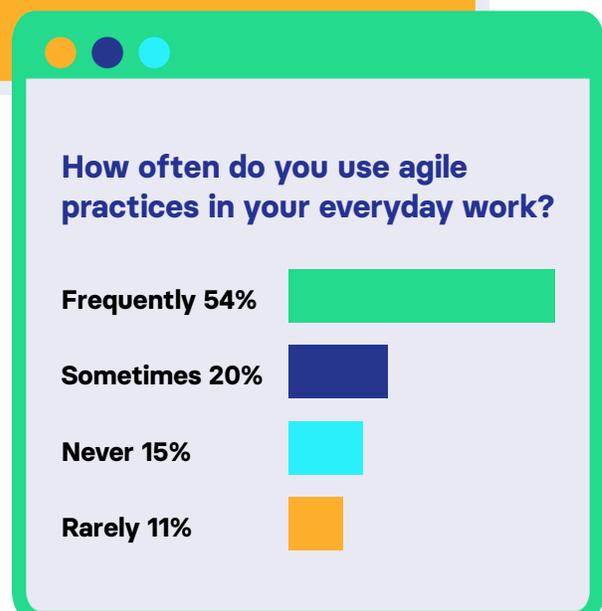
[www.agile.18f.gov](http://www.agile.18f.gov)

## Agile is something you *are*, not something you do.

If you take nothing else from all these words, take this. Agile is not a checklist, or a methodology, or a series of rituals. Agile is a way of thinking and a way of attacking problems. Embrace mistakes, learn and keep trying. Mess up and learn again and again and again. Cut your losses. Fail forward fast. It's okay. You won't get fired. You're learning.

*That is Agile.*

Although agile has really taken hold in the IT space, software developers aren't the only ones using it. In an online poll, we asked the GovLoop community how often they use agile practices in their everyday work. Here's what they said:

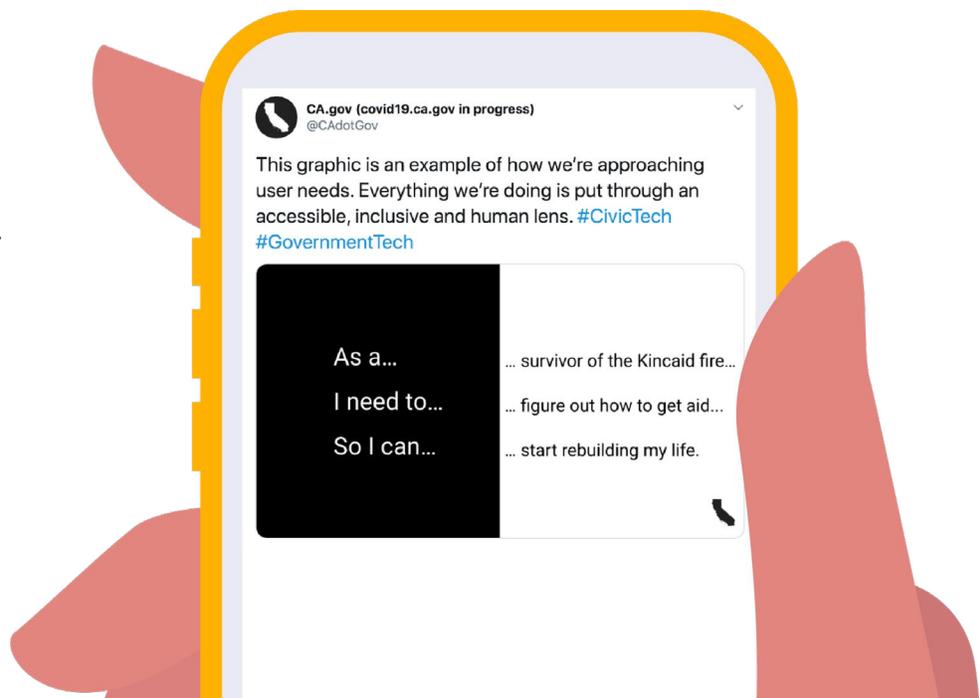


If you're having a hard time conceptualizing what an agile approach entails, here's a visual snapshot of what agile transformation looks like at the Census Bureau. Notice common themes of culture, commitment, coaching and communication. This is not about one team dictating the end result. It's about working transparently and collaboratively and improving, whether that's a product, service or process.



Source: [digital.gov](https://digital.gov)

And [here](#) is an example of how the state of California divides its work into functional increments that keep the user first. These one-sentence user story templates are common parts of the agile process.



# PRESIDIO®

## More than IT Modernization. **MISSION SUCCESS.**



Presidio is a Federal Systems Integrator, providing advanced technology solutions to the Department of Defense, Intelligence and Civilian agencies since 1986. Our extensive portfolio of IT solutions and services have proven instrumental in supporting the mission needs of the Federal Government. Presidio partners with vendors to provide IT modernization, improve security, agility, productivity and cloud deployment.

[Presidio.com/federalesolutions](https://www.presidio.com/federalesolutions)



@ Presidio



@ Presidio



@ PresidioIT

# 3 Ways to Accelerate Business Outcomes in the Age of DevSecOps

*An interview with Brad Sollar, Business Development Manager, Digital Transformation Group, Presidio*

As more agencies demonstrate the success of DevSecOps, the once widening gap between the business outcomes that agencies desire and the tools and processes they use to achieve them is diminishing.

**“We’ve seen multiple cycles of agencies transforming from legacy-style development to a modern approach, and there’s a proven way of this methodology now,” said Brad Sollar, Business Development Manager for Presidio’s Digital Transformation Group.** Presidio specializes in digital transformation solutions that are built on agile, secure infrastructure and deployed in a multi-cloud world.

Agencies have at their disposal reference architecture, or blueprints, for how to align development, security, and operations teams and tools. Plus, technologies such as cloud computing and containers make the technical side of transformation more palatable.

But how can agencies practically transition from where they are today and accelerate business outcomes? Sollar shared three ways to support this shift.

## 1. Take an API-first, microservices approach

When designing applications, ensure that what you’re building today will support future needs, Sollar said. Think of APIs, or application programming interfaces, as a contract for how you interact with services now and into the future.

A microservices approach is about scalability and the freedom of choice, whether you’re choosing a programming language or database. Microservices also break applications down into mini services. So rather than having to update or replace a monolithic application, you can quickly and seamlessly refresh and plug in new features as needed.

## 2. Implement security by design

“One of the biggest changes that people are finally starting to grasp is that security is ongoing and not just the responsibility of a security team,” Sollar said. “The earlier you can start in this process, the better your outcomes are going to be.”

This fundamental change is known as shifting left. From the time the first line of code is written, take steps to regularly check for vulnerabilities. With the DevSecOps pipeline, or set of automated processes, there are security gates where code is regularly checked and remediated if vulnerabilities are discovered.

## 3. Adopt infrastructure as code

The key to accelerating business outcomes is making processes agile, secure and repeatable. That’s what infrastructure as code aims to do by turning assets, such as your network configuration and server attributes, into a machine-readable format.

This code becomes the source of truth for what your infrastructure should look like, and you can use it to recreate infrastructure from scratch, among other benefits.

“Having pre-packaged solutions, from the infrastructure layer to procuring software in the DevSecOps pipeline, is vital,” Sollar said. “We’re a go-to partner for agencies that need to build out their environment.”

Whether or not you are formally certified in agile techniques and methods, chances are you've been exposed to these practices in some way. It's also worth noting that technology often plays a critical role in powering agility. McKinsey & Company cited next-generation enabling technology as one of five key trademarks of agile organizations. They embrace a [mindset shift](#):

**From:** "In an environment of scarcity, we succeed by capturing value from competitors, customers and suppliers for our shareholders."

**To:** "Recognizing the abundance of opportunities and resources available to us, we succeed by co-creating value with and for all of our stakeholders."

## What does agile in government mean to you?

We posed that question to various government professionals we spoke with while researching for this guide. Here's what we heard:

"[Agile is] the flexibility to meet the needs of Nevadans in any circumstance and overcoming barriers by being flexible to do that."

**Robert Thompson**

Deputy Administrator at the Nevada Department of Health and Human Services' Division of Welfare and Supportive Services



"When I define agile in government, it basically is taking an iterative approach to change and making change your friend. Agile in government, to me, is taking the journey to the final product that you do want and helping bring your customer along and helping them see how it works."

**Bill Brantley**

Senior HR Specialist  
U.S. Patent and Trademark Office (USPTO)



"We have to be dynamic, we have to be responsive, we have to be flexible."

**Lina Alathari**

Chief of the National Threat Assessment Center, U.S. Secret Service



## Agile manifesto

You can't talk agile without going back to the heart of where this movement took shape. In 2001, a group of programmers, representing various approaches to software development, came together in search of an alternative to the traditional, document-heavy approach for developing software that didn't always produce value.

What emerged from that meeting was a [public declaration](#) of values and principles for thinking about software development in an agile way.

"Through this work we have come to value

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more."

## What makes agile hard?

The hierarchical structure of government can make agile a tough nut to crack. This is especially true for people who are used to decision-making powers in the hands of a few, rather than with the people closest to the work. That's not to say that agile is impossible, but the work required to break down the siloed culture won't happen overnight.

Another pitfall to watch out for is what USPTO's Brantley refers to as agile theater: where you're going through the motions, using the terminology and techniques, but you don't have an agile mindset. So what does that mean exactly?

It means being comfortable with not having the full solution in front of you, but working your way toward it, Brantley said. There's collaboration to get to the finish line. Consider these questions to keep your agile efforts on track:

- What are we trying to achieve?
- What does done look like?
- How will that work fit into the mission?

When the right mindset is in place, you can begin introducing agile concepts and tools. As you embrace the mechanics, don't lose sight of the spirit of agile, which is iteratively adapting to change.



# OPEN, INNOVATIVE, AND SECURE

Red Hat technologies use the power of open source communities to make you more efficient, meet critical IT demands, and improve service delivery—all without vendor lock-in.

[www.redhat.com/gov](http://www.redhat.com/gov)



**Red Hat**

# What Software Developers Need to Be Productive Now

*An interview with Zohaib Khan, Organization Practice Lead, Public Sector Sales, Red Hat*

Software-based systems are the lifeline between the public and their access to essential government services. Equally important is the ability for software developers to continue improving those systems, just as they were before COVID-19 forced teams to rethink how they maintain operations remotely.

“From a developer’s perspective, they’re challenged to recreate the same environment in their homes that they had at work,” said Zohaib Khan, Organization Practice Lead, Public Sector Sales at Red Hat, an open source software provider.

So what options do agencies have to improve efficiencies for remote developers while also ensuring security and agility? That’s where CodeReady Workspaces come in, Khan said. Built on the open Eclipse Che project, Red Hat CodeReady Workspaces use Kubernetes and containers to provide development and IT teams with a consistent, secure and zero-configuration development environment.

Khan shared three ways that CodeReady Workspaces equip developers for current and future demands.

## 1. Accelerated projects and onboarding of developers

The vast majority of developers are not containers or Kubernetes experts, but IT departments are embracing these solutions to improve application delivery. Realistically, training every developer to become a container and Kube expert first before being productive isn’t viable, and it’s time-consuming.

Using CodeReady Workspaces, authorized developers don’t need deep container knowledge to get started on projects. They can spend more time coding and less time managing the environment or sitting idle during a lengthy onboarding process. Plus, the user experience is as fast and familiar as an integrated development environment on a laptop, and it’s accessible via a browser.

Once the developers get started and become productive, they get valuable experience working with containers and Kubernetes. This allows them to build the depth incrementally.

## 2. No more inconsistencies and “it works on my machine…” delays

Containerized workspaces provide development teams with a more reliable foundation to work. Specifically, they make cloud-native development practical for teams, using Kubernetes and containers to provide each member with a consistent, preconfigured development environment. Developers can create code and build and test it in containers running on Red Hat’s OpenShift — the company’s version of enterprise Kubernetes.

Another benefit of CodeReady Workspaces is that it integrates with your existing development toolchain, which means developers don’t have to sideline tools they were already using in favor of something completely new.

## 3. Protected source code by removing it from hard-to-secure laptops

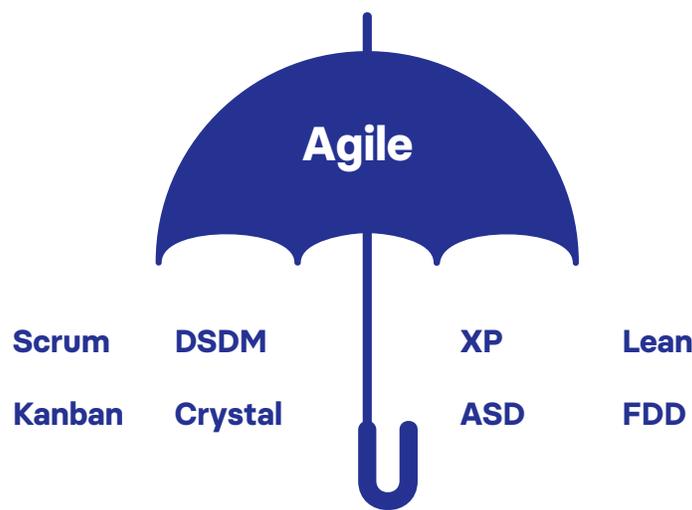
Today, much of the development work takes place on the laptop, which creates security risks if a device is lost or stolen. A laptop solution also makes it hard to replicate, share and secure everything the developer needs.

With CodeReady Workspaces, no source code gets downloaded on the local machine. Everything is delivered in a browser, creating a safer collaborative environment for teams.

Ultimately, the goal is to empower developers to contribute to a project faster. Containers and Kubernetes are the way of the future, Khan said. **“We’re clearing the impediments in your way, and giving you an on-ramp to shorten the learning curve and boost productivity.”**

# Agile Techniques and Keywords

A critical part of making agile work in an organization is ensuring that everyone is speaking the same language. Below we highlight several commonly used agile techniques and key terms to keep on your radar. This is not an exhaustive list, but you can find additional insights at [agilealliance.org](http://agilealliance.org) and [18F.gov](http://18F.gov).



## Burndown Chart:

Burndown charts and burnup charts track the amount of output (in terms of hours, story points or backlog items) a team has completed across an iteration or a project.

## Business Agility:

Business agility is an organization's ability to sense changes internally or externally and respond accordingly to deliver value to customers.

## Continuous Deployment:

Continuous deployment aims to reduce the time between writing a line of code and making that code available to users in production. To achieve continuous deployment, the team relies on infrastructure that automates and instruments the various

steps leading up to deployment. After each integration successfully meets these release criteria, the live application is updated with new code.

## Continuous Integration:

Continuous integration is the practice of merging code changes into a shared repository several times a day, making it possible to release a product version at any moment. This requires an integration procedure that is reproducible and automated.

## Definition of Done:

The definition of done is an agreed-upon list of the activities deemed necessary to get a product increment, usually represented by a user story, to a done state by the end of a sprint.

### Incremental Development:

In an agile context, incremental development is when each successive version of a product is usable and each builds on the previous version by adding user-visible functionality.

### Kanban Board:

A Kanban board is a visual workflow tool consisting of multiple columns. Each column represents a different stage in the workflow process.

### Minimum Viable Product:

The “version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort,” according to entrepreneur and author Eric Ries.

### Retrospectives:

On a regular basis — weekly or bi-weekly — at the end of each sprint, a retrospective allows the team to reflect and adjust practices. Any team member can voice a problem or propose a solution.

### Sprints:

Sprints are the heartbeat of the agile process. Small units of work are delivered in short bursts, typically with one- or two-week cycles. Employees aim for progress the target audience can see and that is delivered and validated at the end of each cycle, allowing the team to move iteratively toward the goal, with regular opportunity for course correction.

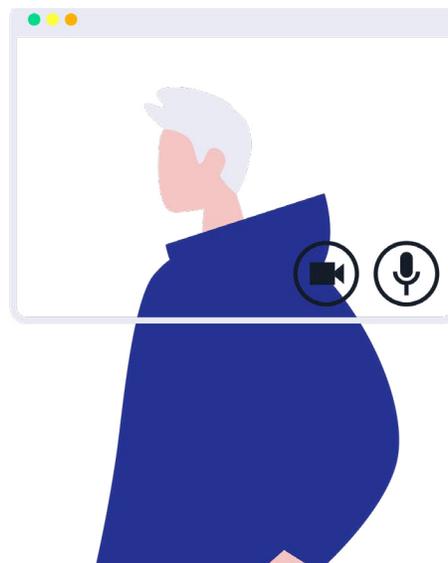
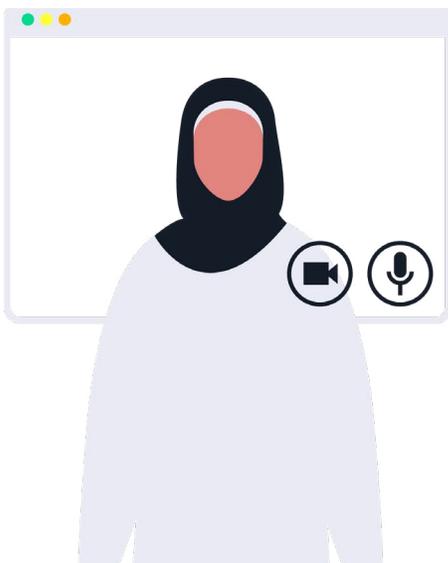
### User Stories:

In consultation with the customer or product owner, the team divides the work to be done into functional increments called “user stories.”

### Is agile all or nothing?

Some agile practitioners might be horrified at the thought of combining various agile practices with traditional methods of working. But the reality is not every agency is ready to go all-in with agile, and some might not see the need to.

Throughout government, it isn't uncommon to see a hybrid version of agile, where agencies embrace different tools and techniques.

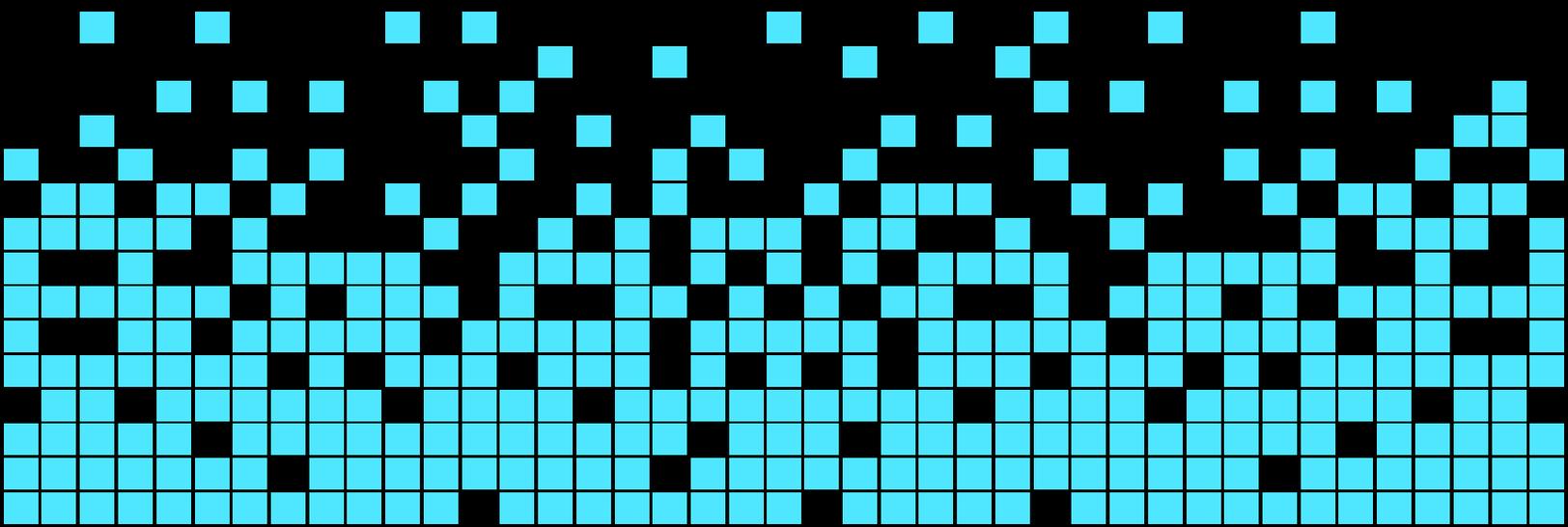




Azure Government

# Create solutions today that adapt for tomorrow. Invent with purpose.

Learn more and  
request a free trial  
[azure.com/gov](https://azure.com/gov)



# 3 Ways DevSecOps Can Improve Cybersecurity Practices

*An interview with Microsoft's Zach Kramer, Engineering Lead, Azure Government; and Derek Strausbaugh, Chief Digital Officer, National Security Business*

As much as agencies want and need to rapidly respond to change, they're only as agile as the systems they rely on.

At the root of the issue are traditional program development processes in government, which don't have the speed and flexibility to keep up with technological changes or fast-paced modern adversaries. But there's a shift taking place. Agencies are rethinking how they approach software and systems development in their technology programs.

Specifically, they're using more flexible methods, such as DevSecOps, to streamline the process and to improve cybersecurity from the start. The goal is to tightly integrate development, security and operations, and enable fast and continuous delivery of value to end users.

Derek Strausbaugh, Chief Digital Officer for Microsoft's National Security Business, and Zach Kramer, Engineering Lead for Microsoft's Azure Government, explain three ways that DevSecOps is changing cybersecurity practices across government.

## 1. Builds cyber considerations into programs from the beginning

The intent of DevSecOps is to get everyone in a program accountable for and invested in security, with the goal of implementing security decisions and actions at the same scale and speed as development and operations decisions and actions.

**"You're really taking security and putting it on the same level as continuous integration and delivery," Strausbaugh said.** So it's not just Agile development, it's actually creating another leg of the stool for quality from the get-go.

## 2. Creates organizational awareness around security

Agile development methodologies that emphasize iterative development cycles and feedback have become more common in federal government technology programs. "But DevSecOps often gets confused as either another name for Agile development or an offshoot of it," Strausbaugh said.

DevSecOps shifts left security accountabilities, allowing programs to operate more efficiently and create more organizational awareness when problems do show up.

"DevSecOps also helps with software and technology development pipelines," Kramer said. **"This is important because it is possible for programmers to build code and deliver products without understanding the infrastructure underpinning it."**

## 3. Changes the culture and the conversation

Another advantage of DevSecOps is that it shifts the program manager's perspective from making sure that software is in compliance or meets a specification or audit to ensuring that the code is written correctly and securely and that it's deployed in a repeatable manner.

Overall, DevSecOps fits into the government's modernization strategy to upgrade legacy systems and incorporate new capabilities such as machine learning or artificial intelligence into its mission. "It is about increasing velocity — speeding up decision-making and operational effectiveness — rather than simply delivering software," Strausbaugh said.

Apply Agile to:

# Leadership

The success of an organization is closely tied to the quality of its leadership. In many ways, teams take on their leaders' identity, which makes agile leadership all the more critical. It's about creating an environment where employees can and do adapt to change because they are empowered and equipped for it.

So who are these leaders in government? We spoke with two nominees of the 2020 Service to America Medals, or SAMMIES, to find out. The SAMMIES are an esteemed awards program sponsored by the Partnership for Public Service that recognizes remarkable work by career federal employees. These leaders shared what agile looks like at their agencies and the lasting impacts of their work.



**Lina Alathari, Ph.D.**  
Chief, National Threat  
Assessment Center, U.S.  
Secret Service

As Chief of the U.S. Secret Service's National Threat Assessment Center, Lina Alathari has a passion for people and for leading with empathy.

Her work reaches far beyond office walls and doesn't fit neatly into scheduled hours. Her focus is developing threat assessment guidelines and working with law enforcement, educators and local communities to intervene and prevent possible mass shootings in schools, workplaces and public spaces. The center's work focuses on research and training to prevent rare, non-random violent acts that affect federal officials, law enforcement, schools and communities.



## Agile in action

- In the past three to four years, the center has seen a significant uptick in community members requesting training to prevent school and workplace violence and attacks against faith-based communities.
- “We have to be dynamic, responsive [and] flexible,” Alathari said, noting that community requests for consultations on threat cases and building threat assessment programs have increased 162% since the 2018 high school shooting in Parkland, Florida. Requests can come in from anyone at any time, and the center tailors its training to meet those diverse needs.
- Alathari has played a key role in the center’s shift to more timely and dynamic research through the use of behavioral case studies. The 2017 shooting during a practice session for the annual Congressional Baseball Game for Charity in Northern Virginia is one example. The center put its research about the shooter in a format to help communities understand how to do a threat assessment investigation. Using high-profile cases, they’ve gotten information out to the community faster to understand the implications of mass shootings and how to prevent them.

## Community impact

Alathari and her team have delivered more than 1,200 training sessions to more than 83,000 law enforcement officers, educators, mental health providers, government officials, faith-based leaders and other private organizations across 50 states. Hundreds of schools and communities have adopted Alathari’s behavior-based threat prevention protocols. They’ve even conducted training virtually during the pandemic.

## Potential pitfalls

Behavioral and social science research takes time, and it isn’t always easy to understand. Although the center does academic-style research, the findings are translated operationally, and the reports are written in practical terms for communities to understand and put into action.

Another challenge Alathari faced was funding and staffing to support the center’s increased scope in work. She created an organizational chart for decision-makers to visualize what would be required to carry out those efforts. Staffing has gone from seven people when she assumed the role of Chief in 2017, to almost 20 in the past year. She credits the strategic growth to effective communication and agile leadership.

Read more about Alathari’s efforts [here](#). You can also check out examples of the work her team has conducted, including an [operational guide to using a threat assessment model](#) and an [overview of 2018 data](#) detailing mass attacks in public spaces.





*Right insights. Right outcomes.*

Three Wire Systems is the leader in innovative and efficient technology solutions for government agencies and large enterprise corporations. Our approach to projects is grounded in solid program management and process improvement principles. With those principles in mind, we design solutions to support your business goals that deliver superior results in a cost-efficient manner. Providing technology solutions across:

[Cybersecurity >](#)

[IT Modernization >](#)

[Lifecycle Management >](#)

In Partnership with **DELL** Technologies  
FEDERAL PLATINUM PARTNER

Three Wire builds solutions advancing IT missions for Government agencies, incorporating technologies from Dell EMC with modern data storage solutions, protection, and processes.

[Contact us today to learn more!](#)

# 3 Ways to Prioritize Feedback for Agile Teams

*An interview with Three Wire Systems' Cindi Clark, Certified Scrum Product Owner (CSPO), Director of Program Delivery; and Tara Harrington, Advanced Certified Scrum Master, CSPO Scrum Master*

The appeal and structure of Agile methods are expanding beyond the realm of software development.

It has helped Three Wire Systems deliver on diverse projects like functional data centers with a refurbishment of Dell hardware, continuously manage the warranty service, and coordinate targeted corporate marketing campaigns throughout the year, said Tara Harrington, Scrum Master at Three Wire Systems. The ability to communicate and iterate with all stakeholders is what makes the entire process consistently successful.

"The reason Agile is so successful is that it's much like shooting an arrow at a paper target," said Cindi Clark, who serves as Director of Program Delivery. "If you're off by a centimeter when you aim, you're off by a foot when it hits the paper target because you can't adjust it midstream. Agile gives you that benefit of being able to adjust as you go so that you don't miss the target."

Agile thrives when you can gain knowledge about how to make improvements and get to the best possible solution. Clark and Harrington shared three ways that agencies can support gained knowledge to ultimately improve outcomes.

## 1. Transparency

Transparency is at the heart of what makes Agile successful because conversations about progress and workload tracking happen in the open. Three Wire Systems, for example, actively shares what it's creating with internal teams and external customers. Through collaboration, employees know what team members and groups are working on, and they can identify bottlenecks, dependencies, or clashes with planned or ongoing work. Transparency also comes in the form of demoing the work before the next work cycle or sprint so that customers can share feedback on what is and is not meeting their needs.

## 2. Inspection

Agile teams can inspect and provide feedback on a project at any time. Inspection is crucial to advise the team if they are on track for success, or if they need to pivot. Regular inspection as a team, through short work cycles, provides built-in, daily opportunities to check in on progress. If a team member identifies a roadblock, the team helps immediately resolve the issue to increase efficiency.

## 3. Adaption

Once the team identifies process improvement, they make changes for the next work cycle. If the project missed the mark or the requirements unexpectedly changed, the team adapts to those changes using a subset of Agile called Scrum. Scrum is a cyclical process that takes Agile values a step further by highlighting the importance of building in opportunities for transparency, inspection and adaptation.

**"Agile isn't as big of a transition as people think," Clark said. "People may think that it's going to change everything, or that it's an expensive or massive change. But, honestly, you can start with a little bit of training and a shared to-do list and transition to Agile over time."**

## Apply Agile to: Leadership



**Corvelli McDaniel**  
Assistant Commissioner,  
Revenue Collections  
Management,  
Treasury Department

Corvelli McDaniel knows the value of strong relationships. He turned that knowledge into action for a cause that's much bigger than one individual or organization. McDaniel's agile approach to leadership and collaborative problem-solving is not only strengthening financial institutions but also transforming communities.

McDaniel created an innovative program for large commercial financial institutions to provide management and technical assistance to help small and minority-owned banks strengthen their balance sheets and better serve low-income communities.

### Agile in action

- Realizing the importance of partnerships and relationships, McDaniel launched the Treasury Bank Mentor Protégé Program in 2018. He saw this as an avenue for small and minority-owned banks to better position themselves for federal opportunities and to remain viable.
- McDaniel spent months promoting the concept. He hit the roadways and the airways to visit banks and meet with senior agency leaders in procurement, shared services, finance and beyond to share the concepts, principles and objectives of the program in its conception. He had to build interest and willingness among the department and large and small banks to try this new approach.
- A partnership with Treasury's Chief Diversity and Inclusion Officer, Lorraine Cole, was key to the program's success. "Without the full support of the Treasury Department, it would die on the vine," McDaniel said. Cole had direct access to senior leaders who were influential in greenlighting the program.





## Community impact

Currently, major “financial agent” banks earn fees to process tax returns and passport applications, collect debts, and disburse benefit payments, with Treasury paying about \$850 million a year for these services. These contracts were not previously available to minority-owned banks, but McDaniel said the Mentor Protégé Program can help these small institutions become Treasury financial agents and shore up their own bottom lines. This entails understanding Treasury’s expectations and the standards for the processing work and for handling information.

## Potential pitfalls

McDaniel stressed the importance of having conviction about what changes will add value to your organization and then documenting them. Have advisers critique your ideas, and ask yourself: Are you willing to go to the mat for this? Will this effort make the customer experience much richer?

## Advice on agile leadership

Leadership is not a single method or style, McDaniel said. Agile leadership requires government employees to use different approaches and models depending on a given circumstance. “Decisions about who leads and who follows are dictated by the task or the problem situation, not necessarily by where one sits in the hierarchy,” he said. “I think we just have to do more to be agile around leadership as we take on these very difficult challenges in government.”

Read more about McDaniel’s work [here](#).



### About Jtek Data Solutions

- Cage Code: 6PXL8
- DUNS Number: 078-386767
- Socioeconomic Info: Small Business
- Hub Zone application, 8A Partnership

### Information Technology

We offer a wide range of IT services from discovery to assessment, architectural review and design to implementation with security, cost and options for every environment in mind.

### Procurement

Key vendor and distributor relationships and alliances allow us to provide customers with the low cost acquisition that allows for superior implementation techniques.

### Advanced Infrastructure

Superior Project Management and engineering team at Jtek allows for innovative solutions to all your engineering needs.

### Cybersecurity

Jtek provides cybersecurity assessments and recommendations to protect our customer's environment from compromise and ensures compliance with all security standards. Experience with DoD STIG and FITARA scoring metrics.

### Lifecycle Support

As subject matter experts in IT Service Management, JTEK Data Solutions provide our customers with full life-cycle services that support continuous process improvements, change management, technical analysis, and operational integration that are tailored to meet the needs of our customers.

### RPA

Robotic Process Automation technology that anyone can use with ease. Enterprise-grade technology with the intuitive experience of a consumer application. Jtek brings ease of implementation and use to our customers.

## CONTACT US

## CAPABILITIES STATEMENT

JTEK Data Solutions provides forward thinking solutions to our customers by providing vendor agnostic solutions in a collaborative setting. Our team combines subject matter expertise to be able to diagnose issues within your organization and provide customized solutions with direct partnerships to multiple vendors and distributors to ensure each solution fits your exact needs. In the fast-paced world of Information Technology, JTEK has the ability and dedication to provide solutions that focus on availability, reliability and the highest cybersecurity to keep your organization operational and safe.

JTEK Data Solutions offers a wide range of architectural, design and implementation solutions and support services. We specialize in providing the right solution for a given problem. As a financially stable and agile small business, JTEK can operate with the low overhead of a small business while delivering large business results. Our proven methodology that starts with assessment, architectural design, multiple course of action options and implementation of non-biased solutions allows our customers to realize cost savings throughout the solutioning and modernization process.

## CORE COMPETENCIES

### Information Technology Services:

- Information Technology services: integration, support and professional services
- Procurement: Key partnerships, vast vendor options and competitive pricing
- Architecture Design: Solutioning documentation, core organizational deliverables (COOP, CONOPS, etc.)
- Cybersecurity: Endpoint, Network, Email, Cloud and Web security
- Robotic Process Automation: Evaluation, procurement and integration. Secure by design

### Differentiators:

JTEK personnel represent years of experience in their field with significant work experience and training. Our personnel have obtained and maintained top level industry certifications in Project Management, Cybersecurity as well as specific IT technologies. Our approach to each project or issue is through revision and collaboration to ensure every solution is customized for each customer. Our solutions architects have worked in all types of environments to include Federal Government, Department of Defense and Civilian and bring lessons learned and experience to every opportunity. JTEK is a SBA certified business as well a partner with a Super 8(a) socioeconomic joint venture that allows non-protestable awards.

# Preparing Your Business Processes for a Post-COVID-19 World

*An interview with John Mihoc, Director of Innovation & AI, JTEK Data Solutions*

There's a new level of urgency forcing organizations to rethink how they operate today and in the future. The new way forward will require them to take a hard look at manual, paper-based processes that have stagnated modernization and put a strain on employees who need the flexibility to work beyond office walls.

**“Organizations and agencies will need to re-evaluate the day-to-day responsibilities of their employees,” said John Mihoc, Director of Innovations and Artificial Intelligence (AI) at JTEK. “They’ll need to identify areas and workflows where automation with tools such as robotic process automation (RPA) — and ultimately AI — can drastically change the landscape and efficiency of the workforce, especially in a post-COVID-19 world.”**

There is a general push across IT operations to “shift left” where possible, Mihoc said. “For example, work that was previously assigned to tier-three engineers is shifting to tier two and then down to tier-one engineers as it becomes more automated,” he said. “Employees are freed up to tackle higher-value tasks rather than tedious work that can be handled by automation.”

That's where JTEK has been an invaluable partner for organizations, helping make changes to their operational models in support of digital transformation and modern IT infrastructure. JTEK takes a multi-pronged approach to craft the right solution for its customers by assessing and understanding their current workloads, mapping business processes, and viewing operations through the lens of human resources, finance and other lines of business.

“It's about understanding the customer's systems and their processes required to complete daily tasks,” Mihoc said. He shared key areas that organizations should focus on as they look to support transformation in a post-COVID-19 world.

## **1. Re-evaluate the day-to-day responsibilities of employees**

Re-evaluating daily responsibilities can help you identify to what extent your organization is tapping into the unique expertise of your workforce. The goal is to free up employees to focus on strategic problem-solving while allowing technology to handle routine and manual work.

## **2. Identify areas and workflows where automation with RPA and AI can drastically change the landscape of the workforce**

The ability to support employees working in remote environments is critical. Tools such as virtual desktop infrastructure, RPA and AI can reduce requirements for in-person interactions, automate tasks and enable employees to seamlessly continue operations. RPA also improves workforce efficiencies and reduces costs by eliminating repetitive and mundane tasks.

## **3. Capitalize on simplicity**

If you have a distributed workforce, deploying and managing the IT infrastructure to support them can be complex. Although there is one overarching mission, each office or division, or at-home worker has specific needs to get their job done.

“That's why we provide solutions that simplify workforce productivity, including bot creation to solve process problems,” Mihoc said. “We support operational consistency across the organization and help them implement scalable solutions that can meet their evolving needs today and into the future.”

Apply Agile to:

# Acquisition

If you're involved in the buying process at your agency, you know better than most the rules and regulations that detail what not to do. **But what if there was a way to test the waters? To experiment lawfully, learn from it, and find ways to replicate and expand success?**

Bridget Fields and her team at GSA's IT Modernization Centers of Excellence (CoE) have proven this is a viable approach. Fields is the Director of Acquisition at the CoE.

Under the CoE model, centralized teams of technical experts work alongside agency employees to accelerate the adoption of modern technologies, such as cloud computing and data analytics.



**Bridget Fields**  
Director of Acquisition  
Centers of Excellence  
GSA

"I like to say that my job is part-time operations, and then part-time just improving the acquisition experience," Fields said.

She shared how her team used a practice called the micro-purchase threshold (MPT), along with flexible agile techniques, to deliver a solution 36 days after writing a solicitation to industry with their requirements.

Want to know how they did it? Let's run through the highlights. As you review them, think through an acquisition approach — big or small — that you'd like to try and how you would fill out each section below.

## CoE objective

In early September 2019, internal leaders tasked the CoE with a high-profile project: Create an internal demonstration website to digitally display prototypes and other deliverables that CoE teams have developed. Using those prototypes, other agencies can get inspiration or adopt and use them.

## Main characteristics of this project

- Tight time frame
- Public deliverables
- Small budget

## User story: In the words of a user, whom will this project help and how?

As a **user**, I want to **be able to access a URL** that will **display an innovation project prototype**.

## Acquisition technique

The CoE team used an MPT procurement, which they detail in an article on [Digital.gov](#) about the project. MPT procurements aren't widely competed across government, but the U.S. Digital Service (USDS) and the Veterans Affairs Department are among the agencies pioneering this approach.

"A procurement run in this fashion allows the government to obtain one or more user stories [or a description of a software feature] under a single micro-purchase transaction, provided the stories are carefully sized so that the total transaction comes in under \$10,000 (the purchase card threshold). When these conditions are met — including all acquisition overhead and development work — the entire story can be competed, awarded and delivered within a matter of weeks," according to Fields and her colleagues.

## Potential pitfalls

Transfer of knowledge and costs associated with bringing any team up to speed is a challenge. Fields noted that there were still unknowns her team is working to answer, such as what happens when a new contract is selected to tackle a different user story as part of the larger program.

## Advice to get started

Create a backlog that clearly lists what it would take to begin using agile processes at your agency. You can start at a high level and get more granular, detailing what stakeholders need to be involved and practical steps to get from where you are today to where you want to go with agile.

**"It just showed the power of a backlog within a procurement, which is a thing folks don't normally talk about," Fields said. "Using the prioritized backlog, it was much easier for us to develop what I've been calling the minimum of viable procurements."**

## Agile in action

- The team focused on the agile tenet of delivering the value that users seek as soon and as often as possible.
- They identified the absolute minimum that had to be done to achieve success. They answered this question: "What is the central value to be delivered through this project?"
- As a first step, the project team created an initial product backlog and then reached out to the acquisition team. Product backlogs list any new features, fixes and changes that might be delivered to achieve an outcome.
- The team limited its scope to one user story — the highest-priority story — and used it as a starting point to deliver the project's core value, which was to make prototypes available for public view on the web.

## Resources

- You can view the [documentation](#) on GitHub that explains how to conduct an MPT buy at your agency. GSA also has [templates](#) for creating agile contracts.
- Fields shared this [six-part series on agile](#) by two GSA employees in the agency's Technology Transformation Services office.
- She also recommends this [Harvard Business Review article](#) titled "[Embracing Agile](#)" because it provides a clear explanation of many proven best practices that public-sector employees can adapt and apply.



is proud to be



[www.ftei.com](http://www.ftei.com)

# 3 Reasons to Shift From Monolithic to Modular Data Centers

*An interview with Bob Venero, President and CEO, Future Tech Enterprise, Inc.*

For government agencies, a well-equipped, modular data center can be a great way to meet the demand for increased compute capacity while minimizing energy consumption.

A modular design is flexible. It can help meet short-term capacity requirements while avoiding the need to heat or cool a 10,000-square-foot data center.

But, according to Bob Venero, President and CEO of Future Tech Enterprise, Inc., **“a modular data center is only worthwhile if it is a true turn-key solution that meets the most advanced safety and security standards.”**

Below, Venero, whose company was recently named Dell Technologies’ Federal Growth Partner of the Year (2020), shares his thoughts and recommendations on modular data centers and data center management.

## 1. Safety, security & SCIF-certified

Federal system integrators and government agencies follow the most rigorous security and safety standards.

“So, any modular data center used in these environments must have the proven ability to withstand extreme weather events, human-made disasters and even unexpected seismic disturbances,” Venero said.

That’s why Venero and his team recommend the iFortress modular data center.

“iFortress is certified as a Sensitive Compartmentalized Information Facility. “It meets numerous lethality survivable standards for explosion blasts, in sheer, fire and thermal test conditions.”

iFortress units are airtight, weathertight, energy efficient, highly insulated, mildew resistant and all fire/thermal-rated, as well as hydro-dynamic/permeable-rated. iFortress is also accredited by the CIA, the Defense Intelligence Agency and the National Security Agency. It’s completely 705-compliant — the highest standard of data security available in the world today.

## 2. Easy assembly, which enhances flexibility and speeds up timelines

Using traditional construction, data center projects typically require a multi-phased approach, starting with initial assessments, planning, deployment and management.

By comparison, iFortress allows for ever-changing and swift decision-making and rapid deployments to almost any location in any environment.

The timeframe from understanding the requirements to a turnkey engineered solution is weeks. Depending on size, the timeframe for onsite assembly to become fully operational is just a few weeks or a couple months.

“With multiple pre-configuration options, iFortress is literally an off-the-rack, turnkey solution in a box that allows for a great amount of customization as required,” Venero said. “It’s completely scalable based upon site location, personnel requirements, equipment density, technology utilization plans and infrastructure redundancy requirements.”

## 3. Smart data center management

It’s time to change the way you think about traditional monolithic data centers. For example, one consideration that should be top of mind is the use of intelligent power, or monitoring controls that help you achieve a truly “lights out,” modular data center.

With a modular data center, you can scale your infrastructure as you need to without the hassle of large, new build-outs and planning costs.

Apply Agile to:

# Customer Experience

Meeting the needs of customers is just as much an inside job as it is a public-facing responsibility for government agencies. That mindset has powered herculean efforts at the Nevada Department of Health and Human Services' Division of Welfare and Supportive Services (DWSS) to serve some 700,000 Nevadans, many of whom have felt the devastating economic impacts of COVID-19.

"I don't think we've seen an event like this since 9/11," said Robert Thompson, the division's Deputy Administrator. Thompson and his team support the state's medical, food, energy and cash assistance programs. Applications for cash assistance increased 370% nearly overnight, he said.



**Robert Thompson**  
Deputy Administrator at  
the Nevada Department  
of Health and Human  
Services' Division of  
Welfare and Supportive  
Services

How did the state's 2,300-person DWSS team rally together and respond to the massive influx of Nevadans in need, while also prioritizing the well-being and empowerment of the team? We've highlighted their approach below.

## Main characteristics of this project:

- Increased service delivery volume
- Demands for strong, flexible technology solutions
- Budget constraints

## User story: In the words of a user, whom will this project help and how?

As a **Nevadan in need**, I want to **be able to get food, cash or medical assistance** so that **I can provide for myself and/or my family**.

As a **state employee** I want **an efficient system in place** so that **I can do my job in a safe environment**.

## Project impact

"We were processing cases and tasks faster than ever before," Thompson said. He credits their rapid service delivery to the all-hands-on-deck approach, coupled with reduced red tape. "We kept going. We were flexible. We thought outside the box."

## Project challenges

Most of the casework that falls under Thompson's purview can be done virtually. For example, someone in Reno can work on an application that originated in Las Vegas without issues. But there are exceptions. About 15% of case managers still use paper files because their work is highly specialized.

Those employees drove to the office, dropped off their paper files, signed out their next set of cases and took the work home.

Under normal circumstances, SNAP applicants must undergo interviews to receive food assistance. The federal government's decision to waive interview requirements brought relief. "We were able to turn around and get those food stamps back into that customer's hand quickly, instead of trying to figure out how to do interviews," he said.

## Serving the workforce

Customer experience is also about serving those who serve others. When Thompson sent an email to his colleagues in the early days of their pandemic response, little did he know it would morph into much more. He let them know he was thinking of them. He spotlighted their tremendous efforts to serve the public, and he reiterated that they were one team working together at a time when they felt overwhelmed and fragmented.

Thompson received hundreds of responses to that email, so he sent more. His emails organically morphed into a daily newsletter with updates, jokes and shout-outs that employees relish and have come to expect.

"Overnight, they lost their social network," Thompson said. "They lost their watercooler talk. They lost the ability to say good morning to each other. So we had to figure out a way to move them together, and now this newsletter has our culture in it."

## Agile in action

- 90% of the workforce began working from home after the governor issued a stay-at-home order. It took four days to transition everyone, while the division simultaneously kept operations running.
- 7 years ago the welfare division set up an outreach campaign that involved sending case managers into the community to serve the public in non-traditional locations outside the office. That effort was the catalyst for ensuring that employees had technology in place to work remotely.
- During the COVID-19 crisis, the division went to an all-hands-on-deck model. "We were working 16- and 20-hour days trying to come up with a plan," Thompson said. "We had never serviced Nevadans before with our front doors closed."
- Every employee, including supervisors, trainers and auditors, who knew how to process cases or new requests for assistance was directed to stop their normal duties. "We put them on casework because meeting the needs of the Nevadans during this COVID event became paramount," he said.

## Resources

- This [McKinsey article](#) explains how to bring agile to customer care.
- The CoE housed at GSA are agile, IT modernization teams. You can check out their work on customer experience [here](#).
- The [National Association of State Chief Information Officers](#) hosted a webinar explaining how the Texas Health and Human Services Commission and the Idaho Department of Health and Welfare adopted agile.

Technology solutions  
you're going to be

*Wild about!*

Wildflower is honored to serve the United States Federal Government, including its National Laboratories, doing so for three decades. We have long-term experience delivering complex technologies and services with a proven record of consistent, successful accomplishments. Our program and supply chain methodologies are a commitment to delivering the highest quality products, service, and support for customers in the public sector.



**Contracts We Serve:**

Army ITES  
SEWP-V  
SCMC  
GSA  
DOE-Motorola-ICPT  
First Source II



**Solutions:**

Data Centers  
Communications  
Security & Cyber Security  
Cloud Solutions  
IT Hardware  
Unmanned Aerial System



**Services:**

Artificial Intelligence  
Cloud  
Managed Services  
Warehouse & Logistics  
VAR



**Certifications:**

FAA 107 Pilots  
ISO 9001:2015  
FOCI  
Q Clearance  
L Clearance  
HubZone  
Small Business  
Woman Owned  
Minority Owned



# Retaining Visibility in a 100% Remote Work Environment

*An interview with Fernando DeLosReyes, Solutions Architect, Wildflower*

The sudden and dramatic shift in the number of remote employees due to COVID-19 was far from a mere numbers exercise. Adapting to the coronavirus meant that many agencies had to work in ways that were completely at odds with the capacity and IT configurations already in place.

Most offices are traditionally configured for 20% of their collective workforce to be able to work remotely while 80% of their staff work on-site, said Fernando DeLosReyes, Solutions Architect at Wildflower.

**“Government networks weren’t designed to support 100% remote work,” DeLosReyes said. “But Wildflower has played a key role in helping agencies manage the influx of remote employees, leaning on internal experiences managing a mostly remote workforce and three decades of delivering telecommunications products and services to the government.”**

The need for most employees to work from home flipped the 20/80 rule to 80% of the workforce connecting to the virtual private network (VPN) remotely and 20% or even less of the workforce working physically on-site.

This shift causes a host of security problems in the planning and deployment phase to support a mostly remote workforce. Three of the primary issues that must be top of mind when making the switch from 80/20 to 20/80 are licensing, oversubscribed VPNs and excessive back-and-forth traffic through the VPN — known as the boomerang effect.

## 1. Verify licensing

A crucial first step in handling the 80/20 switch is for each organization to verify exactly how many licenses they have, how many more licenses they will need, and how many VPN connections the existing infrastructure can support. Some organizations have this information on hand and can simply task network and security operators for verification; for others, the information must be gathered from the ground up.

## 2. Address oversubscribed VPNs

Additionally, when VPNs are trying to manage more data than they are designed to support, and the tools that are in place to monitor the traffic aren't scaled for the load they're facing, the network and monitoring tools are oversubscribed. Ultimately, the network doesn't see the data, which results in data dropping. It's not only an inconvenience but also a security threat.

## 3. Be aware of the boomerang effect

The boomerang effect occurs when remote workers connect to the VPN and then access the internet. All traffic to and from the internet first must go through the VPN and then make a U-turn (or boomerang), doubling — and sometimes even tripling — the amount of traffic through the VPN and throughout the network.

But these technology challenges haven't halted innovation, DeLosReyes said. With fewer employees on-site, agencies have been able to do upgrades that required taking the network down for an extended period. “A lot of organizations are innovating, and now is the time,” he said.

Apply Agile to:

# Human Resources

Agile is making inroads into the human resources (HR) space, particularly in the areas of learning and development.

"There's actually an agile approach to course design," said Bill Brantley, Senior HR Specialist and a Program Manager for the U.S. Patent and Trademark Office's Career Coaching program. "We're trying to move away from the training as an event, to training as part of your work."

Traditionally, training professionals have used a waterfall-type method called instructional system design. They start with learning objectives, build lessons and assessment tools, and then deliver the course and evaluate how well it worked.

The agile approach Brantley uses has continuous planning and development to ensure the course delivers value. For each hour



**Bill Brantley**  
Senior HR Specialist  
U.S. Patent and  
Trademark Office  
(USPTO)

of training, there is about five to eight hours of planning. "It takes me a little bit less time to build a course, but that's because it's kind of being built in motion," said Brantley, who also co-leads the federal government's Agile/Lean Community of Practice and is a lifelong learner and certified Disciplined Agile Practitioner. Brantley shared additional insights on his approach to agile course design.

## Main characteristics of this project

- Continuous change
- Responsiveness to the customer
- Continuous learning

## User story: In the words of a user, whom will this project help and how?

As a **USPTO employee**, I want to **develop skills** so that **I can perform my job and advance in my career**.

## Project impact

Student evaluations are proof that the information is taking root. This style of learning enables them to retain and use the information they learn. There is interactive discussion — chats and breakout groups — built into each lesson, as opposed to hours of lecture-style teaching and workbook assignments afterward. "Their resumes are better," Brantley said. "They're doing better in interviews. They're getting jobs. That's the end goal of training."

## Agile in action

- Using an iterative approach, Brantley develops mini courses or series of beta courses to get feedback from learners as the course is further developed and improved. “We’re also evaluating how... the learner [is] using it as they go through the path,” he said.
- Brantley used this method for a resume writing course. He began with a short, simple course and then solicited feedback from learners. He tweaked the learning objectives and built out the course, using constant dialogue with students to better understand what they needed.
- The questions he posed to users included: Do you have suggestions on how we can improve this course? Did we answer the questions you had when you came to the class? “Because as adult learners, when people come to a resume class, they’ve had experience with resumes and job hunting and all this, so they have some expectations,” Brantley said. “They have some questions, and I want to make sure I capture those.”
- He also monitors the federal government’s flagship jobs website, USAJobs.gov, to ensure that new resume requirements for federal jobs are flagged and incorporated into his courses.
- To measure competency, Brantley assesses how a student has changed in terms of knowledge, skills and abilities at the end of the course. That includes evaluating resumes after the course and asking students how they would apply information that they learned.

## Project challenges

One of the biggest hurdles is getting people to adapt to a new style of delivering training and development. Some instructors see iterative course design as a half-baked approach. They want the entire, finished product all at once — not a minimum viable product or MVP.

## Advice to get started

It takes time for people to truly understand what agile means and that it isn’t just for IT. Familiarize yourself and others with different agile methods, whether that is a Kanban board to digitally visualize and manage projects, or product backlogs to prioritize what features are addressed first. Don’t overcomplicate things. Pick a few techniques that work for your team and your situation and go from there.

## Resources

- Federal employees can join the [Agile/Lean Community of Practice](#).
- For insights on niche areas of e-learning, check out this weekly live videocast and podcast: “[Instructional Designers in Offices Drinking Coffee](#).”
- The Association for Talent Development hosted a webinar on performance development and goal-setting for agile teams that you can view [here](#), along with additional resources.
- “[Applying Agile Practices — Agile Human Resources \(HR\)](#)” from GSA also offers helpful resources for HR professionals.



*Innovate, Grow, Know with ThunderCat Technology and Dell Technologies*

---

**CLOUD** 

**ANALYTICS** 

**SECURITY** 

**INFRASTRUCTURE** 

# Moving From Tools to Cultural Changes With DevSecOps

*An interview with Kurt Steege, Chief Technology Officer, ThunderCat Technology*

"If it ain't broke, don't fix it" is a mentality that has stymied governments for decades — robbing agencies of the benefits that come from incrementally improving operations and adapting to change.

But with growing acceptance of approaches such as Agile and DevSecOps taking hold over the years, the business-as-usual mindset is gradually fading.

"The thing that folks are taking to heart is that these methodologies aren't about tools but about cultural change," said Kurt Steege, Chief Technology Officer at IT solutions provider ThunderCat Technology. "It's about how you can take your mission to the next level and solve problems in a completely new way."

For example, pre-COVID-19, consider that many government agencies saw mass telework as something farfetched and impossible to accommodate. Networks and infrastructure were not built to support a fully remote workforce, but when confronted with no other option, agencies had to find a solution.

Joining forces with partners such as Dell Technologies, ThunderCat takes a consultative approach with its government customers to ensure the best possible solution. "The key is understanding what risk is tolerable and what risk is not," Steege said.

He shared three tips that agencies should keep in mind as they embrace incremental development using DevSecOps.

## 1. Prioritize the three-legged stool: people, processes and technology

Traditionally, silos have compartmentalized the work happening in the IT space.

"And when you start to bring development and security into that mix, there's this tendency to finger point when issues arise, unless there's a mindset shift," Steege said. "Teams must work collaboratively to ensure all legs of the stool have equal focus, otherwise the stability is comprimized."

## 2. Embed security into everything you do

It's not a coincidence that the "Sec" in DevSecOps is in the middle because it is critical to everything that agencies do, Steege said. In the past, agencies treated security as an add-on. "If you do that, you're setting yourself up for a much longer time period to get things done," he said.

The concept of DevSecOps incorporates security into every aspect of the process — from the initial work and throughout the deployment process. Integrating security throughout the entire lifecycle puts you in a better position to catch and remediate issues early, which leads to more secure and rapid deployments.

## 3. Measure success

"You need to be able to measure what is going on when dealing with more integrated teams," Steege said. He highlighted an extensive annual report from research firm [DORA](#), which details the importance of measuring success within the DevOps framework.

Metrics to consider are the time it takes to put the latest software updates into production, how often changes are actually implemented, the change failure rate, and how long it takes to restore services if there's an issue.

**"Although culturally it can be hard, bringing together development, operations and security into an integrated team, working together to achieve a common goal, can accomplish so much more than working in silos," Steege said.**

Apply Agile to:

# Legacy IT

Agile sounds great for new projects, but with so much legacy inventory, how do agencies thoughtfully and securely modernize without disrupting critical business?

“Incremental development is important in these situations as well,” according to 18F recommendations. “Incremental development can allow end users to start seeing benefits even before the legacy system can be fully replaced.”

And nowadays, you’re hearing agile and DevOps discussed in the same breath. But what does it all mean? Clint Troxel, 18F Supervisor and Innovation Specialist, put it this way: “Agile without DevOps is a bundle of potential energy with no outlet.”

Developers can make all the iterative changes to software that they want, but operations and security teams must be in the loop to ensure that new features, bug fixes and product releases occur in a timely manner.

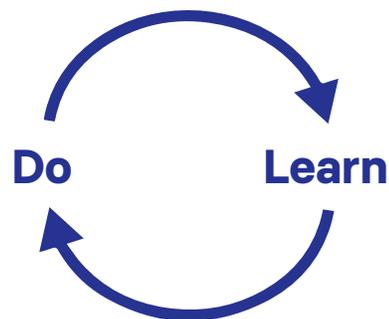
## 1. Find a way to do discovery.

Legacy systems are those that have an old code base and cannot be quickly maintained, said Alberto Colon-Viera, a Digital Services Expert with USDS. There isn’t much transparency around how they work, and there is a lot of interwoven functionality that agencies don’t fully understand. “You don’t know what you don’t know,” when it comes to these systems, Colon-Viera said.

So, back to the dilemma of how to do agile on legacy systems. That was the topic of discussion during the [AGL Summit East 2019](#) in Washington, D.C. We’ve outlined highlights from a candid conversation about modernizing legacy systems.



## A simpler approach to doing agile



*Adapted from [Civiqueso](#)*

Agile provides agencies with a path to start doing discovery and to look at the problems through a different lens. Using agile, they can take an iterative, incremental and highly interactive approach to understanding their IT systems and then deciding how best to modernize in small chunks.

## 2. Take it slow.

Ashley Owens, Director of Acquisition at 18F, encouraged attendees to approach the modernization of legacy systems in a human-centered way. For internal end users, think of it like a breakup, she said: “You’ve been with this system a long time. You’ve been together for like 20 years.”

Deciding how this breakup should happen is key. But spoiler alert: It should happen slowly, Owens said. Ask the right questions, including what should be built vs. bought and what the impact on end users will be.

## 3. Have clear outcomes.

Everett Harper, CEO and Co-Founder of Truss, explained that legacy systems are often Frankensteins of multiple systems that have survived mergers and reorganizations.

When it comes to these systems, the mindset is often on maintaining, rather than the ability of the system to deliver. Agile is a tool for getting everyone in the same room and on the same page to discuss and define what an outcome actually looks like.

## 4. Invest in cross-functional teams.

The cross-functional teams of agile are very important. You need all the pieces, and you need them working together, Owens said. Although you have contracting professionals who can write contracts, the harder part is working closely with the product person to identify low-hanging fruit, determine what you can turn off on the system and when you can begin to break the system down.

The product person also knows how fast something new can be turned on, which should be central to the acquisition process. Agile empowers agencies to look at acquisition in a different way — both incrementally and holistically.

You should take outputs from that discussion with the product expert to determine what part of the acquisition needs to happen when. You also need engineers to be a part of that conversation and provide input on the infrastructure — where that software will live. You then need user experience professionals to represent the internal and external end users.

## 5. Empower and build trust across teams.

Doing agile on legacy systems requires a shift in mindset for government, Owens said. This involves agencies assuming their roles as empowered product owners and understanding their systems and how they work.

“The entire agency isn’t going to wake up and be agile,” she said. The more successful agile projects there are, the more the appetite for agile will grow.

As you look to bring users into the room, help them see that you are going to meet regulatory mandates. Ultimately, hearing less about government IT projects’ failure will be a sign that agile is working.

### Resources

- Agile coaches from state and local government talk about their challenges and successes on the frontlines of government during this [AGL Live chat](#).
- GSA has [outlined steps](#) to consider for starting a project that has been deemed fit for agile development.
- Check out this [post on Medium](#) from local government professionals in Austin, Texas: “5 Fundamentals for Designing an Agile Organization (esp in local government).”

# A Data Center Customized for Your Unique Needs

## Is your infrastructure overburdened with supporting new remote users?

The experts at Connection® Public Sector Solutions can start you on the path to better performance, security, and flexibility in your data center.

Start with a [Dell EMC Live Optics Assessment](#) to get a clearer picture of your current workloads and performance—and we'll help you design a solution that meets your unique needs and budget.

To learn more about how we can help you deploy the latest technologies in your data center, contact an Account Manager today.

**Connection**<sup>®</sup>  
PUBLIC SECTOR SOLUTIONS  
**we solve IT**<sup>®</sup>

In partnership with

**DELL** Technologies  
TITANIUM PARTNER

1.800.800.0019  
[www.connection.com/ps](http://www.connection.com/ps)

# 3 Tips for Modernizing IT With Business Requirements in Mind

*An interview with Heather Eakin, Manager, Data Center Practice, Connection*

The siloed nature of many government organizations has rippling effects that run deep.

One of the more telling consequences magnified amid COVID-19 is the inability for some agencies to quickly meet workforce and public demands through technology. “Agencies looking to be more agile and shift gears rapidly are hard-pressed to do so with traditional, three-tier infrastructure,” said Heather Eakin, Manager, Data Center Practice at Connection. “Resources are siloed, and so are the people who manage those resources.”

Eakin and her colleagues at Connection are working closely with agencies to update their legacy data centers and migrate to a hybrid cloud. Connection is a Dell Technologies titanium level partner that offers a complete suite of assessments, including LiveOptics, an industry standard for visualizing and analyzing IT infrastructure and data center workloads. The goal: to architect a custom-fit solution for organizations according to their unique requirements.

**“Having an infrastructure such as a hybrid cloud, which pools the resources together, makes it easier to reallocate them as the mission needs change,” Eakin said.**

With hybrid cloud, agencies have access to self-service options and a consolidated view to manage IT resources both in the cloud and on premises. Eakin shared three best practices for agencies to consider when taking an agile approach to acquiring such custom-fit solutions.

## 1. Understand business and technical requirements

Having a clear understanding of your agency’s business and technical requirements is critical. “Without a clear understanding of the end goal, you could easily implement a solution that won’t do what you need it to or one that isn’t easily adopted by the end-user community.”

Either way, you’re left with a solution that might only meet a fraction of your needs — if any.

## 2. Prioritize assessments

Assessments are closely tied to understanding your agency’s needs and supporting those efforts. “An assessment is a good place to start because it can help you understand what you actually have in your environment,” Eakin said. It can help you answer key questions, including what issues may be festering in your environment and any constraints you might not be aware of.

“All of those questions play a role in understanding how you can get from where you are now to where you want to go,” she said.

## 3. Don’t make the journey alone

“You don’t have to do it all alone,” Eakin said. “Develop a relationship with a trusted adviser who can help you discern those technical requirements and present options and solutions that meet your agency’s needs.”

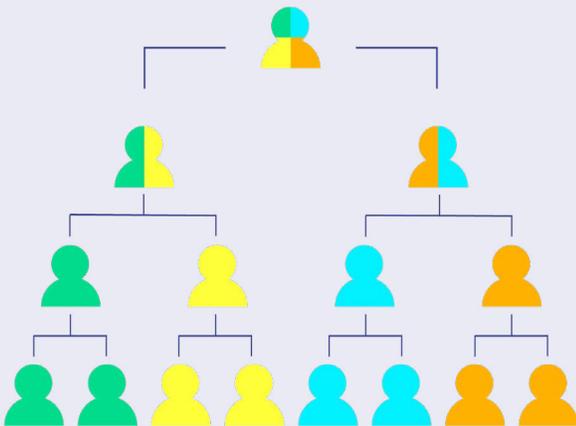
One of the biggest challenges that agencies face is finding the right fit because there are many solutions that could potentially meet their needs. “With partners like Connection and Dell, we can help guide you through your options and cut through the chaos to form a clear picture of what will work for you,” Eakin said.

# Agile vs. Not Agile

In the HR graphic below, there is a clear distinction between traditional HR management, which is focused on implementing requirements and aligning the workforce with those changes, vs. agile management, which prioritizes speed and the employee experience. Agile HR professionals value adaptiveness and the ability to meet fluctuating workforce demands.

## TRADITIONAL MANAGEMENT

Focus on Control & Alignment

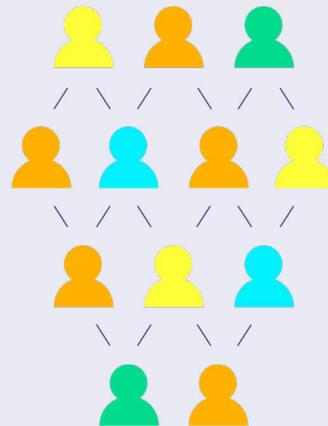


**Creates:** Execution, Order, Control

**HR's Job:** Implement controls, standards, and systems to **drive alignment & execution**

## AGILE MANAGEMENT

Focus on Speed & Customers



**Creates:** Adaptability, Innovation, Speed

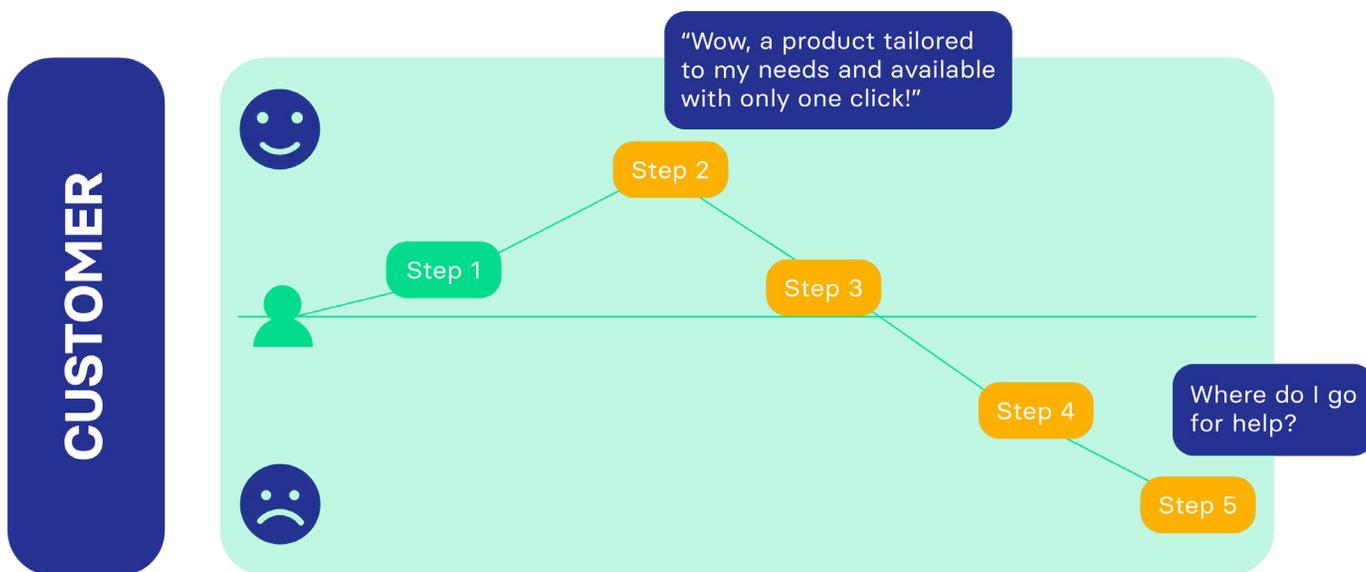
**HR's Job:** Implement programs, systems and strategies, which **foster expertise, collaboration, and decision-making**

Source: [GSA, Agile HR presentation by Leigh Ann Shaffner](#)

Throughout this guide, we've provided several examples of what agile in action looks like across government. But having a visual representation of agile vs. non-agile practices is equally — if not more — powerful.

The first graphic simulates the initial steps in an end-to-end customer journey. You can see that customer satisfaction fluctuates from the happy to unhappy range as the customer gets

lost in the bureaucracy of manual and delayed processes. Although the product delivery arm of the organization used agile practices to develop a user-friendly application, that same agile mindset did not permeate the entire customer journey. This resulted in a frustrated and dissatisfied customer.



**Agile:**

**Not Agile:**

**ORGANIZATION**

**Delivery Organization**

- Optimized product offerings
- Digitized sales/signup

**Operations**

- Lots of manual and redundant work
- Delayed processes not meeting customer expectations
- Clarifying questions to the customer

**Customer Service**

- Multiple handoffs in resolving customer request
- No service mindset to impress the customer
- Errors and follow-ups during request resolution

*Adapted from McKinsey & Company*



# Box for government

Modernize your mission-critical processes

Transform field inspections and optimize evidence collection by simplifying field operations with Box. With Box capture, classify, and search for rich content, starting case work from the field. From case workers to department personnel, we make it easy for everyone to access and share critical information from anywhere, on any device.

Learn more at [box.com/industries/government](https://box.com/industries/government)



# What's Your Plan for Managing Agency Operations Post-COVID-19?

*An interview with Sonny Hashmi, Managing Director, Global Government, Box*

There are still unknowns about what government operations will look like going forward, but one thing is certain: This new normal won't be a mirror image of what we experienced pre-COVID-19.

What that means and how those changes manifest will differ by agency. **"The time is now to start the conversation with leadership about what policies, culture and workplace practices will be," said Sonny Hashmi, Managing Director, Global Government at Box.**

Hashmi and his team have played an integral role in helping agencies such as the Agriculture Department implement secure, cloud-based tools in a matter of days; employees couldn't wait months in the midst of a pandemic. Having access to digital workflows, document sharing and signatures were critical for the remote workforce to continue supporting customers who could no longer visit service centers but still needed help.

Maybe your agency is making similar adjustments to ensure business continuity. Either way, all agencies should be preparing for the future while prioritizing the issues outlined below.

## 1. Prioritize security

"The one constant is that security is priority," Hashmi said. "Personally identifiable information and national security information cannot be compromised."

That was easier said than done as massive amounts of employees began working remotely. "Agencies don't have control over home infrastructure, which is a big challenge," he said.

But the cloud-based model for security is changing that paradigm by securely connecting employees to government resources. "The capabilities are more robust, secure and compliant with government requirements, and there are a lot of use cases to prove it," Hashmi said.

## 2. Start taking action

Now is not the time to develop a five-year plan that collects dust on the shelf or that might be obsolete within months. Instead, Hashmi recommends taking small steps toward the future today.

"A lot of these collaboration technologies and cloud platforms may not have been mission-critical before, but now they are," he said. For one, some people who may never return to the office. They will need digital tools to continue working.

The same is true on the customer side. For Chris Tonjes, Chief Information Officer for Washington, D.C.'s Office of the Attorney General, moving operations online was critical for continuity during the pandemic. There was pent up demand from people who wanted access to digital forms, so moving business processes online was a welcomed change.

## 3. Keep users' needs top of mind

"Increasingly, citizens and employees will expect to work in new ways," Hashmi said. "Supporting them will require a reprioritization of investments by moving dollars away from traditional IT projects to cloud-based options."

This shift can help agencies reduce the total cost of ownership for IT investments and long-term operations and maintenance costs — freeing them up to meet future needs for employees and customers.

When you prioritize security and users' needs to take meaningful actions, you position your agency to be responsive and adaptable to change. Ultimately, preparing your operations for a post-COVID-19 world means embracing a digital mindset, new policies and new ways of working that put people first.

# What's Next?

The agile movement started because people wanted to try new things and experiment with new ways of working. But what works for one organization might not work for your agency, and that is OK. The spirit of agile is about finding what best suits your organization so that you can make improvements and adapt to change quickly.

To help you with next steps in your agile journey, we spoke with Darryl Peek, who served as Director of Digital Innovation and Solutions at the Homeland Security Department's Office of the Chief Technology Officer. Peek also led the agency's agile pilot working group. He recommends:



**Darryl Peek**  
Former Director of  
Digital Innovation and  
Solutions, Homeland  
Security Department,  
Office of the Chief  
Technology Officer

## 1. Defining the value proposition of agile.

Ensure that leaders are on board with the new approach and that they will be available to provide decisions, feedback and perspective.

## 2. Prioritizing macro communications.

Have touchpoints that allow people to hear from leaders about what is happening and how they are supporting the effort. Communicate the agile model that works for all levels of the organization.

**3. Getting training.** Make it available to all employees and ensure they are served by a scrum master and product owners who can help them develop a foundation in agile.

**4. Choosing the right tools.** Identify a tool that will help effectively capture user stories and visually track the workflow process.

**5. Measuring effectiveness of your agile model.** What are the metrics of success? Ensure there is a feedback loop for identifying challenges and improving processes.

# About GovLoop

GovLoop's mission is to inspire public sector professionals by serving as the knowledge network for government. GovLoop connects more than 300,000 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](mailto:info@govloop.com).

[govloop.com](http://govloop.com) | [@govloop](https://twitter.com/govloop)

# Thank You

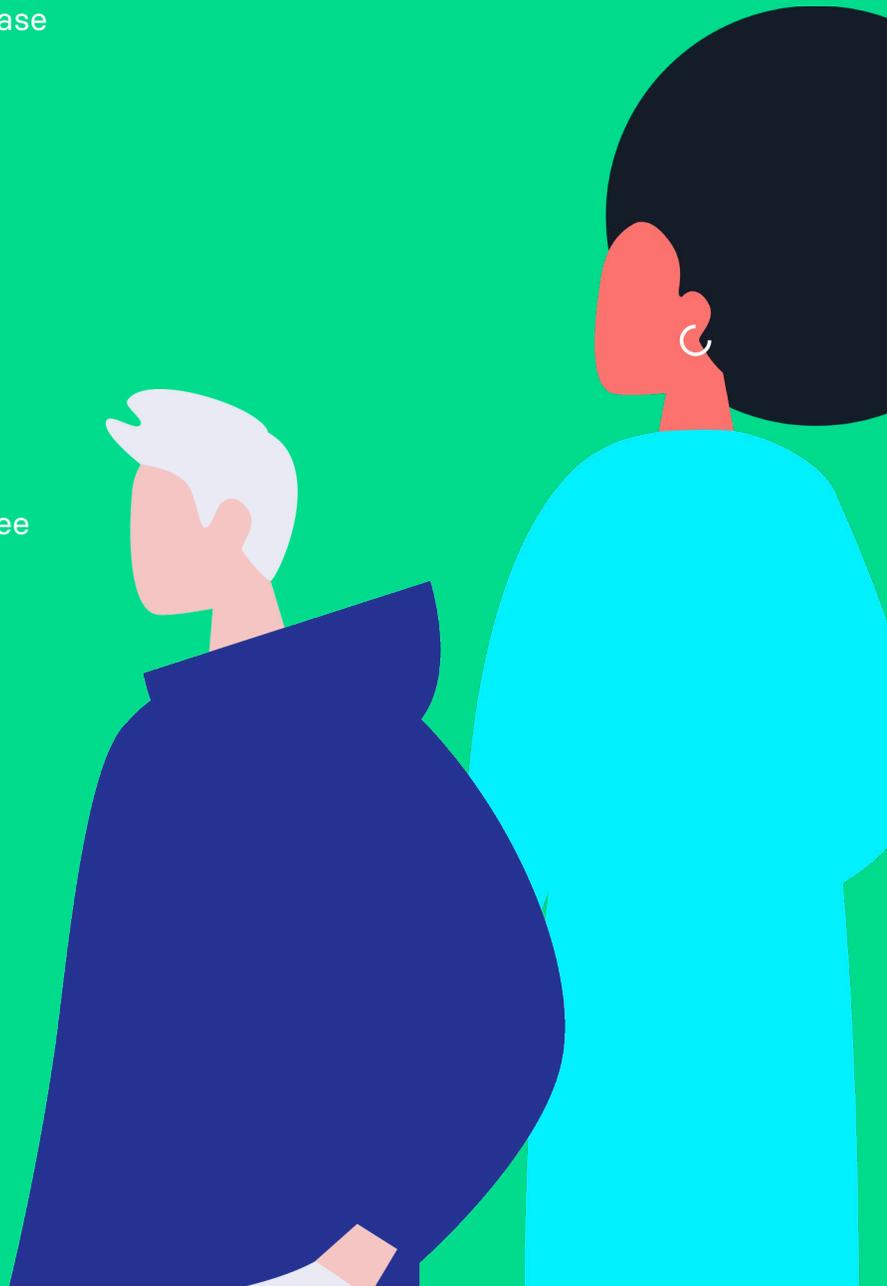
Thank you to Box, Carahsoft, Connection, Dell, Future Tech Enterprise, JTEK Data Solutions, Microsoft, Presidio, Red Hat, Three Wire Systems, ThunderCat Technology and Wildflower International for their support of this valuable resource for public sector professionals.

# Author

Nicole Blake Johnson, Managing Editor

# Designer

Jacob Hege, Junior Graphic Designer





1152 15th St. NW Suite 800  
Washington, DC 20005  
P: (202) 407-7421  
F: (202) 407-7501  
[www.govloop.com](http://www.govloop.com)  
@GovLoop