Appian

RPA and Enterprise Automation

Strategies and Technologies to Win in the Digital Economy

RPA—Robotic Process Automation—is a hot topic these days.

And, for good reason.

RPA helps organizations drive efficiency, increase productivity, and cut costs by automating various repetitive and manual tasks.

And, that's a shame.

Why? Fact is, if you are using RPA for these things exclusively, you could be missing out.

In this paper, we'll take a deeper look at RPA, as well as technologies that—*if implemented*—can make RPA more effective than you ever imagined.

If you're considering RPA for your business or institution…or even currently using RPA, this paper is meant for you.

What you'll learn:

- What is RPA?
- Signs RPA might be for you
- The best use cases for RPA
- 3-Signs you can get more out of RPA
- Create amazing possibilities: Technologies to expand RPA
- How to get started now

WHAT IS RPA?

RPA—or Robotic Process Automation if you hate acronyms—is technology to automate repetitive and rule-based tasks performed by people.

For more perspective, consider the definition of RPA Software, according to industry analyst Gartner:

> *RPA tools are designed to mimic the same "manual" path taken through applications by a human using a combination of user interface (UI) interactions or by using connectors to client servers, mainframes or HTML code. An RPA tool operates by mapping a process in the RPA tool for the software "robot" to follow computer pathways between screens and various data repositories. An RPA tool can be triggered manually or automatically, move or populate data between prescribed locations, document audit trails, conduct calculations, perform actions, and trigger downstream activities.*[1]

For a more real-world scenario, consider the example of a basic order to cash process that includes several different steps:

Let's assume delivering the order requires a person to access a third-party shipping vendor's website and then perform the following steps:

1. Login to customer order management system
2. Search and open a customer order
3. Login to the shipping vendor's website
4. Copy and paste data from order management system to shipping vendor's website
5. Submit the order for shipment using the shipping vendor's website
6. Copy tracking number from shipping vendor's website to customer order management system
7. Mark order as shipped in order management system

Now, imagine you're shipping hundreds of orders every day.

Can you see how these simple actions quickly become a full-time job...or even jobs? This is an example of tasks that can be automated using RPA. RPA can mimic the same steps that a human performs.

For large enterprises with expansive, complex operations, these types of tasks are everywhere! And, they can be mind-numbing…so much so that when humans take on the tasks, mistakes should be expected.

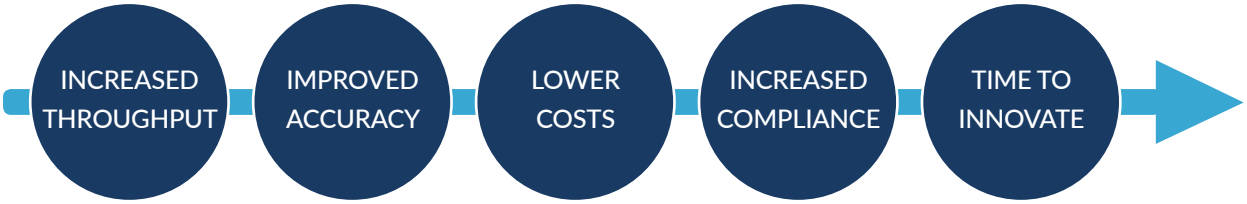
Why? Humans get weary…eyes get heavy…fingers hit the wrong buttons…breaks are a necessity.

Not so for the software robots of RPA.

How? Imagine an invisible robot logging into systems, using the graphical user interface exactly like a human would, only at lightning speeds…with no mistakes…and no breaks. Now you get the idea of how RPA software works.

But, what about from a value standpoint?

What does RPA deliver?



By using RPA, organizations can simplify work and achieve more in less time. And it all happens while freeing full-time employees to focus on more meaningful work.

3 SIGNS RPA IS FOR YOU

1. You have employees wrestling with the swivel-chair effect and performing repetitive tasks.

If you've ever had to work across multiple systems to do a single job, you know the swivel chair effect. You get information from one screen, then swivel your chair to the other and pull info from there...then perhaps swivel to a third...a fourth...a fifth! RPA can take care of this, logging into the first, second, third, and all systems; getting the data and performing the task.

Lesson learned: Use RPA as a way to reduce employee frustration over repetitive, irritating tasks and free resources to focus on more strategic efforts and projects.

2. You have a long backlog of legacy integration needs.

Building enterprise applications requires integrations with existing business systems like ERP and CRM systems. This can be daunting, especially for large organizations with hundreds (or more!) of disparate business systems.

Do you have a backlog of legacy integration needs creating bottlenecks on your path to better customer satisfaction and greater operational efficiency? If so, RPA is a technology to consider.

Lesson learned: RPA can serve as a way to integrate legacy business systems and avoid time-consuming, costly integration projects.

3. You have tasks as part of a process that require higher levels of compliance and auditability.

Knowing precisely how a particular task is completed and then having that information recorded for audit and compliance needs is quite common for large enterprises. With RPA, a software robot performs a predefined set of actions, without errors or departures from the standard flow of work, and therefore, can help to establish better process accuracy, higher level of compliance and reduce risks. Additionally, the tasks performed are captured and logged in activity logs resulting in better auditability.

Lesson learned: RPA can serve as a way to improve compliance, governance, auditability and risk management.

WHAT ARE THE BEST USE CASES FOR RPA?

Look for the following attributes to identify tasks with the greatest ROI and automation potential using RPA:

TASK ATTRIBUTES	DESCRIPTION	OTHER CONSIDERATIONS
RULE-BASED	Activities that can be performed by following well-defined rules are a good fit for RPA.	Consider adding cases management or enterprise workflow in the mix for more complex processes and decisions that require human judgement.
HIGH VOLUME	The higher the transaction volume, the higher is the ROI potential of RPA.	In some cases, low-volume tasks can also be a good fit if there are needs for reducing human error to improve compliance and to manage risks.
LOW EXCEPTIONS	Tasks with limited variations and fewer exceptions are great fit.	Consider case management or enterprise workflow solutions for more dynamic processes.
STABLE AND WELL-DEFINED PROCESS	Tasks that are mature and stay relatively unchanged are good fit.	Process that change often require changing the RPA scripts. The resulting overhead may defeat the purpose of automation.
LOW SYSTEM CHANGE	Process ,that require limited or no changes to existing systems are a good fit.	If the underlying system needs change then it defeats the purpose of RPA as a non-invasive technology.
STRUCTURED DATA AND READABLE ELECTRONIC INPUTS	Tasks that require working with structured data and readable electronic inputs (Excel, Word, PDFs, etc.) are a good fit.	Consider adding optical character recognition (OCR) and other AI technologies to the mix if the data is unstructured or in a format that is not readable (like images).

Lesson learned: Not all manual tasks are a good fit for RPA.

3-SIGNS YOU CAN GET MORE OUT OF RPA (AND WHAT TO DO ABOUT IT)

By this point, you certainly get it. RPA is cool tech that uses software robots to automate basic tasks by mimicking user actions. It speeds work and cuts costs.

But, how do you know you're ready to expand the scope of automation beyond RPA? And, what can you do about it?

Here are a few signs to look for, along with actions that you can take now to get more value from your automation initiatives.

1.) You want to drive greater enterprise automation, but continually run into tasks and processes that are not the best fit for RPA alone

This is a clear sign RPA may not be enough to deliver on your automation goals.

Consider what Craig LeClair, Vice President and Principal Analyst at Forrester Research, had to say about RPA:

> *RPA is showing progress as the precursor to tomorrow's digital workforce but works in a simple fashion today automating repetitive tasks but without insight into the end-to-end process or business goals. RPA will benefit from the advanced rules management and process control available within low-code and BPM platforms.*

With this statement, Mr. LeClair has laid out a map for increasing the value of RPA.

RPA is great for automating high-volume, rule-based tasks within stable, mature business processes. As a result, RPA can address only a subset of most organizational automation needs.

- What about dynamic tasks that change often?
- Long running processes that stay in flight for months?
- Tasks that require human judgments?
- Tasks that require complex rules and decision management?

These represent some of the tasks that can be automated but aren't the best use cases for RPA.

Action to take: Explore other technologies in combination with RPA that will help you automate business process that are dynamic, long-running, and with complex rule and decision management needs.

2.) You want to achieve better collaboration between digital and human workforces.
It sounds like science fiction. And it's real. We are entering a new era where humans work alongside software robots.

Humans will manage the robots. They will oversee and approve the tasks performed by the robots and manage errors or exceptions that occur while robots process tasks. This could easily lead to significant overhead for the humans.

In this scenario, wouldn't it be great if the tasks themselves could be programmatically assigned to humans only in the case of exceptions? What if the assigned tasks could be associated with a completion time, escalated, or prioritized as needed to make sure the collaboration is productive and the overall process stays on track? Can you see the value in this approach?

Action to take: Automate the handoffs between humans and the digital workers. Scale the robots without creating unnecessary overheads.

3.) You want automation initiatives to make an impact on your business outcomes.
RPA provides a proven solution for enterprises burdened by the inefficiencies and challenges associated with legacy business systems or people-intensive processes. But, it's not the end-all-be-all of digital transformation.

Consider what Research from Gartner, Inc has to say about focus:

By 2019, process automation will have limited impact on top-line growth for 50% of organizations that will erroneously focus on labor reduction, not on improving business outcomes.[2]

Gartner further recommends organizations formalize an enterprise automation roadmap (EAR) to wholistically address organizational automation needs.

Many organizations rush to select RPA software and start a project. Learning about RPA suitability and functionality should be done in conjunction with building a broader enterprise automation roadmap (EAR). [3]

Building an EAR requires a hard look at different automation technologies, as well as an understanding of the interplay. There are significant benefits for those organizations that put in the effort to understand how technologies like RPA, business process management (BPM), and artificial intelligence (AI) can be combined to build and execute an overall enterprise automation strategy.

Action to take: Build a center of excellence (COE) that looks at how core enterprise automation technologies like RPA, BPM and AI can be used together rather than working in isolation.

TECHNOLOGIES TO EXPAND RPA: UNDERSTANDING THE INTERPLAY BETWEEN RPA AND BPM

RPA is about automation. And, to an extent, so is BPM.

So, you wonder...what's the difference?

The most simple way to put it?

- RPA is about automating tasks performed by people.
- BPM is about automating overall business processes.

Want more detail? Here are some additional differences:

	BPM	RPA
IMPLEMENTATION APPROACH	Create new business process. Enhance existing business process. Enable continuous process improvement.	Automate an existing manual task with minimal process re-engineering.
INTEGRATION APPROACH	Integrate with existing business systems like CRM and ERP programmatically. Integration is system-to-system.	Integrate with existing business systems through the user interface. Software robots mimic actions of humans.
APPLICATION INTERFACE	New web/mobile applications, including smart forms, dashboards, and other modern interfaces, are created.	New interfaces are not created. The robots work with existing UIs.
APPLICABILITY	Business process automation and dynamic case management	Automate, rule-based tasks performed by people

Enterprise automation initiatives can benefit by bringing these technologies together. Doing so provides a flexible framework that can enable greater automation, increase agility, and help organizations define a comprehensive long-term automation strategy.

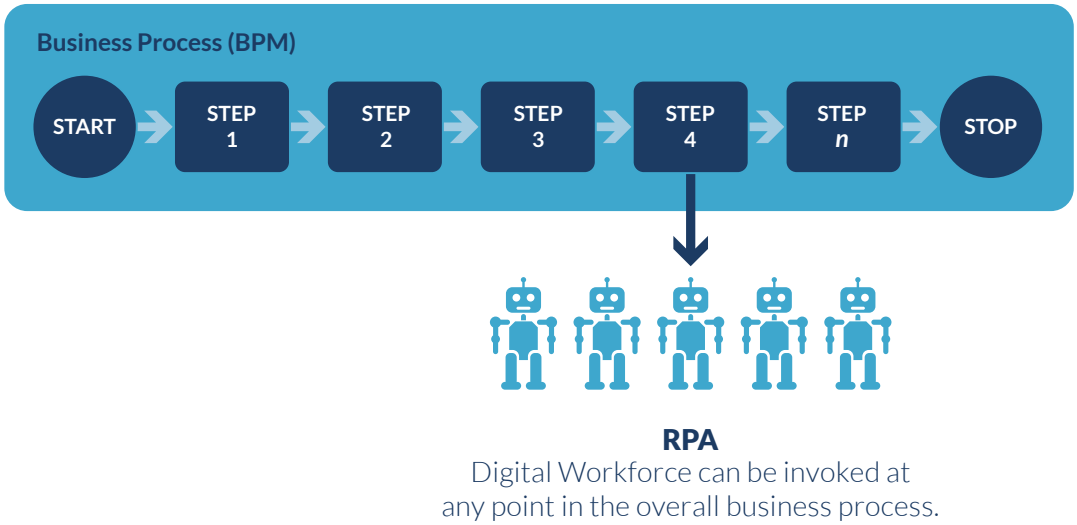
Here are some benefits that can be achieved by using BPM and RPA together.

Greater automation

Consider RPA a piece of an overall process where repetitive and rule-based tasks performed by people are automated. Now plug in those tasks as part of a more complex business process handled by BPM.

Voila! You can achieve greater automation!

Doing so, you also get complete visibility into the overall business process, as well as the audit trails for a comprehensive compliance and risk management strategy.

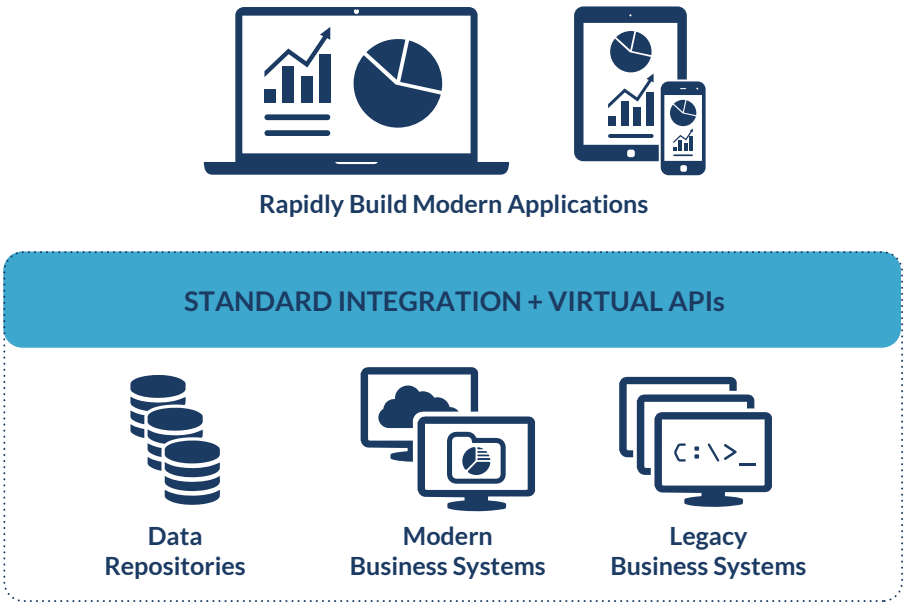


Rapid digital transformation using virtual integrations

It's a fact of life for many organizations—legacy business systems that are difficult to integrate with. Combining automation technologies like RPA and BPM can help...considerably. Software robots can rapidly enable virtual integrations with legacy systems that otherwise may take months or even years to build! This provides an ability for organizations to deliver modern applications...fast...regardless of the underlying complexities of their IT systems.

Using RPA as a way to integrate with older systems can make your investments in modern apps future-proof. These RPA-based integrations can be replaced with APIs or web services whenever an older system gets replaced with a modern business system or whenever programmatic integrations are available.

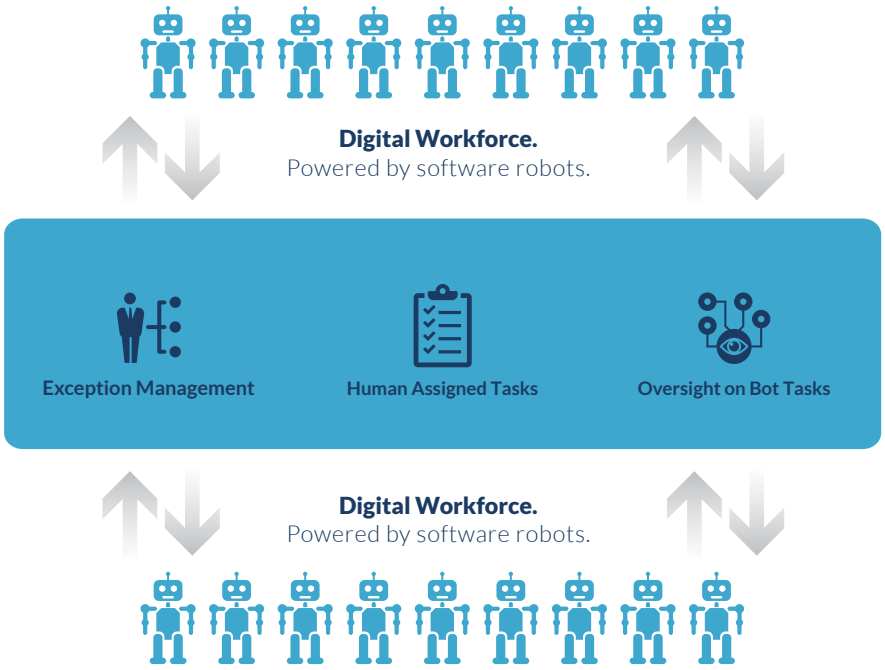
The net result is a greater ability to define a clear, long-term transformation strategy with unprecedented flexibility.



Human Digital Workers Collaboration

You can achieve seamless collaboration between your human and digital workforces using BPM and RPA together.

The handoff of tasks between humans and robots can be automated, and a complete audit trail of interactions and tasks can be maintained. Tasks assigned to humans can be directed to the right person or the right team. In addition, the assigned tasks can be associated with a completion time, escalated, or prioritized as needed to make sure the collaboration is productive and the overall process stays on track.



Bringing it all together

Leading organizations are aggressively working towards achieving greater automation and providing cutting-edge customer experiences. They are in the process of transforming how business gets done—*a "zero-touch" digital self-service environment*—imagine logging into your bank's mobile app and speaking to a virtual assistant about your needs and getting issues resolved immediately. For a typical large enterprise with hundreds of IT systems, an application like this requires significant behind-the-scenes plumbing.

Achieving a seamless customer experience and automating the plethora of related business processes require organizations to use multiple automation technologies.

Bringing these technologies together and understanding the way to best use them in concert will make all the difference.

- The difference between being a laggard and being a leader
- The difference between being disrupted and being the disruptor
- The difference between simply surviving and truly thriving

Will you continue along your current path? Or will you be the next transformation legend? It's up to you.

HOW TO GET STARTED NOW

Appian RPA with Blue Prism is a new product offering from Appian that combines industry-leading low-code, BPM, dynamic case management (DCM), and RPA capabilities to deliver comprehensive enterprise automation solution and drive rapid digital transformation.

Learn more about Appian RPA with Blue Prism

This combination of capabilities allows you to take advantage of RPA in a far broader sense than traditionally available.

To get started, sign up for a demo. See the transformative power of Appian RPA with Blue Prism first-hand!

1. Tornbohm, Cathy. "Market Guide for Robotic Process Automation Software." Gartner, November 7, 2016. ID: G00309392
2. Gartner. Robotic Process Automation: Eight Guidelines for Effective Results, Cathy Tornbohm, 12 October 2016
3. Gartner. Robotic Process Automation: Eight Guidelines for Effective Results, Cathy Tornbohm, 12 October 2016

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Appian provides a leading low-code software development platform that enables organizations to rapidly develop powerful and unique applications. The applications created on Appian's platform help companies drive digital transformation and competitive differentiation.

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