



Robotic process automation

A “no-hype” buyer’s guide

An economy increasingly based on digital interaction is pushing interest in automated business processes to new heights.

But what’s the best way to get there?

Automation holds great promise for enterprises that rely on rapid, efficient processes to drive efficiency and deliver better experiences to business users and end customers.

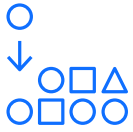
There are many paths and possible entry points, from standalone software solutions to sophisticated business process management systems and full outsourcing. Each has its own advantages, drawbacks, potential benefits and level of risk.

One technology receiving a lot of attention is robotic process automation (RPA). RPA can be thought of as a gateway — a way to introduce automation and gain business benefit at low cost and with near-zero risk. The concept is simple: a software “robot” replicates routine human-computer interactions, automating what would otherwise be tedious, repetitive tasks. RPA thus 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 thus be difficult to automate without significant change. But to deploy RPA wisely, it pays to understand the technology’s benefits and limitations — and the ways in which it can be leveraged to expand its capability and the value it brings.

**The RPA market
is projected
to reach
US\$2.1B
by 2021.**

Source: Forrester Research¹



Where RPA fits in the automation landscape

Deploying RPA software is not equivalent to building fully automated processes and platforms from the ground up. With standalone RPA, a software robot literally does what a human would do: tasks such as data retrieval and entry, button clicks, file uploads and downloads, or invoice processing.

While this is an important limitation, RPA is nevertheless advantageous because it frees humans to do higher-value work.

Full automation, on the other hand, employs systems, processes and even third-party services 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 is a middle ground, however. When integrated with other automation software to enhance its focused capability, RPA can be used in more situations and thus become a valuable component of an automation strategy that includes data capture, business rules and workflow.

RPA:

What it is, and what it isn't.

RPA is a way to easily automate individual, relatively simple tasks that would otherwise be handled manually.

RPA does not automate entire business processes or workflows on its own.

Standalone RPA pros and cons

Pro

- Can automate repetitive back office tasks that do not require human judgment (e.g. invoice or claim processing).
- Easy to implement in the right use cases and carries low risk, because it replicates manual tasks that already exist.
- No need to retrain employees or alter existing processes.
- Liberates humans from routine, repetitive tasks. This leads to greater job satisfaction, improved morale, greater productivity and freedom do more important work like solving problems or adding value to customer interactions.

Con

- Not well suited to more complicated tasks that depend on complex decisions or have multiple paths.
- Cannot fix processes that are poorly designed or inherently inefficient. If bottlenecks are present, they may continue to exist.
- Inherently limited in scope and potential benefit. Not a substitute for purpose-built, fully automated processes.

Robots: Opportunity or threat?

To workers, automation may understandably 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 human tasks, not humans. It's assistive, taking over highly repetitive tasks and helping 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 TCO.

For the organization, the implication is clear: There is a need to think about and prepare for the opportunity rather than the potential problems. That means becoming educated on the benefits of automation.



What level of automation is right for you?

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

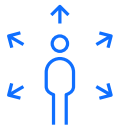
There are, in effect, two options:

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

The key is to clearly understand when standalone RPA is enough, and when it is time to consider enhancing it by adding more advanced capabilities such as unstructured data capture, business rules management or workflow orchestration.

Choosing the right approach

	Standalone RPA: Quick, easy, affordable	RPA plus: Enhanced and integrated
When to use	Very good at speeding up simple tasks that can be precisely documented and have a defined sequence of steps.	Needed 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 multiple outcomes and/or decision-making.
Task characteristics	Routine. Repetitive. Predictable. Prescribed. Does not require flexibility.	Non-routine. State-dependent, with multiple variables and multiple outcomes. More reliant on human interaction and judgment.
Implementation cost and complexity	Very low. Deployment in days to weeks, with little IT skill required.	Greater than standalone RPA but still relatively low compared to full automation. Deployment may take weeks or months and require assistance, depending on internal capabilities.
Potential ROI	Moderate to moderately high, depending on how much routine tasks currently cost (e.g. low per-task cost but very high volume).	High due to added value provided by more extensive and sophisticated automation.



What do you need to get started?

Implementing standalone 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 that all potential task variations are accounted for. The resulting robot is tested to ensure that it works.

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

It pays to first identify the tasks most appropriate for automation and potential ROI. That will help to determine whether it’s wise to consider an enhanced solution, or continue to perform the task manually, instead of implementing standalone RPA.

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

- Simple, consistent and repeatable.
- Repetitive low-skill tasks that create human issues such as high error rates and low worker morale.
- Existing or planned processes where “stripping off” routine tasks can free humans and deliver a significant productivity, efficiency and/or cost benefit.
- Tasks that offer meaningful opportunities to improve customer and worker experiences by speeding up existing processes.

Some tasks may meet many of these criteria but still not be suitable for standalone RPA. For example, processing paper invoices may meet every criterion, but will 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 goals, standalone software may be all that's required to begin with. However, there is value in looking for a vendor able to deliver a broader portfolio of software and services, to ease transition to an integrated "RPA plus" capability when needed.

Key questions for your RPA vendor



- Are you a "pure play" RPA provider or is RPA 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, if I need you to?
- 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, monitor and handle exceptions?
- Do you have a good track record in business optimization and enterprise computing?



Next step: Give RPA a try

Standalone 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 relatively easily in a few days or weeks, providing useful learning opportunities as well as data on which to build a business case for more robust “RPA plus” automation.

Getting started is easy.

Learn about IBM RPA — get immediate access to product information and customer reviews here:

<http://ibmhybridcloud.lookbookhq.com/rpa>

Here's how to proceed:

1

Choose a few simple tasks to automate and check to see if their parameters fall within the capabilities of the RPA software you're trialing.

2

Gather information about how much time each 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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