



Tech to Hire

Transforming Federal HR Beginning with Recruiting and Hiring

INTRODUCTION

Technology has the potential to transform federal human resources, particularly how federal agencies recruit and hire talent. In decades to come, predictive analytics, which uses data to predict future events, could help identify agencies' potential skill gaps years in advance. Artificial intelligence could sift through hundreds of thousands of resumes and professional networking profiles to identify people with the right skills and experiences. And blockchain, a ledger-like database that stores digital transaction information across computer networks, could speed up background checks and security clearances, and provide traceable and verifiable information on applicants' backgrounds.

But those developments seem far off when assessing where government is today. Federal hiring processes are antiquated: It takes agencies 106 days on average to hire new employees, according to fiscal 2017 Office of Personnel Management data. The lengthy wait discourages job seekers from applying for federal careers. Meanwhile, in fiscal 2017, only 6 percent of full-time employees were under the age of 30 compared with 45 percent aged 50 and above, and 21.9 percent of the federal workforce was eligible to retire.

Yet agencies still rely on decades-old legacy technology to bring new employees on board. Many agencies have software for storing resumes and hiring-related paperwork that does not connect with systems that manage workers once they are hired. Others manually sift through candidates' applications and paperwork.

Agency representatives cite many reasons for not upgrading their recruiting and hiring technologies, ranging from data privacy and cybersecurity concerns to reluctance to change current agency systems and processes. Tight budgets factor in as well. However, money spent on maintaining legacy technology systems consumes more than 75 percent of IT budgets, according to fiscal 2015 Government Accountability Office estimates. This money might be better spent on replacing patched and cobbled-together systems with new technology that functions more efficiently.

As long as agencies continue to accept the technology status quo, they will be hampered in their ability to

attract the next generation of talent. These federal job seekers grew up with technologies at their fingertips, and they expect to be able to use the latest methods when applying for jobs. For example, 82 percent of people aged 18–34 would apply for a job on a smartphone, according to a talent acquisition survey, compared with 56 percent of respondents older than 35.¹ However, USAJOBS, the government online job portal, does not provide that option, while many private sector companies do.

As a first step toward substantially improving the recruiting and hiring process, agencies could follow the lead of the federal agencies already using technologies such as automated skills and qualifications assessments and specialized career sites for applicants in particular fields.



Methodology

For this issue brief, the Partnership for Public Service and Salesforce interviewed human capital and information technology experts from six agencies, who discussed ways government could use existing technologies more effectively. They also discussed how they could further improve their recruiting and hiring capabilities through new technologies. What follows are two approaches taken by agencies using modern technology.

¹ Jibe, "2014 Talent Acquisition Survey," September 2014, 31. Retrieved from <https://bit.ly/2OP2znp>

TWO AGENCIES MODERNIZING THEIR RECRUITING AND HIRING SYSTEMS

The people we interviewed described several ways technology helps them recruit and hire talent. The Social Security Administration uses an online skills and qualifications test to find the most qualified candidates from among a large number of applicants. The National Aeronautics and Space Administration created a specialized career website to attract job seekers in high-priority occupations.

Technology can help agencies find the most-qualified candidates

Agencies often receive hundreds of job applications for open positions. Not all those job seekers are qualified, but staff still must sift through all applications, an often overwhelming undertaking. Indeed, the most challenging task for federal supervisors is finding skilled candidates from among the applicants, according to a 2016 Merit Systems Protection Board survey.¹

Technology can make the process easier to manage. The Social Security Administration turned to USA Hire, an online skills and qualifications assessment tool OPM launched government-wide in 2012. Initially the test was designed for only a few administrative professions. However, OPM has since expanded it to include more than 900 assessment types for additional job series, occupations and skills.

Before SSA started using USA Hire, hiring managers found it difficult to identify candidates most likely to succeed at the organization. The agency, like many others, was using self-assessment questionnaires and paper exams to gauge candidates' skills and faced the time-consuming task of evaluating the answers. And even after doing so, the remaining candidate pool was too large to manage successfully. "In the past, we often had over 1,000 applications for a single vacancy and we would have hundreds left at the end" of the assessment process, said Adam Gower, SSA deputy associate commissioner for the Office of Personnel.

Since 2016, SSA has been requiring applicants to take the USA Hire online test after they apply for entry-level positions such as social insurance specialists, or other front-line jobs, including those at teleservice and processing centers. The test was expanded in 2017 to cover SSA's most common position: claims specialist. The new exam incorporates technological innovations including avatars, or digital figures, to simulate situations an employee could face.

Online testing allows SSA to hire more easily for its 1,200-plus locations across the country. "We have small offices in small towns, and we need to fill positions in each of those locations," Gower said. Yet with offices scattered all over the country, "we cannot simply bring everyone together and put them in a large room to test." With the online approach, job seekers can take the test where they are located, which "improves the equality of opportunity for those who cannot travel," Gower added.

Additionally, most open SSA positions are at the GS-05 to GS-07 level. Assessing the aptitude of candidates for these entry-level jobs is challenging because they do not have a career history that demonstrates their skills and qualifications.

The online test is meant to help by measuring skills such as teamwork, critical thinking and problem-solving, which are among the skills most likely to predict success on the job, according to a National Association of Colleges and Employers survey.² Testing also provides more accuracy about candidates' skills than when job seekers self-report them, as they do when applying for positions on USAJOBS. Those self-assessments are a common concern with the federal hiring process, according to hiring managers, because many applicants underestimate or overestimate their qualifications. Taking a test through USA Hire "is better than asking people if they are an expert," Gower said.

Once applicants take the test, the results are automatically scored and displayed electronically. "It allows us to do something we do not have the human capacity to do—quickly rate hundreds or thousands of applications," Gower said.

The test is successful in "reducing the applicant pool to include only the most qualified job candidates," according to OPM.³ SSA found that up to 20 percent of applicants either do not take the test or do not follow through on the entire assessment. The agency is "getting a lot smaller group at the end of the process that are more qualified," Gower said, adding, "We are doing a better job of identifying the best candidates."

Another benefit for agencies considering USA Hire is that it is OPM-approved. OPM's hiring and organizational psychology experts designed the technology to comply with federal hiring rules, so agencies that use it have fewer legal, security and privacy hurdles to overcome than if they introduced a new technology. USA Hire also is an off-the-shelf, readily available technology, making it quicker for an agency to get the system up and running than building an agency-specific technology from the ground up, an option agency staff often think is the only way to get technology that fits their needs.

² National Association of Colleges and Employers, "Career Readiness Competencies: Employer Survey Results," December 2014. Retrieved from <https://bit.ly/2BLjzZ4>

³ Office of Personnel Management, "Assessment & Evaluation: Online Assessment." Retrieved from <https://bit.ly/2vQioZt>

¹ Merit Systems Protection Board, "Improving Federal Hiring Through Better Assessment," July 2018, 1. Retrieved from <https://bit.ly/2KA7ZiL>

Technology can help agencies target mission-critical talent

Too often, federal hiring managers recruit for a position by posting a job announcement and hoping skilled job seekers apply. NASA is one of several agencies that have moved beyond this “post and pray” approach to use technology to attract highly-skilled candidates for mission-critical occupations.

The agency’s custom-built career website focuses on featured NASA careers in a few specific fields, including engineering, data science and information technology. Each job category’s page is tailored for people in that occupation and draws job seekers in by describing the possibilities of a NASA career in that field. “If an engineer comes to our site, they could access a page we built specifically for engineers,” said a NASA interviewee.

To encourage engineers to imagine working at NASA, the page describes a range of opportunities to support NASA’s mission, such as being able to create technologies to achieve supersonic flight on Earth or building scientific instruments to detect water on Mars. To build a personal connection with job seekers, each career page also includes a video of current NASA employees sharing their stories. The engineer page, for example, features Rubik Sheth, who builds radiators for Orion, NASA’s next-generation spacecraft for human space exploration.

The NASA career site complements USAJOBS by providing more information on what NASA careers look like across various fields. All NASA vacancies are listed on USAJOBS, but select job categories are highlighted on the agency’s site, with links to USAJOBS to apply. The agency’s site is a way “to share what working at NASA is like, and the exciting careers at our agency, as a supplement to the kind of information you can find on USAJOBS,” said Jane Datta, NASA deputy chief human capital officer. The strategy seems to be working. Since the launch, traffic to the new career site has increased significantly and has continued to grow. The average time a user spends on the site has also increased consistently, a factor that helps NASA determine if the content is engaging.

NASA understood that attracting sought-after professionals, such as those in STEM fields, requires a message that differentiates the agency from other employers. The new career site was part of a larger effort to enhance NASA’s employer brand and communicate what makes the agency stand out from its competitors, a message that is woven throughout the website. On a page called “My Everyday Extraordinary,” the career site conveys the message that there are incomparable aspects to a NASA job, including the “opportunity to work on unique and challenging projects that truly make an impact on humanity.” Florence Tan, an engineer featured on the page, discusses the instrument she built to explore Titan, Saturn’s largest moon, something few others have had the opportunity to do.

STEPS FOR GETTING STARTED

Based on SSA’s and NASA’s experiences, there are short-term changes federal HR and IT leaders could implement to transform their recruiting and hiring.

Federal HR and IT leaders should evaluate which steps in the recruiting and hiring process could be automated through technology to make the HR process quicker and more efficient than performing it manually.

Agency leaders also should determine if they could benefit from technologies their federal counterparts already use. They could adopt technologies built or modified to comply with federal rules and processes faster, and potentially at lower cost, than building a new technology.

Finally, chief human capital officers, chief information officers and their staff should consider how each recruiting and hiring technology fits into the HR process. Technologies supporting various elements of recruiting and hiring should be connected to each other to offer a seamless experience to job seekers and hiring managers.

CONCLUSION

With the number of retirement-eligible federal employees increasing and the next generation of job seekers expecting an efficient hiring process similar to that in the private sector, agencies can no longer rely on the outdated recruiting and hiring technologies they have made do with for too many years.

Technology is fast becoming a foundation for managing the workforce effectively, a process that begins with recruiting and hiring. For example, some agencies already use software that automatically transfers personnel information on new employees into electronic official personnel files to ensure a smooth onboarding process. Such technological solutions are the start to bringing federal human resources into the 21st century.

Improving recruiting and hiring through technology is a first step in a technology journey that could have an impact on every job seeker and federal employee. For example, cloud computing improves access to data and information regardless of where an employee works geographically. Communication tools including chat and instant-messaging functions help employees create a work community and stay in touch with their agencies and one another. Applications for mobile devices create new and different ways to engage customers. Even cutting-edge technologies such as virtual reality and augmented reality might one day improve the way government operates, including “using virtual therapy to treat PTSD, educating farmers on the installation of solar panels, or disaster management preparedness and response,” according to the General Services Administration’s website.

While many of these developments seem far off when considering the government status quo, it is the

Partnership and Salesforce's hope that this issue brief sparks a conversation on how technology could play a larger role in federal HR.

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KEY DATA POINTS AND RECOMMENDATIONS

106 Days

on average to hire new employees

Source: 2017 Office of Personnel Management data

6%

full-time federal employees under the age of 30 in fiscal 2017

45%

full-time federal employees aged 50 and above in fiscal 2017

21.9%

federal employees eligible to retire in fiscal 2017

Source: 2017 Office of Personnel Management data

75%

share of federal IT budgets spent on maintaining legacy technology systems

Source: 2015 Government Accountability Office estimates

82%

people age 18–34 who would apply for a job on a smartphone

Source: 2014 Jibe survey

Short-term changes federal HR and IT leaders can implement to transform recruiting and hiring:

Evaluate which steps in the recruiting and hiring process could be automated to make the HR process quicker and more efficient than performing it manually.

Adopt technologies built or modified to comply with federal rules and processes faster, and potentially at lower cost, than building a new technology.

Connect technologies supporting various elements of recruiting and hiring to offer a seamless experience to job seekers and hiring managers.