Robotic Process Automation and Its Impact on Talent Acquisition

Robotic process automation (RPA) is having a moment. This tool for automating basic processes is already saving some organizations time and money on talent sourcing, interviewing, hiring and onboarding. Investors and major tech players are paying attention to RPA, too, because of the potential in combining RPA with AI to automate complex tasks for a variety of functions and industries.

However, as with many technologies that create excitement, there’s also some confusion about exactly what RPA can do now, what makes it different from AI and what’s required to implement it. In this report, we’ll clarify how RPA and AI are different but can work together, how talent acquisition can use RPA now, what to consider before adopting an RPA solution and what the future of RPA may bring.

Machine Learning:
ML uses algorithms and statistical analysis to identify patterns in large data sets and make decisions based on the patterns found. ML is considered a subset of AI, and it’s the type of AI most commonly associated with advanced RPA tools like process discovery and workflow generation.

Artificial Intelligence:
AI is a broader concept than ML, but without a universally accepted definition. In general, AI describes machines that learn in some way and make decisions based on what they learn. For example, speech recognition programs, natural language processing tools, smart robots and machine learning are all forms of AI. Chatbots that use natural language processing to answer applicants’ questions in real time are a form of AI-based RPA.

Intelligent Automation:
IA describes the use of RPA plus many types of AI to automate more complex tasks, including some that require human-like intelligence, and then continuously optimize those processes based on data analytics.
Data Points

- Gartner reported RPA software sales grew more than 63% year-over-year to $846 million in 2018, making it the fastest-growing segment of the global enterprise software market.
- RPA can deliver 20% to 25% in FTE savings.
- Many organizations see payback on their RPA investments within 12 months.

Robotic Process Automation Explained

Robotic process automation is software that fully or partially automates repetitive, rules-based tasks like retrieving data from one application and entering it into another program or database. RPA software replaces human labor on these tasks, which can free workers to focus on other tasks (vendors frequently use the phrase “higher-value tasks”) or allow employers to shrink their workforce.

Although RPA is a trending topic in tech — Gartner placed RPA at the peak of its yearly Hype Cycle for AI in 2018 — basic automation tools like data-collecting screen scrapers and macros have existed for decades. So what makes RPA different from these simple automation tools or from application tracking systems (ATS) and customer relationship management (CRM) tools that have their own internal automation tools and integration options?

Put simply, these tools automate a single task or short series of tasks within an application. RPA can automate processes involving multiple tasks and multiple applications that aren't integrated with each other. For example, an RPA tool can automate chatbot conversations with potential candidates, manage their ATS profiles, walk new hires through the onboarding process, set them up with payroll and more, all with minimal or even no human input. Many ATS and CMS offerings fall somewhere between macros and RPA in terms of automation capability.

Google Trends Shows the Rapid Rise In RPA Interest

RPA for Talent Acquisition

RPA software is growing faster than any other global enterprise software category, with a value projected to reach $1.3 billion by the end of 2019. While it’s unclear exactly how many companies have adopted RPA, Computer Economics estimates that 24% of large organizations have already begun to work with RPA technology.

Today’s RPA software can handle repetitive, rules-based, multistep talent acquisition tasks faster, more accurately and at a lower cost than humans can. For example, RPA programs can work with multiple programs to automate candidate engagement email campaigns, ATS updates, employee record creation for new hires, payroll enrollment, and required signature collection from new hires and managers. RPA programs can also help HR departments avoid fines by automatically tracking compliance and sending alerts when a compliance issue arises.
Once new employees are in the system, RPA software can manage their system access and training. B2B tech review site G2 describes a typical use case for RPA in new employee onboarding and training: The program creates a business email address, business app user ID, and login credentials for each new employee, then sends training documents and tracks their completion. All of this is accomplished without human intervention.

**What's available now?**

Several vendors offer RPA solutions for talent acquisition. These programs let clients choose and customize the workflows they want to automate, like offer letters, onboarding, internal transfers and compliance. With these solutions, employees and managers are directly involved in setting up the automated workflows.

Other companies use RPA in their software-as-a-service offerings for talent sourcing. One mobile-first recruiting platform says it uses AI and machine learning to identify prospective candidates when jobs are posted, create personalized recruiting content and schedule interviews and for faster interview-to-hire. This type of solution integrates with the client’s ATS.

Pricing for current RPA solutions varies by the number of licenses required and the level of service. Enterprise RPA licenses can range from $1,000 to $15,000 per bot, depending on the number of bots licensed.

However, smaller organizations shouldn’t hesitate to consider implementing an RPA bot to streamline the more repetitive — yet valuable relationship-building — recruiting functions. The price can be as low as $24-$49 per month and allow you to both personalize the candidate experience and automate your talent acquisition process.

And note, “Typically, robot license costs are much lower than the average cost of human workforce,” Ernst & Young reports.

**Who can benefit from RPA for TA now?**

Whether RPA is right for your organization depends on your current workflows, your potential costs savings and the RPA offerings that fit your budget.

HR departments and SMBs with employees handling a lot of repetitive, rules-based tasks that require moving data

**What to Consider**

Do your existing systems have unused automation capabilities?

If so, it may be more cost-effective to begin your task automation program with those tools before investing in new software.

How efficient are your existing processes?

RPA is most effective when processes are already streamlined, according to the Harvard Business Review. Otherwise, you're automating inefficient processes, which reduces the ROI on your RPA investment.

Is connecting your existing systems via RPA a better choice than replacing those systems?

Gartner points out when an organization implements RPA for cross-system data management, it is “effectively chaining itself to the UIs of the past.” If your current software applications are nearing the end of their lifecycle, it might be more cost-effective to invest in newer, smarter systems before implementing a RPA bot.

What about buy-in from IT?

Although RPA tools are designed to reduce the need for IT involvement, IT expertise is required for RPA security, system maintenance coordination, hosting decisions and other RPA-related tasks.

What about your employees?

How will you redeploy employees whose time is freed by RPA? How much of their time will be spent interacting with the new RPA system? Will they need training for new roles? Will some of them be laid off?

Do your expectations for RPA scalability match reality?

It's easy to see the cost-savings appeal of a fully automated HR back office, but most organizations find RPA challenging to scale. Deloitte reports that just 3% of organizations attempting to scale RPA have been able to implement 50 or more bots.
from one system to another may benefit from inexpensive RPA tools that can be customized in-house to free up employees for other tasks.

At the enterprise level, the **Sierra-Cedar survey found** only 12% of large organizations (>10k employees) using RPA for any HR purpose. Small businesses (<2,500 employees) barely moved the needle with only 4% adopting RPA for any HR purpose.

Large organizations with HR and employee data spread among several systems and companies that are growing rapidly stand to gain the most from adopting enterprise RPA tools. However, due to the change-management costs involved, "only the largest HR organizations would likely possess the transactional base to justify the *robotic process automation learning curve*," according to McKinsey.

**Looking Ahead to Intelligent Automation**

As fast as RPA is growing, it is but one stage in a technological process that may lead to a more comprehensive type of enterprise automation — intelligent automation (IA). Although AI and IA don't have standardized definitions, **Accenture** offers a useful distinction between RPA and IA, noting that RPA solutions are often turnkey programs that overlay the processes they automate, while IA is a top-down, more tightly integrated tool that can automate judgment calls in a way RPA cannot.

As RPA incorporates more AI elements, and those AI elements become more sophisticated and human-like, experts expect RPA to evolve into intelligent automation.

What might intelligent automation look like for talent acquisition? It's not fully clear now, but we can see possibilities in the AI and RPA tools some organizations already use.

For example, Hilton is using AI to find passive jobseekers and potential good fits who might be overlooked by traditional candidate sourcing tools. Sourcing, screening and interviewing enough candidates to put together a 30-person training class used to require six weeks. With AI handling those tasks, Hilton can now put together a class in one week.

Chatbots, an example of natural language processing in TA, already help some companies engage with interested candidates, answer their questions and schedule interviews. Chatbots plugged in to RPA tools can also help with in-office HR tasks like answering basic questions about benefits, training and login credentials. As chatbot, RPA and AI capabilities improve, some industry experts predict the growth of conversation-as-a-service tools that expertly mimic human conversation as well as chat marketing that supplements or replaces email blasts to reach target audiences — like jobseekers.

As AI elements like natural language processing and speech recognition improve, the time to "train" chatbots and other automated tools should drop and accuracy increase. That could enable RPA to take on more complex tasks, like turning spoken statements into messages automatically for faster and more accurate interview transcription or determining the *tone of a chat transcript or email message* to help evaluate candidates' attitude and cultural fit.