

RPA

APPLICABILITY IN TODAY'S LANDSCAPE



CONTENTS



3 ABSTRACT
-What is RPA?

8 USE CASES OF RPA
- Data Extraction
- Invoice Management
- E2E Retail Management

6 CHALLENGES IN IMPLEMENTING RPA IN VARIOUS INDUSTRIES
-Process Fragmentation
-Lack of Clear RPA Vision
-IT Unpreparedness

10 BASIC STEPS FOR A SUCCESSFUL RPA IMPLEMENTATION

10 CONCLUSION

7 ADVANTAGES OF RPA
-Volume, Speed, and Consistency
-Labor Savings
-Better Accuracy, Productivity, and Efficiency
-Achieving Business Data Security
-Decision Automation

11 REFERENCES

ABSTRACT









What is RPA?

“In layman’s terms, RPA is the process by which a software bot uses a combination of automation, computer vision, and machine learning to automate repetitive, high-volume tasks that are rule-based and trigger-driven.”
–David Landreman, CPO of Olive

Robotic process automation (RPA) has been ever-present in different forms for a long time. The 70s to 90s era witnessed computerized automation, 90s saw business process management (BPM),

and the Generation Z of the 2000s has watched RPA grow and flourish. Today’s Digital Transformation is now helping RPA evolve into a better, productive form.

According to a report by McKinsey & Company on emerging and disruptive technologies, “It is predicted that automation technologies, such as robotic process automation (RPA), will have a potential economic impact of nearly \$6.7 trillion by 2025.”

<p>RPA is ...</p> <ul style="list-style-type: none">  Automation of rule-based repetitive manual tasks  A solution to emulate human actions digitally  Non-disruptive and user friendly 	<p>RPA isn't ...</p> <ul style="list-style-type: none">  A physical robot  A way to replace humans  For judgment-based processes
<p>What it can do</p> <ul style="list-style-type: none"> Automate form filling Fetching, processing, storing information  Process certain decision-making Processing structured content from documents Extract, scrap data from different formats and sources Logging and reporting data 	<p>Where it can help</p> <ul style="list-style-type: none"> Integrates well with existing IT infra Accelerate digital transformation with rapid implementations  Freeing people from repetitive tedium Mimics the way humans interact with software to perform high-volume, repeatable tasks Boost productivity across the board Collecting social media statistics

No industry, be it manufacturing, legal, IT, finance, retail, or real estate, is sufficient today and need an RPA customized to their needs. Making tasks easier and heading toward an automated world has huge advantages such as saving time, ergo, and making more money. But lately, organizations are struggling to find a power-packed RPA to get the maximum returns from their investments.

Humans run all occupations, and they have their limitations. **Aligning mundane and repetitive tasks to RPA leaves the executives with more time to spend on creative and strategic endeavors and to enhance their other skills.**

Let us look at some challenges and everyday tasks faced in all companies, large and small, in healthcare, IT, sales & operations, retail & FMCG (fast-moving consumer goods), customer service/BPO, finance & accounting, pharmaceutical, and SCL & manufacturing industries.

INDUSTRY ROTE TASKS



Human Resources

- Employee onboarding
- HR spend analytics & reporting
- Time record validation
- Travel & expense management



SCL & Manufacturing

- Supplier portal integration
- Purchase requisition and automation
- Freight management
- Invoice, quote, and contract management
- Supply and demand planning



IT, Sales & Operations

- Server and application monitoring
- User setup and configuration
- FTP download, upload, and backup
- Software installations



Customer service/BPO

- Order entry and updates
- Query resolution, FAQs
- Billing
- Shipping notifications
- Refunds and processing KYC information



Finance & accounting

- Purchase requisition
- Automating invoice processing
- Credit note processing
- Accounts payable three-way match
- Client onboarding
- Accounts reconciliation
- Financial planning and forecasting
- Automatic report generation
- Tax reporting and reconciliation process



Retail & FMCG

- Invoice, quote, and contract management
- Customer support and feedback management



Healthcare

- Appointment scheduling
- Account settlement
- Claims management
- Discharge instructions
- Audit procedures
- Healthcare cycle



Cross-functional

- Scraping, data extraction, aggregation
- Integration from websites, portals, documents, and systems
- Data entry
- Process monitoring and optimization
- Applications integrations

To resolve the aforementioned manual, repetitive, and rote tasks beg the question of how to simplify work and the suggestion of implementing RPA in the processes promptly.

Even when the senior executives and leadership decide on RPA after numerous deliberations, they are faced with pain points, including **process fragmentation, lack of a clear RPA vision, and IT unpreparedness.**

CHALLENGES IN IMPLEMENTING RPA IN VARIOUS INDUSTRIES

Challenges



Process Fragmentation

Each department in an organization unfailingly follows a set of complex workflows and processes involving many employees and some of their standard tasks. A single task can then be stuck with the same department for days, with multiple employees tackling the task in their unique work styles. Thus, sometimes an end-to-end workflow produces an endless amount of delays and errors.

The senior management henceforth decides to introduce RPA to combat the malady of errors but is faced with increased process complexities and a comparatively lower level of individual automation ROI. Introducing RPA at every step proves costly, thus proving a huge hindrance to its implementation.

Lack of Clear RPA Vision

Believe it or not, many companies do not view RPA as a productive use of their time and are still living under the rock.

Automation is a long shot for them, and they operate traditionally.

Lack of a proper vision and ambition for RPA mars the efforts and long-term thinking of a few in an organization. And without a proper vision and an RPA goal, securing the funding to implement RPA and teach peers is a foregone conclusion.

IT Unpreparedness

Though COVID has taught us to be resilient and be prepared for any uncertainty, our IT teams are slowly catching up to the deployment differences between automation technologies and traditional IT systems.

An average robot implementation ranges anywhere between 4 and 24 weeks. As the IT teams mentally prepare and start working on such timelines, the RPA processes and technologies pace rapidly, and their training and implementation levels accelerate accordingly.

ADVANTAGES OF RPA

RPA offers multifold advantages that are difficult to miss:



Volume, Speed, and Consistency

Robots have the capacity to execute colossal amounts of tedious, repetitive tasks in a short time. And their consistency levels are incredible.

At the end of the day, they are machines and are bound to deliver uniform, regular work, provided they are trained, programmed, and managed efficiently.

Trading this individual with robotic software will speed up processes and help produce an error-free, accurate, and efficient workflow.

When mind-numbing tasks like copy-pasting data between different business systems are diligently split between robots and employees, it will give the workforce more time to produce creative and ingenious ideas and products.



Labor Savings

Since a lot of administrative and manual work can be done by robots in a fraction of a minute compared to human personnel, it is much wiser to hire or implement one because speed is equivalent to massive labor savings in today's time.



Achieving Business Data Security

Defining and hiring strict-level RPA protocols is the need of the hour. It will help cut down human fiddling with sensitive data, lending a touch of added security and compliance to the business systems.



Better Accuracy, Productivity, and Efficiency

It is a proven fact that a bored or distracted employee may make mistakes costing billions of dollars. And imagine when there is an emergency, and the employee must deliver at double their normal speed! They will be highly prone to mistakes.



Decision Automation

RPA helps make instant decisions based on preprogrammed business rules and Bayesian logic. The system analyzes past successes and failures and decides the right course of action for daily operational tasks. It frees a lot of mind space and time for executives.

USE CASES OF RPA

Use Case 1 - Data Extraction

For instance, an IT consulting company like Cybage Software is dealing with a client invoicing and related tasks that is a huge headache, especially when there is a use of legacy systems lacking APIs, database access, or virtual desktop infrastructure (VDI).

Imagine this use case where a retail company wishes to extract data from the invoices sent by its vendors. An approximate 1,100 vendors share PDF format invoices. 20 vendors out of the total send 1,500 – 1,700 invoices daily, constituting 90% of the lot. To extract data from the PDF, the company needs a licensed utility (a sort of file reader), which costs a huge amount considering scanning and reading an estimated 2,400 – 2,600 pages every day.

Now, Cybage Software helps the client build an RPA solution consisting of regex and in-house built libraries and extractors. According to the calculation, Cybage uses self-built libraries, extractors, and regex to derive data from the 20 regular vendor invoices received each day. This is a huge chunk of invoices (nearly 90%) taken care of. It also uses custom packages and licensed utility for the rest of the 10% vendor invoices.

This technique proved 80% successful data extraction in a 5-month time frame. Whenever the team faced an error with regex, it raised a flag, and the alternative licensed utility scanned those erroneous invoices.

This proved to be a cheaper method to process all invoices via an RPA bot for the customer without disturbing their existing flow.

Use Case 2 - Invoice Management

Consider a US-based MNC swamped with complex processes and invoices every day. Cybage Software stepped in again and supported the company with a smooth RPA adoption for scaling and flourishing.

It created and implemented an automation solution and an agile bot development model to procure statements from vendors in a fraction of the time it usually took for the manual force. In perspective, the 300+ bots looked up, fetched, and processed data for approximately 8,000 vendors in under 3 minutes. It is no small feat.

RPA technology, such as UiPath, accelerated accuracy and scalability while cutting down cost, time, and human interactions. The efficient bots even identified the missing invoices from vendors and proactively sent emails requesting additional data.

As a bonus, the Cybage team also built a knowledge bank to train newer resources so that they can scale the development process whenever needed. There was quick reconciliation for discounts within SAP across all vendors, not to mention that manual errors were eliminated, and one arrived at accurate calculations.

Use Case 3 - E2E Retail Management




This instance speaks of Cybage’s intellectual prowess for a retailer of a telecom player. This retailer possesses about 1,100 retail

stores across the US, and it deals in a range of wireless devices, including phones, tablets, mobile broadband, wearable technology, accessories, and product insurance.

With this broad view of the organization, Cybage took upon the end-to-end management of bots to deliver process efficiency for multiple departments, including HR, finance, inventory, and procurement.

Manually updating, uploading, and managing retail management software, information on desktop applications, and store alarm software is just the tip of the iceberg.

The Cybage team took stock of the situation and deployed 10 bots for live support. It automated 15 processes and saved over 90% person-hours every day. It improved inventory and vendor management, devised timely resolutions for interdepartmental queries, and reduced off-hours dependency on employees.

	Client Industry	Tools & Platforms	Overall Savings	Benefits to Business
 <p>Use Case 1</p>	Retail	RPA solution (UiPath) with regex and in-house built libraries & extractors	80% cost savings	<ol style="list-style-type: none"> 1. Minimized billing cost 2. Reduced manual errors
 <p>Use Case 2</p>	MNC	UiPath, VB.Net, VBA, ReFramework, Azure DevOps, Tableau, MS Teams, SAP	99%+ time saving	<ol style="list-style-type: none"> 1. Quick data processing 2. No manual errors 3. Accurate results
 <p>Use Case 3</p>	Retail + Telecom	Power Apps, Azure, SharePoint Online	90% saving in FTE (full-time equivalent)	<ol style="list-style-type: none"> 1. Processes' efficiency 2. Improved inventory & vendor management 3. Timely query resolution

BASIC STEPS FOR A SUCCESSFUL RPA IMPLEMENTATION

The phases below need to be kept in mind for any RPA implementation, especially when we are introducing it in an organization:

1. Team structuring where departmental stakeholders (Functional users), Business Analysts / Solution Architects, and the RPA development team are identified with their respective roles and responsibilities.
2. Process identification by required departments considering all regular, exceptional scenarios and their applicable rules.
3. Process mining by Business Analysts or Solution Architects to identify the right set of qualified processes for automation based on its eligibility and ROI.
4. A detailed design of prioritized processes for automation execution and its conformance by respective stakeholders.
5. Development of bots for process workflow and its testing at staging environment before deployment.
6. Testing at different environments and phases with integrations, including user acceptance.
7. Production monitoring and regular maintenance and enhancement of bots relating to process enhancements and exceptions.

Among all these phases, **process mining is critical as it qualifies the right set**

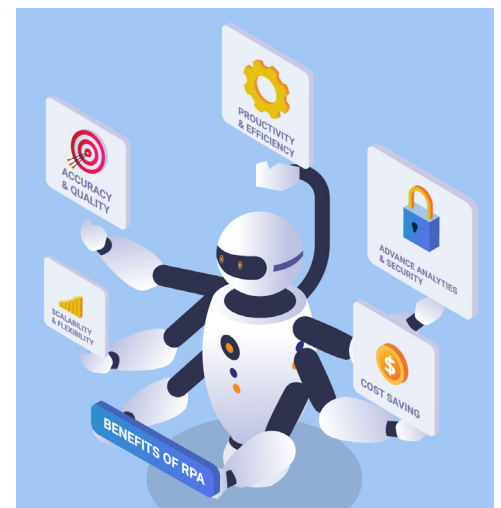
of processes to be considered for automation based on functional priority and expected ROI. For implementation, the process needs to be analyzed from all functional and technical aspects, including all possible variations.

In general, any process that is manually driven and has dedicated, pre-defined rules and flows is considered for RPA implementation. However, RPA solutions can also be considered to optimize any existing automated flows in the system or in any non-manual-driven process.

CONCLUSION

RPA is here to stay, and many organizations are awakening to its benefits. It is integral for a company to define its RPA goals with precision and sharpness to harness maximum benefits.

We have listed the advantages and eligibility parameters in this whitepaper



to help decide on the right RPA partner.

In the last decade, organizations have been deploying RPA for cost reduction and labor displacement. However, now the goals are more nuanced, covering returning time to employees, eliminating errors, cutting costs, and most importantly, improving the customer experience.

It is about time you decide!

REFERENCES

1. <https://www.tibco.com/reference-center/what-is-decision-automation>
2. <https://www.mckinsey.com/business-functions>
3. <https://www.uipath.com/rpa/robotic-process-automation>
4. <https://www.uipath.com/blog/rpa/the-evolution-of-rpa-past-present-and-future>
5. <https://www2.deloitte.com/bg/en/pages/about-deloitte/articles/Intelligent-Automation-Survey-2021.html?adlt=strict>