

Your Guide to Virtual Collaboration and Training in Government



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Executive Summary

The COVID-19 pandemic has changed the conversation around how and where public-sector employees work. In the years to come, remote work might be a necessity rather than a perk. Plus, now that many government employees have successfully worked remotely, agencies may have to make it a permanent option.

To embrace this change, agencies will need to connect with and develop their workers across increasingly large distances. **In 2021 and beyond, remote work, virtual training and virtual collaboration will be more common than before.**

Take virtual collaboration. In the remote work era, government employees can brainstorm ideas, conduct meetings and even play games with one another online. These interactions often produce the same results as in-person encounters, all without travel or other physical considerations.



Meanwhile, training no longer needs to happen inside agencies' offices. Today, agencies are discovering they can cultivate the talent they need remotely. Whether it is onboarding or professional development, recruitment or retraining, agencies have unprecedented digital options for their workforces.

But when dealing with federal, state and local agencies, cooperation and education are not one-size-fits-all. If your agency needs help translating its collaboration and training into the virtual world, use this guide as your blueprint. The insights, tips and tricks we provide will help you work effortlessly either at the office or remotely:

- First, we summarize the latest data, news, quotes and statistics to highlight how the public sector currently trains and works.
- Second, we explore five key components of successful virtual training and collaboration: culture, cybersecurity, professional development, skillsets and the user experience (UX).
- Third, we share insights from federal, state and local thought leaders about how their agencies have used virtual training and collaboration.
- Fourth, we share best practices for maximizing both in-person and virtual training and collaboration at your agency.

Agencies do not need to abandon traditional cooperation or learning approaches. But those that consider how to operate virtually are the best prepared for the world ahead. And, while onsite and virtual work may mix more frequently, the way agencies focus on constituents will always stay the same.

At a Glance:

Viewing the Virtual Landscape

5 Virtual Training and Collaboration Terms to Know

The following terms are crucial for understanding and discussing virtual training and collaboration.

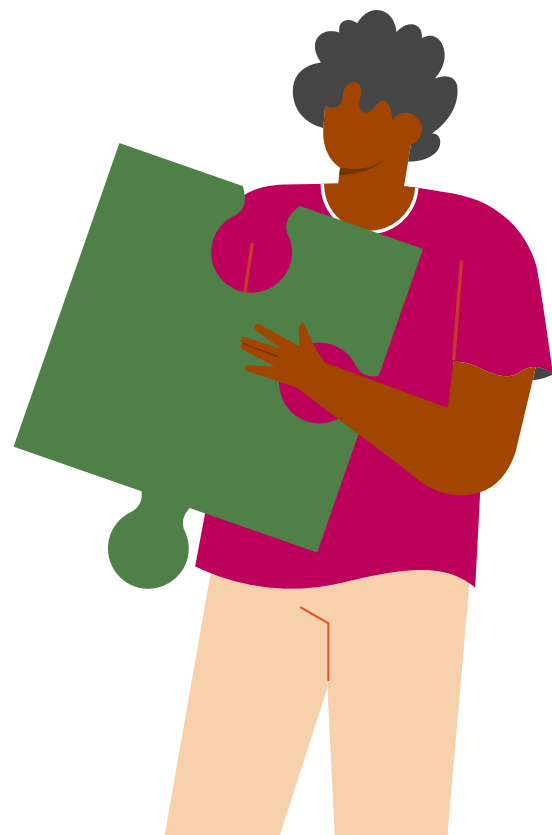
Cloud computing – Cloud computing underpins reliable remote work as the cloud comes from decentralized IT spread across multiple locations. Clouds deliver resources such as data storage on demand with little to no physical IT infrastructure. Subsequently, cloud can make virtual training and collaboration more affordable, flexible and scalable.

Endpoints – Endpoints are devices such as laptops that connect to IT networks. As a result, managing and securing network endpoints are crucial for agencies implementing remote work. Without well-protected endpoints, agencies are vulnerable to risks such as cybercriminals. Employees without reliable endpoints cannot use virtual training and collaboration as easily.

Gamification – Gamification applies gaming principles and design elements to non-gaming contexts. At agencies, gamification can make remote collaboration, training and work more engaging, informative and valuable. The more fun employees have, the more connected they may feel to their agency.

Reskilling – Reskilling occurs when employees acquire fresh skills. Imagine a person who learns how to analyze data for the first time. Through reskilling, anyone can expand their skillset and ultimately improve their agency. Reskilling can also save agencies energy, money and time by improving existing talent rather than investing in new hires.

Upskilling – Upskilling involves people elevating their initial capabilities. Picture designers who create visual materials. After learning about new software, designers can add videomaking to their design skills. Upskilling updates workers on the latest developments in their fields.



6 Facts About the Federal Virtual World

General IT spending, including support for virtual work

\$90.9B

The projected amount of governmentwide IT spending across federal agencies for fiscal 2021.

Source: [Federal IT Dashboard](#)

\$37.7B

The projected amount of total IT spending at the Defense Department (DoD) for fiscal 2021, about 41% of the above total.

Source: [Federal IT Dashboard](#)

Federal telework statistics

42%

The percentage of federal employees eligible for telework in fiscal 2018, the most recent numbers available. About 22% of those employees worked remotely that year.

Source: [Telework.gov](#)

39%

The percentage of federal employees with situational telework in fiscal 2018, vs. 66% with routine telework.

Source: [Telework.gov](#)

Telework spending at the Office of Personnel and Management (OPM), the federal government's human resources (HR) arm

\$3.8M

The amount OPM had available to enable telework and DevOps tools in September 2020, amid the COVID-19 pandemic. DevOps combines software development and IT operations into one business methodology.

Source: [OPM](#)

\$7.3M

The amount OPM had available for telecom in September 2020, with another \$1 million available for hardware and software.

Source: [OPM](#)

6 Facts About the State and Local Virtual Worlds

What state CIOs expect to change

No. 1

The rank state chief information officers (CIOs) gave expanded work from home and remote work options among the business processes, practices and investments most likely to change after the COVID-19 pandemic.

Source: National Association of State Chief Information Officers (NASCIO)

No. 2

The slot state CIOs assigned to expanded use of collaboration platforms and remote meetings among the business processes, practices and investments most likely to change after the COVID-19 pandemic.

Source: NASCIO

Where state CIOs rank virtual capabilities

No. 7

The place state CIOs ranked remote work — including virtual meeting and collaboration capabilities — in their top 10 priorities for 2021.

Source: NASCIO

How states are performing digitally

1

One state — California — had a modern digital government experience, including a statewide digital strategy and workforce training related to IT modernization, in 2020.

Source: Internet Association (IA)

3

The number of states that had a cloud-first statute prioritizing cloud solutions in 2020, with the states being Delaware, Minnesota and New Jersey.

Source: IA

No. 9

The spot where state CIOs ranked collaboration technologies such as file sharing tools in their top 10 priorities for 2021.

Source: NASCIO

The 5 Pillars of Going Virtual

Remote work has many potential benefits. For example, it can save government employees money and time commuting, and it can enable people to work alongside family, friends and pets they would otherwise see less.

But moving in-person collaboration and training online is not as simple as shifting physical and virtual gears. We depend on nuances such as body language for feedback, an advantage that often disappears online. Whether physical or virtual, collaboration and training require agencies to carefully consider what best fits their employees' needs.

All told, quality virtual collaboration and training involve agencies' people, processes and technology working together.

To successfully collaborate and train virtually, agencies should examine their culture, cybersecurity, professional development, skillsets and UX. Ultimately, agencies that consider all five pillars can take on both onsite and remote work more easily.

The next few sections highlight recent developments from each pillar, illustrating how agencies can seamlessly virtualize their collaboration and training.



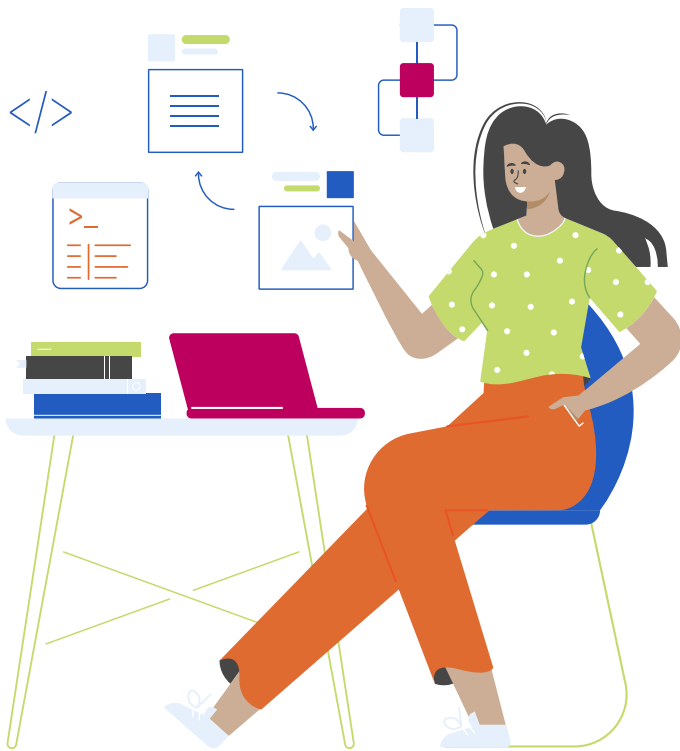
Connecting In-Person and Remote Workforces

Pillar #1

4 Virtual Culture Success Stories

Agency culture dictates how employees behave internally with one another and externally with constituents. To that end, culture is a vital concern for agencies. Those that fail to consider how their culture functions may disappoint employees, the public or both.

Remote work adds another dimension to workplace culture. Getting everyone on the same page about an agency's culture grows harder when some people are onsite and others are remote. To reach goals such as improved diversity, equity and inclusion, agencies will need to consider their physical and virtual identities equally.



1. Digitize cultural training

In January 2020, Oregon's Department of Transportation (ODOT) digitized some in-person classes for its [Construction Training Program](#). The shift demonstrates how agencies can use technology to reach underserved communities such as people with hearing challenges.

The Americans with Disabilities Act (ADA) of 1990 requires agencies to provide reasonable accommodations for people and employees with disabilities. Because of the COVID-19 pandemic, ODOT could no longer safely conduct some of its ADA Inspector Certification training in person.

By transforming parts of this training program, the department encouraged social distancing and conducted crucial ADA lessons simultaneously.

2. Elevate digital literacy

Digital literacy is the ability to analyze, create, find and share knowledge using communications and IT. Consequently, digital literacy anchors the virtual world.

Throughout 2020, the Library of Congress (LOC) [leveraged virtual lightning talks](#) to boost digital

literacy agencywide. Lightning talks are brief presentations on one topic. LOC presenters covered knowledge in their areas of practice during 15-minute sessions aimed at raising digital literacy.

Virtual lightning talks illustrate how agencies can rapidly overcome online distractions with focused content. Online presentations such as these also require less physical travel for attendees.



3. Drive equity with data

In November 2020, Los Angeles' controller launched a website underscoring how data can spark virtual collaboration. Collecting data from several federal agencies, the [L.A. Equity Index](#) rates the city's equity across four categories. Now, users can see how their tract of Los Angeles ranks on a scale of one to 10 for educational, environmental, resource access and socioeconomic conditions.

Tools such as the Equity Index can not only help residents see their communities more clearly, they can spark lasting change. Using Equity Index maps, policymakers can improve sections of Los Angeles lagging in, say, broadband internet access.

4. Level the digital playing field

In January 2020, New York City launched the country's first plan to close a digital divide. [The Internet Master Plan](#) imagines a city with broadband internet access citywide.

The strategy centers on five principles: affordability, choice, equity, performance and privacy. Collectively, these standards strive to provide inexpensive, reliable and speedy broadband access at home or on the move.

Eventually, municipal leaders expect the plan will aid New York City's long-term economic growth. By providing equal broadband access, governments such as New York's ensure that residents can participate in their community's prosperity.

Balancing Privacy and Security Virtually

Pillar #2

4 Virtual Cybersecurity Success Stories

The data involved in virtual collaboration and training creates two concerns. First, agencies must protect this data from internal and external cyberthreats. Second, they must preserve individual and organizational privacy whenever possible.

Although remote work has expanded out of necessity, it also generates more opportunities for cybercrime. The more endpoints the public sector has, the more vulnerabilities exist for cybercriminals to potentially exploit.

The reality is that governments must always practice cybersecurity vigilance without harming UX for constituents. Organizations that do not adequately protect their virtual collaboration and training operations are playing with fire. Cybersecurity breaches can cost agencies budget dollars, public trust and mission wins.

1. Team with allies

Virtual cybersecurity training can occur anytime, anywhere and across any distance. Consequently, virtual tools can make cybersecurity training collaborative across organizations.

Though separated by the Pacific Ocean, the U.S. and Australia agreed in November 2020 to [continuously develop a virtual learning opportunity together](#). Going forward, the Australian Defence Force (ADF) and DoD will team up on U.S. Cyber Command's cyber training range.

The Persistent Cyber Training Environment prepares users for real-world defensive missions across boundaries and networks. The environment additionally sharpens cybersecurity readiness through constantly evolving courses inspired by partnerships including the U.S. and Australia's.

2. Know the enemy

From the federal level down, agencies are tackling one of cybersecurity's most troubling trends — attacks against K-12 educational institutions and their remote learning services.

In December 2020, the FBI, the Cybersecurity and Infrastructure Security Agency (CISA) and the Multi-State Information Sharing and Analysis Center issued a [Joint Cybersecurity Advisory](#) about this startling phenomenon.

The advisory warned K-12 organizations about dangers such as malware — or malicious software — that cybercriminals use. The alert also listed steps K-12 entities can take to protect themselves, such as automatically updating antivirus software.

Initiatives such as these suggest agencies are striving to detect, prevent and survive more cyberattacks remotely.

3. Explore zero trust

Zero trust security automatically distrusts everything inside and outside agencies' network perimeters. Networks are continuously monitored, and entities such as users must be validated before accessing sensitive data and other assets. Collectively, these traits are making zero trust increasingly appealing to agencies.

Consider New York City's Cyber Command (NYC3), which published a [request for information](#) in November 2020 about a citywide zero trust architecture.

In the request, NYC3 credited zero trust security with helping ensure its continuity of operations. The agency also praised zero trust for eliminating downtime while NYC3 became 100% remote because of COVID-19. Benefits such as these illuminate zero trust's potential to support agencies' virtual needs.

4. Follow network security guidance

Launched in 2007, the Trusted Internet Connections (TIC) program seeks to fortify federal network and perimeter security governmentwide. TIC 3.0 added securing federal data, networks and boundaries to these objectives while providing visibility into agency traffic such as cloud communications.

In December 2020, CISA issued a [draft use case](#) explaining how agencies can secure remote users. CISA's use case covers two common virtual scenarios.

The first situation involves any remote user device connecting to network infrastructure that agencies do not directly manage or maintain. The second scenario features remote user devices such as smartphones that are privately owned and not supplied by agencies. Use cases like these can help agencies safely navigate virtual activities.



Digitizing Personal and Professional Growth

Pillar
#3

4 Virtual Professional Development Success Stories

Professional development cultivates the personal and occupational qualities that make people stronger employees. Across agencies, professional development programs are also increasingly popular because of their impact on employees. From onboarding to hiring, promotion to retirement, professional development affects workers' entire careers.

Yet remote work creates new challenges for professional development. How do agencies keep their employees engaged across vast distances? What about soft skills, those non-technical abilities like positivity that can help workforces thrive?

In the coming years, agencies may need to nurture soft skills using interesting but informative virtual tools. Agencies that cannot develop professionals virtually may miss chances to reach employees who expect such opportunities for personal and career growth.

1. Transform onboarding

Onboarding gives recent hires the behaviors, knowledge and skills that will help them ace their new roles. For agencies, quality onboarding can launch lifelong dedication to public service.

In 2020, COVID-19 disrupted one of federal onboarding's most critical steps: the oath of office. The oath of office commits every federal career to serving citizens above all else. In March 2020, DoD discovered its Personnel Services Division (PSD) did not have the equipment to administer this oath virtually.

Enter the Defense Digital Services (DDS), which partnered with PSD to [digitize onboarding procedures](#) such as the oath. By November 2020, about 1,000 DoD employees had onboarded virtually using tools such as computer cameras.



2. Teach the basics

Agencies cannot hire personnel who do not exist. In September 2020, North Dakota's Information Technology Department (NDIT) announced it would pay the registration fees for area middle and high school students to participate in an online cybersecurity competition.

Begun in 2008, the Air Force Association's (AFA) **CyberPatriot** contest hopes to inspire K-12 students to pursue careers in cybersecurity and related fields. Participants find and fix online cybersecurity vulnerabilities in virtual operating systems, with the winning team making the most secure environment. By promoting initiatives such as CyberPatriot, agencies ensure their talent pool for cybersecurity professionals doesn't run dry.

3. Conduct job fairs online

Job fairs are a staple of professional development as they curate employment and training options that forge more capable workers. In recent years, **virtual job fairs** have become an affordable, more agile alternative to physical events.

The Health Resources and Services Administration's virtual jobs fairs are no exception. These free digital mixers connect health care sites with primary care trainees and practicing clinicians who are seeking jobs. Overall, the virtual format assists the administration with leading and financially supporting health care providers. As a bonus, virtual job fairs are cheaper to conduct and accessible nationwide.

4. Modernize testing

In July 2020, OPM released guidance for implementing then-President Trump's executive order for modernizing federal hiring. Issued in June 2020, the order mandated that federal agencies focus on the skills job applicants possess plus their educational degrees.

OPM's guidance explained various ways agencies could gauge job seekers' professional development. Among the options were computerized or video-based situational judgment tests, which asked participants to detail how they would handle work challenges. Using virtual methods such as these, agencies can rate employees' professional development potential without ever meeting in person.

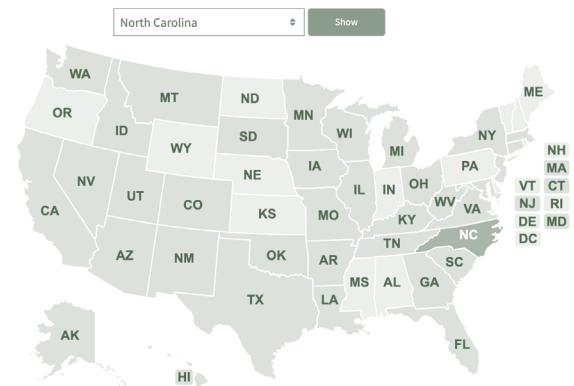
Virtual Job Fair - October 2019

The Virtual Job Fair held in October 2019 included 100 sites from 36 states promoting 1,317 job vacancies.

Contact the sites directly for more information about available job opportunities.

Select a state, or use the drop-down menu, to view contact information for the participating sites.

Participating sites: AL, AK, AZ, AR, CA, CO, CT, FL, GA, HI, ID, IL, IA, KY, LA, MD, MA, MI, MN, MO, MT, NV, NJ, NM, NY, NC, OH, OK, SC, SD, TN, TX, UT, VA, WA, WV, and WI.



Recruitment, Reskilling and Upskilling Online

Pillar #4

4 Virtual Skillset Success Stories

Skillsets encompass all the abilities employees need for their duties. Although professional development often focuses on attributes that are measured subjectively, skillsets often concern job-specific competencies such as data entry that are technical and measured objectively.

Nowadays, many agencies realize their workforces need diverse skillsets. But these abilities do not simply appear. Rather, agencies must intentionally cultivate these skillsets through recruitment, reskilling and upskilling.

To obtain skillsets digitally, agencies should understand how their recruiting, reskilling and upskilling will work online. Without reformatting these procedures for the virtual world, agencies may have trouble expanding their skillsets.

1. Revolutionize skills training

Debuting in November 2020, the Air Force's [Digital University](#) has worked to boost digital literacy servicewide. Currently, the program offers more than 12,000 free online courses to all Air Force members. Covering skills such as web development, the university offers a selection of roughly 100,000 licenses in areas such as computer programming.

Digital U's accessible and self-guided courses may also offer a glimpse at future federal reskilling efforts. The Air Force has discussed expanding Digital U to other military branches.

2. Consider the future

Agencies should continually reassess the skillsets their workers need to meet their missions. After all, emerging technologies such as artificial intelligence (AI) – which imitates human cognitive abilities such as reasoning – may dramatically alter how agencies operate.

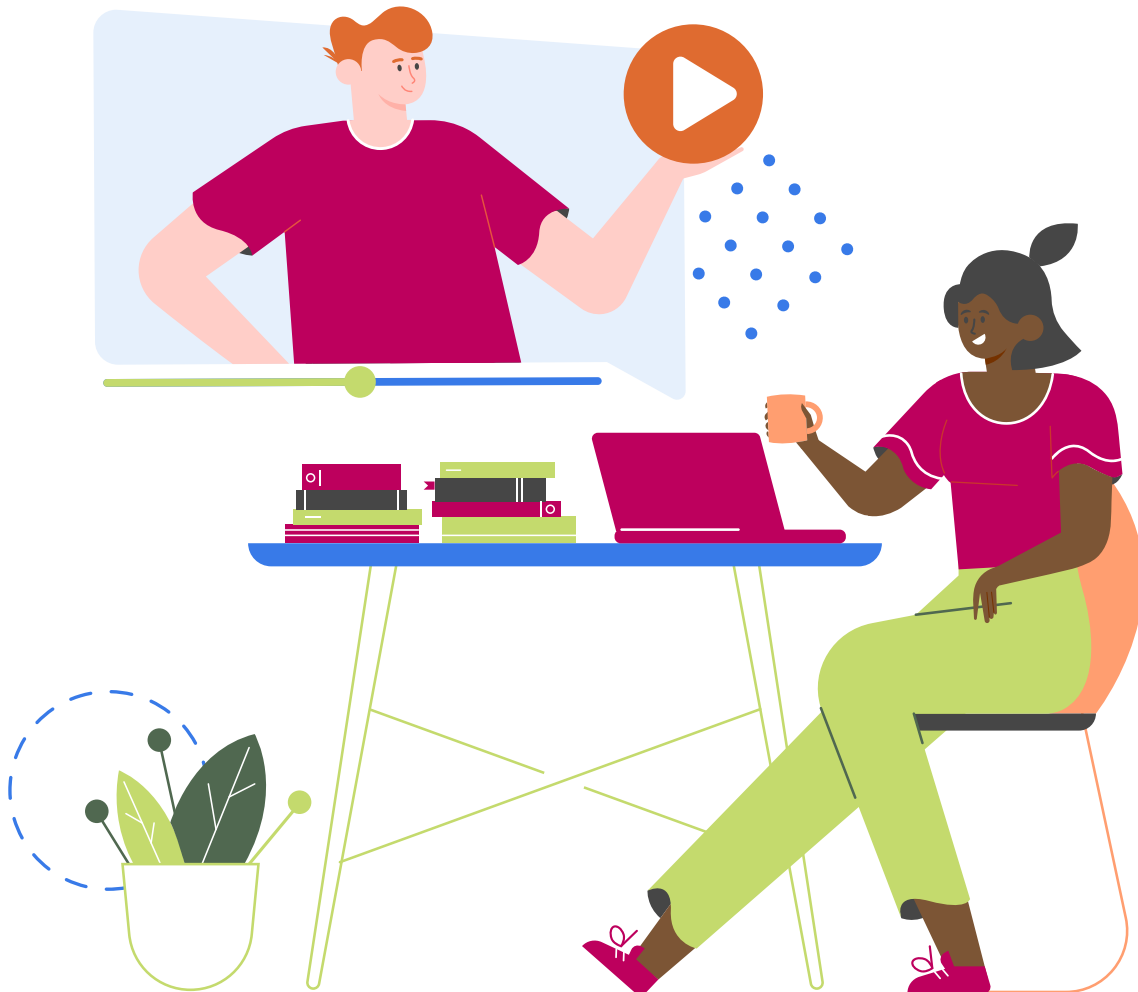
In July 2020, the Bipartisan Policy Center, a think tank that promotes bipartisanship, released a [white paper](#) predicting how agencies might acquire AI skillsets. The paper recommended that agencies embrace nontraditional learning methods – including self-guided online education – to achieve healthy AI skills like coding. Digital learning can help people gain skills in areas such as AI without investing in long-term higher education.

3. Start from scratch

Sometimes, the best way for agencies to gain necessary skills is to create them. Look at [Illinois' Digital Navigator Collaborator program](#). Announced in November 2020, the program will train volunteer applicants to coach residents on digital literacy skills in select communities statewide. The initiative will gradually increase Illinois' digital equity and literacy by teaching connectivity, remote work and digital device skills. Programs such as these can not only close gaps in digital equity, but can also generate fresh economic opportunities in rural, low-income and underserved communities. Perhaps most importantly, these programs can deepen the talent pools available to agencies.

4. Get organized

Having access to a wide range of skills will not help agencies if they get lost in organizational clutter. To prevent this problem, agencies should consider digital personnel management platforms. Recall the Homeland Security Department's (DHS) proposed Cyber Talent Management System. In its [fiscal 2020 budget](#), DHS requested \$11.4 million in funding for the system, a portal for tracking the agency's cybersecurity recruitment and retention. DHS described it as a merit-based system focused on people's capabilities. Digital portals such as these can help agencies constantly refresh employees' skillsets for mission victories.



Putting People First Digitally

Pillar #5

3 User Experience Success Stories

UX covers how a person reacts to using a product or service from start to finish. For agencies, UX is much like a coin.

Employees are the first side of the coin. Inside agencies, workers have functions they must complete and tools for doing so. Internal UX matters because how agencies operate often dictates the progress toward mission success.

The public is the second side of the coin. Agencies serve constituents, yet they will not make headway with confusing or unsatisfying products and services. To best serve constituents, UX must be integral to agencies' digital outreach.



1. Make the physical virtual

Conducting business physically is not always necessary. COVID-19 has produced ample evidence that agencies can serve the public virtually, whether it is for convenience, health or other reasons.



In May 2020, Miami County, Ohio [stopped walk-in transactions](#) for military veterans because of the coronavirus pandemic. Instead, the county's Veterans' Services Commission established stations in its office waiting area where employees and veterans could talk via laptops. By scheduling appointments for these discussions, the commission did its part to protect public health during the COVID-19 emergency. In turn, the agency could conduct more of its exchanges with veterans over email and phone, leaving only the most important conversations for in-person appearances.

2. Reduce paper

The Office of the Senate Sergeant at Arms (SAA) preserves the Senate's historical documents and distributes them to senators for reference. With such influential users, SAA must make collaboration quick and efficient for lawmakers.

Digital content services platforms such as [the one SAA uses](#) can provide users with immediate access to electronic versions of significant scanned materials. By shrinking its paper trail, SAA can also reduce the risk associated with damaging or replacing hard copies of valuable records. In tandem, features such as these enable agencies to rapidly focus on researching, drafting and implementing policy.

3. Communicate differently

COVID-19 presented California's Department of Corrections and Rehabilitation (CDCR) with a dilemma: How could people who are incarcerated connect with their family and friends without spreading sickness?

CDCR answered this question by updating its [video visiting program](#) to include all 35 of its prisons in December 2020. Now, people who are incarcerated can schedule free half-hour video visits with loved ones every 30 days. The swap also prevents CDCR staff, visitors and people who are incarcerated from transmitting illnesses. With in-person visits suspended statewide until further notice, video conferences are a sound compromise during a difficult time.





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3 Ways Upskilling and Reskilling Benefit Your Workforce

An interview with Tony Holmes, Practice Lead for Public Sector Solution Architects, Pluralsight

Government is in the middle of the reskilling revolution. With new technologies, processes and mandates rapidly impacting workforces, agencies must strengthen existing skills while developing new abilities for roles that did not previously exist.

Subsequently, agencies must reskill, upskill and take a data-driven approach to their workforces to acquire the necessary skills for achieving their goals. Addressing these skills gaps will be difficult, especially during the COVID-19 pandemic.

Unfortunately, agencies cannot hire away their skills gaps. Instead, data should determine how upskilling and reskilling can augment agencies' hiring. Together, reskilling and upskilling can close agencies' skills gaps without relying solely on hiring.

"We know that the broader a person's knowledge base, the better that they can solve problems," said Tony Holmes, Practice Lead for Public Sector Solution Architects at Pluralsight, a tech workforce development company. "It's important for digital transformation."

Holmes shared three ways reskilling and upskilling employees virtually can help agencies manage change.

1. Cultivate learning

Encouraging employees' learning can help agencies avoid stagnation, adapt more easily and embrace potentially revolutionary technologies like artificial intelligence (AI).

Agencies that continuously assess their workforces' skill sets can develop strategies for acquiring the abilities they lack. For example, agencies interested in embracing AI can build the skills their teams will need to use it internally, or hire people with those traits externally, depending on organizational needs.

"A culture of learning is absolutely vital," Holmes said. "A lot of people don't study broadly because they don't have a breadth of access."

2. Transform in-house talent

Agencies that embrace reskilling and upskilling can retain and improve their talent more easily, Holmes said. Rather than competing with the private sector, this approach can close skill gaps rapidly and affordably for agencies.

"Great technologists can be grown organically," he said. "They don't have to be hired."

Consider Utah's Department of Technology Services (DTS). Using Pluralsight's virtual training tools, DTS can identify skills gaps, tailor training to close them and measure success afterwards. In one case, a DTS receptionist shifted roles after training herself in project management.

3. Predict the unpredictable

Data can assist agencies with improving their skillsets by anticipating future needs and filling gaps accordingly.

Leveraging training platforms like Pluralsight Skills, agencies can find hidden talent within their teams. For example, DTS quickly developed an application to support Utah's homeless population after identifying a programmer through the platform.

"Ultimately, technology can help with innovation, but the ideas, the architecture and the problem-solving come from our technologists," Holmes said.

Overall, people are the No. 1 factor for success with digital transformation and innovation, not technology. Thankfully, agile and iterative virtual training can help agencies juggle the hiring, reskilling and upskilling they need for mission success.

Inside IRS's Digital Microlearning Program

The Internal Revenue Service (IRS) handles all federal taxes, so training employees about such a huge responsibility can seem intimidating. But since 2013, the [Self-Help Online Tutorials \(SHOTs\) program](#) has been the IRS's secret weapon.

SHOTs use microlearning — or short, simple educational videos — to inform IRS workers about topics such as safety leave. Through SHOTs videos, IRS employees can brush up on a subject in about three minutes or less, on average.

GovLoop spoke with SHOTs Program Director Kelly Barrett about how these microlearning videos are acclimatizing employees to IRS's nuances.

The interview below has been lightly edited for brevity and clarity.

GOVLOOP: *What inspired SHOTs, and how does the program work?*



BARRETT: I've been with IRS for 22 years now. Outside of work, I use YouTube for just about everything. With SHOTs, I just saw a need and started creating videos.

The problem with formal training is it is a one and done. Once you get that green checkmark, you rarely retake that course. Sometimes you may be sent to training because it's the only time it's offered. However, as time passes, and you don't apply it, you'll quickly forget it. Like the adage, "If you don't use it, you lose it."

So, sometimes the piece you need is that one step. With microlearning, we are trying to break down

the topic into single, specific actions. You just need to know that one step. You can watch the piece you need in one screen, and then do it live in one application. You're learning by doing.

How might virtual collaboration and training benefit IRS beyond COVID-19?

I think SHOTs is a huge benefit. Attention spans drop significantly after more than an hour.

With virtual learning, you don't have eye contact with the instructor and with virtual learning, there can be many distractions. In formal training, you rarely relaunch an e-learning course or go back to the instructor and ask for the lesson again.

The SHOTs program solves these problems. We try to keep our videos to three minutes or less. We find that is the perfect amount of time to relay pertinent core information. SHOTs videos help employees learn quickly when they need it.

And the key to SHOTs is they are always available. It is 24/7, 365 days a year. If you forget something, you can go launch the video again.

How do SHOTs aid IRS leaders and workers?

Employees don't always have a lot of time for training. SHOTs can be huge for providing immediate, on-demand assistance.

Often, the same question is asked repeatedly at work. SHOTs are meant to help employees do their jobs more efficiently and with higher quality. Less time is spent asking other people for help around you. It ends up saving the organization money because people are being more productive.

Leaders can also relay pertinent information. For instance, we did a series of SHOTs on leadership. As employees retire, a lot of knowledge and expertise walks out the door. The SHOTs program allows us to capture that knowledge and expertise before they retire.

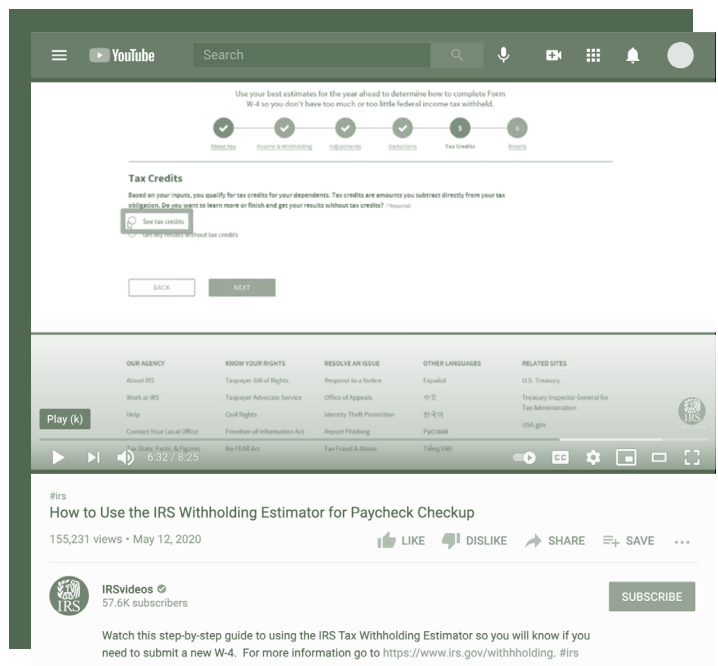
What separates SHOTs from traditional, in-person training?

Instructors became experts over many months or years. We can't expect people to be an expert after only an hour or even weeks.

Our SHOTs videos, meanwhile, are much shorter. Our brains learn much like our stomachs. Take a little bit at a time and learn bit by bit. You build knowledge on top of each bit of information.

Now, we teach other areas in the IRS how to create their own SHOTs videos. They know their work, and they are the best people to do it. They learn how to storyboard, edit and publish these videos. Employees love it. Many have told me it's the first place they look to learn something new.

Systems and applications change and get updated. If there is a video that will get us unstuck, that is key. We are adding videos every month. SHOTs videos can be embedded or incorporated into traditional learning. The key is the videos are available days, months or years after the employees have completed their formal training. People can get an immediate refresher when they need it. I think programs like SHOTs are the wave of the future for learning.



How Henderson, Nevada Gave Firefighters a Virtual Edge

The Henderson, Nevada Fire Department not only fights fires but also handles the city's other emergency services. Whether it is providing ambulances, rescuing lost hikers or retrieving hazardous materials, department employees have full plates. And with 11 stations spread across the Las Vegas Valley, the department must always communicate clearly and decisively.

In January 2020, the department rolled out a virtual collaboration tool agencywide. Presently, this application permits Henderson's firefighters to connect anywhere inside the city's approximately 106 square miles.

GovLoop spoke with [Deputy Fire Chief Scott Vivier](#) about how virtual collaboration augments his agency's performance and safety while handling about 30,000 calls annually.

The interview below has been lightly edited for brevity and clarity.

GOVLOOP: *How has COVID-19 changed how Henderson approaches collaborating, training and working virtually?*



VIVIER: We service the second largest city in Nevada. It is an all-hazards department. Fire departments are unique because they operate 24 hours a day, seven days a week.

The pandemic has highlighted the need to put certain safety precautions in place. We were fortunate to have begun a journey several years ago to become a smart city, and one of the technologies we found prior to this pandemic was a hardware/software solution. We were able to instantly communicate with our fire stations and our crews with the push of a button. It sped up our ability to share critical information.

We need to give up-to-date information to our crews. A lot of times we respond to an emergency and there are immediately lessons learned. In the past, our battalion teams would have to drive to every single station. Or they would have to have their units leave their fire stations for a centralized location. Having this technology allows us to stay connected.

What advantages have virtual tools given your department?

Our training doesn't always happen 8 a.m. to 5 p.m., but training has been fantastic with it. It is great having classes where you can interact in real time. We have a lot of staff working from home, like everywhere else. With our platform, the instructor can see all the students looking back at them. It is easy to use and all built in. The platform is extremely flexible. That was something we didn't know going in. If you must enter passwords and logins and it takes four clicks, firefighters are going to take an ax to it.

How do we communicate with all the stations in real time? Now, our members can download the application to whatever smart device they have. That device can become a live camera that can broadcast two-way information. It integrated into our drone program. We were trying to figure out how to get video from the drone pilot to the command post. We didn't know how simple the application was. That was the first thing we really liked. It was a hardware/software solution that worked as advertised.

Your agency is now using its virtual tools to share information such as buildings' floor plans among drones, employees and stations. How else is your department leveraging virtual tools for its unique responsibilities?

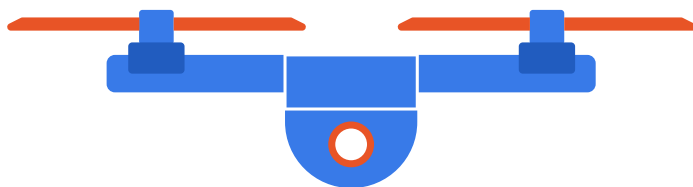
Nothing in the fire service happens alone. We're highly dependent on connectivity. In emergency services, simple is better. There are lots of solutions out there. While technically very sophisticated, for the user, this application is very simple.

When you picture a house fire, picture a box. Our job is to cover all seven sides of the box. Obviously, it is not possible to see all seven sides at once (note: the seven sides are the box's four sides, the top, the bottom and the inside). Someone would have to physically position themselves on all the sides of the box to provide real-time information about what was happening.

From a bird's-eye view using a drone, you can see up to five sides of the building at once. If there are dangers on the roof — solar panels, air conditioning units — it can give us real-time insights about people inside the building. All that information gets fed back into that technology. It is helping keep us safer and more effective.

Drones can also easily locate people. Henderson has over 180 miles of trails to maintain. Unfortunately, people don't always make good decisions on the trails or get stuck. Part of rescuing them is finding them. We have had several successful rescues where the drones found the people before we did.

We think the future is bright. The advances in technology are going to allow us to become more efficient and serve the public more effectively. Other stations don't have all the audio and video capabilities we have at our stations. We feel very blessed.



Best Practices for Virtual Collaboration and Training

At this point, most agencies have tried remote work. With virtual government no longer hypothetical, agencies must decide how they will balance collaborating, operating and training in person and virtually.

Most agencies, however, are used to doing things physically. How do agencies that have never worked virtually take the first step? Every agency's response depends on factors including their budget restraints, workforce demands and available technology.

For a federal perspective, GovLoop spoke to Deputy CIO Beth Killoran of the General Services Administration (GSA). For state government input, we talked with John Angus, Deputy Director of Utah's Department of Technology Services (DTS).

Here are four tips Killoran shared for robust virtual collaboration and training, followed by four recommendations from Angus.

1. Embody consistency

To avoid disrupting their missions, agencies should consider virtual collaboration and training that closely resembles the in-person UX for both activities.

"We don't want the people who are remote to have a very different experience from those who are in the office," Killoran said of GSA's virtual options. "It doesn't matter who you are. You'll be able to do your job and collaborate in the same way."

2. Increase interactivity

Going virtual can be a drastic transition, so engaging features such as screensharing can make digital collaboration and training feel more natural.

"Not everyone wants to speak up in meetings," Killoran said. "Being able to use polling and chat features helps with that capability."

3. Amuse employees

Agencies have serious goals, but that does not mean their workers cannot enjoy themselves. Killoran recommends using gamification such as friendly competitions to inject more positivity into agencies' virtual work.

"It helps promote more teambuilding," she said. "But it is also that competitive nature we all have. It makes you want to learn, but also to win."

4. Imitate successes

Agencies eager to dive into the virtual ocean should consider how their peers made the plunge.

"Talk to an organization that has been there, done that," Killoran said. "Learn from their successes and failures. Start small and figure out what kind of platform you'd like to try."

5. Stay approachable

Dispersed workforces do not need to be disconnected workforces. Angus suggested that agencies actively communicate with their workers about collaboration and training opportunities wherever they are.

“Some people will pop open a virtual meeting room and have that open all day,” he said. “You can use that kind of thing to have someone look at some code or draw out a chart.”

6. Schedule ‘library hours’

Angus described “library hours” as set periods when his agency’s teams do not disrupt one another physically or virtually. By clearing space for focused work, employees can achieve more results together or alone. Whether it is collaboration, training or work, agencies experience higher productivity.

“We can always use a little bit of focus,” Angus said. “It can go so far. We let the teams decide what is best for them. That has probably been the biggest change in productivity that we’ve seen.”

7. Champion creativity

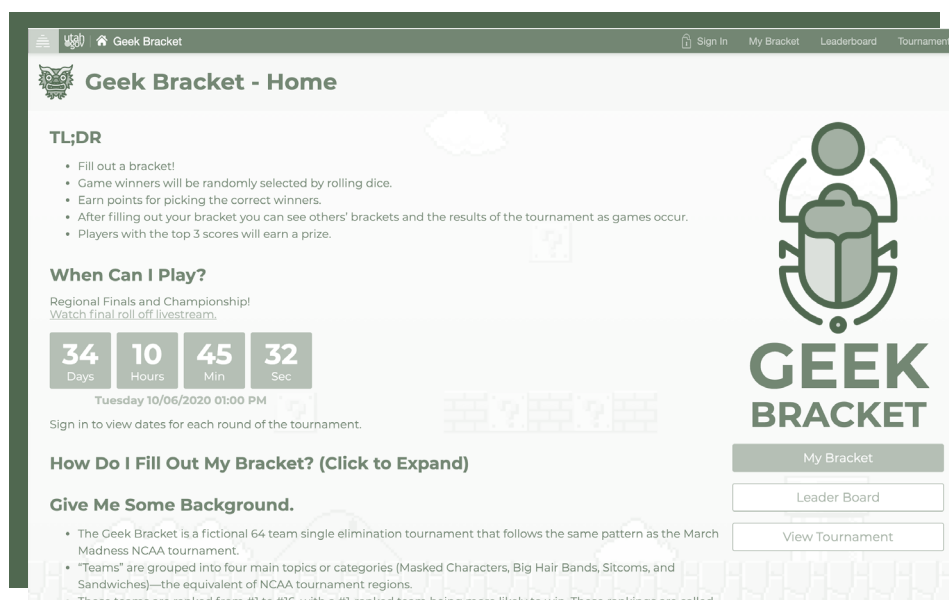
Angus advised agencies to approach subjects such as virtual collaboration creatively. During September and October 2020, DTS competed in a gaming tournament aimed at fostering agencywide unity. Dubbed **Geek Bracket**, the competition featured DTS staff guessing the winner of pairings across humorous categories such as sandwiches. All matchups were randomly determined. To win, players had to pick the most correct outcomes.

“Working from home has led to some constraints,” Angus said. “Creativity can come from those constraints. It ended up snowballing into something that was fun for everyone.”

8. Express humanity

Angus noted that remembering government employees are people too can help agencies reap more returns from their virtual tools. According to Angus, empathy, humility and understanding have streamlined DTS’ virtual work.

“I see my executive has a dog in the background that needs to be let out,” he said as an example of awareness for others. “I think it has actually brought us a little closer together.”



Conclusion

Early on, many agencies believed working remotely would reduce their overall productivity. Instead, virtual work has debunked the myth that every employee must work in the office to be successful. When people can perform their professional obligations remotely, there are fewer barriers to what they can achieve.

There is no denying that virtual collaboration and training require commitment. Still, reimagining how their people, processes and technologies work together can reward agencies. At day's end, the agencies that can collaborate, train and work anywhere can please constituents anywhere, too.



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.

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Thank You

Thank you to Carahsoft, Coursera, Red Hat and Pluralsight for their support of this valuable resource for public sector professionals.

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