



WHITE PAPER

How Federal Agencies Can Reskill Workforce to Ensure Digital Transformation

Summary of Roundtable, hosted by ATARC on October 27, 2021

During a recent roundtable hosted by the Advanced Technology Academic Research Center (ATARC), participants from various federal government agencies discussed reskilling the federal workforce to align with the advancing digital landscape. Participants agreed there is a widespread need for increased data literacy among workers at all levels of the organization, but aspects of organizational culture and recruitment practices present barriers to efficiently reskill the existing workforce at scale. Of additional concern is the federal government's ability to identify where skill gaps currently exist at scale and to determine the most efficient way to fill those gaps. Several solutions to begin addressing federal workforce reskilling were discussed, but participants agreed workforce training is a continuous process that should be accessible to employees and encouraged by supervisors.

Need for an Ever-Ready Workforce

Roundtable participants emphasized the need for an 'ever-ready' workforce that is capable of quickly responding to changes in technology. To ready the existing workforce for the demands of advancing technology, participants agree that the federal government should provide access to training opportunities and make clearer the career pathways for certain job classifications.

Roundtable participants and audience members shared that data literacy is a critical, foundational skill for all positions in federal government. Having the ability to analyze data, put numbers in context, and communicate data are valuable skills of all government employees regardless of position or title. Becoming data literate does not require hard, technical skill, rather trainings and certification programs can usually provide sufficient

education. Encouraging and offering data literacy programs can be an impactful way for agencies to quickly overcome skill gaps.

The Future of Work is Here

To retain talent, Federal Government needs to:

- ❖ Define clear career pathways
- ❖ Re-examine qualification requirements in dated job classifications for applicability
- ❖ Provide access to training opportunities
- ❖ Increase organizational flexibility

Identifying where gaps in skill occur across and within agencies may be more complicated and require additional data collection and analysis. Future modeling can determine the existing competencies within an agency and match them to the needs of the organization. Moreover, the qualifications required of certain job classifications should be re-examined to determine their applicability as the needs of the organization and the skillsets of the workforce evolve with technology. The ability to easily identify skill gaps in reference to specific job classifications can provide existing employees a better roadmap for their career, which could ultimately help with retainment of talent.

Panelists agree that the future of work is already here, and it is critical to provide the existing workforce the tools they need to be successful. Existing federal employees must have the ability and tools to confidently solve problems quickly. Without confidence in their work and if they are not offered opportunities to reskill or grow, the

government faces the risk of losing talent due to the organization's inflexibility. Training opportunities not only shows a commitment on the part of the organization to support employees, but trainings often lead to promotions within the workforce.

Why Reskilling is Needed

Roundtable participants discussed openly the challenges facing the federal government to efficiently reskill the federal workforce in data literacy at scale. Workforce transformation has not kept up with the pace of digital transformation in many federal agencies, which has widened the skill gap further as new technology begins replacing legacy systems. Challenges to reskilling the workforce include an organizational culture rooted in status quo mentality and job descriptions requiring unrealistic qualifications.

Participants agreed that for digital transformation to take root in the organization, supervisors must shift their perspective from that of maintaining status quo to proactively solving problems. Regulations have dictated organizational culture, which then lead to systems and processes rooted in regulation. Risk taking is usually avoided which presents problems when an organization needs to transform.

candidates. Hiring managers agree that in the current age of technological advancement, formal academic training may not always reflect a candidate's competency and whether they will be successful in a job. Rather, up-to-date certifications and licensing credentials may offer a better indicator of skill and competency. Supervisors need to adapt their thinking to better define job qualifications in order to attract candidates who understand what is needed.



An example discussed by participants was the job description of a data scientist. Currently many job descriptions for data scientists require proof of advanced math education, when in reality the job does not require this level of skill. There are rooted assumptions as to what the qualifications the organization thinks they need. Supervisors must have a solid understanding of what skills currently exist within their teams and where there are potential gaps. Knowing the existing strengths of their teams, supervisors can not only create opportunities for employees to excel within their strengths but also make better hiring decisions.

Participants discussed using systems strategy to build competency libraries using big data to determine if the workforce is meeting competencies and where gaps in skill are located. Building systems that are continually updated and fluid in this ever-changing environment is critical, particularly with cybersecurity. As with data literacy, cybersecurity and workforce development are not siloed, so it is important to understand where these competencies are located within the organization. A system that analyzes competencies and qualifications can

Need for Reskilling

Challenges facing Federal Workforce:

- ❖ Legacy systems replaced by new technologies
- ❖ Hiring practices conducted through a lens of compliance
- ❖ Job descriptions requiring unrealistic qualifications
- ❖ Gaps in supply and demand of certain types of talent (e.g. data skills, cyber talent)

Hiring practices are also conducted through a lens of compliance rather than holistically assessing the skill of

also create better defined career paths in the federal government.

Roundtable participants nodded to the issue of retaining talented government employees in the age of digital transformation and acknowledged the prevalent war on cyber talent. There are currently more job openings for cyber talent than there are applicants, which begs the question how the federal government will fill this gap in skill. There is never a fixed target when it comes to advancements in technology, so the government must consider how it will prepare for technology that is not yet mainstream. Whether to borrow talent from the private sector or to build talent from within will always be a question facing supervisors.

Solutions to Begin Reskilling

Participants of this roundtable discussed both immediate and long-term solutions to reskill the federal workforce. All agreed that solutions differ based on the needs of the organization, but that culture change and strong management from supervisors are required at all levels.

When asked what resources should be invested in training federal employees, participants suggested up to 20-25% of an agency's budget should be invested in learning and development. However, much of this training may look more like an apprenticeship rather than traditional classroom learning. Expanding on what many supervisors already do with their employees, training over time with an apprenticeship model fosters strong supervisor-employee relationships.

Developing strong relationships between supervisors and staff allows supervisors to convey the needs of the organization to employees while also understanding the needs of the individual. Knowing where the two meet and acting on opportunities for employee growth is important to build a culture of continuous learning. Roundtable participants agreed that change management is a continuum and requires all employees to be continuously learning throughout their career. Supervisors must embrace this and begin empowering employees to take

on challenges and learn new skills. Cultural change starts with workforce management.

Reskilling Solutions

Changes needed to impact true Digital Transformation:

- ❖ Need for culture change and strong mgmt
- ❖ 20-25% of budget investment in learning
- ❖ Emphasis on career long learning
- ❖ Need for employee empowerment
- ❖ Leveraging the value of apprenticeships and mentorships
- ❖ Openness to comprehensive policy changes

Similar to apprenticeship is mentorship. The value of mentorship and connecting with someone who is already doing the work can help individuals navigate uncharted waters in their careers. This is especially helpful in the current environment where career paths are less defined. Participants also experienced successful outcomes with training in intimate cohorts that focus on small skill building and the strengths of the individual.

Future Considerations

Participants discussed the potential of larger scale training programs, and noted they are still being considered. Training needs differ considerably among agencies, which makes it challenging to program. Also discussed are comprehensive changes to policies that would change the qualifications of certain job classifications, making it easier to hire the right people for a specific role. Agency budgets must also align with training goals in order for more intentional training to occur. Digital transformation is occurring at a much faster rate than workforce transformation, but there are strategies agencies and supervisors can take today to narrow the widening skills gap.

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