RPA:Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate humans actions interacting with digital systems and software. Just like people, software robots can do things like understand what's on a screen, complete the right keystrokes, navigate systems, identify and extract data, and perform a wide range of defined actions. But software robots can do it faster and more consistently than people, without the need to get up and stretch or take a coffee break.

Benefits of RPA?

Robotic process automation streamlines workflows, which makes organizations more profitable, flexible, and responsive. It also increases employee satisfaction, engagement, and productivity by removing mundane tasks from their workdays.

RPA is noninvasive and can be rapidly implemented to accelerate digital transformation. And it's ideal for automating workflows that involve legacy systems that lack APIs, virtual desktop infrastructures (VDIs), or database access.

RPA Tools

RPA tools are the software that helps users to configure various tasks to get automated. Most of the organizations have periodic and repetitive tasks such as data entry, data extraction, report generation, etc. These tasks are manually performed on the software by the employees. Such repetitive tasks can be easily automated with the help of bots. The software that utilizes bots for performing automation is called the RPA Tool

✓ UiPath

UiPath is a highly extensible Robotic Process Automation tool that helps to automate desktop or web applications. It offers global enterprises to design and deploy a robotic workforce for their organizations.

The best thing about UiPath is that it includes a community edition that comes with drag and drop feature. So, the users do not need programming knowledge to automate the tasks using UiPath. The community edition is free for the people who want to learn, practice, and implement RPA.

Features

o It provides multiple hosting options, such as cloud environments, virtual machines, and terminal services.

- o It supports a high range of web and desktop applications.
- It supports the auto-login feature to run bots.
- o It includes scrapping solution which works with .Net, Java, Flash, PDF, Legacy, SAP, with maximum accuracy.

✓ Blue Prism

Blue Prism is an RPA Tool that provides a virtual workforce to the organizations. It helps organizations to automate manual, repetitive, and rule-based business processes in an agile and cost-effective manner. It includes drag and drop support to automate the tasks.

Features

- o It is platform-independent so that it can be used on any platform.
- It contains robust features like load balancing, data encryption, and end-to-end auditing.
 Thus, every change is audited.
- Blue Prism also supports automation of codes written in Mainframe, Java, Windows applications, and even web-based applications.
- It supports all major cloud platforms, like Microsoft Azure and Amazon AWS. So, users can manage most of the tasks centrally.

✓ Automation Anywhere

Automation Anywhere is one of the popular RPA vendors that offers powerful and user-friendly capabilities to automate any complex business process. This tool is a combination of all the core functions. It combines RPA with intellectual elements like language understanding and reading any unstructured data.

Automation Anywhere is a web-based administration system that provides control to run and manage end-to-end automated business tasks for companies. It allows automating a broad range of tasks, from basic windows configuration steps to the ultimate networking and remote database processes.

Features

It provides easy integration with different platforms.

- It provides Bank-grade security through authentication, encryption, and credentials.
- It distributes tasks to multiple computers and rapidly automates complex and complicated tasks.
- It offers scriptless automation.

✓ Pega

Pega is an RPA tool that can be used to automate the routine tasks which are repeated in a workflow. It adds the ability to automate tasks using the UI of existing applications. It can be beneficial to speed up manual tasks by automating user actions.

Features

- o It provides a cloud-based solution.
- It helps in the deployment of the solutions to the customers.
- o It captures insights at the desktop. It gets details of how work gets done.
- It does not store any execution data in a database. Everything gets stored in memory.

√ WorkFusion

WorkFusion is a **SaaS** (**Software-as-a-Service**) cloud computing platform. It automates the monitoring of data feed and helps you to manage crowd-sourced workers from global talent markets.

WorkFusion uses statistical quality control to ensure the accuracy of the work output.

Features

- o It can collaborate with multiple users across different workstations.
- o It supports quick start / stop automation, just by pressing a button.
- It also has a drag and drop feature.
- It allows organizations to digitize their operations and enhance productivity.

✓ Jacada

Jacada is also one of the leading RPA tools. It helps in Desktop Automation and allows organizations to automate time-consuming, error-prone, and repetitive tasks. It supports in increasing accuracy, productivity, and customer satisfaction.

This tool is widely used for creating communication centers and customer services.

Features

- It includes hybrid RPA capabilities that combine attended and unattended bots.
- It provides an unparalleled level of flexibility for automated processes handling.
- It reduces the average handling time for organizations.
- o It helps in increasing first call resolution (or instant resolution).

✓ WinAutomation

WinAutomation is a powerful, robust, and easy to use windows-based desktop automation tool that allows the development of software robots. It provides enterprisegrade security and controls.

This tool can fill web forms, extract data, and transfer the same data from one application to another.

Features

- It provides easy integration with leading third-party applications.
- o It supports parallel execution during testing.
- o It includes image and optical character recognition.
- o It requires minimal coding for the development of bots.

✓ NICE Systems

The NICE system is an intelligent RPA tool which is also known as **NEVA** (**Nice Employee Virtual Attendant**). It operates on both the cloud and on-premise business software.

With the help of this tool, a variety of tasks can be executed independently without human intervention. It helps employees to perform repetitive tasks.

It allows businesses to make accurate inferences with the help of high-level analytics of structured and unstructured data.

Features

- It supports both attended and unattended automation.
- o It is ideal for banks, Finance, HR, etc.
- It provides increased customer satisfaction and productivity.
- It automates ordinary tasks and ensures compliance adherence.

✓ Contextor

Contextor is an integrated development environment used for a robotic automation process. It offers a complete customer view, online help, and exchange the data between two or more applications.

Features

- o It helps in configuring robots through a drag & drop, and point & click approach.
- It can monitor the processes executed on the workstation.
- It can discover and recognize the target applications.
- It can maintain existing projects and add new features.

In the present time, there are many more vendors who are providing RPA Tools. However, the leading tools in the RPA market are **UiPath**, **Blue Prism**, and **Automation Anywhere**. These tools are most widely used in organizations for various purposes.

Core Functionalities of RPA Tools:

Following core functionalities should be present in any RPA tool:

- A software robot should be able to interact with other systems either through Screen
 Scraping or API Integration.
- A software robot should be capable of making decisions and determine its actions based on inputs gathered from other systems.
- A software robot should have an interface to program the other robots.

Choosing the right RPA Tool:

As we have seen, there are lots of RPA tools, but the question is which tool should we choose. Following are some parameters which should be considered before choosing the RPA tool:

- Technology
- Scalability
- Security
- Total Cost of Ownership
- Ease of Implementation
- Ease of Use & Control
- Vendor Experience
- Maintenance & Support
- Quick Deployment