

Cybersecurity and Talent Retention: Challenges and Successes of Remote Work

Summary of Roundtable, hosted by ATARC in November 2022

Remote and hybrid workforces are not a new concept. These alternative working arrangements increased in popularity long before the pandemic. In fact, the Office of Personnel Management reported a 22% increase in remote workers in the years from 2012 to 2016. However, the COVID-19 pandemic necessitated a rapid and unprecedented transition to full remote work for many industries and government agencies. In the last few years, instances of remote and hybrid work have soared and are now the preferred way to work for many.



The percentage of the Federal workforce under the age of thirty is 7%.

While remote and hybrid work tout plentiful benefits for both employers and employees, government agencies are still navigating the changes brought upon by the rapid shift to remote work. The Advanced Technology Academic Research Center (ATARC) recently held a roundtable discussion with topic experts from various Federal agencies to share challenges and successes with managing, retaining and recruiting talent in an evolving work environment, and why cybersecurity is a key to success.

Remote Workforce: Tools & Security

Long before the pandemic caused a drastic shift to virtual work, cybersecurity was a topic front of mind. Now, agencies have a greater need for technology that supports strategic goals while supporting a good digital work experience for the remote workforce. When technology issues arise and frustration mounts, these challenges have an impact on team member experiences. As agencies continue to shift from legacy systems and paper-based

processes, it's important for agencies to work with end-users and to design new systems that ultimately work best for them.

Other agencies represented at the roundtable already had online collaboration tooling in place before the pandemic, which resulted in an easier transition to full remote work. While the workforce did have the tools in place, agencies still needed to educate the workforce on the tools' capabilities and instill a sense of confidence that they could perform work remotely.

Remote Work: Recruitment & Hiring

Recently, agencies have experienced an increase in hiring to fill a significant number of positions. The influx in applications and interviews are forcing agencies to re-think hiring practices in a new, more remote way of work. Many agencies are struggling to fill certain positions, particularly data scientists, and are going through three or four rounds of interviews without filling the position. This struggle is causing agencies to reconsider how they define remote work and what technologies are needed to reach hiring goals and provide a good user experience. Ultimately, agencies want employees to be able to log-on remotely, and have the same or similar work experience as if they were working on-premise.

Other roundtable participants point to a lack of leadership as the cause for ineffective remote work practice. Technology is no longer the problem, because it's proven to connect people across the world and successfully move missions forward. Agencies should be focusing on preparing leaders to embrace and manage a remote workforce. Another roundtable participant noted how disappointing it was that the government was not prepared to welcome talented tech professionals into the federal workforce after recent Big Tech layoffs.

With such a prevalent skill shortage, agencies must step back and examine their hiring policies in light of remote work and candidate qualifications. A recent Executive Order prioritizes hiring tech talent with demonstrated skill sets over having formal degrees.

Cyber teams often lament about the difficulty in recruiting more qualified candidates. What people may not realize, one participant shared, is if everyone working on a side tech degree or certification graduated tomorrow, there still would not be enough people to fill all the open cyber positions. If that is the case, agencies must look elsewhere for talent and be willing to change internal policies to make it happen.

Often, talented candidates will receive better paying jobs in the private sector with better upward trajectory or benefits. Even during the hiring process, candidates will accept other positions because they receive offers on the spot. Unless the federal government can amend hiring policies to issue offers on the spot, agencies will continue to struggle hiring talented tech workers.

Reskilling and Staff Retainment

Since hiring talent from the outside is challenging, agencies must look to their existing workforce to fill the talent gap. While there have been attempts to create cybersecurity incubators and technology training programs for existing federal employees, none have taken off despite a positive response from the workforce. Roundtable participants concur that people want opportunities to grow in their existing jobs, but the government does not have clear programs or paths for them to do so.

Beyond investing in more of these training programs, agencies must also consider that training should not be limited to just technology staff. There are critical technology functions spread across the government, such as data analysis and AI, that are growing and will become more impactful in the coming years.

But the reality for many is that cybersecurity, AI, and technology are intimidating. Agencies should also consider how to make the tech field more approachable to those who believe it's beyond their understanding.

Hiring Policies – Need for Overhaul

In the new age of remote work, agencies have an opportunity to overhaul workforce hiring policies for not just cyber positions, but for multiple disciplines across government. Agencies should examine whether current policies are still applicable, whether educational requirements are still needed, and what other changes need to occur to accept more candidates into the workforce.



Looking at the internal workforce, agencies should begin normalizing the idea that “it’s okay to teach someone how to do their job while we’re paying them.”

Right now, workers are leaving Federal employment to grow their careers elsewhere. When all it would take is a change in policy to enable workers to stay and grow in their positions. In the past, agencies have attempted to train cohorts of government employees in cyber and AI skills, but realized after the training was complete that they did not qualify for a job in tech due to educational requirements. A change in policy to accept skill-based education must occur in tandem with government sponsored technology training.

The Biden Administration is prioritizing the creation of cybersecurity apprenticeship programs, including the 120-Day Cybersecurity Apprenticeship Sprint, which concluded in November 2022. As a result of this sprint, numerous companies have created cybersecurity apprenticeship programs and thousands of newly skilled workers were hired. Still, other roundtable participants encourage tech training as early as high school. Programs such as The National Youth Cyber Education Program, Cyberpatriot, is an example of exposing and educating youth to cybersecurity and STEM disciplines early.

Instituting career ladder training programs may incentivize new hires to remain with the agency. Jumping from one

agency to the next to gain experience for promotional hiring is a common occurrence in the federal government. But for many in the lower levels of the GS scale, there are no internal training opportunities available that would enable their promotion to a higher level. This, in tandem with apprenticeship programs, creates a clear pathway for career advancement in the Federal government. This would not only help with reskilling and retention, but also recruiting those looking for opportunities to advance.

Recruitment Challenges & Strategies

When discussing challenges with Federal recruitment, roundtable participants point to a recruitment package that does not entice potential candidates, particularly those in younger generations. Sometimes, the mission alone will appeal to candidates, which is a hard element for many private sector businesses to compete with. On most other levels, however, the Federal government can't compete.



A question posed by the roundtable: “Are you trying to hire people with degrees, or are you trying to hire people that can do the job? Because they are not necessarily the same thing.”

Even navigating usajobs.gov is a cumbersome process, especially for cyber or tech talent who are used to immediate job offers. Currently, the federal government is not an employer of choice for many, and roundtable participants encourage agencies to change that. One strategy is to look for talent in less competitive markets. Often, the Federal government cannot compete for cyber talent in the Washington D.C. metro area, due to salary expectations and private competition. Agencies have been successful in identifying tech talent in other states eager for work, but note that federal employment is not on the radar of many people outside of the D.C. area.

Job descriptions should focus less on a list of esoteric tasks and more on desired traits. Often, job ads exclude the majority of people agencies hope to speak with simply

because of how they are written. Data and artificial intelligence skills will evolve and pivot, usually within two years. As such, agencies should be identifying candidates based on their ability to adapt and their presence of thought in changing environments.

Changing how agencies market to candidates is key. Leveraging in-person and virtual events as well as direct hire authorities to enable quick job offers have helped some agencies with their recruitment efforts. Others are developing strategic partnerships with colleges through scholarship for service models that generate a pipeline of qualified and eager candidates upon graduation. Identifying what matters to people is critically important to tap into the next generation of public servants.

Some agencies at the roundtable are talking with their Gen Z team members to better understand what drew them to Federal work, what pain points exist, and what barriers they may have to staying with the government. Taking this qualitative information and putting quantitative data around it will help agencies create employee-driven solution-based actions and policies around recruitment, hiring, and retention.

Takeaways

Benefits could be gained, if Federal Agencies:

- ❖ Reframe how they're considered an employer of choice and what they want their reputation to be
- ❖ Upon hiring talent, listen to them, understand their needs, and offer opportunities
- ❖ Rethink hiring policies from the perspective of the candidate journey. What leads a person to even begin thinking about Federal employment? Identify their pain points and tailor a recruitment strategy around solving them
- ❖ Focus on durable skills during hiring and when retaining employees. Technology is changing fast, and the skills gap is increasing. Agencies need to hire lifelong learners
- ❖ Make it easier for people to start work, but also make Federal employment attractive

Check out www.atarc.org for more relevant information.