

Robotic Process Automation

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ABSTRACT

Robotic automation is a smart way to manage work on those AI machines that can be easily segmented. Robot Automation is a sequence of steps that provides the result of sound action without human interference. In any organization, Robot automation can perform tasks as an individual. The RPA is a system in which compliance is carried out in accordance with the rules of the organization. When any organization changes its rules then it needs to hire a new employee who can work with the new rules or should provide training to existing employees to map the requirements of the new rules. Both methods use time and money. By using Robotic automation, a company can appoint successful employees who can create an image of human employees.

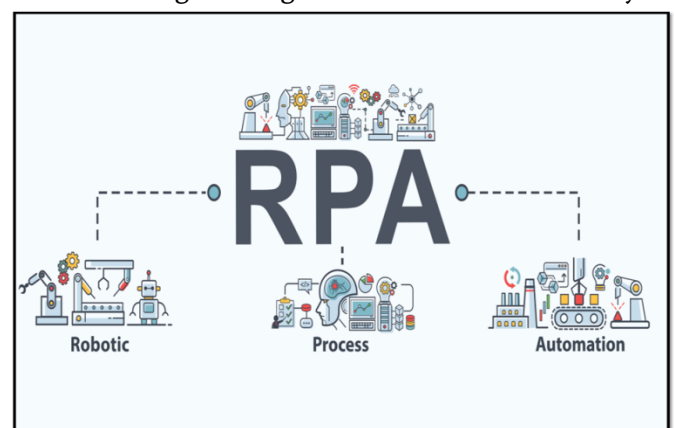
Keywords: Robotic Process Automation, BluePrism, UiPath, Automatic Anywhere

I. INTRODUCTION

The RPA is that the use of technology, governed by business vision and systematic inputs, aims to build more business processes economically. With RPA harassment tools, the company will integrate computer code, or "robots," to capture and interpret applications for routing, data manipulation, response and communication. RPA conditions vary from one straightforward thing like creating an automatic response to Associate in Nursing email to send thousands of bots, each set of tasks in the Associate in Nursing ERP system.

COOs operating in financial services companies were at the level of RPA acquisition, finding ways to use computer code to conduct business processes while not issuing accounting or pricing, the same Regina

Viadro, vp of EPAM Systems and therefore the company's Hawkeye State policy authority. Viadro has worked to integrate consumer RPA into financial services, health care, marketing and staffing, demonstrating the magnitude of RPA use these days.



II. OBJECTIVES

- A. Origination of Robotic Process Automation
- B. Types of Automation
- C. RPA Tools

III. TYPES OF AUTOMATION

The main types of RPA: traditional automation and understanding

There are two main types of robots available for businesses to perform various processes.

Traditional RPA are software programs used for simple tasks that do not require decision-making or comprehension work. These types of bots are also called rule-based systems as they require a set of rules for how the work is done, where you can log in, what data you will collect and where you transfer it. Typically, robotic process automation refers to bots based on rules, ready for simple tasks and scans thousands of automated processes.

Currently, the traditional RPA covers almost any business activity on the shelf. Some providers such as Datamatics offer over 800 use cases of RPA. That number indicates that the solutions market is mature and probably has a bot for your business.

However, there are many limitations to this approach, as traditional RPA software can manage, say, personal speech or adapt to changes in UI automatically. If so, the second type of RPA may be used.

Cognitive Automation is an advanced form of RPA that can detect images, handwriting, or understand human speech. This type of RPA can be used to create digital documentation, automate customer communication, or analyse random data.

Although it has great power, cognitive robots should be designed for a specific application case that requires a team focused on artificial intelligence and machine learning to use cognitive robots in your process.

RPA TOOLS

i. Blueprism

Blue Prism is an RPA tool that provides visible staff to organizations. It assists organizations to execute manual, duplicate, and legal-based business processes in a fast and cost-effective manner. It involves dragging and dropping support to automate tasks.

ii. UiPath

UiPath is a downloadable Robotic Process Automation tool that helps to make desktop or web applications work. It provides businesses around the world to design and deploy robotic personnel in their organizations.

The great thing about UiPath is that it includes a social program that comes with the drag and drop feature. Therefore, users do not need planning information to perform tasks using the UiPath.

iii. Automatic Anywhere

Automation Anywhere is one of the most popular RPA vendors that offers powerful and easy-to-use tools to perform any complex business process. This tool is a combination of all the key functions. It combines RPA with psychological factors such as language comprehension and reading any informal data.

Automation Anywhere is a web-based management system that provides control over the operation and management of automated end-to-end business operations for companies.

iv. Pega

Pega is an RPA tool that can be used to perform routine tasks repeated over and over again. Adds capabilities using UI for existing applications. It can be useful to speed up manual tasks by automatically performing user actions.

Benefits

1. Increase Productivity

Many RPA robots are fully focused on specific tasks. Imagine a RPA bot that allows an employee to create a monthly report for 20 minutes, enduring by hand for four hours.

2. Increase Success

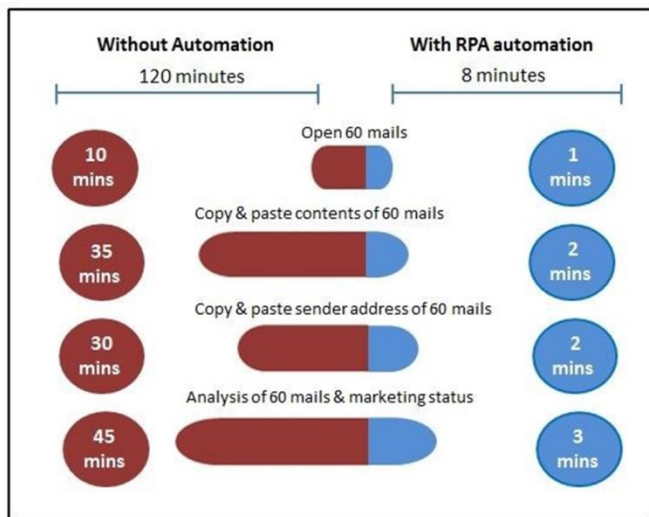
RPA software does not need to rest - it can work 24 hours a day, 7 days a week and 365 days a year. Likewise, it does not take a vacation or illness.

3. Improve Accuracy

Since employees are human, there is a possibility of errors. A key feature of the robotic automation process is its ability to eliminate processing errors.

4. Increase Security

Among the advantages of robotic process automation, the most convincing is that it operates at a mock level. Since the bot performs only one function, there is no concern for data leaks from one component to another.



Drawbacks

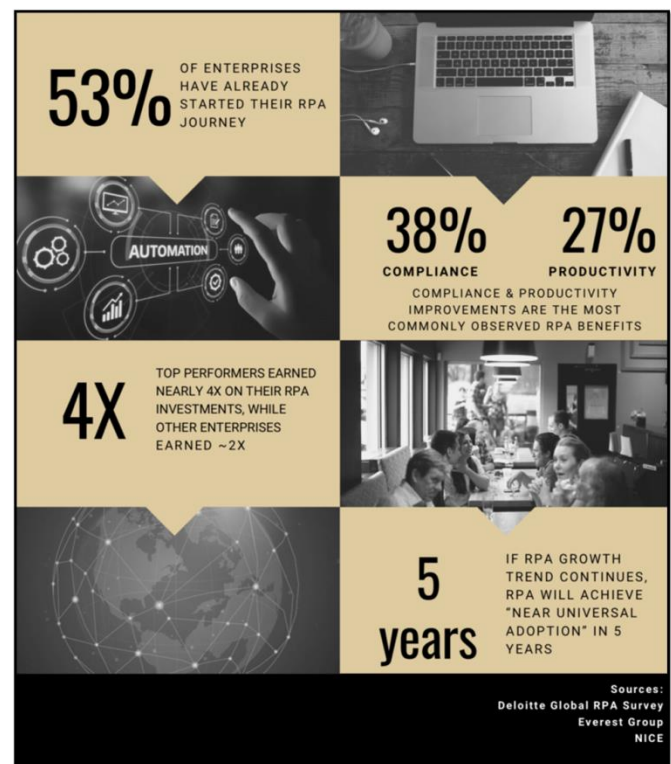
- Desktops are not compatible with all work because surface level automation is still required for certain tasks within certain applications.
- Some of the introductory methods of integration with applications began to fail.
- The instability of the desktop image causes automation to fail.

IV. SURVEY

- The RPA industry will grow from \$ 250 million in 2016 to \$ 2.9 billion by 2021. (Forrester)
Although Forester made the 2016 estimate, this is reminiscent of Bill Gates' quote: "Most people

keep a close eye on what they can do in one year and take for granted what they can do in ten years." Here's why:

- Robotic process software (RPA) revenue grew by 63% in 2018 to \$ 846 million. Only nine of the top ten brokers are changing stock positions in 2018. (Gartner *)
- The market size of automatic process automation is already valued at \$ 1.40 billion by 2019 and is expected to reach \$ 11 billion by 2027, increasing the CAGR by 34% from 2020 to 2027 (Grand View Research).
- By 2025, the market for integrated robots is expected to reach \$ 12 billion (MarketsAndMarkets)
- The potential economic impact of information technology is expected to be \$ 5-7 trillion by 2025.



V. CONCLUSION

It is important for an organization to adopt RPA solutions in order to have a better understanding of what their core business objectives are. When available business processes and IT infrastructure are

in place, an entity can view RPA automation as an easy-to-use tool to achieve their automated goals. Even if the process, platforms, and applications are outdated, the RPA can be used to resolve issues. Overall, in this age of digital transformation, the process of robotic automation is very much needed in companies that maintain a healthy workplace.

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