Rethinking the U.S. Government’s HR Department
With 2.2 million civilian workers, the federal government is the largest employer in the U.S.—even ahead of Walmart. Despite its size, or perhaps because of it, it has many challenges implementing new efficiencies and technologies.

Under the Trump administration, the government has unveiled plans to reorganize its human resources functions. This could help create operating efficiencies and improve services to federal employees. The revamp would put functions such as payroll, retirement, insurance, and even travel under a single entity renamed the Government Services Agency.

Already, the White House has been moving to combine some of the functions of the Office of Personnel Management (OPM), such as health care and retirement services, under the GSA. There are also ongoing efforts to move background investigations required for federal employee and contractor security clearances over to the Department of Defense.

As part of this restructuring, plans are being discussed to adopt new technology to improve government HR functions. Some of the proposed improvements are fairly basic, such as digitizing files, while others are more cutting-edge. As part of its plan to create a paperless, updated human resources department, the OPM is developing a blockchain-based employee record-keeping system.¹ This would keep the federal government in step with the private sector’s increasing use of advanced data analytics.

Besides improved efficiency, there’s hope these federal efforts to modernize HR functions could lower costs. Consolidation already has cut costs. Still, the U.S. government spends just under $2,000 per civilian employee on HR functions, compared with approximately $1,400 in the private sector, according to Steve Goodrich, president and chief executive of the Center for Organizational Excellence, a consultancy on organizational strategies.

A Move to More Digital Files

President Donald Trump’s management agenda, which was released in early 2018, details moving to a nearly paperless HR approach. When it comes to digitizing records, there’s still a long way to go.

The government has a digitized employee record base, Enterprise Human Resource Integration (EHRI), that launched in 2009. EHRI data on federal civilian employees, however, is quite limited, and there’s a need to include more information regarding pay, leave, and telework. A 2016 report by the Government Accountability Office said the data was weak and often contained errors or incomplete fields, making it hard to analyze staffing issues. For instance, reports analyzing federal pay have had to rely on incomplete data.²

The government made strides in consolidating its payroll systems under President George W. Bush, when the number of payroll providers was reduced to 4 from 26, saving more than $1 billion over 10 years.³

Now it is looking to further consolidate and strengthen its digital employee record base. As part of that initiative, the new payroll platform, called NewPay, will include work schedule and leave management systems, and will shift to a software-as-a-service model.⁴

Retirement benefits offer another example where pen and paper are the processing norm. Federal employees who decide to retire notify their HR department, which assembles the retirement paperwork and mails it to OPM. The paperwork is then processed manually, even though approximately 1,800 business rules have to be applied to calculate retirement pay.⁵

Retirement claims typically surge in January, and OPM has struggled to pay for overtime to keep processing times within 60 days and the backlog steady. The agency received more than 15,000 retirement claims in both January 2016 and January 2017.⁶

Sometimes a serious backlog and political pressure are required to push through change. The Department of Veterans Affairs was criticized by lawmakers when its claims backlog topped 610,000 cases in 2013. After the move to digital processing of claims—as well as new hires and mandatory overtime—the department was able to reduce that backlog from 610,000 in early 2013 to around 70,000 by Oct 2015.⁷ More fixes may be on the way, as the backlog has been creeping up again and is likely to worsen without an influx of new staff, according to a 2017 study by the GAO.

“One of the reasons why that happened there was so much political scrutiny. Congress had to invest in the technology needed to turn things around,” Goodrich said. “The same principle applies in human resources.”

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⁵ Bloomberg interview with Steve Goodrich, president and chief executive of the Center for Organizational Excellence
Agencies Test Blockchain

Blockchain’s promise to revolutionize many HR functions should help the federal government in various ways. Contract spending for blockchain projects is projected to rise for the third consecutive year in 2018.⁸ The trend could accelerate, with almost a dozen projects in various stages of the procurement process.

Among those is OPM’s electronic employee record system, called the Employee Digital Record, which uses advanced blockchain and other technologies. The agency is working to provide every federal employee a unique digital identity that would securely access and automate several human resource functions. OPM started soliciting bids in June 2018 for the system, which could represent the government's first multimillion-dollar blockchain contract.⁹

The plan, which is supported by Trump’s management agenda, is part of the larger vision of moving to a paperless government. This would include the use of electronic payments, paperless interagency transfers, and development of a paperless forms tool to let agencies create online forms.¹⁰

In addition to efficiency, blockchain promises to improve accounting. Because of the enormous size of the federal government, which has more than 2 million civilian employees working in more than 430 agencies plus contracts with thousands of vendors, accurate accounting and sharing of data is challenging. Sometimes large mistakes happen.

A recent audit by Ernst & Young found the Pentagon failed to properly document construction projects worth more than $800 million.¹¹ The firm warned that financial management and oversight at the agency was weak, with no reliable way to track the large sums of money it handles. Blockchain could improve the accuracy of federal recordkeeping, by helping the government securely collect, store, and process the massive amounts of information it handles.

Meanwhile, dozens of pilot programs are underway in various agencies, according to the Emerging Citizen Technology Atlas, which is run by the GSA. The Centers for Disease Control (CDC) and Prevention, for instance, is using blockchain to securely share medical records with public health workers in the field to help stop the spread of infectious diseases. The Pentagon also is experimenting with the technology to manage a supply chain of 3-D-printed components.

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⁸ Cornille, “How Blockchain is Empowering Cyberpunks and Governments Alike”
⁹ Ibid
AI and Predictive Analytics

In addition to blockchain, technologies like AI and predictive analytics hold significant potential for a system as large and varied as the U.S. government. Digitizing more employee files will improve efficiency, but it's just the first step. Analytics and AI can help track attrition rates, demographic data, geographic information, education, supervisory ratios, skill levels, workload, and other metrics, allowing agencies to maximize workforce effectiveness.

With the use of analytics, the federal government could find more efficiencies in record management, data management, and data exploitation, and be able to do large-scale workforce planning and predictive analysis around the workforce.

There's certainly room for improvement. According to an employee viewpoint survey that was included in the President’s Management Agenda, satisfaction within the federal government on hiring people with the right skills averaged around 42 percent in 2017.12

Private-sector companies recently have been experimenting with hiring algorithms that promise to fill jobs faster, with more diverse candidates and improved retention rates. One company, Pegged, worked with a Maryland hospital to reduce turnover by 30 to 50 percent, saving millions through improved productivity and lower hiring costs.13

Applying analytics to government employee data might also be useful for health-care benefits. Every health-care provider regularly submits data to the government, but there's currently little capacity to analyze it. With a database of 2.2 million federal employees as a test population, the federal government could have a robust database with which to identify geographic incidence of heart disease or flu outbreaks.

Obstacles to Adopting New Technology

Moves to improve federal government HR functions through technology hold much promise, but also pose many obstacles.

Among the obstacles that the effort to consolidate resources faces are current laws that prevent agencies from sharing data. The Health Insurance Portability and Accountability Act, for instance, prevents Medicaid and Medicare from sharing data with the CDC. In other cases, lack of sharing may be a matter of not communicating, reflecting institutional barriers that will need to be addressed.

Agencies will sometimes purchase a thousand licenses for their technology from a vendor but then end up using only a fraction of them. With more consolidation, these resources could be better shared among agencies.

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12 “The President’s Management Agenda,” p. 22
There has already been a lot of consolidation in the last three to four decades. Some agencies are contracting out HR functions to other divisions within government to get economies of scale. But functions like recruitment or promotions are easier to outsource than more complex work such as labor relations or disciplinary actions.\textsuperscript{14}

Agencies’ tendency to underestimate the resources needed to maintain and scale automation tools is another potential roadblock. There’s a common misconception that because something is automated, companies or agencies can just set it up and forget about it. For implementation to be successful, there also needs to be a plan for ongoing operations and maintenance, as well as managing the associated costs. The task of ongoing management can be challenging for agencies to plan for and budget.

“Agencies have an annual budget. At the same time, the federal government is also aware of a deficit that could be $1 trillion this year,” said Stewart Liff, chief executive of consultancy Stewart Liff & Associates and author of seven books on managing government employees. “When you’re looking to invest in a wholesale system that entails a long-term commitment, it may or may not make sense on a budgetary basis.”

It’s already difficult to drum up support to update legacy IT systems, which can be costly and require training many employees.

Changes are “easier said than done and each comes with a different set of headaches,” Liff said. “Any good organization is looking to introduce change where it makes sense.”

\textsuperscript{14} Bloomberg interview with Stewart Liff, chief executive of Stewart Liff & Associates
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