THE JOURNEY TO RPA
Five Phases to Unleashing the Power of a Digital Workforce
The Journey to RPA

Five Phases to Unleashing the Power of a Digital Workforce

Many government agencies are just waking up to the prospect of incorporating a digital workforce into their organizations as part of their digital transformation initiatives. For too long they have relied on human workers—whether staff, contractor or outsourced—to perform repetitive, error-prone tasks that are better suited to machines that won’t make mistakes. With a coming wave of retirees, lack of filled billets, and a culture of doing more with less, now is the time for change.

Recent federal government initiatives are pushing agencies towards the inclusion of Robotic Process Automation (RPA) as a key solution within their respective toolboxes. OMB memorandum M-18-23 requires agencies to “Develop and implement strategies for shifting resources to high value activities.” As part of this shift, agencies are specifically directed to introduce “new technologies, such as RPA, to reduce and redirect repetitive administrative tasks.”

Furthermore, the President’s Management Agenda (PMA) encourages government entities to begin “Developing a Workforce for the 21st Century” as one of its top aims. The goal, according to the PMA, “is to align and strategically manage the workforce to efficiently and effectively achieve the federal government’s mission.”

RPA is key to unlocking a more efficient, streamlined and responsive government. Digital workers can work 24/7 and are less prone to making errors than their human counterparts. Also, the development of the new generation of intelligent automation platforms make it possible for agencies to foster a culture of innovation and develop an operational agility that enables them to respond to ever-evolving mission requirements.

We recognize that such transformation does not happen all at once, but builds over time, as agencies deepen their understanding of RPA technology and the new opportunities that it creates.

This whitepaper is distilled from Blue Prism’s nearly 20 years of experience working with leading organizations across the public and private sectors. It describes the journey to RPA in five phases—beginning with market research and ending with large-scale deployment—while providing insight on the best path to follow and addressing issues that may be encountered at each stage of RPA maturity.

As a pioneer in the field of modern RPA—and as a recognized key innovator in the field of intelligent automation—Blue Prism stands ready to guide agencies on this digital transformation journey.

Phase 1: Market Research

Goal: Idea and discovery | Timeframe: 0-1 month

When it comes to choosing an RPA platform, it’s critical to take the time to get the decision right. Enterprise-grade RPA is not an off-the-shelf product like a laptop computer or a server. It cannot be evaluated by checking a standard list of specifications and features, as each organization will have different operational requirements, and each planned automation will require individual attention.
RPA can be thought of as a labor sourcing option that is just as important as the employees and contractors that organizations have relied on for years. The same criteria used when selecting an IT worker or contractor apply here as well—including reliability, security, productivity and capability—and whether that resource would be trusted within an organization.

The more experience agencies have with RPA, the more they will rely on it to address their labor requirements, said Ed Burrows, director of the RPA program at the General Services Administration. “We’re finding higher-value processes in the future to automate, meaning large labor hour savings,” he said.

At the outset, it’s important to distinguish RPA from RDA, that is, robotic desktop automation or recorded desktop automation. Here is a quick overview of the fundamental characteristics of each.

In a nutshell:

- **RDA**: As the name implies, RDA works at the desktop level. Human workers “train” these bots to perform tasks by recording the literal steps they take when performing their jobs. The results are saved as scripts that depend on X-Y coordinates and require the system to be set up the same way each time. To function, RDA requires a human counterpart—what the industry refers to as attended automation. Humans manually initiate and control each automation. Desktop automations reuse human workers’ credentials, on their desktops and laptops. For simple task automation, such as basic manipulations within Word, Outlook and Excel, RDA might be the best solution.

- **RPA**: True digital transformation—automating not just tasks, but end-to-end business processes, or integrating legacy systems with the cutting-edge capabilities of artificial intelligence (AI), machine learning (ML), and the power of the cloud—requires RPA—specifically, Connected-RPA. Connected-RPA is Blue Prism’s vision for how RPA can transform the use of digital workers within the enterprise. It enables organizations to provide their human employees with drag-and-drop access to a growing range of cloud, AI and cognitive capabilities that can be used to automate processes. Although process automation is driven by end-users, any successful implementation must be governed by the IT team.

Repeateable processes:

- **RDA**: As noted earlier, RDA carries out processes as recorded by individual end-users; different workers might design the same process in different ways. For example, one user may import a weekly report into Excel to work on it, while another may use an Access database on their desktop for the same work. Although these are similar actions, they utilize different outputs and artifacts. This disjointed approach makes it difficult to identify and propagate the most efficient processes.

- **RPA**: Because processes are vetted by the IT team and approved by the business/operations team, they can enforce the consistent use of the most efficient processes across the organization, providing a platform for transformation.

“We’re finding higher-value processes in the future to automate, meaning large labor hour savings.”

GSA’s RPA Program Director Ed Burrows

---

¹ “Is RPA ready for prime time?” Jan. 2, 2019, FCW.com
Performance:

- **RDA**: These workers only run in “attended” mode, meaning they are available only while their human counterparts are logged on—which means you get, at most, a 6- to 8-hour window of effective operation daily. And if a system is not configured exactly as it was when the script was recorded—or if the computer has gotten bogged down by too many browser windows open at the end of a day—the digital worker might not operate correctly.

- **RPA**: Connected-RPA is designed to run “lights out,” or autonomously, in your data center, cloud facility or a hybrid implementation sharing both. Autonomous RPA is where you see the greatest RPA, because digital workers can run 24/7, operating more efficiently and effectively. Connected-RPA digital workers can also work in “assisted” mode, collaborating with human workers on processes (see chart).

Security/compliance:

- **RDA**: The tasks the RDA bots perform are end-user initiated, so your systems won’t know whether a bot or a human is running a task. This is likely to be a red flag for IT security and compliance experts. RDA also creates a vulnerability for inside threats, since there is nothing to stop an end-user from recording processes that skirt security controls.

- **RPA**: Connected-RPA comes with enterprise-grade security. Digital workers use their own credentials, and everything they do is logged. Unlike your human workforce, you’ll have a history of their entire process history, saved for as long as you wish, with bulletproof audit support.

Given the intense interest in enterprise-grade RPA, a growing number of market research firms, such as Gartner, Forrester and Ovum, are now tracking developments and producing comprehensive studies—looking both at platform capabilities (e.g., automation and execution, AI, security monitoring and governance) and at the vendors’ strategic approaches (e.g., partner ecosystem, innovation, product road map). We believe if you read this research with an eye towards scalability, resilience, compliance and security, your choices will be clear.

---

### Recommended Configurations

<table>
<thead>
<tr>
<th>Attended</th>
<th>Assisted</th>
<th>Autonomous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robot and Human Share Keyboard</td>
<td>Robot is co-worker with its own workstation</td>
<td>Work carried out independently on schedules</td>
</tr>
<tr>
<td>Human interference can result in incorrect data entry</td>
<td>Robot interacts through any digital interface (email, SMS, forms, chatbots, voice-to-text, web services, etc.)</td>
<td>Working on secured workstation</td>
</tr>
<tr>
<td>Script &amp; data exposed to human</td>
<td>Can process sensitive data without human exposure</td>
<td>Provides complete audit, compliance, and governance</td>
</tr>
<tr>
<td>Lack of auditability between human vs. robot activity</td>
<td>Auditability between robot and human</td>
<td></td>
</tr>
</tbody>
</table>

*Blue Prism demos may be shown in attended mode, but this is not recommended for production deployments.*
Phase 2: Vendor Interviews

Goal: Define and design | Timeframe: 0-1 month

Once you have a basic understanding of the RPA landscape, you can begin looking at specific vendors and their platforms. At this point, features, functionality, and demos are important, but they don’t tell the whole story.

Consider licensing. Cost per digital worker is not a reliable measure, due to the significant variation in capabilities from one platform to the next. For example, Blue Prism’s digital workers have six core intelligent automation skills built in, with the ability to handle any type of process, whether fully autonomous or assisted—with all available in a single SKU (see chart).

In contrast, other vendors charge different amounts for different types of bots. That difference in price structure affects both the upfront cost and the total cost of ownership (TCO). Over time, as they gain experience with RPA, agencies are likely to take fuller advantage of its capabilities. If your partner does not provide an inclusive licensing model, your costs will increase over time.

Beyond licensing, the cost associated with the other factors hinges upon the design of the RPA software. Some products, especially the desktop-based ones, are easy to deploy on a limited basis, but later prove to be difficult and expensive as an organization looks to scale up their implementation. Automating a greater range of processes or extending automation across different departments is an entirely different endeavor than automating copy and paste operations in desktop productivity software.

For example, how do you decide which processes are good candidates for automation and which are not? Does the vendor have a process discovery tool to explore processes and their expected results? With the right tools at your disposal, you can ensure that you automate the right processes, realize the transformational gains that are possible, and save your organization a lot of wasted effort.
Governance is also an important consideration. Who ultimately is responsible for the automations? Is it the employee controlling their own self-built automations? Is it IT, who manages the underlying systems? Or is it the responsibility of the businesses which rely on the repeatable, secure and verifiable results. These questions go to the heart of an organization’s identity, but the answers themselves are reflected in the platform’s design, build, scope and ethos.

Here are some other areas to explore in your discussions with vendors:

**Security:**

- What are the security architectures of the RPA platforms you are considering? Can they be configured to be compliant with the security mandates and controls in place at your organization? Does the solution have an accepted DISA STIG?
- Does the platform support credentialing and Role-based Access Control, making it possible to enforce the same identity-based access controls used with human workers?
- Does the platform distinguish between human workers and digital workers?
- Are passwords shared between users and the digital workers on a desktop?
- When GAO or the IG come to audit your project, are you confident your deployed solution offers an immutable and secure audit log of the digital workers’ activities? Are logs stored insecurely on the file system, or stored securely on a database server?
- Is the RPA platform offered on a FedRAMP-compliant cloud platform?

**Innovation:**

- Given the pace of innovation in RPA, what is on the vendor’s roadmap and what is their strategy for providing access to future advances?
- Will future add-ons be paid or free? If there is a cost, how much?
- What are the vendor’s capabilities regarding artificial intelligence and machine learning? Does your vendor offer you a choice to decide what AI and/or ML technologies to leverage, or are you locked into what they offer in their tool?
- Do they work with your existing and future cloud vendors, and do they support FedRAMP?
- Do your selected vendors partner with innovative companies—and do they make it easy to leverage solutions developed by partners?
A healthy partner ecosystem is essential to supporting your long-term strategy, giving you the operational agility to adapt as your requirements change. This becomes even more important when RPA tool usage proliferates throughout your organization. You may have different consulting and advisory firms working in departments like finance, accounting, and operations—does the vendor partner with them or sideline them?

**Ease of use:**

- What skills are required to develop in these new RPA platforms?
- Does the vendor offer a no-code, drag and drop user interface, or will developers be required?
- How do you modify existing processes?
- How do you modify recorded processes if a change is required?
- What underlies the recorded or completed process itself?
- Does the platform rely on technology that is being depreciated in the near term?

The answers to these questions will determine the development workforce you need, and ultimately the cost to deploy and maintain process automations.

**Compliance:**

Finally, be sure that any platform in consideration complies with industry standards and government mandates. That includes:

- CERT Secure Coding
- FedRAMP Compliant Cloud Service on Microsoft Azure
- DISA IL5 (Impact Level 5) Compliant
- FISMA
- HIPAA
- NIST 800-53 & RMF
- PCI
- TAA
- Veracode Continuous (Target: Level 5)
- ICD 503
- FIPS Compliant

**Phase 3: Pilot**

**Goal: Validate and buy | Timeframe: 3-6 months**

Once you’ve narrowed the field of vendors under consideration, it’s worth taking the time to see how their claims stand up in real life. The most common approaches are proof of concepts, prototypes and pilots.

Proof of concepts provide quick results in days, but they don’t provide an opportunity to see how the technology works with actual enterprise processes. You will also be limited to typical desktop type automations with limited room for growth.
To truly validate the value of RPA in your organization, you should conduct a pilot, working with a vendor under a contract with a base of between 12 and 20 weeks plus option years.

**Here are some parameters to consider when planning a Pilot:**

- Choose just a handful of processes to automate—enough to get an understanding of how the platform works and to have something concrete to share with others in the organization.

- Choose processes that drive value into the operations and mission of the agency, having a positive impact on citizens or on the employees who serve them. One of the goals of the Pilot is to lay the groundwork for that future work by helping people to expand their understanding of the art of the possible.

- Don’t treat the Pilot as an end in itself: Develop it with the intent of eventually taking it into production. This provides a low-risk approach that you can build on in your option years, while demonstrating value and having a showcase to ensure buy-in from the rest of your organization.

- In the same vein, a Pilot should be transferrable to other parts of the organization once you move into production. As your solutions develop over time, in iterations well beyond your Pilot, your employees and managers will learn how to leverage the capabilities of digital workers in new and more powerful ways.

- Don’t expect the Pilot itself to have a miraculous effect on your operations—it’s just the starting point.

**Phase 4: Pilot to Production**

**Goal: On-board and implement | Timeframe: 6-36 months**

Moving RPA into production is not a one-and-done task. Successful organizations need to consider a Robotic Operating Model (ROM) for governance to help manage people, process and digital workers. Through process discovery and mapping, you will build a pipeline of new processes best suited to automate and transform while still improving on your existing processes. If you’ve chosen your platform correctly, you will have an expandable set of application objects and processes you can leverage across your organization.

As RPA moves into production with intelligent digital workers, agencies need to begin instilling the best practices and disciplines that will ensure long-term productivity and scalability.

As part of this, understanding your vendor’s best practices and how they will be integrated with your organization’s own is of tantamount importance. Do their best practices apply to more than just a desktop bot, and can they extend to serve an entire enterprise by working in your data centers and cloud installations?
For example, consider credentialing. Credentialing a digital worker for a Pilot might be a light lift, but how does that process work when credentialing numerous digital workers? And how well does it integrate with an agency’s existing credentialing process? More importantly, does it meet the latest requirements set forth by the U.S. Office of Management and Budget, from their May 2019 memorandum entitled “Enabling Mission Delivery through Improved Identity, Credential, and Access Management”? Page 7 of the memorandum states that “Agencies shall manage the digital identity lifecycle of devices, non-person entities (NPEs), and automated technologies such as Robotic Process Automation (RPA) tools and Artificial Intelligence (AI), ensuring the digital identity is distinguishable, auditable, and consistently managed across the agency. This includes establishing mechanisms to bind, update, revoke, and destroy credentials for the device or automated technology.”

A lot depends on the platform itself, of course, which is why that should have been addressed during vendor interviews. But the transition to production provides an opportunity to train people on that process and build confidence in those capabilities, which should include the strictest, most secure credential management solution.

Finally, ensure that your vendor and implementation partners have a roadmap or maturity model as a way to ensure a consistent level of quality across RPA implementations.

Additionally, your organization should consider creating an RPA center of excellence (COE). A COE provides a way to capture and build institutional knowledge around RPA, and to share that knowledge with different parts of the organization as they embark on RPA initiatives. For example, the COE should document effective governance and controls, track performance metrics, and capture best practices in methods, tools, and approaches. Think of it as a grand plan for ensuring long-term success.

**Seven Divisions of RPA Maturity**

Blue Prism has developed a Robotic Operating Model (ROM) that covers how agencies can work with RPA, including people, processes and technologies. Our ROM covers seven areas:

1. **Vision.** Identify the expected business benefits and outline how these align to the overall agency mission.
2. **Organization.** Create the organization design that best supports delivery of RPA that aligns with agency strategy and culture.
3. **Governance.** Select the best processes to ensure the agency realizes the benefit of its investment.
4. **Delivery methodology.** Define the optimal delivery strategy and embed policies for rapid and efficient delivery of RPA solutions.
5. **Service model.** Set up an engagement model to support operational processes while defining the management, scheduling and referral handling processes.
6. **People.** Define the roles and responsibilities for the delivery and support teams.
7. **Technology.** Define a highly scalable and maintainable technical architecture to support the use of RPA.
Phase 5: Initial Production to Scale
(100-plus Blue Prism Digital Workers)

Goal: Scale and deliver mission critical business outcomes | Timeframe: 36-plus months

At this point, as your organization begins to build out its RPA implementation, the focus is part technology and part culture.

From a technology perspective, as your digital workforce grows, you need to fine-tune your policies, processes and workflows for managing the development and deployment of a growing range of processes.

Again, this is something that you should have addressed while doing research and vendor interviews—what are the capabilities of the platform for managing growing complexity?

• Does your platform support a multi-team environment, with the ability to track and manage RPA implementations across different departments in a cohesive way?

• How easy is it to take automated processes developed for one project and deploy as part of another?

• Can you adapt automated processes as requirements change and redeploy quickly and easily?

While scaling up is listed here as part of the fifth phase, it should be factored into RPA initiatives from the beginning. Organizations that have successfully scaled are managing hundreds to thousands of Blue Prism Digital Workers with two to three humans via Blue Prism's Control Room.

At this point, if everything else is in place, the goal is to make RPA part of the culture of an organization. RPA should be seen as an enabling technology—one that creates new opportunities to imagine how work gets done. In its “Predictions 2019: Automation” report, market research firm Forrester noted that RPA, in conjunction with AI and business process management, was emerging as a key investment for CIOs.

“In 2019, Forrester predicts that automation will become the tip of the digital transformation spear, impacting everything from infrastructure to customers to business models.”

– Forrester’s Predictions 2019: Automation

To spur innovation, it is important to give your team access to a robust digital marketplace, where they can get easy access to the latest AI and cognitive technologies, further increasing the efficiency of the RPA platform.

The idea of employees being entrepreneurs might sound far-fetched. But as noted before, no one knows the work better than the program operations people doing it day after day. Undoubtedly many of them recognize that existing work processes are not necessarily as efficient or effective as they could be, but earlier automation platforms simply lacked the capabilities needed to make meaningful change.
Intelligent automation is a change agent that breaks the innovation bottleneck. As more and more employees develop an understanding of what’s possible—as they explore the AI and other cognitive capabilities embedded in the platform and available through the partner ecosystem—they will begin to identify even more opportunities to automate processes and free themselves up to take on higher value work, develop new skills, and advance their careers.

This is how transformation happens—not just by launching transformation initiatives but by cultivating a transformation mindset throughout an organization. This is why RPA is necessary. Agencies cannot achieve the goals of the President’s Management Agenda by making incremental changes or buying more of the same technology. They need to create new ways of doing business. The journey to RPA is the beginning of that larger journey.

Contact us to start your journey today! By downloading this whitepaper, you are qualified to receive free training for up to three people in your organization, a 60-day evaluation license, and a Process Discovery Tool Interactive Session with a Blue Prism subject matter expert.

**About Blue Prism**

In this digital era where start-ups are constantly disrupting markets, only the most agile and innovative enterprises survive and thrive. At Blue Prism, we pioneered Robotic Process Automation (RPA), emerging as the trusted and secure intelligent automation choice for the Fortune 500 and public-sector market. Now we bring you connected-RPA supported by the Digital Exchange (DX) app store—marrying internal entrepreneurship with the power of crowdsourced innovation.

Blue Prism’s connected-RPA can automate and perform mission critical processes, allowing your people the freedom to focus on more creative, meaningful work. More than 1,000 major enterprise customers leverage Blue Prism’s digital workforce, empowering their people to automate billions of transactions while returning hundreds of millions of hours of work back to the business. Visit www.blueprism.com to learn more about Blue Prism.

**Call us at 1-888-75-PRISM (1 888-757-7476)**

or **visit us at www.blueprism.com/gov**

**to start your agency’s digital transformation today!**
Call us at 1-888-75-PRISM (1 888-757-7476)
or visit us at www.blueprism.com/gov
to start your agency’s digital transformation today!