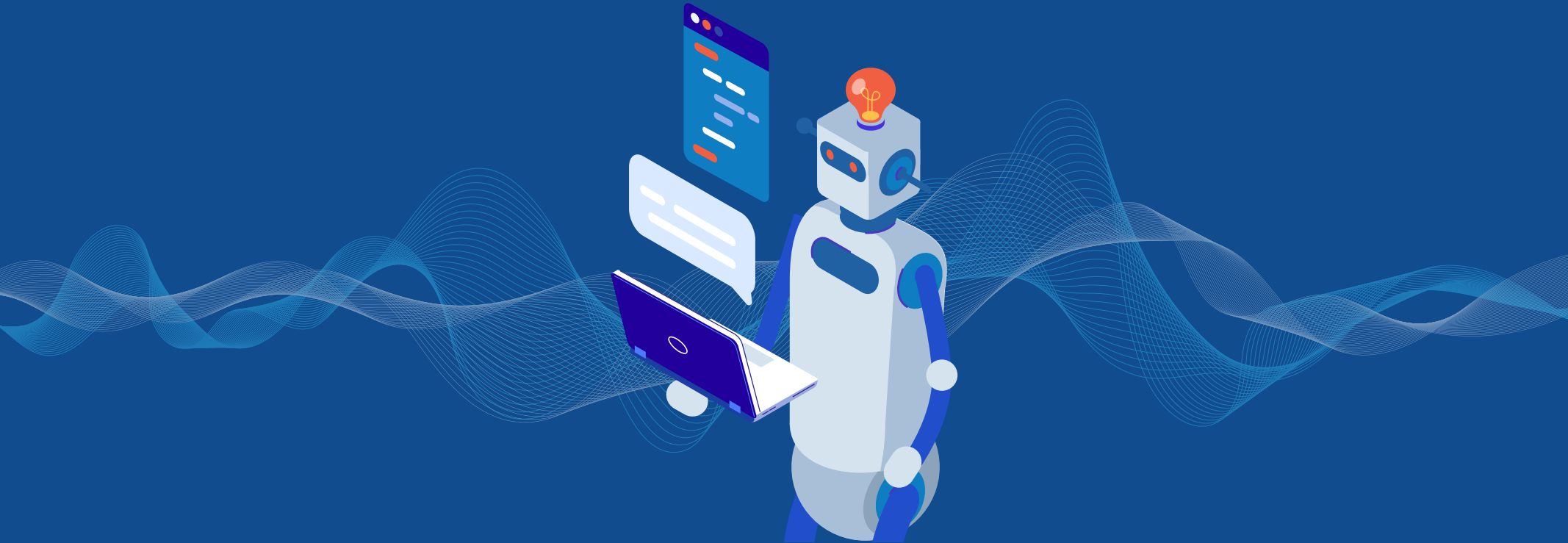


Your New Digital Coworker



GOVLOOP
E-BOOK
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Executive Summary

A mountain of daily pressures often separates state and local governments from mission success. At many agencies, each day could start with tightening budgets, growing workloads or shrinking staff numbers. On top of that, today's public servants must also frequently contend with rising data security concerns, regulatory requirements and citizen demands.

Fortunately, robotic process automation (RPA) can help agencies reimagine how their employees work in the 21st century. **RPA software can automate repetitive tasks, fully automating some operations while working in collaboration with people on others. These digital coworkers free up their human counterparts to focus on tasks that are more complex, engaging and bring more value to the agency.**

The potential for automation is even greater when artificial intelligence (AI) joins the mix. AI simulates human cognitive functions, making it possible for a program to solve problems and learn as it goes. That intelligence enables RPA to take on a greater range of tasks and more work from flesh and blood workers.

In "Your New Digital Coworker: A GovLoop E-Book," we'll explain how aligning AI and RPA presents agencies with an opportunity to transform their work. We'll also look at best practices for pairing digital and human workers together and share insights from RPA thought leaders about how this technology builds on gains your agency can make with AI, automation and cloud computing.

Whether you're state or local, RPA can produce cost savings, new efficiencies and stronger regulatory compliance for your agency. This e-book will teach you how to get all three of these outcomes agencywide through RPA. Ultimately, your agency's return on investment (ROI) from RPA satisfies both sides of the government coin.

RPA at a Glance

How have state and local agencies embraced RPA, and how is it impacting their workforces? At agencies using RPA, what benefits are they seeing? These stats will set the context for why RPA is one of the most exciting emerging technologies in state and local governments.

22%

The percentage of state CIOs in 2018 who said that they had already deployed automation software for AI, RPA or machine learning, which occurs when machines learn to perform tasks without humans.

\$2 million

The amount that Rep. Vicky Steiner (R-District 37), a North Dakota state legislator, proposed as a tax credit for assisting companies with adopting automated RPA statewide in 2019.

22%

The percentage of state CIOs in 2018 who said that they planned to deploy automation software incorporating AI, RPA or machine learning in the next two to three years.

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State CIOs ranked AI and RPA seventh among their top 10 priorities for 2020 in terms of technologies, applications and tools.

27%

The percentage of state financial managers in 2018 who chose RPA as one of the top three cognitive technologies that their agency should invest in during the next two to three years.

\$846 million

The amount of money RPA software revenue generated worldwide in 2018, with North America having a 51% share of the market.

57%

The amount of money RPA software revenue generated worldwide in 2018, with North America having a 51% share of the market.

63.1%

The percent that RPA software revenue grew worldwide in 2018, making it the fastest-growing segment of the global enterprise software market.

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State chief information officers (CIOs) ranked digital government – including digital assistants and chat bots – second among their top 10 priorities for 2020 in terms of strategy, policy issues and management processes.

“The workforce for the 21st Century must enable senior leaders and front-line managers to align staff skills with evolving mission needs. This will require more nimble and agile management of the workforce, including reskilling and redeploying existing workers to keep pace with the current pace of change.”

– The President's Management Agenda (PMA)

The 'Why' and 'How' of RPA



Think of public service as a triangle. One side is the agency, another is the government employee who delivers public services and the third – arguably the most important – is the citizen who depends on those services. RPA can transform all three sides of the triangle.

RPA is an agile, easily customizable tool that gives governments scores of options for improving their operations. For example, many agencies struggle to achieve their missions working under often unpredictable budgets. RPA, however, can lighten the burden that manual labor places on an agency's workers. It can work around the clock and is less likely to make errors, making operations cheaper, quicker and more efficient.

Agency workers also benefit from RPA. For many government employees, tasks such as completing spreadsheets take lots of time and bring little reward. Freed from these duties by digital coworkers, employees can focus on jobs that are more challenging and require their judgment and problem-solving abilities.

Citizens are perhaps RPA's biggest beneficiaries. As agencies drive down costs with RPA, they can spend taxpayer dollars more effectively, expanding the services that they provide. RPA also helps accelerate the delivery and accuracy of public services, improving the overall customer experience (CX).

Over time, agencies that provide a higher-quality experience build stronger bonds with the people they serve. These ties are especially important at the state and local levels, where citizens and public servants often live in the same place.

Workforce Modernization: A National Priority

Agencies at all levels of government are under increasing pressure to reimagine how they get work done.

The federal government set the tone in March 2018 with the release of the [President's Management Agenda \(PMA\)](#). It describes workforce modernization as one of three pillars of transformation: providing better financial stewardship, improving citizen services and achieving mission outcomes.

Automation is also key to the agenda. It calls for agencies to use IT modernization “to drive increasing efficiency, effectiveness, and transparency.” In an August 2018 memorandum on “[Shifting From Low-Value to High-Value Work](#),” the Office of Management and Budget (OMB) specified RPA as a viable tool for reducing “repetitive administrative tasks.”

It might be tempting to see workforce modernization as just another mandate that will strain agencies' overstretched resources. But that's not the case. In fact, the real mandate for workforce modernization is its sheer necessity: Given tight budgets and growing demand for more modern, efficient services, agencies simply need to modernize their workforce, or create “a workforce for the 21st century,” as PMA puts it.

RPA can align state and local agencies with their federal counterparts in accordance with the PMA while they also make gains of their own. RPA can:

- **Make it possible to streamline and automate key work processes as part of a larger modernization effort**
- **Support the development of data infrastructure and strategies that enable agencies to better leverage data analytics capabilities**
- **Strengthen the accountability and transparency of the data that agencies provide to their workers and to the public**
- **Realign agencies' human workers to better serve citizens' needs**

RPA helps accomplish these four goals by augmenting human workers' ability to perform tasks. For example, by automating data analysis and collection, RPA accelerates – and improves – human decision-making.

The 6 Traits of Successful RPA

Because RPA is so flexible, agencies might have to decide which methods best suit the results they're seeking from the technology. RPA uses automation in six intelligent ways that agencies can harness in any combination to benefit their workforces. They are:

- **Knowledge and insight** – The ability to harvest, understand and deliver insights from disparate data sources.
- **Learning** – The ability to adapt to evolving process patterns and derive contextual meaning.
- **Visual perception** – The ability to read, understand and contextualize visual information.
- **Problem solving** – The ability to solve logic, business and system problems autonomously.
- **Collaboration** – The ability to work seamlessly alongside people and systems.
- **Planning and sequencing** – The ability to optimize workloads and discover opportunities for better outcomes.

Collectively, these six traits make it possible for agencies to increase their operational agility and help employees be more productive and engaged.

The largest returns from RPA, however, might come from its role as a force multiplier. Gradually, intelligent RPA creates the potential for “human in the loop” processes, in which tasks are handed off as needed from digital to human workers and vice versa.

This approach lets agencies automate a wider range of processes, not only rote tasks. Over time, as agencies revisit more routines, they can automate those that produce the most progress toward their missions.

But it's also important to remember that some mundane tasks are vital. Take patching applications for security flaws or resetting compromised passwords, for example. Automating these processes can help agencies secure their data faster and with fewer missteps. Gradually, the more agencies apply RPA to their various cybersecurity obstacles, the more these problems disappear – and the more that security professionals can focus on more complex challenges.



RPA in Action: State Government Success Stories

Nationwide, state and local governments who have properly incorporated RPA bots into their workforces are reaping major returns every day. At these agencies, RPA is making a difference in fields as diverse as finance, healthcare, human resources (HR) and transportation. Regardless of their function, agencies that boost their ranks with RPA bots can make life easier for their human employees.

Consider the following state governments. Using Blue Prism's RPA bots, these agencies have transformed their workforces and the labor they perform for the better

New York Power Authority

The New York Power Authority (NYPA) is a state public-benefit corporation unlike any other in the U.S. As America's largest state public power organization, NYPA's finance and HR processes operate on a unique scale. Using RPA bots, however, NYPA has automated scores of workflows that were once performed only manually.

Since adopting RPA, NYPA now pays invoices and schedules interviews for external candidates. NYPA also leverages RPA for its year-end forecasting and handling its employee transaction workflows. RPA bots additionally aid NYPA by onboarding vendors into its platform for competing for bids related to its services. Jointly, these RPA programs are helping NYPA improve how power is delivered to New York's tens of millions of citizens.

Virginia Department of Transportation

Every year, Virginia's Department of Transportation (VDOT) uses RPA bots to help make the state's winters more tolerable for citizens.

First, VDOT provides real-time analytics to its bots tracking Virginia's snow plows and how the services they provide are reimbursed. Second, VDOT's bots compile geospatial tracking data and information about Virginia's snow plow fleet to understand how to best service roads.

As Virginia taxpayer dollars increase each winter, VDOT then validates and verifies the best routes for its snow plows. In turn, this helps reduce fraud and waste in VDOT's service contracts.

In the future, RPA bots are also bolstering VDOT's efforts recovering wildlife from roads, addressing potholes and assisting drivers with emergencies. Although weather can be difficult to predict, VDOT's bots can lend the agency a hand no matter the season.

New Mexico Department of Health and Human Services

New Mexico's Department of Health and Human Services (DHHS) offers proof that AI and RPA can reap big returns for agencies pairing them together.

DHHS manages dozens of state programs involving such diverse benefits as day care and food stamps. Using a cocktail involving AI, automation and RPA, DHHS has made it significantly easier for citizens

to apply for or inquire about these initiatives. Working together, DHHS's AI and RPA bots decide which benefits citizens might qualify for or need the most information about. It's an outcome that eases the burden on public servants while improving the CX citizens receive.

Texas Medicaid Health Partnership

Medicaid is a federal and state program that assists people with limited income and resources who qualify with medical costs. Given the benefits can help cover such services as nursing home and personal care, Medicaid can have a life-changing impact on citizens and their help.

Texas's Medicaid Health Partnership (TMHP), for its part, provides outsourced and third-party Medicaid services, such as claims and enrollment processes to the state government. RPA bots are now helping this relationship run more smoothly by optimizing some of TMHP's business processes.

By taking over responsibilities such as downloading PDFs and moving them through workflows, RPA is helping TMHP focus on its mission. The result is that TMHP's human employees can focus less on manual tasks and more on improving citizens' well-being.

Fiscal Information System for California

The Financial Information System for California (FI\$Cal) is the Golden State's statewide accounting, budget, cash management and procurement IT system. Developing FI\$Cal required a cooperative partnership between California's Controller, Treasurer and the directors of its Departments of Finance (DOF) and General Services (DGS).

Signed in 2007, this collaboration was formalized with a memorandum of understanding (MOU). Although MOUs aren't legally-binding, FI\$Cal required a serious commitment from all agencies involved. Since then, RPA bots are helping the various agencies involved in FI\$Cal perform data migration activities. Helping FI\$Cal succeed, finally, matters as California ranked as the world's fifth largest economy in 2018.

Georgia State Accounting Office

Georgia's State Accounting Office (SAO) is a major agency as it establishes statewide accounting and reporting standards and practices. Currently, SAO uses RPA to help with various challenges for the greater good of Georgia.

For starters, RPA bots help operate and improve Georgia's statewide financial and human capital management systems. After that, they also train Georgia's accounting and payroll personnel in new policies, procedures and standards.

Perhaps most importantly, RPA bots assist with preparing Georgia's Comprehensive Annual Financial Report (CAFR), the state's annual financial audit. SAO's bots can additionally provide statewide financial information on an interim basis. Subsequently, these bots are crucial for improving Georgia's accountability, efficiencies and internal controls.



Increase your agency's human
workforce potential with
Blue Prism's connected-RPA



RPA: A Revolution in Working

An interview with Ron Jones, Senior Director – Technology Strategy, Public Sector, Blue Prism and Deb Rossi, Sales Director, Public Sector State, Local and Education (SLED), Blue Prism

Whether they're state or local, RPA offers government workforces a before and after moment. Before adopting RPA, many employees will grapple with heavy workloads that are recurring, time consuming and unexciting. After embracing RPA, these workers will have more time and freedom to pursue the duties they're passionate about.

But RPA doesn't change agencies overnight. Instead, agencies using RPA must use it to reimagine all their work. By determining which work best fits their bots – and which is better for their people – agencies can create “human in the loop” processes that transform how they deliver public services.

To understand how RPA can modernize government workforces for the 21st century, GovLoop spoke with Ron Jones, Senior Director – Technology Strategy, Public Sector, Blue Prism and Deb Rossi, Sales Director, Public Sector State, Local and Education (SLED) at Blue Prism, an RPA software provider.

Rossi said that agencies considering RPA should picture how it could aid their employees. “RPA helps government employees minimize boring, repetitive and mundane tasks,” she said. “Imagine what it would be like to come to work every day and have an array of personal assistants to help you?”

For evidence, consider social workers who often focus on administrative case work rather than helping families. RPA can assist these public servants with such time-consuming tasks as filing documents and let them focus on more meaningful labors instead.

“A human in the loop process is a process that's automated end to end and leverages both humans and bots,” she said. “For example, the repetitive, rules-based components of a process can be performed by the bot and the higher value and more complex interactions are handled by the human.”

RPA bots supplement humans rather than replace them. According to Rossi, this distinction is crucial for agencies dividing their workloads between their digital and physical workers.


Perhaps most importantly, RPA can help make agencies as innovative as private-sector companies. Private-sector employees are accustomed to tools such as RPA, and agencies that add them to their toolkits will become more attractive to potential talent.

“By merging human ingenuity with RPA's Digital Workforce, we are transforming the nature of work entirely.” – Ron Jones, Senior Director – Technology Strategy, Public Sector, Blue Prism.

RPA can lend agencies a hand with all these problems and more. Using providers such as Blue Prism, agencies can meet challenges from cybersecurity, recruitment and other concerns. Blue Prism's Connected-RPA strategy is focused on managing RPA as a strategic platform, not just on developing individual bots.

“Blue Prism's connected-RPA simultaneously unburdens government employees and provides opportunity to create even more value and job satisfaction,” Jones said.

Takeaway: RPA gives agencies a chance to upgrade their work from the ground up through automation and digital transformation.



RPA Expert: ‘Humans Will Always Need to Be Involved’

Amy Hille Glasscock’s latest research suggests that RPA adoption is on the rise across state governments. According to Glasscock – a Senior Policy Analyst at the National Association of State Chief Information Officers (NASCIO) – it’s a trend that implies more agencies are lightening their workloads with RPA.

Despite this, Glasscock cautions that RPA use is still in its infancy at state organizations. As RPA grows in popularity, concerns about its impact on the workplace are also growing. These early days are thus an opportunity to address how RPA bots and humans will coexist in the future.

During an interview with GovLoop, Glasscock argues that RPA’s benefits far outweigh its costs.

This interview was lightly edited for length and clarity.

GovLoop: How would you describe RPA to someone who’s unfamiliar with it, and how can it benefit state and local agencies?

Glasscock: RPA is software tools that partially or fully automate human activities that are manual, rule-based and repetitive. Some examples that agencies might use RPA for are virtual assistants and chatbots (*Editor’s note: Virtual assistants are software agents that*

can perform tasks and services based on an individual’s commands or questions. Chatbots are software programs that imitate human conversations using audio and text dialogue systems). Those are a form of RPA. Those are a starting point for governments that are going down the RPA path. You can ask them questions like, how do I renew my car tags? How do I get scholarship money for college? How do I pay my property taxes? A chatbot will respond and send you the necessary links. If there’s a question that it can’t answer, then a human will step in.

We recently did a study and interviewed CIOs and some people at agencies that are working on technology. One in four of our respondents said that they had deployed these types of solutions. They can answer a lot of the questions that citizens used to need to ask humans. It frees up humans from having to do that kind of work that they don't necessarily have to be doing.

How does RPA help agencies with their budgets, cybersecurity and workforce?

Across state governments, there are budget limitations. There's only so much capital to go around. You only have so much money that you can spend on your workforce. Especially when you're talking about qualified technology or security staff that have the skills that agencies really need, it's hard to compete with the private sector for those applicants. You just can't compete with private-sector salaries.

RPA allows humans to be able to focus on more creative things or the things that humans need to focus on. It saves them a lot of hours. It can also increase job satisfaction and make state governments look more appealing if you don't feel like a human robot at the end of the day.

For cybersecurity, RPA can make it easier for employees to ensure that their passwords are

secure, and they don't have to call someone. It doesn't have to be 9 to 5. If you're looking at the future of AI in terms of looking at patterns, machines might be better suited to pick things up 24/7. It helps the cybersecurity personnel do their jobs better. It adds a layer of security without having to attract more cybersecurity staff. As far as security goes, there's a lot of promise with AI and RPA for state and local governments.

What balance do you see between digital and human coworkers at state agencies going forward?

Humans will always need to be involved. Humans must be there to make sure that these programs are pursuing the right outcomes. They must keep any ethical or bias concerns in check. Maybe there are some people who like entering in the same number repeatedly, but a lot of people would like to do things that are more substantial and fulfilling for their jobs. With lots of the stuff that can be automated, it took up hours before and that time can now be spent interacting with citizens. While there are concerns about replacing humans – like robots taking our jobs and things like that – at this point I think it's unfounded. It's mostly going to be a positive thing.

What's the main takeaway that people should have after they've learned about RPA?

State governments are in the early stages of RPA, but the CIOs are moving in that direction. In our latest state CIO survey, 65% of CIOs said that they feel that AI – including RPA and machine learning – will be the most impactful emerging IT area in the next three to five years. It's where people are looking to for the immediate future.

Conclusion & Next Steps

For many agencies, the first step toward using RPA is recognizing that work can be done in new ways – acknowledging that existing workflows are not necessarily the cheapest, easiest or fastest. The following suggestions can help agencies find the optimal balance between their digital and human workers:

Communication is Key

Change can be difficult, and agencies that don't coordinate with their employees about it risk alienating them. People might resent the technology disrupting their routines if they're unprepared for it. Agencies can avoid such setbacks by updating employees about what's next. Overall, public servants who stay informed of their agency's RPA progress are more open to the technology; they can also provide more input about how to make it work successfully.

Plot Workflows Step by Step

Workflows show the various steps that accomplish a goal, so understanding all of them can help agencies integrate RPA bots. First, agencies must capture information about every stage of their workflows. Next, they must link each step of their processes in a logical, sequential order. Last, they must test if their RPA bots can handle the desired workflows from start to finish. Collectively, RPA demos can ensure that agencies are reaping the best returns from their bots; it also ensures that less time is wasted on assigning flawed workflows to these digital employees.

Assess AI's Place in the Process

AI is a gamechanger, and, when paired with RPA, its power can ripple across entire governments. Despite this, not every workflow needs AI, RPA or both. Deciding which processes could benefit from one or both technologies is a valuable exercise. Agencies that determine where AI and RPA can pair most effectively multiply the benefits from both tools.

Divide and Conquer With Digital Coworkers

Agencies that craft a roster of digital coworkers can also better track which roles they have. Organizations can then put more RPA bots on more urgent tasks and fewer bots on less pressing ones. It's an arrangement that lets agencies cluster their bots wherever they're most needed, and it also balances the amount of labor digital and human workers performs.

Build Out a Bot Bench

As the number of bots grows, so does the number of tasks agencies can give them. Agencies that expand their stable of bots can assign more workers to tasks as the need arises. Before long, these agencies can scale their bot labor up or down as necessary for mission success.

Have an Escape Hatch

RPA bots aren't perfect, and they'll occasionally stumble once they encounter exceptions in their normal routines. When this happens, having more bots or humans waiting in the wings can keep tasks on track. More bots are better for simpler responsibilities, while humans are best for more complicated ones.

Monitor RPA Productivity

Agencies with RPA should gauge how their bots are performing. Governments that watch their bots understand how much work they're completing; they also grasp how much time bots spend on projects, what benefits they produce and what challenges they present. Agencies that see their bots clearly can leave them to their own devices and focus on mission success.



Thank you to Blue Prism for their support of this valuable resource for public sector professionals.



About GovLoop

GovLoop's mission is to inspire public sector professionals by serving as the knowledge network for government. GovLoop connects more than 300,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to the public sector.

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