ROBOTIC PROCESS AUTOMATION IN BUSINESS

Project Report submitted to the

Department of Commerce and International Trade

in partial fulfillment of the requirements for the award of the degree

Bachelor of Business Administration

AJAY.R.RIPSON

URK18BBA006

Under the guidance of

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Assistant Professor

Department of Commerce and International Trade

Karunya Institute of Technology and Sciences

[Declared as a Deemed University under sec.3 of the UGC Act, 1956]

April 2021

TABLE OF CONTENTS

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I would like to the opportunity to thank and express my deep sense of gratitude to my Mentor and Guide Dr.K.Aruna and my Head of Department Dr.C.Samuel Joseph, I am greatly indebted to both of them for providing their valuable guidance at all stages of the study, their advice, constructive suggestions, positive and supportive attitude and continuous encouragement without which it would have not been possible to complete the project.

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I owe my wholehearted thanks and appreciation to the entire staff of the company for their cooperation and assistance during the course of my project.

I hope that I can build upon the experience and knowledge that I have gained and make a valuable contribution towards this industry in coming future.

CERTIFICATE

This is to certify that the project report entitled ' **Robotic Process Automation in Business** ' is a bonafide record of work done by **AJAY.R.RIPSON URK18BBA006** under my supervision and submitted in partial fulfillment for the award of the degree of Bachelor of Business Administration of Karunya Institute of Technology and Sciences.

Place: Coimbatore

Date: 19/04/2021   Research Supervisor
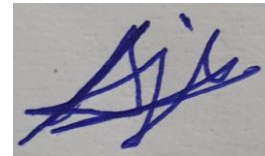
External Examiner   Internal Examiner

Head of the Department

DECLARATION

I, **AJAY.R.RIPSON** hereby declare that the project report entitled '**Robotic Process Automation in Business** ' is a bonafide record of the original research work carried out by me in the Department of Commerce and International Trade, Karunya Institute of Technology and Sciences and that it has not been submitted earlier elsewhere for the award of any Degree, Diploma or Fellowship.

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ABOUT THE COMPANY

Quadance Technologies Private Limited is a private incorporated on 2018.

Overview

At Quadance, we understand the challenges faced by the business due to inefficient process and the cost overheads induced by poor quality. We endeavor to help organizations in their digital transformation by utilizing our extensive experience in implementing automated process simplifications and quality assurance.

Our philosophy is to embrace simplicity and provide simple and efficient solutions to reduce complexity. We strive to provide best in class experience to our customers and employees by being their trusted partner, by virtue of our core values – integrity, trustful collaboration, empowerment and inclusiveness.

Website: http://www.quadance.com

Industry Information: Technology & Services

Company size: 11-50 employees

Headquarters: Trivandrum, Kerala

Location: 1st Floor, Amstor House, Technopark, Trivandrum, Kerala 695581, IN

Type: Privately Held

Founded: 2018

Specialties: Robotic Process Automation (RPA), Test Automation, and Testing

INTRODUCTION

RPA is defined as an art of using software robots to interact with Software-as-a-Service applications and IT systems to automate the rule-based manual jobs associated with repetitive and transactional processes. The robot mimics the interactions of an employee with a system's user interface. The RPA services provide data security, enhanced business efficiency and effectiveness across various business applications without modifying available system and infrastructure. Robotic Process Automation can be termed as the breed of technology in the industries like Machine Learning, Automation Engineering and Artificial Intelligence. It can be considered as the low-risk process of performing business tasks in an automated manner than using the most valuable human resources on tasks that are repeated over the time. Further, RPA is for the non-technical businesspersons who are looking for the technology that do things for them rather than doing by themselves.

Automation has changed the aspects of the business today. In addition, the opportunity of applying robotic automation in business processes has been gaining more attention as they challenge in a digital world, which requires faultless operations. With RPA Robotic Process Automation solution, businesses are automating knowledge-based, professional service processes that don't demand human interaction. Concurrently, it is serving as a fundamental activist to the conventional insight of labor arbitrage.

When it comes to robotics and automation, people usually think of it as robots or devices. However, RPA stands for virtual or invisible robots, which sits inside the systems, moving between various applications, checking, inputting, updating and processing more promptly that a human could. Therefore, RPA robotics is different from other direct types of automation. As like human user, RA interacts with different systems at the level of GUI or presentation layer. Hence, existing software systems can function together more efficiently; since, RA completes some tasks far faster and reliable than human do. This logical software tool shifts manual effort away from repetitive processing functions towards optimizing business processes. A major benefit is it connects existing system without re-engineering them. Alternately, it functions with various user interfaces like MS office documents, ERP systems and databases. Today's RPA systems are more flexible and accurate than humans are - they enhance compliance and are available 24/7.

Advantage of RPA:-

- Increased Employee Productivity
- Codeless
- Lower Cost
- Accuracy & Quality
- Consistency
- Improved Analytics
- Increased Employee Productivity
- Increased Customer Satisfaction
- Faster
- Reconciliation from Multiple Systems
- Versatility
- Better IT Support and Management

Disadvantages of RPA:-

- Initial Stage setup
- Lack of Skilled resources
- Maintenance Cost
- Not suitable for dynamically changing tasks
- 100% Process automation is impractical
- Report Generation
- Approval Process for Mortgages
- Fixed Asset Amortization
- Foreign Exchange and Bad debt write-offs
- New account (multiple) entry
- Journal entry

Insurance of RPA:-

- Part of Underwriting Services and policy issuance
- Electronic filing of policy documents

- Premiums comparison
- Update customer data
- Update data for new products
- Recoveries and Payments Comparison
- Capital Markets
- Reconciliation activities
- Checking customer records across various systems
- Customer on-boarding process
- Upstream and downstream data comparison

Benefits of RPA in Business

- **Optimize resource use**

  To achieve high efficiency in business operations, you need to eliminate the risk of errors. This risk is significantly elevated with tedious tasks as humans tend to succumb to boredom and make silly mistakes when carrying out repetitive acts. These tasks are often undertaken with less interest and therefore, suboptimal vigilance. RPA can be used in these cases to replace humans and assign them tasks that are worthy of their time and effort. By optimizing the use of human resources, companies can get significant tasks done with least resistance from employees who were worn out by repetitive ones.

- **Introduce adaptability and flexibility to processes**

  Robotic Process Automation tends to introduce flexibility to business operations. The capacity of RPA systems to adapt to conditions and situations deems them useful in businesses where parts of a constant process change in particular RPA systems have the inbuilt intelligence to make these tiny changes in their working, thus freeing human resources for more useful work. Studies have shown that when humans are asked to make small changes in daily tasks they are habitual of, they will often forget making the modifications. RPA programs are installed on servers to combat this challenge, making processes flexible and scalable in case the demand shoots or the scope of a process expands.

- **Aim for cost-effectiveness**

RPA tools along with workflow tools can prove to be a game-changer for businesses. Both tools don't compete with each other- as is the popular notion- instead, complete each other. The program awaits a signal from the workflow tool to perform a specific job, and upon receiving the message, the programs perform the task and feeds the process back to the workflow tool. In essence, RPA and workflow tools round each other off and complete the circuit needed for cost-effectiveness.

- **Improve communication**

  Replace document creation tools with RPA, as it is better equipped to carry out your critical communication processes through its intelligence. RPA can make changes in single documents with triggers along with processes and effect these changes throughout other documents, thus releasing the pressure on employees to manually update files and make tiny edits. These processes can ensure the end users, representatives, and on-field workers receive the latest information, every time.

- **Discover automated responses and triggers**

  Typically, every RPA system has scheduling capabilities and even though it operates way beyond the scope of a scheduler, it assists managers with completely automated and semi-automated scheduling. In the former scenario, it only triggers and responds when a particular event takes place- mostly a human activity such as a click. In the case of unattended automation, the trigger does not need to be a human action but can be anything such as an email or a document. Businesses can identify specific areas in their operations that can be wholly or partly automated with the use of triggers and responses.

- **Implement RPA hassle-free**

  RPA implementation does not require setting up an API, which saves businesses huge costs and time. Robotic process automation comes with its own set of Graphical User Interfaces – ones that are easier to use and need little technical expertise. RPA systems can perform the same operations humans do such as clicks, keystrokes, pressing buttons, and so on, through the same UI.

- **Empower the workforce**

When robots get to do the tedious tasks, employees rejoice. Studies have shown that employee satisfaction increases as they perform meaningful and worthy jobs. As employees undertake significant duties, they look forward to appreciation, and that becomes an active driver in their efforts, leading to build an organization with driven people. Another indirect benefit of employee satisfaction is when employees have high morale and boosted spirits, they don't feel the need to switch jobs.

- **Insights and Analytics**

  With robotic hands working on data and analytics, there are lesser risks of data leakages, obsolete information, and incorrect analytics. RPA helps companies see right through their data and get actionable/verified insights with minimal error rate. Robots also help collect data where it wasn't feasible for humans. Therefore, a wider scope of data collection and analysis leads to fuller and more comprehensive insights. Meanwhile, employees can focus on more sophisticated analytics, leading to better decision making.

- **Error-free operations**

  With RPA, this benefit comes as a no-brainer. Process automation eliminates costly mistakes – those that lead to false analytics and poor decision making. RPA helps businesses introduce precision in their operations and makes monotonous processes error-free. An obvious benefit of this is when there is no missing, or mistaken customer information & service reps face no hassles serving customers in a personalized fashion. However, even a slight disturbance to the customer can ruin their experience with your business – a risk that becomes negligible with RPA.

- **Secure enterprise data**

  RPA can be integrated with multiple applications to enhance the security of enterprise data. These integrations will ensure that client's apps are not modified or enhanced by a robot. This system reduces the risk of unauthorized access as business functions use and inherit the already available security infrastructure where authorization concepts are already implemented.

Planning for RPA- the internal and external factors

When business executives consider implementing RPA in their enterprise, they ponder on the internal policies, processes, and people. They look for the operations that, if automated, would benefit the organization. Then, they begin to plan and strategize on how to go about implementing Robotic Process Automation.

In terms of business functions or departments that are ripe with opportunities for process re-engineering, improvement and automation through RPA, they mainly include supply chain management, sales, finance and accounting, and human resources.

When it comes down to assessing and analyzing the different areas for transformation & discovering insights that are actionable in nature, enterprises or businesses should gather metrics relevant to each process under inspection that covers.

- Where is majority of the time spent in completing each process?

- Which applications cost the most time and effort?

- Which activities or tasks carried out result in production of tangible results?

While internal factors play a vital role, along with that, businesses should also conduct external research to partner with the best RPA service providers. Doing this requires a holistic view of one's needs, and a calculative study of each vendor's strengths and weaknesses. The right RPA implementation partner should be in a position to advise you on the scalability of RPA for your business. It helps you if they derive insights from process data to help predict and suggest the next best move for your organization.

Why do you need Robotic Process Automation (RPA)?

Different business like small, medium or large, want to increase service quality or reduce costs but without any change in existing processes. This is where Robotic Process Automation helps. RPA is all about training the software robot to do new iterative tasks without changing the system involved. It simulates human work of logging into applications, entering tones of data, sending emails and doing other repetitive tasks. Presume a situation, a robot is sitting in front of a computer observing the task being performed by you, gets trained for it quickly and implements the same as is without any manual intervention from you. Isn't that amazing?

RPA doesn't entail any form of physical robot. It mimics a human work by interacting with applications in the similar way that a human does. It also allows interpreting existing application, activating responses, controlling data, and communicating with other digital systems. RPA Solutions can be enhanced with machine learning and Artificial Intelligence.

It is serving the need of different domains:

- In HR, RPA can be used in new employee joining formalities, Payroll Processes, and save a lot of documentation work done manually.
- In Insurance sector, it can be used for Premium Information, Claim Processing & Clearance.
- In Travel domain, RPA can be used for Ticket Booking, Passengers Details, and Accounting and much more
- In Finance, RPA can be used in Accounts Payable i.e. one can streamline the intake of vendor invoices with BPM, and auto-assign invoices to workers based on pre-defined rules.
- In Logistics, RPA companies contribute to analytics and artificial intelligence by gathering information about business patterns and internal workings to reveal potential disruptions and bottlenecks. These insights can be used to improve and optimize specific areas of the supply chain.

Some of the key benefits of RPA are as follows:

1.   Cost Savings

One of the important advantages of RPA is the quick reduction in the cost it can deliver. By automating tasks, the cost saving of almost 30% can be achieved over the yield of productivity. Software robots also cost less than a full-time employee.

2.   Increased Employee Productivity

RPA ultimately facilitates humans and robots to try and simply do what they excel at. As RPA liberates the employees from everyday tasks, they can focus more on clients' connection, relationship management and can perform other such activity which they are excel at.

3.   Quality & Accuracy

RPA offers enhanced services to processes with the high probability of human errors, thereby increasing accuracy. Robots are reliable, and consistent and don't complain when expected to work tirelessly. They reduce the cases of re-work and enhance quality. The vital part is that robots follow rules exactly thereby producing 100% accuracy.

4.   Improved Customer Experience

By distributing RPA, one can liberate high-prices resources from additional routine and repetitive tasks and set them back on the bleeding edge by helping customers.

5.   RPA is scalable

With the help of RPA, companies can make adjustments based on seasonality and can easily scale up or down operation as needed.

6.   Better Control

Various companies prefer to outsource busy work to external parties. This comes with an inherent risk of human errors, inefficiency etc. RPA brings forth a better solution and since the work stays in-house, the business keeps up most extreme ownership, control and concludes.

7.   No New tool learning

As the name suggests, no new tool learning is required to access RPA. By simply logging into any application and by connecting to system APIs, you can simply copy and paste data and move files, folders as per the requirement with saving and sharing it. Menus are easily navigated and mentioned clearly that one can use it easily.

Can you afford to ignore robotic process automation?

Robotic process automation (RPA) can bring rapid, measurable efficiencies to your workplace. What's the best way to achieve them?

- Robotic applications can be trained to do routine tasks that involve a level of variety or judgement, for example basic insurance claims processing
- RPA allows users to create automators for technology processes without coding or technical expertise
- Businesses are advised to work out clear objectives first and keep initial deployments simple when experimenting with RPA

Robotic process automation (RPA) is the white-collar equivalent of the automation that has revolutionized industry in the last 30 years. In the British economy, four fifths of which is made up of service companies, RPA will be at least as large a revolution as the shift to automated factory production – as long as managers make the most of the technology.

Why is RPA difficult?

Because it covers so many types of office automation. We can think of the automated processes as an extension of the macros that make working with spreadsheets more efficient – but far more complex, and with much wider scope. Processes that benefit from typically have repeatable and predictable interactions with IT applications, including those that may require toggling between multiple applications.

Simple digital automation has a problem it can capture human inefficiency and replicate it. But that changes if you add AI, an intrinsic part of RPA, to this. If the tasks are routine, but with some variety or judgement (for example, basic insurance claims processing or finding the answer to simple tech support questions), the robotic application can be trained to do it as well as a human, but 24 hours a day.

RPA offers an entirely new sourcing option. It's a scalable digital workforce that can increase productivity, improve experience and deliver a new level of operational agility

Today's RPA allows users to create automators for technology processes without coding or technical expertise. That means it is wise to make sure that business objectives are the priority

It should be linked to existing business goals: improving efficiency, enhancing customer service; growing revenues; increasing productivity or increasing job satisfaction. And to make sure that

an executive sponsor focuses on the right things, he advises keeping initial deployments simple. The most common mistake is to target overly complex processes and attempt to remove human workers entirely from them. But this leads to extra costs and considerably more deployment time.

Many organizations have attempted to improve efficiencies by using business process outsourcing (BPO) for exactly these types of task. RPA offers an entirely new sourcing option, it is a scalable digital workforce that operates alongside human employees to increase productivity, improve experience and deliver a new level of operational agility. BPO can provide services focused more on human interaction.

How RPA Works?

This question has always popped on whether RPA uses physical robots, or are there actual robots present to automate tasks.

Well, let me tell you that RPA does not replace humans with actual robots. But, there are softwares available in the market which let you configure automation workflows to automate your business operations. According to our experts, the demand for RPA certification training is going to rise by 150% due to the lack of the skill set in the market.

Though I have mentioned that RPA is implemented through software which is nothing but RPA Tools/Vendors, let me tell you a few guidelines on how to get started with RPA, before we start discussing tools.

How to Get Started With RPA?

You need to follow the below steps, to get started with RPA:

Step 1: Gain extensive knowledge about the history behind RPA. That is, learn all about Traditional Automation.

Step 2: Learn about RPA and the various Applications of RPA.

Step 3: Choose the process that you wish to automate, and retrospect about the process dependencies. This is a way to make sure that your business doesn't suffer loss while you are busy automating the task.

Step 4: Gain extensive hands-on experience in RPA Tools, such as UiPath, Blue Prism, and Automation Anywhere.
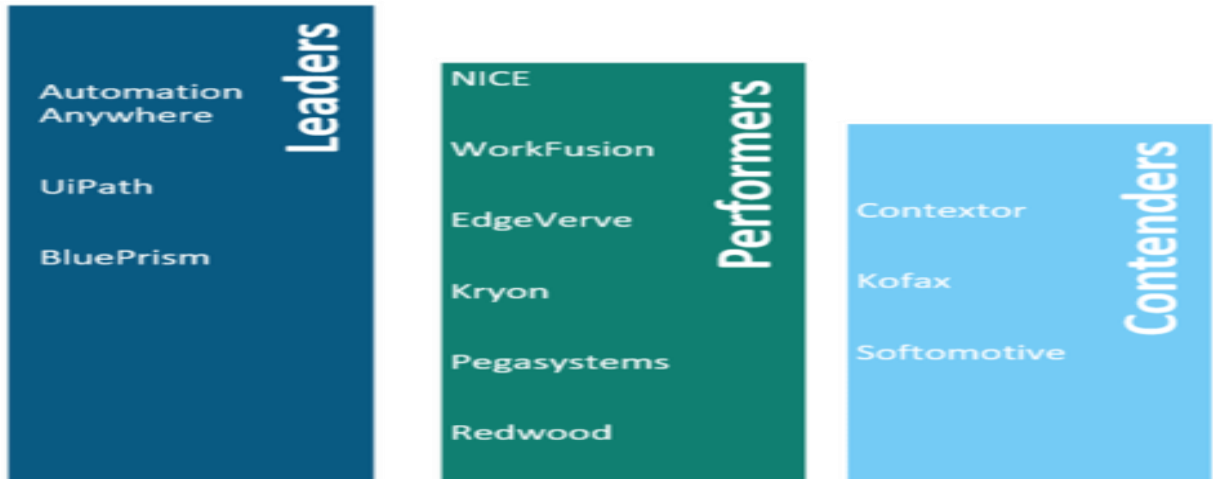
Use cases of RPA

1. **Patient Registration in Healthcare**

➢ Manual
- o Traditional Queuing
- o Arrive at the hospital
- o Get Token
- o Token Queuing
- o Registration Form Filling
- o Blood Test (not compulsory)
- o Get appointment
- o Consult Doctor

➢ RPA(bots)
- o App/Web-based booking system
- o Login to the booking system
- o Add KYC details of patient while registration
- o (bots)automatically fill details of patient with help of KYC
- o Automatic patient previous health history checking and suggestion of consulting
- o Take an appointment with best doctors recommended
- o Get QR code
- o Arrive at the hospital
- o Scan QR code(automatically registered)
- o Consult Doctor

2. **Account Opening in Banking**

➢ Manual

- o Hard copy of all necessary Documents
- o Carry out Original copy of Documents Required
- o Visit nearest Bank or required Bank
- o Get Token
- o Token Queuing
- o Approach Window Desk
- o Fill Offline Application Form
- o Submit hard copy of all required Documents
- o Approval Pending
- o Bank Account Opened
- o Manually Printed Passbook & Cheque Book and collected by customer on the next day of account opening

➢ RPA(bots)

- o App/Web-based application system
- o Install Banking APP/Search Banking website
- o Apply to opening Bank Account
- o Choose necessary account to Open
- o Register Bank with KYC registered mobile number
- o Automatic filled and digital signature attached form(Bots)
- o Video KYC for Verification with Original proof (Bots)
- o Upload necessary documents (Bot verification)
- o Bank Account Opened in 5minutes(Paperless)
- o Confirmation & Account Details sent via Message and Email
- o (Bots)Automatically generates Passbook & Cheque Book and sent it to respective Address

3. **Personal Loan Process in Banking**

➢ Manual

- o Customer
- o Visit nearest Bank or required Bank
- o Fill Loan Application Form
- o Provides Required Documents
- o Bank conduct financial Analysis
- o Loan Approved? (Yes)
- o Bank Provides Loan Documents
- o Customer signs the Document
- o Loan Disbursement

➢ RPA(bots)

- o User
- o Install Banking APP/Search Banking website
- o (Accessible to 3rd Party Application)
- o KYC filled form(Automatically filled fields by bots)
- o Check Prequalification
- o Loan amount required < 50% of salary(Yes)
- o Submit Loan Application
- o Approver Review
- o Approved Application
- o Loan Amount Disbursement

4. **Claim Processing in Insurance**

➢ Manual

- o Fill Insurance Form
- o Pay Insurance Fee
- o Company accepts Insurance
- o Insured suffered loss
- o Insurance Company Investigate
- o Cost Estimation

- o Insurance Covered
- o Company pays Compensation

➢ RPA(bots)

- o Extract notice of loss from Email
- o Digitize claims form using IQ bots
- o Fraud Potential Check
- o Triage & Assign
- o Claim Team Review
- o Approve & Pay
- o Claims Reporting and Analysis

5. **Sales Process in Manufacturing and Retail**

➢ Manual

- o Buyer buys Product
- o Credit form
- o Order Entry
- o Order form
- o Credit check
- o Check Account receivable Balance
- o Calculate credit Terms
- o Credit Issued Report
- o Terms Approved
- o Sales Approved

➢ RPA(bots)

- o Buyer buys Product via Email
- o Email include Product Required, Quantity,
- o Discount required, Bill date
- o Mail Auto-generated and sent to seller
- o (Bots)Automatically extract emails to specific file
- o Invoice generated
- o Notification of sale has been sent through automated mail

- o Robotic Product verification
- o Order confirmation Auto-Mail

Industry	Usage
Healthcare	• Patient registration • Billing
HR	• New employee joining formalities • Payroll process • Hiring shortlisted candidates
Insurance	• Claims Processing & Clearance • Premium Information
Manufacturing & Retail	• Bills of material • Calculation of Sales
Telecom	• Service Order Management • Quality Reporting
Travel & Logistic	• Ticket booking • Passenger Details • Accounting
Banking and Financial Services	• Cards activation • Frauds claims • Discovery
Government	• Change of Address • License Renewal
Infrastructure	• Issues Processing • Account setup and communication

RPA in various Domains:

- Banking

- Insurance

- Healthcare

- Transportation

- Food industry

- Financial services

- Retail

- Telecommunications

- BPO

- Education

Real - Use cases of RPA:-

- ➢ **RPA in Banking**

  - o **Profile**

    Federal Bank is a leading private sector bank that is headquartered in Kerala, India. Over the last ten periods, this bank has grown and now operates for more than 1250 branches throughout India.

    FEDERAL BANK
    YOUR PERFECT BANKING PARTNER

  - o **Challenges**

    The bank wanted to merge the unique customer identification codes to identify the customers. If the bank decided to do this task manually, then it would be time-consuming, error-prone, and it would be tough to scale the bank simultaneously.

One more challenge which was observed is that the bank wanted to make sure that its employees were empowered to provide and maintain strong customer relationships and other relationship-oriented services. But, they also wanted to use digital transformation in the front, to run businesses, serve its customers and help employees.

- o **Solution**

  To overcome the challenges, Federal Bank started looking for various opportunities and started evaluating the top RPA vendors. The bank used the robots provided by UiPath to uniquely identify the customers with their customer IDs. The UiPath robots could process a sample of 10000 customer records within a day and could merge 250 records in an hour.

- o **Result**

  If we talk by the numbers, then UiPath has helped Federal Bank achieve the following numbers:

  - 0% error rate in the reconciliation process
  - Completion of tasks in 50% time
  - Automate 15 different processes very quickly
  - The company has the plan to automate around 53 tasks by the end of the year 2020

➤ **RPA in Insurance**

- ○ **Profile**

  Future Generali India Life Insurance Company Limited has around 117 branches and aims to protect and enhance people's lives with a complete range of simplified solutions. It is a joint venture between three groups, Future Group, Generali Group and Industrial Investment Trust Limited (IITL).

- o **Challenges**

  All the processes involved with group insurance were manual and required around an average time of 7 days. This was because the application runs on the AS/400 platform and all the business processes feed into or take feed from the core insurance systems at various stages of the policy issuance and underwriting life cycle.

  So, in short, all the operations increased the cost for the company. Instead, if we get operational activities such as uploading member data for various policies is done using RPA, then the process will be more effective and would cost less.

- o **Solution**

  The team of Future Generali India Life had started to automate the tasks of 50 transactions daily with the help of scripting-based automation using Python. While the scripting based automation was doing well in a discrete area of automation, it was however difficult for various other processes/projects.

  So, when the team decided to move to UiPath, they had realized that the platform was easy to use. The UiPath robots were now automating the task of sending the record files to the clients, as a designated robot would extract record files from the system and the same would be communicated to the client. This not only increased the speed of the process, but also enhanced the security as every attachment send over by an email would be password protected.

  The designated Robot extracts record files from the core system and the same are then communicated to the client. Implementation of Robots has increased the data security, as every attachment sent over email by the Robot is password protected.

Apart from this, this company also used UiPath to automate the bank reconciliation process. With the help of UiPath the company was able to do the following processes:

- Upload the un-reconciled bank transactions and the daily bank statements from the core system through a robot.
- The adjustment journal is automatically posted to the core system.
- The bank reconciliation statement now has a predefined format, and the adjustments journal is automatically uploaded to the system by a robot.
- Set a flexible set of rules for a robot, and automatically reconcile 93% of transactions which had perfect matches. The remaining 7% has a combination of partially matched transaction.

o **Result**

The results of Future Generali India Life Insurance Company Limited partnering with UiPath are as follows:

- 83% of automation was achieved in the bank reconciliation process
- The time required to identify employees who need to complete underwriting was reduced from 1 day to 15 min with automation.
- 33 processes automated

➢ **RPA in Healthcare**

o **Profile**

Max Healthcare is one of India's top healthcare service providers. It has around a network of 14 hospitals with 2300+ doctors. They have treated more than 2.8 million patients from 130 nationalities.

o **Challenges**

One of the major challenges faced by Max Healthcare was to process large volumes of patient transactions while simultaneously ensuring the security and accuracy of the documents.

If I have to elaborate on the challenges faced while processing the transactions of patient documents, then refer to the following points:

- Unstructured data had to be streamlined
- Difficult to manage the sudden spikes and downfalls in the volume and frequency of data.
- The data entry and reconciliation process was time-consuming and was error-prone.
- Maintaining accuracy was tough as they were formatting issues, unclear fields, and missing data.
- Claim settlement processes faced issues such as retrieval of information, tracking, and also security of documents.

o **Solution**

Max Healthcare decided to go for the UiPath enterprise platform as it was very easy to use and helped them reduce the turnaround time in the current processes. Since the company wanted to start with only a few tasks, they picked up the following tasks to be automated.

- Reconciliation of data for CGHS
- Processing of claims
- Reconciliation of data for ECHS

A UiPath Robot was developed to extract the customer-related information from PDF files and outlook messages. After the data is collected, it is populated in a CSV format to integrate with the clients' database.

o **Result**

The results of Max Healthcare using UiPath are as follows:

- Around 1 crore of pending payments was recovered.
- 65-75% of the time saved in CGHS and ECHS processing
- Almost 50% of turnaround time was reduced for claims processing.

➢ **RPA in Transportation**

o **Profile**

DHL Global Forwarding Freight (DGFF) is a leading provider of the ocean, overland, and air freight-forwarding services. This company has a global service center unit with five centers. The human employee strength is more than 4500 and brokers transport services between the freight carriers and the customers to ensure efficient transport and routing services.

- o **Challenges**

  The company's main challenge was to improve its finance and logistics process across all its 5 centers. So, they aimed to create a global process automation hub to remove the internal process bottlenecks to provide the best services. The solution to this challenge was to come up with a human delivery center structure complemented by a virtual delivery center.

- o **Solution**

  The virtual delivery center was enabled by the UiPath enterprise platform as UiPath ensured the shared-services model operating at peak performance. DGFF started with a pilot project known as the Post Flight where a UiPath robot would extract data from the division's system and combine it with critical flight data. Then, the robot would generate a report automatically.

  Before this solution, the company had to put 30 people to complete the same process. But, now after UiPath has helped them automate, 15 of the employees are moved to more rewarding/higher-value work and the rest are managing the activity-based exceptions to lead better customer service.

- o **Result**

  After the pilot project was successful, the team started a Center of Excellence (CoE) to define the standards for RPA based process automation such as the configuration and services for DGFF.

  If we talk of the numbers, then UiPath has helped DGFF achieve the following numbers:

  - 50% reduction in the total resources required to complete the process
  - Enabled human employees to do much rewarding work
  - 300 robots are providing work equivalent to 300 full-time employees, who are presently working with better initiatives.
  - Has deployed 80+ robots is less than a year
  - Achieve complete ROI in 1 month

➢ **RPA in Food Industry**

  o **Profile**

  Known for its iconic Hyderabadi Dum Biryani, Paradise is one of the most admired restaurant chains in India. Started as a small cafe in 1953, has now expanded to more than 45 outlets across 8 cities in India. Around 2 years back, Paradise partnered with various online food service providers to ensure home delivery. This step had increased the delivery channel to grow from 5% to 30%.

  o **Challenges**

  The main challenge which Paradise was struggling with was delays and errors in manual revenue and reconciliation process. Paradise works with Swiggy, Food Panda, Zomato, and Uber Eats having around 6000 transactions per day. So, it was tough for them to manually reconcile the revenue on a daily basis and the company took 5 days to complete the reconciliation process of a single day. This, in turn, generated a huge backlog of pending reconciliations with high chances of errors.

  o **Solution**

  So, the solution to this problem was to automate the task to increase the speed of the process and also simultaneously increase the accuracy. Paradise then reached out to AiRO Digital Labs, which is an IT company specializing in the field of AI and RPA to standardize its reconciliation process. AiRO and Paradise soon zeroed upon the UiPath Enterprise RPA platform as it was easy to use and could be

easily used to scale. By deploying just 2 UiPath robots the team was able to automate the reconciliation processes by bringing down the reconciliation time from 5 days to 4 hours.

The automation was designed in the following way:

- The UiPath robot will initially extract data from various sources such as the ERP system, dashboards on aggregator's platforms, 3rd party tool where all the orders of aggregators would be present, and the emails of debit/credit card details.
- The collected data would be consolidated and stored in a single file, after which the reconciliation process would be done.
- Finally, the robots will also map each transaction against the information given and perform several checks to recognize any exceptions.

- **Result**

  If we talk by the numbers, then UiPath has helped Federal Bank achieve the following numbers:

  - Reduce the reconciliation time from 5 days to 4 hours
  - Achieve 10% accuracy
  - Use human employees for more crucial tasks

- **RPA in Financial Services**
  - **Profile**

    Ernst and Young or commonly known as EY is one of the largest professional services firm headquartered in London. It provides assurance, tax and transaction services and advisories to solve client's challenges.

- ○ **Challenges**

  A U.S bank was spending a lot of manual effort on various repetitive, error-prone and rules-based processes such as data entry, verification of data and documentation. So, the bank collaborated with EY to automate the tasks by implementing RPA. The main task was to improve the quality of data, increase productivity, and reduce regulatory risks within the banking operations

- ○ **Solution**

  To overcome the above-mentioned challenges, the team decided to consider the following factors while choosing the RPA platform:

  - An RPA tool which has been used in the banking and finance industry before
  - Licensing flexibility
  - An enterprise-grade solution which has the ability to operate with the existing application scope and IT infrastructure
  - Provides professional training with rapid deployment

  Automation anywhere was the RPA tool which satisfied all their requirements and the team decides to use this RPA tool to solve the below issues in the following manner:

  - Flood Certification Orders

    Since there were high volumes of flood certification orders on a daily basis, the team had to spend a huge amount of time ordering each and

every flood certificate. This was because there were many dependency issues as the team had to wait for the vendor to return the order, then enter the data into a system from PDF.

With Automation Anywhere, the bots order the flood certificate and automatically gather the data returned from the PDF file. Then, these bots input the data into system records. This has helped the team meet the requirements of flood-zone loads rather than wasting time in ordering the certificates.

▪ Mortgage QA/QC
The quality control/assurance team spent the maximum time of their day gathering the necessary loan documents and comparing it with various data points across multiple sources.

With Automation Anywhere, the bots deployed gave high gains as they could gather the necessary loan documents and give the data to the QA/QC reviewer. This has helped the team to avoid errors and repetitive process of finding the correct data. Now, the team can focus on identifying and resolving the exceptions.

▪ Address Verification
For every loan taken up by a customer, the bank has to check each address in the system of records against the Unites States Postal Service (USPS) website to confirm the official records. To perform this task, an employee had to follow the below steps:

- Navigate to the address lookup tool
- Compare the addresses
- Attach the screenshot to the loan file

With Automation Anywhere, the bots can compare the addresses without manual intervention. The address which is incorrect or does not have any match in the

system would be automatically flagged and would be further handled by an exception processing system.

- o **Result**

The results achieved are as follows:

- More than 1 million dollars were annually saved.
- 0 errors from processes with regulatory components.
- 2-3x greater efficiency
- Better customer experience.

➢ **RPA in Retail**

- o **Profile**

RBS or Retail Business Services is a branch of the Ahold Delhaize USA which provides services to Food Lion, Stop & Shop, Giant Food, Giant/Martin's, Peapod, and Hannaford.

- o **Challenges**

RBS or Retail Business Services has been deploying automation for more than 15 years now, but it ran into problems when they tried to automate the processes which involved interacting with the vendor's application or website. This resulted in denying requests at a higher frequency and unreasonable costs

- o **Solution**

To overcome the challenges, the company decided to use Automation Anywhere. By using Automation Anywhere the company decided to save thousands of hours

in various departments such as finance. In the finance department, the company automated the task of payable accounts, retrieval accounts, and inventory processes. Not only this but now the company's process does not require changes from its application vendors and is less prone to errors, requires less time, and is less complex.

o **Result**

The results achieved are as follows:

- 69,000+ full-time employee hours are saved
- 75% of the finance eligible processes are automated.
- 65+ bots are deployed in production

➢ **RPA in Telecommunications**

o **Profile**

Sprint Corporation is one of the top telecommunications company based in Overland Park, Kansas. It is the fourth-largest mobile network operator in the United States and offers a wide variety of wire-line and wireless services. It has around 53.9 million customers and has an annual revenue of $33.6 Billion.

o **Challenges**

Spring Corporation wanted to automate its financial tasks by including the tax department related activities. Apart from this, the team also wanted to automate

tasks in other sectors such as sales, network, HR, IT, enterprises, customer care, and procurement.

o **Solution**

To overcome the challenges, Spring Corporation chose Automation Anywhere to automate its tasks. It was chosen as it is user-friendly, provides advanced functionalities with unattended bots, and can be used in various industries. The program to automate tasks initially started with 50 use cases, to reduce the manual intervention in a specific time. The company achieved this goal in 6 months and was able to develop valuable automation.

o **Result**

The results achieved are as follows:

- More than 20,000 hours are saved
- 50+ automation developed
- More than 50+ automation in the pipeline.

➤ **RPA in BPO**

o **Profile**

MAXIMUS is a worldwide leading provider of government services. It designs, develops and delivers health and human services programs. This company has offices situated in 6 countries with their employees answering more than seven million calls at contact centers every month.

o **Challenges**

MAXIMUS being a large organization wanted to adopt the top emerging technologies and one such technology was to use RPA. So, the team took up the initiative to create a playbook for assessing hundreds of MAXIMUS operations across the globe.

o **Solution**

MAXIMUS used the Automation Anywhere platform to implement a highly available delivery network of processes, people, and tools to manage all the automation opportunities. The different processes which were automated are as follows:

- Management of the workforce by triggering messages through RPA
- Data entry tasks
- Intake of customers
- Management of documents
- Customers facing and back-office processing such as health plan enrollment, processing of premiums, and eligibility determination
- Provisioning and de-provisioning of employees [executed by bots]

o **Result**

The results achieved are as follows:

- More than 2.5 Million $ saved annually
- 39 bots deployed in production and more than 10 are expected to be deployed in production by next year.

➢ **RPA in Education**

o **Profile**

The University of Melbourne is located in the heart of Melbourne and has close to 50,000 students studying in various streams such as law, business, economics, arts, media, and engineering. This university has partnered with leading research centers and is one of Australia's oldest and most reputed institutions.

THE UNIVERSITY OF
MELBOURNE

o **Challenges**

Being one of the top institutions, the University of Melbourne's admission council team had to manually enter the data of all the students. This was quite a labor-intensive process as it involved downloading individual attachments and consolidation of students' results. This resulted in delays and duplication of data and eventually became tough to handle large volumes of student applications.

o **Solution**

The University of Melbourne decided to deploy to automate the above mentioned manual tasks with the help of Robotic Process Automation. They decided to choose Automation Anywhere to reduce manual intervention and automate processes across various departments such as faculty admissions, student admissions, and supplier tracking.

The bots deployed across all departments automate the data entry tasks and attachments for new admission applications.

o **Result**

The results achieved are as follows:

- Increase the efficiency of critical business processes.
- Boost staff engagement and reduce 10000 hours of manual force was reduced.
- Improve customer experience
- 97% of throughput in processing supplier details
- 22 processes are automated

Inbound and Outbound Marketing in Business

- ➢ Inbound Marketing
  - o Pulls interested readers in
  - o Solves consumer's needs
  - o Interactive with readers
  - o As helpful content is consumed, audience members become leads
  - o Where you see it: websites, blogs, eBooks, opt-in emails, SERP, social media

- ➢ Outbound Marketing
  - o Pushes messaging at everyone
  - o Written to sell products
  - o One-way communication
  - o Disrupts whatever content is being consumed
  - o Where you see it: TV ads, billboards, pop-up internet ads, telemarketing, magazines

What is Outbound Marketing?

Outbound marketing, also referred to as "interruption" or "push" marketing, uses tactics that get a message to a large number of people in an effort to make a sale. Print/TV/radio advertising, cold calling, direct mail, mass emails, and other methods are aimed at large audiences of people (most of whom may not even be looking for the marketer's product). It's a one-way conversation that typically focuses on the product and reasons why the audience should buy it**.**

THE PROBLEMS WITH OUTBOUND MARKETING

The big problem with traditional marketing is that in order to be appropriate for the largest number of people, the message must be very general. In other words, with traditional marketing tactics it's impossible to be relevant to a variety of specific needs and challenges. There are other reasons traditional marketing isn't working today:

- 60% of surveyed TV viewers would make the effort to find and download TV shows to avoid advertisements. With the growing number of online TV streaming services, television ads can be skipped, and you can't make an impression on your audience if they've tuned out.

- Digital music services and satellite radio make it easy for listeners to avoid radio advertising. As of December 2019, there were 271 million active Spotify users alone. Radio doesn't have the impact it once did.

- 58% of direct mail recipients never read or scan their direct mail pieces. Referred to as "junk mail," this tactic has low effectiveness.

- The average person gets bombarded with over 1,700 banner ads per month but only sees half of them. Not exactly a lot of bang for your buck.

- The average office worker receives 120 emails every day, and 55% of all of that email is spam. So, people expect to tune out most email.

- The estimated loss of revenue due to ad blocking is expected to increase to $2.12 billion in 20207.

What is Inbound Marketing?

While outbound marketing pushes messages to a wide audience, inbound marketing is "magnetic." Rather than sending out general messages to uninterested audiences, inbound marketing allows you to attract your best prospects — and those who are actively looking online for solutions. When they get to your site, those prospects find help, guidance, and education directly related to the searching they're doing online.

At the heart of inbound marketing is content: blog content, video content, and downloadable content offered on a company's website, such as white papers, guides, eBooks, tip sheets, and others. When using an inbound approach, marketers develop this content to align with specific points in the buyer's journey:

- At the beginning of their journey, a buyer is getting familiar with the problem and potential solutions.
- In the middle, they're comparing a small set of potential solutions.
- At the end of their buying journey, they're doing due diligence needed to make a final decision.
- And then there's the actual customer experience, where delighted customers can turn into promoters.

AN EXAMPLE OF INBOUND MARKETING IN ACTION

You are the facilities manager of a disposable tissue manufacturing company, and you've decided that it's time for a new conveyor for the company's XYZ line of products.

Your first step toward purchasing new equipment is to do research online to understand your options. Not surprisingly, you Google "conveyor systems with best output." High in the results is an eBook entitled "5 Ways a Cylindrical Conveyor Improves Productivity & Output." You click on the link, get to a supplier's blog, and read it. It has some great information! At the end of the blog post is an offer of downloadable content also related to conveyor output, so you provide your email in exchange for the content. You're now a lead in that supplier's system. The supplier is able to send you additional, helpful content offers to draw you further into the sales funnel. As a facilities manager, you're eager to be engaging with this supplier because you now have evidence of this company's expertise. You also appreciate the useful information they've provided as you consider your options.

See how it works? While traditional marketing sends general messages to a wide (and often uninterested) audience, inbound marketing creates and offers content developed specifically for distinct audiences, relevant to multiple stages in their buyer's journey.

Prospects are attracted to that content as they do research related to their challenges, and once they find it on a supplier's site, they become engaged in a conversation with that supplies.

	Inbound Marketing	Outbound Marketing
Definition	Focuses on crafting high-quality content that organically attracts people.	Uses traditional non-digital strategies and jargon-filled messages to draw attention.
Examples	Blogs, SEO strategy, keyword targeting, social media, etc.	TV commercials, billboards, direct mail, newspaper and magazine ads, etc.
Audience Engagement	Permission-based and relevant.	Interruption-based and often disassociated.
Brand Positioning	You're always the main headline.	Stand out or you won't be seen at all.
Marketing Strategies	Integrated, cross-channel strategies.	Linear strategies with limited marketing avenues.
Messaging	Educational, specific, useful.	Broad, forced, complicated.
Distribution	Continuous and iterative.	Inconsistent and varied.
Data & Attribution	All digital and quantifiable.	Immeasurable and hard to track.

Which factors should you consider while selecting a RPA Software?

You should consider the following factors before selecting a tool

- Desired Platform Support: Web, Desktop, Citrix, SAP, etc.

- License Cost if applicable

- In the case of an outsourcing project, you need to factor customer/Client preference of the automation tool

- The cost involved in training employees on the tool

- Hardware/Software requirements of the automation tool

- Support and Update policy of the automation tool vendor.

RPA (Robotics Process Automation) Tools

➤ **OutSystems**

OutSystems is the #1 RPA with advanced capabilities for enterprise mobile and web apps.

Features:

- Full-stack Visual Development: Drag-and-drop UI, business processes, logic, and data models to create full-stack, cross-platform apps. Add your own code when needed. No lock-in ever.

- Develop Complex Apps: Build the cool apps you want no matter how complex, and bring in the latest tech like reactive web, AI/ML, IoT, RPA and micro services.

- Never Hit a Wall: With OutSystems, low-code means no limits. You can use the languages you know to add your own code and extend the platform as you wish.

- Stay Away From the Boring: Ship your code automatically. Build your apps on a DevOps ready environment that gets your stuff in production with the click of a button.

➤ **Eggplant**

Eggplant (now part of Keysight Technologies) is an award-winning RPA solutions provider and has been named a leader by all the top analysts, including Gartner and Forrester. Don't fight today's testing war with yesterday's technology.

eggplant®

Features:

- End-to-end automation able to interact with multiple systems to complete a task.

- Universal fusion engine that can test any system from mobile to mainframe.

- Resolve issues with real-time data analytics

- Designed for process experts not technical experts or developers.

- Reduce manual errors by automating repetitive process tasks.

➢ **HelpSystems**

Automate by HelpSystems, is a comprehensive RPA platform designed to automate repetitive and manual processes across your organization. Automate provides 5x the value of other solutions through its ease of use, stable and robust functionality, and ability to scale your automation strategy.

helpsystems

Features:

- Over 600 prebuilt automation building blocks

- Graphical workflow design brings IT and business teams together

- Ability to integrate with an extensive list of applications

- Intelligent automation capabilities with advanced conditions and trigger scenarios

- Industry leading security, auditing, and integration capabilities

- Centralized visibility, management, and reporting and analytics within distributed networks

➢ **Power Automate**

Power Automate is RPA tool that helps you to boost your organization's productivity. This application enables you to build a secure workflow without writing any code.

Features:

- It helps you to increase the accuracy and efficiency of the workforce.

- This application provides step by step guide to simplify business process automation.

- Power Automate tool automation is protected by MS security technology.

- It offers AI models for object detection, form processing, and text recognition.

- You can integrate this app with Microsoft 365, Azure, and Dynamic 365.

➢ **Creator**

Creator is a tool that helps you to build software from scratch without writing complicated code. It enables you to convert business logic into a functional workflow with ease. This software is integrated with QuickBooks, PayPal, and Zapier.

Features:

- It offers role base control functionality to keep your business streamlined.

- Provides a wide range of insightful reports.

- You can easily drag and drop code with ease.

- Supported devices are Android and iOS.

➢ **Agenty**

Agenty is a Robotic Process Automation software for data scraping, text extraction, and OCR. It enables you to create agent with just few mouse clicks. This application helps you to reuse all your processed data for your analytics.

Features:

- It enables you to integrate with to Dropbox and secure FTP.

- Provides you automatic email update when your job is completed.

- You can view all activity log for all events.

- Helps you to boost your business performance.

- Enables you to add business rules and custom logic with ease.

➢ **Automation Anywhere**

Automation Anywhere RPA developer tool combines conventional RPA with intellectual elements like language understanding and reading any unstructured data.

Features:

- Intelligent automation for business and IT operations

- It is one of the best Robotic Process Automation tools which uses SMART
  Automation Technology

- Rapidly Automates complex and complicated tasks

- Distribute tasks to multiple computers

- offers script less automation

➢ **UiPath**

UiPath is a highly extensible Robotic Process Automation(RPA) tool for automating
any desktop or web apps. It is one of the Open source RPA Tools that allows global
enterprises to design, deploy a robotic workforce for their organization.

Features:

- Uipath can be hosted in virtual terminals or cloud environments

- Provide support for a high range of applications to work with, which includes
  web and desktop applications

- Auto-login features to run the bots.

- Scraping solution which works with.Net, Java, Flash, PDF, Legacy, SAP, with absolute accuracy

➢ **Blue Prism**

Blue Prism RPA tools help business operation to be agile and cost effective by automating, manual, rule-based back repetitive office processes. It is one of the Free RPA Tools which provides a flow chart like a designer with drag and drops feature to automate various business processes.

Features:

- Easily implemented in the short time span of 4 to 6 weeks

- Robust and feature-rich analytics suite

- The tool doesn't require programming skills to implement

- Build highly efficient and automated end-to-end business processes

- Improved Control Room to offer real-time feedback

➢ **Pega**

Pega systems automation framework tool supports all usage scenarios. Pega unifies architecture based on a business rule management system and predictive analytics decision management mechanism.

Features:

- Open APIs that quickly connect to your existing services

- Actionable intelligence helps you to automatically finds processes to optimize

- The adaptive intelligence that learns on the fly

- This RPA open source tool captures insights at the desktop. It gets complete details of how work gets done.

➢ **OpenConnect**

OpenConnect automatically discovers, automate, and improve service processes and optimize workforce productivity. The tool helps you to address all types of operational and competitive challenges.

Features:

- Entirely server-based architecture

- Dashboard views with real-time status

- Centralized governance

- Highly secure, encrypted data.

- Advanced connectivity capabilities

➢ **KOFAX from Lexmark**

Kofax RPA is one of the most efficient way to acquire, enhance and deliver information from any application or data source. This includes a website, portals, desktop applications and enterprise systems without any coding.

KOFAX

Features:

- Helps you to remove errors by Automating Data Gathering and Input

- Increase Operational Efficiency with Intelligent Software Robots

- Monitor and Optimize Processes with Robotic Process Intelligence

- Deploy, manage and execute robots from a centralized server

- Built-In Analytics and Process Intelligence

➢ **G1ANT**

Giant is a software platform for humans to deploy advanced skill robots in their workplace.

G1ANT

Features:

- Boost Efficiency of your organization

- Precisely measure all the activities performed by the Robot which allows you to analyze each automated process.

- Giant helps you to standardize your business process.

- Employees can put their focus on more creative processes and spend more time in the creative processes.

➢ **WorkFusion**

WorkFusion is a (SaaS) crowd computing platform. This RPA software automates the process of monitoring of data feed and helps you to manage crowd-sourced workers from global talent markets.

WorkFusion

Features:

- This Robotic Process Automation software automates tasks by just press of a button

- Deploy bots as you need, to operate simultaneously for enterprise-scale automation

- Collaborate with multiple users across different workstations

- Automate across your team

➢ **Contextor**

Contextor is robotic process automation solution offers complete customer view, online help, and shares data between two or more applications.

contextor
We augment humans with bots

Features:

- Automate tasks in real-time

- Ensure the proper sequencing of tasks

- Gather and maintain a contextual data collection

- Provide a contextual assistant/help

- The tool can n monitor the processes executed on the workstation.

➢ **Jacada**

Jacada RPA is a robust RPA tool that helps in Desktop Automation. It is one of the best RPA automation tools which allows companies to automate time-consuming and error-prone, repetitive tasks.

Features:

- Automated processes conducted with the highest possible accuracy and unbeaten level of consistency
- Reduced Average Handling Time of your organization
- Helps you to increased first call resolution

➢ **Kryon**

Kryon Robotics process automation tool. It works on the cutting edge of RPA technology, driving innovation in the discovery of suitable automated processes.

Features:

- Helps you to Identify all of your processes that should be automated for time and cost savings
- Empower companies to accomplish their tasks with greater speed, accuracy, and efficiency

- Helps you to automate all your repetitive and time-consuming business processes

- Enhances productivity at every stage of your business processes

➢ **NICE Systems**

NICE is a cloud and on-premises enterprise software solutions. This RPA python tool helps any organizations to take firm and accurate decisions based on advanced analytics of structured and unstructured data.

Features:

- Increased Customer Satisfaction

- Improved productivity

- Better resource utilization

- Allows your employees are free to focus on high-value activities

➢ **Onvisource**

Automata RPA solution can capture and process repetitive actions such as filling out online forms, communicating with other systems, and adapting to change or new situations.

Features:

- Automata can quickly assist with large volumes of business or customer transactions

- Robotic Transaction Processing

- Automated Desktop Transaction Recording and Monitoring

➢ **Redwood Software**

Redwood RPA tool offers unattended robotic processes that are easy to create, simple to scale and fast to deploy. It is one of the best RPA solutions that provides many plug-and-play robots which provide instant connections to most standard applications.

Features:

- Automate simple and complex tasks

- Offer a unique network of services which can be used to robotize any process quickly.

- Three-tier landscape with automated promotion and audit trail

- All robotic and human interactions are stored automatically, which offers complete insight of all process activity.

- Allows you to Run, clone and edit bots

➢ **AutomationEdge**

AutomationEdge RPA tool offers many essential technologies for automation of front office, middle office, back office and IT operations.

Features:

- Allows you to automate Excel spreadsheet procedures and activities
- Chabot is capable of interacting with customers and fulfills requests using Artificial Intelligence.
- Front, middle and back office automation

➢ **Foxtrot**

Foxtrot by Enable Soft is the faster way to create and run automated tasks for your organization. It is one of the best RPA companies that offers many easy to use tools which automate tasks in hours and days rather than weeks and months.

Features:

- Designed for business users instead of technical experts
- Extensive library of actions helps you to create your automation.
- An easy method to create and run automated tasks for your organization

- **Verint**

  Verint is a Robotic Process Automation which automates all kinds of repetitive, time-consuming tasks. This solution offers software robots that can completely replace the need for manual processing.

  Features:

  - Helps you to reduce compliance risk by eliminating human error

  - Increase processing capacity and speed

  - Allows your employees to conduct quality works

  - Helping reduce the errors which occur when employees manually complete difficult processes

- **Visual Cron**

  VisualCron is an automation, integration and task scheduling tool for Windows.


  Features:
  - Decreased cycle times and improved throughput
  - Reduce errors while significantly increasing efficiency
  - Offers great flexibility and scalability to your organization
 - Round-the-clock availability

Manual Process Vs Robotic Process Automation

The following diagram depicts the manual process of providing the user with access to an application

MANUAL PROCESS - ROLE BASED ACCESS TO APPLICATION
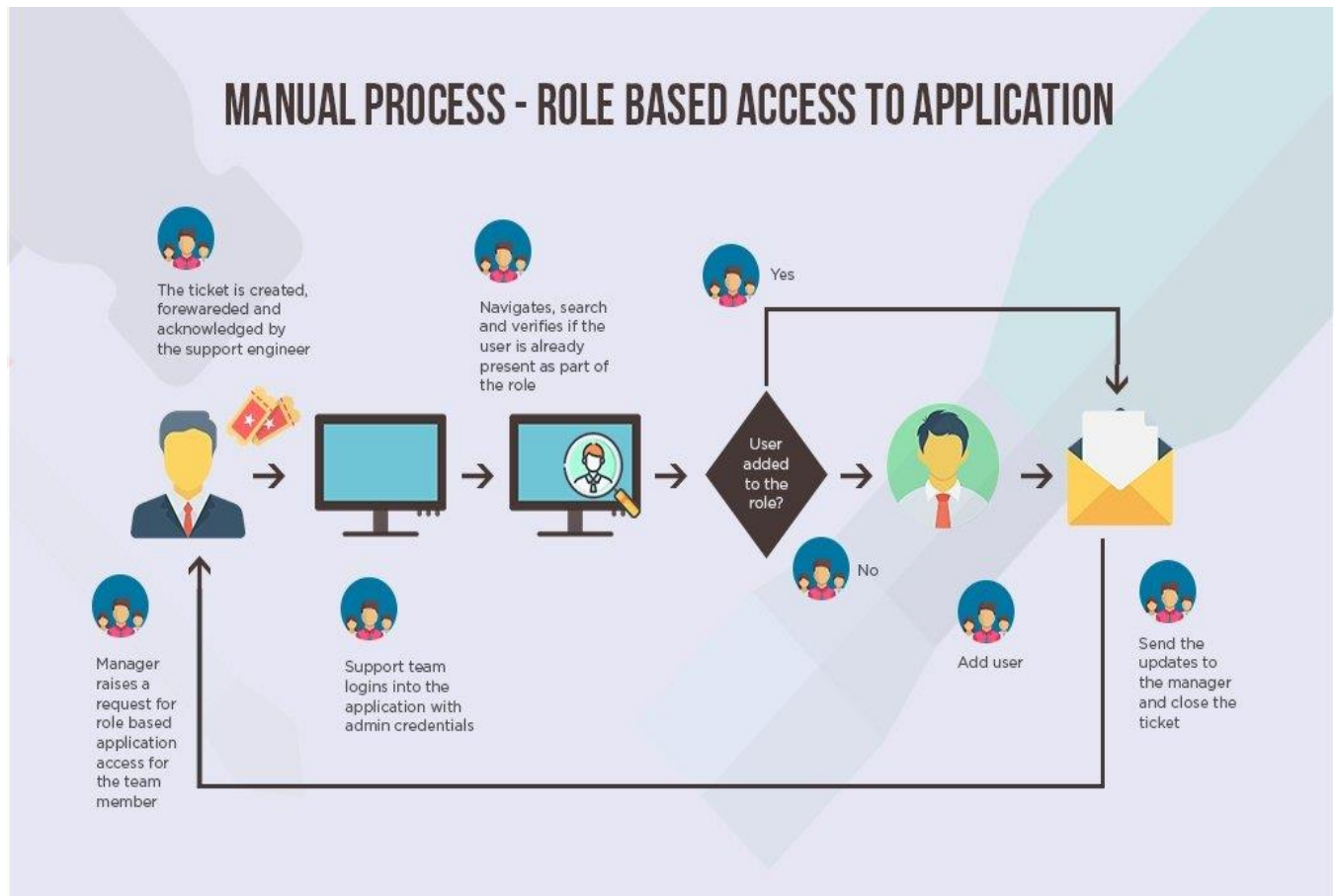
It is a labor-intensive process. In this approach, the employees are involved in the mundane routine task. As it highly relies on the action of the employee, it increases the chance of errors due to fatigue or lack of concentration.

In the contrast, implementing RPA tool in this process can benefit the support team to capture or record the routine activities performed and replay them.

ROBOTIC PROCESS AUTOMATION- ROLE BASED ACCESS TO APPLICATION
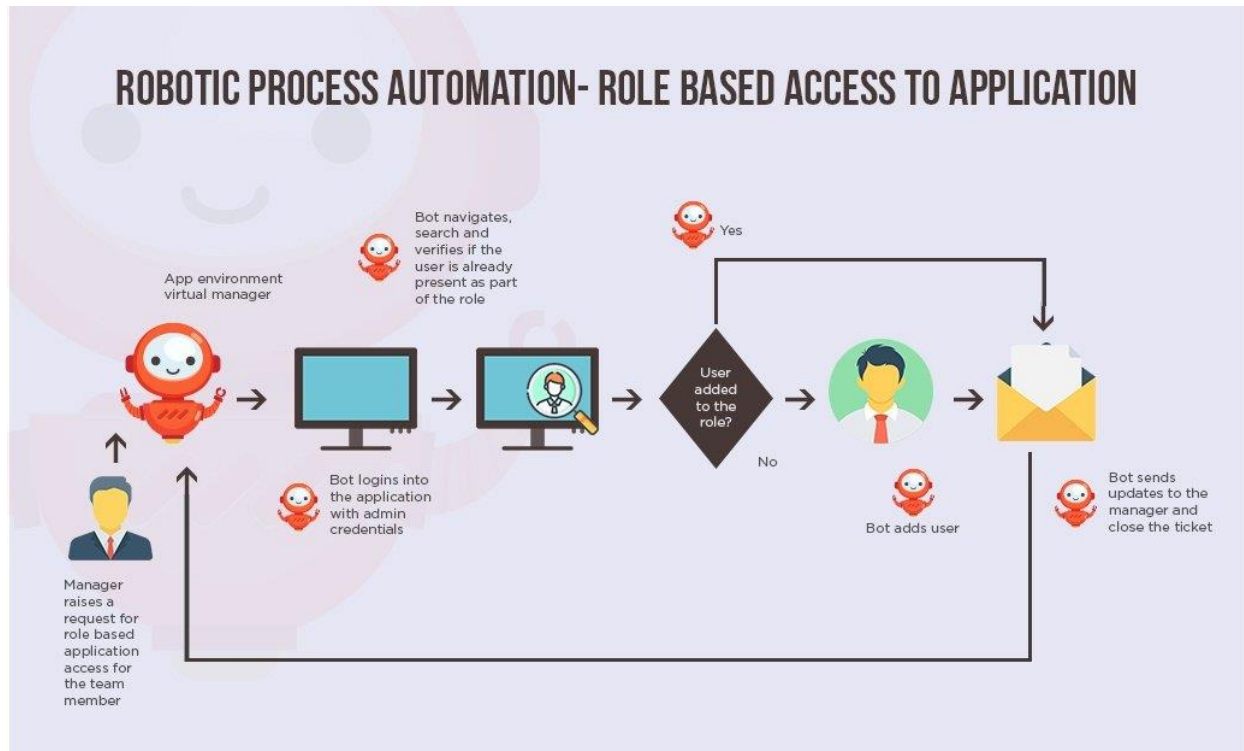
Here, the entire manual actions are recorded, scheduled and activated by a robot when required. When it comes to robotics and automation, people usually think of it as robots or devices. However, RPA stands for virtual or invisible robots, which sits inside the systems, moving between various applications, checking, inputting, updating and processing more promptly that a human could. Therefore, RPA robotics is different from other direct types of automation. As like human user, RA interacts with different systems at the level of GUI or presentation layer. Hence, existing software systems can function together more efficiently; since, RA completes some tasks far faster and reliable than human do. This logical software tool shifts manual effort away from repetitive processing functions towards optimizing business processes.

CONCLUSION

In the present study, the power of RPA is unleashed through a managerial use case. It focused on how a busy manager in the corporate world can engage RPA as an assistant in the place of a human being for sending repetitive emails which are categorized into three different subjects and delivering more productive, efficient and effective results. The value of deploying the RPA project has been measured for different key performance indicators namely Transaction time, Accuracy, Qualitative Indicators, Throughput, Productivity and Compliance which illustrate the potential of RPA over traditional automation by enhancing customer value and business value thereby empowering competitive advantage.

The RPA technology includes plenty of potential in shifting the way businesses operate. Undoubtedly, every business across the world will benefit from the competence of an automation system in the future. As long as industries are on the search for new solutions, a higher ROI and lower overhead, RPA will continue becoming more prevalent as well as sophisticated.

Robotic Process Automation enables businesses and organizations to seamlessly automate tasks across systems and applications. The primary goal of RPA is to replace tedious, repetitive, and error-prone manual work with the efficiency and reliability of virtual automation technology. With 100% productivity and zero error, RPA has a wide range of applications across several sectors ranging from healthcare to banking.

RPA adoption will continue to grow in the years to come. Meanwhile more advanced robotics solutions will continue to mature and be adopted across industries. Those organizations that are successful in scaling RPA are best positioned to advance to and reap the benefits of enhanced and cognitive automation solutions.

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