

Welcome to RPA Class - Cluster 2

RPA (Robotic Process Automation)

The process of automating business operations with the help of robots to reduce human intervention.

R - Robotic - The entities that mimic human actions are called as robots

P - Process - Process is a sequence of steps that lead to a meaningful activity

A - Automation - is any process that is done by a robot without human intervention

Final Definition of RPA

Mimicking human actions to perform a sequence of steps leading to a meaningful activity without any human intervention.

In today's market, there are some RPA tools such as

Blue Prism, Automation Anywhere, UiPath, WorkFusion, Pega Systems etc....

among these, there are 3 leading tools (trio) such as UiPath, Blue Prism, Automation Anywhere

Comparison of Top 3 tools.

3 features

1) is trial version available ?

UiPath - Free edition available

Blue Prism - No trial version

Automation Anywhere - 30 days trial version

2) Is it user friendly?

UiPath - User Friendly visual designer

Blue Prism - User Friendly visual designer and easier than AA

Automation Anywhere - developer friendly

3) Popularity

UiPath - Most Popular

Blue Prism - More popular than AA

Automation Anywhere - Least popular in the trio

Application of RPA

Customer Service - chatbot

Accounting - Payment processing, bill processing, invoice processing

Banking & Financial Services - Loan processing, report generation, account opening & closing, risk analysis

Healthcare - appointments with the doctors, patient data analytics, medical bill processing, data entry etc..

Human resources (HR) - Employee information (entry & exit formalities), payroll (salary processing), reports

Supply chain management - Goods & Services (transportation)

Robots - Physical actions

bot - a software program to perform a task (automation of task)

In RPA, we are going to create bots. (Set of commands)

RPA Life Cycle - 4 stages

- 1) Analysis - Business analyst team and RPA architect work together to come up with a plan.
- 2) Development - development team will start working on the requirements for the automation of task. (creation of bots)
- 3) Testing - the bot will be tested either by development team directly or by testing team (similar to software testing techniques).
- 4) Deployment & Maintenance
After successful development & testing of the bot, Once deployed. If any problem is raised then it will undergo checking by development as well as testing team. Every time the bot is deployed, it undergoes maintenance & updating.

Task - Copying the data from one excel file to another excel file

disadvantages?

- takes lots of time (time complexity)
- high cost
- errors

- less efficient
- low accuracy

RPA Advantages?

- time reduced
- cost reduced
- more efficient
- more accurate results
- results are fast
- improves the customer experience
- low error rate

Automation Anywhere - RPA tool

why AA ? (features)

Advanced security

Performance monitoring - control & monitor the performance of bots, bot is successfully executed or not ? (passed or failed)

complete system automation - I can create bots for complex operations also.

user friendly - drag & drop commands , no programming skills required

It will automate the data transfer between applications and files - Integrating application with AA tool.

Automation Anywhere Architecture - 3 components

- 1) control room
- 2) bot creator
- 3) bot runner

Control room - (Admin console) - it is a web based application that controls the AA.

Apart from that control room deals with

- i) user management - it manages all users that are configured to the AA tool.
- ii) source control - code (set of commands) of every bot will be managed. so it becomes very easy to share the code across diff systems.
- iii) dashboard - it will complete analytics/results of all bots, that means i can check how many

bots are passed and
failed ?

iv) license management - diff types of licenses configured in AA

there are two types of licenses

dev license - using this, I can create edit run a bot

run license - using this, I can only run a bot (I can't make any changes)

bot creator

- developers use desktop based applications in order to create bots.
- dev license
- after successful authentication in the AA tool, the code of every bot will be stored in the control room.
- If diff developers create individual bots then all bots will be merged & will be executed at once.

bot runner

- they will use a desktop tool in order to run the bot.
- run license
- Multiple bots can run in parallel
- the bots will report the execution logs/pass/ fail status to control room

SEM In Exam

SEM End Exam

Continuous evaluation (RPA Skill book - 12 experiments)