Federal agency executives are recognizing real benefits from enterprise automation to drive business transformation without the lumbering pace and high cost of IT modernization projects.

Over the past three years, the successful deployment of robotic process automation (RPA) across the federal government has persuaded a groundswell of executives to “think automation-first” in reimagining how they modernize their agency’s day-to-day workflows and operating models to elevate mission performance.

Krista Kinnard, chief of emerging technology in the CIO’s office at the U.S. Department of Labor — and the former director of the AI Center of Excellence at the General Services Administration — is one of them. “I think that automation — specifically using bots — is really starting to take off and provide value to businesses,” she said. “Sure, you could buy a completely modern, cloud-based system that could solve all of these problems [inherent in legacy systems.] But one, how expensive is that going to be? Two, how long is that going to take? And three, how much additional value will you get from buying some behemoth software?”

The momentum behind the use of automation is borne out in a survey conducted by FedScoop and StateScoop last year that found that more than 6 in 10 federal and 4 in 10 state respondents said their agencies were currently using RPA tools to facilitate their work.

Transforming the Army through automation

Raj G. Iyer, former CIO at the U.S. Department of the Army, told FedScoop before stepping down in February, that automation is taking on an expanding role across federal enterprises.

“Automation enables Army to create new capabilities in legacy systems without investing resources into changing the underlying system,” he said. “These new capabilities, like mass de-obligations in the legacy accounting system of our Standard Operations Maintenance Research and Development System (SOMARDS), are a quicker and more efficient way of effecting legacy divestiture.”

Iyer described how the Assistant Secretary of the Army (Financial Management and Comptroller) office recently completed a pilot, testing RPA’s ability to improve the handling of unmatched transactions (UMTs) across several use cases. ASA (FM&C) handles more than one million such transactions per year, according to Iyer.

“Robotic process automation is uniquely well-suited to audit activities, like retrieving source documentation at scale and consolidating disparate reporting,” he explained. He called the RPA pilot at ASA (FM&C) “a resounding success,” adding, “RPA is expected to save millions of dollars in manual labor each year.”

RPA is also helping Army acquisition officers determine contractors’ “responsibility” qualifications. “Vetting is painstaking and manual, so we used RPA to pull data from the Internet, extract the right data, and put it in reports to make it available to analysts,” he explained. “Human intelligence is still involved in vetting a company for contracting, but data collection is automated through a bot, saving the Army millions in annual labor costs.”

However, Iyer also foresees a more significant role for automation across the Defense Department, helping support the military’s shift to large-scale combat operations under the Combined Joint All Domain Command and Control (CJADC2) initiative.

“Automation enables Army to create new capabilities in legacy systems without investing resources into changing the underlying system”

- Raj G. Iyer, former CIO, U.S. Department of the Army
executives with a list of funds that otherwise would have taken weeks to assemble, giving them time to put those funds to use rather than having to return them to the U.S. Treasury.

Today, CBP has 157 more than 250 RPA bots in production or under development, according to Madhugiri. "Automation is moving from the edges, all the way inside into the enterprise. That's a big change," he asserted.

Automation in the mainstream at CBP

Sunil Madhugiri, chief technology officer at U.S. Customs and Border Protection, is another automation advocate.

'Automation used to be an afterthought. Now, we're seeing that every software development has some automation built in — not only for the 'last mile' but also automation concerning AI machine learning," said Madhugiri.

CBP's experimentation with automation began about three years ago, not long after Madhugiri joined what amounts to one of the world's largest law enforcement organizations, with more than 60,000 employees. At the time, CBP primarily tested ways RPA bots could reduce the mundane work agents and employees encounter assembling and manipulating data beyond the confines of CBP's enterprise software systems.

One of CBP's earliest automation success stories traces back to the height of COVID travel restrictions. CBP was charged with reviewing flight manifests and informing airlines within 48 hours which passengers needed to be prevented from boarding U.S.-bound planes because of new rules disallowing them from entering the U.S.

"We wrote these bots to take in the manifest of airline passengers and then inform the airlines. We automated the whole process," recalled Madhugiri. What began as four hours' notice to the airlines grew to 12 hours and then to 24. At one stage, CBP bots helped divert 239,000 passengers from ill-fated journeys to the U.S. and saved those passengers, the government and airlines millions of dollars.

In a more recent instance, CBP created and deployed a bot that identified unallocated funds still on CBP's books as the fiscal year was closing out in September. The automated reports provided program and financial

Automation trends to watch in 2023

A new report from UiPath provides a guide on the latest technology, strategy and use case developments to help advance the adoption of enterprise automation. The key takeaways:

1. Automation becomes the enterprise's new way of operating and innovating.
2. Businesses/enterprises ramp up automation to counteract growing labor and inflation pressure.
3. Digital CIOs step up their role — and step up automation to meet new goals.
5. Low code becomes a top priority for getting automation and AI into more people's hands.
6. New AI-powered innovations push automation's boundaries even further.
7. Rounding out digital skills becomes the next hot issue for HR and IT leadership.

Get the full report here.

"Automation is moving from the edges, all the way inside into the enterprise. That's a big change." - Sunil Madhugiri, CTO, U.S. Customs and Border Protection

U.S. Customs and Border Protection used automation to help airlines identify and divert 239,000 at-risk travelers from boarding U.S.-bound flights during the pandemic.

The modernization paradox

Without question, federal agencies understand the need to modernize their IT and security systems. They also understand the hidden and often-mounting costs of putting off modernization. But even the best-managed IT modernization projects can involve months or years of planning, inevitable complications and costly transition expenses. And too often, the improvements don't measure up to expectations.

"Modernization has become synonymous with big, 'rip-and-replace' efforts, involving new systems, long-term physical transformations that are costly in technology, change management, workforce, opportunity cost, and time to value," noted Mike Daniels, senior vice president, public sector at
“Advanced, low-code automation tools that are technology agnostic...can provide agencies the means to dramatically leverage their existing IT investments with minimal risk while providing the ability to adapt and change in the future.”

- Mike Daniels, SVP Public Sector, UiPath

“Investing in an ‘operating resilience layer’ that addresses how work actually gets done not only leverages the huge investment public sector organizations have already made in underlying IT modernization but also future-proofs organizations as the number of systems and technologies that need to be operationalized inevitably keeps growing and changing,” he said. Advanced, low-code automation tools that are technology agnostic, like those offered by UiPath, “can provide agencies the means to dramatically leverage their existing IT investments with minimal risk while providing the ability to adapt and change in the future.”

Todd Schroeder, a former chief of digital services at the U.S. Department of Agriculture who now serves at UiPath as public sector vice president, adds that automation platforms not only bring the power of scale to the work agency employees need to get done but can also address process pain points quickly.

Schroeder cited one example shared by New York State Deputy CIO Rajiv Rao at a recent UiPath public sector forum. New York’s Department of Labor faced a massive surge of unemployment insurance claims claims during the pandemic’s peak, numbering hundreds of thousands per day. Rao explained how a 10-fold increase in staffing failed to meet the demand, leading Rao’s team to turn to UiPath to automate core steps in the claim process. That effort allowed the NYDOL to work through the backlog of claims in short order and, by expanding the use of automation, ultimately saved the state an estimated $12 billion in potential fraud.

“Automation provides agencies another advantage: It adds value to IT that agencies have already invested in,” Schroeder said. For years government and industry have invested in technology and tools under the premise that technology improves performance. Still, the law of diminishing returns comes into play when employees and customers have to spend an inordinate amount of work, time and energy interacting with multiple technology systems to accomplish a task as part of a more extensive process but addresses a more profound question, said Daniels. “It also gets at, ‘How do you operationalize that work in the context of your mission? What do you do with that signal to take action?’”

Imagine the platform as a single pane of glass for onboarding employees, help desk services or customer contact centers. Organizations that use the UiPath platform enterprise-wide are able to offer simplicity and speed to their employees and customers. At the same time, automation absorbs the drudgery of accessing multiple tools to onboard an employee or the delayed productivity employees and customers experience while waiting for a password reset, says Schroeder.

Perhaps no organization has more riding on the success of automation than the U.S. Army.

“We’re focused on standing up deployment through our cArmy cloud, so we have a standard, accredited environment for everyone,” said Raj Iyer. “This will allow anyone across the Army to bring in use cases and build, deploy and monitor bots, helping us scale this across the Army. Scaling at this level will help us gain and sustain irreversible momentum as we democratize digital access across our workforce and empower everyone who wishes to become a change agent.”

“Automation — specifically using bots — is really starting to take off and provide value to businesses.”

- Krista Kinnard, Chief of Emerging Technology, U.S. Department of Labor

RPA’s growing federal community of practice

Federal government employees looking to learn more about RPA from their peers can find additional resources at the Federal RPA Community of Practice, which has more than 1,400 members from over 100 departments and agencies and a variety of resources, including:

RPA Program Playbook
Offering best practices, lessons learned and proven strategies for RPA program development.

Federal RPA Use Case Inventory
Offering over 300 RPA use cases across the government, including applications for acquisition, administrative services, finance, human resources, IT, travel, trouble ticket reports and more.

“We have historically looked at driving productivity, improvement and outcomes through waves of new underlying technology investments. Those returns are diminishing because of the increasing complexity not only being introduced across the technical environment but also across the process and people dimensions of the enterprise,” said Daniels.

Daniels, who has held senior management positions at Oracle, Salesforce and Google, proposes looking at modernization through a different lens: “What if you could see a dramatic improvement in time to value without the costly rip-and-replacements of systems? Or if you could achieve transformational benefits without putting current operations on hold?”

Daniels suggests that automation offers a different approach to transformation at public sector agencies by “operationalizing” processes and tools that can take advantage of artificial intelligence and machine learning. Whether agencies are looking for signs of fraud in a mountain of reports or sifting through a sea of images to identify clues in an investigation, automation not only adds speed and scale to the business process. Schroeder says automation can eliminate this “work tax.”

Learn more about UiPath in the public sector, access a free trial and explore for yourself, or talk to one of our experts here.

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