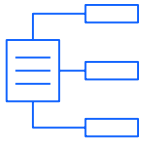




# Robotic process automation:

A no-hype buyer's guide





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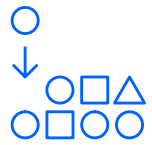
## Introduction

Automation holds great promise for enterprises that rely on rapid, streamlined processes to gain efficiency and deliver better experiences to customers and employees. There are many paths and possible entry points, from standalone software solutions to extreme automation platforms designed to deliver digitally transformed, technology-driven IT and business processes. Each has its own advantages, drawbacks, potential benefits and level of risk.

One technology that continues to receive a lot of attention is robotic process automation (RPA). RPA is often a gateway — a way to introduce automation and gain business benefits at low cost with near-zero risk. The concept is simple and well-known: a software “robot” replicates routine human-computer interaction to automate tedious, repetitive tasks. RPA bridges the gap between manual interaction and full automation.

RPA is particularly appealing where IT resources and budgets are limited, or for working with back-end applications that lack good APIs and would be difficult to automate without significant change to your systems. But to deploy RPA wisely, it helps to understand the technology’s benefits and limitations, how to expand its evolving capabilities and the value it brings.

The RPA market is projected to reach  
**USD 10.6B**  
by 2027.<sup>1</sup>



## Where does RPA fit into the automation landscape?

Deploying RPA software isn't the same as building fully automated processes and platforms from the ground up. With basic RPA, a software robot literally does what a human would do. This includes routine tasks such as data retrieval and entry, button clicks, file uploads and downloads, or invoice processing. While this is an important limitation, basic RPA is nevertheless advantageous because it can improve the speed and accuracy of task completion while freeing humans to focus on higher-return work.

Full automation, on the other hand, employs systems, processes and even third-party services that are purpose-built for automation from the outset. For this reason, the potential benefit of full automation is much higher — but so is the commitment.

There's a middle ground, however. When integrated with other automation software to enhance its base capability, RPA can be used in more situations and become a valuable component of an automation strategy that includes technologies such as artificial intelligence (AI), data capture, business rules and workflow.

For example, when RPA is integrated with AI, AI insights can be acted on by sending instructions directly to bots that complete tasks via other systems, such as an automation platform — with no lag time or human intervention — for improved efficiency, customer and employee experiences.



Today, a lot of AI insights are still driven to people to take action. Take Procure to Pay workflows. Many of these workflows still involve invoice processors at some point, usually at the point where you need to approve an invoice for payment. When RPA is combined with AI, it's possible to easily identify the manual steps, quickly build an aligned RPA robot, and then add it to the pool of invoice processors. A workflow engine would gradually determine that the best way to handle certain types of invoices is to route them to the bot, sending recommendations directly to it. This automatic routing reduces response time, saves time for the invoice processor to focus on other work, and enables end-to-end automation of the process.

## RPA: What it is, and what it isn't

Basic RPA is a way to easily automate individual, relatively simple tasks that would otherwise be handled manually. It doesn't automate entire business processes or workflows on its own.

## Robots: Opportunity or threat?

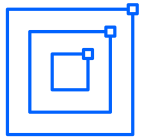
Understandably, automation may be seen as a threat to job security. When deployed properly, however, it becomes a source of opportunity both for the business and its workforce:

- RPA replaces tasks, not humans, by automating highly repetitive tasks to help workers do their jobs better.
- Worker knowledge becomes more valuable because they now have the time to apply it to benefit the business and its customers.
- RPA can help achieve gains in accuracy and speed.

## Basic RPA pros and cons

| Pros  | Cons   |
|---|--|
| <ul style="list-style-type: none"><li>• Basic RPA can automate repetitive back-office tasks, such as invoice or claims processing, that don't require human judgment.</li><li>• It's easy to implement in the right use cases and carries low risk, because it replicates manual tasks that already exist.</li><li>• There's no need to retrain employees or alter existing processes.</li><li>• It liberates humans from routine, repetitive tasks which can lead to improved job satisfaction, morale and productivity.</li></ul> | <ul style="list-style-type: none"><li>• Basic RPA is not well suited to more complicated tasks that depend on complex decisions or have multiple paths.</li><li>• It can't fix processes that are poorly designed or inherently inefficient so any current bottlenecks may still exist.</li><li>• It's inherently limited in scope and potential benefit, and isn't a substitute for purpose-built, fully automated processes.</li><li>• It's hard to scale from pilot projects.</li></ul> |





## What level of automation is right for you?

How best to deploy RPA depends on the use case. It's important to match capabilities with desired outcomes in order to achieve strong ROI.

There are, in effect, two options:

- Deploy basic RPA as a simple way to introduce automation.
- Combine RPA with additional components to create a more sophisticated “RPA plus” capability.

The key is to clearly understand when basic RPA is enough, and when it's time to consider a more full-featured RPA solution that includes capabilities such as unstructured data capture, intelligent chatbots, or advanced decisioning or content services.

|   | <b>Basic RPA: Quick, easy, affordable</b>  | <b>RPA plus: Enhanced and integrated</b>   |
|---|--|--|
| <b>When to use</b>                        | To speed simple tasks that can be precisely documented and have a defined sequence of steps. | For processes which, due to complexity and dependencies, need to be coordinated. Enables RPA to be used for more complex, conditional actions that may involve decision-making or multiple outcomes. |
| <b>Task characteristics</b>               | Routine. Repetitive. Predictable. Prescribed. Does not require flexibility.                  | Non-routine. State-dependent, with multiple variables and multiple outcomes. More reliant on human interaction and judgement.  |
| <b>Implementation cost and complexity</b> | Very low. Deployment in days to weeks with little IT skill required.                         | Greater than basic RPA but still relatively low compared to full automation. Deployment may take weeks or months and require assistance depending on internal capabilities.                          |
| <b>Potential ROI</b>                      | Moderate to moderately high, depending on how much routine tasks currently cost.             | High due to the added value provided by more extensive and sophisticated automation.   |

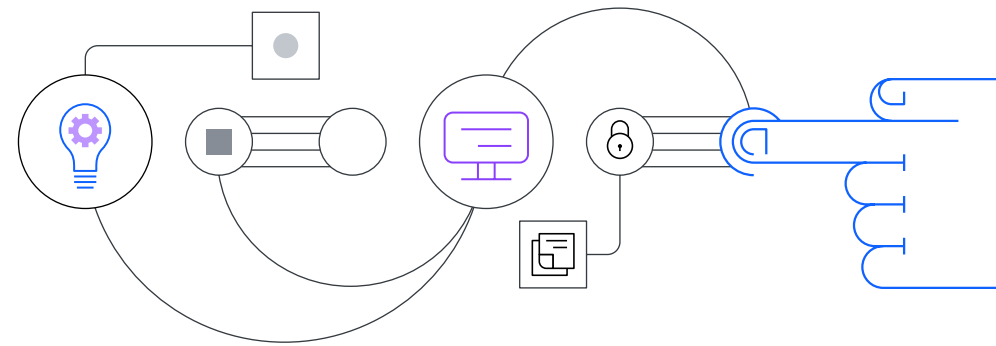


## What do you need to get started?

Implementing basic RPA is remarkably simple. The task is performed by a human as usual and “recorded” for the software. The resulting script is fine-tuned to ensure all potential task variations are accounted for. The resulting robot is tested to ensure it works.

A strategy that incorporates RPA as part of a more sophisticated automation capability — one that involves AI, data capture, business rules or workflow management — is likely to require additional planning and scrutiny of the overall process including all inputs and outputs.

It helps to first identify the tasks that are most appropriate for automation and lead to improved ROI. This will help determine whether it’s wise to consider an enhanced solution, or continue to perform the task manually, instead of implementing basic RPA.



### A “RPA-ready” task can be judged by certain key characteristics

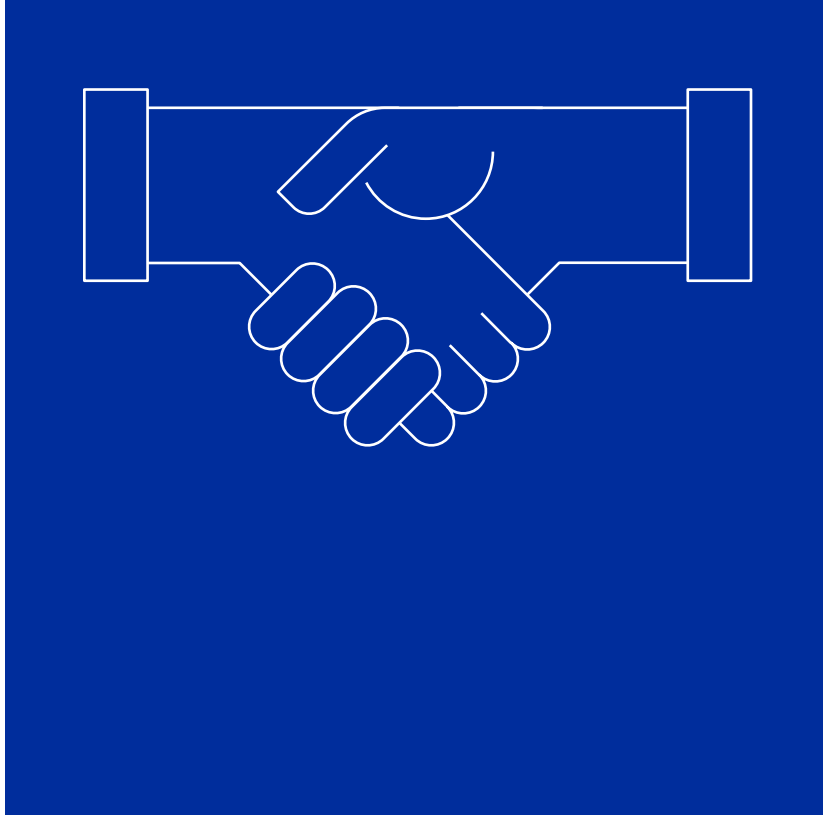
- Tasks that are simple, consistent and repeatable.
- Repetitive low-skill tasks that are prone to human error.
- Existing or planned processes where automation can improve productivity, and efficiency.
- Tasks that can be executed quickly to improve customer and worker experiences.

Some tasks may meet many of these criteria but would still not be suitable for basic RPA. For example, processing paper invoices may meet every criterion, but require additional data capture capabilities or a redesign of the process to make it fully digital.



## How do you find the right RPA provider?

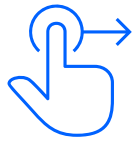
Not all RPA software solutions are the same and neither are the vendors that provide them. Depending on your goals, standalone software may be all that's required to begin. However, there's value in looking for a vendor that can deliver a broader portfolio of software and services to ease transition to an integrated "RPA plus" capability when needed. You'll get the advantages of basic RPA while being able to scale beyond pilot projects to broader adoption and utility.



### 8 key questions for your RPA vendor

- Are you a "pure play" RPA provider or do you consider RPA to be part of a larger automation strategy?
- How extensive and integrated is your automation platform?
- Can you help me find the best integration opportunities and recommend the optimal course of action?
- Do you have a clear roadmap that can show me how to become more automated in the future?
- Do your offerings meet my requirements for security and compliance?
- Do you have the expertise to help me map, prioritize and document my tasks and processes?
- Does your RPA solution offer tools to develop and test bots, manage deployment, and monitor and handle exceptions?
- Do you have a good track record in business optimization and enterprise computing?





## Give RPA a try

Basic RPA can be so inexpensive and easy to deploy that in most cases there's little if any financial or business risk in experimenting with it. Pilot programs in which one, or a few, tasks are automated can be set up in a few days or weeks. These programs can provide useful learning opportunities as well as data you can use to build a business case for more robust "RPA plus" automation.

It's important to recognize that many companies still have fewer than 10 bots in production. Barriers to being able to scale beyond pilots range from failure to identify best use cases to lack of the right controls. To gain the momentum needed to scale, start by showing business and operations teams what the bots are doing and the value they bring. Prioritizing an RPA pipeline for future bot needs that takes a whole process view is also key to getting the most out of the good decision to make RPA part of any automation toolkit.

### What IBM offers

IBM offers a full-featured, low-code RPA solution with some unique features, such as intelligent chatbots. [Learn more.](#)

### How to get started in 7 steps:

- 1** Choose a few simple tasks to automate and see if their parameters fall within the capabilities of the RPA software you're trying.
- 2** Gather information about how much time each task takes, both individually and in aggregate across the business.
- 3** Record the task steps using the RPA software.
- 4** Make any updates to refine the script.
- 5** Put the robot into production for a trial period.
- 6** Measure results and analyze the impact on both the workflow and employees.
- 7** Assess efficiency gains, time savings and quality improvement.

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