Survey On Digital Transformation With Rpa

Jyothi Arun[1],Vaishali Salvi[2], Priyanka Sharma[3], Nileema Pathak[4], Pranoti Nage[5]

[1]*(Atharva College of Engineering/ Mumbai University, India)*
[2]*(Atharva College of Engineering/ Mumbai University, India)*
[3]*(Atharva College of Engineering/ Mumbai University, India)*
[4]*(Atharva College of Engineering/ Mumbai University, India)*
[5]*(Atharva College of Engineering/ Mumbai University, India)*

Abstract :
RPA is the technology to manipulate data and to communicate with other digital systems & so on. It is to arrange computer software to act as ROBOT. According to the capabilities of employees , they can boost up the use of robotic process automation. Along with time and money which are two main factors which can be saved by the use of it.RPA "Robots" are same as industrial robots, as it provides improvements in accuracy and increases productivity as well. This transformational process helps people out from dull and repetitive tasks. Large number of industries can use these technologies. The emerge of technologies are based on the artificial intelligence workers. This will help to reduce the barrier to use automated products. People blend how they spend their time like never before.
Keywords : *rpa, artificial intelligence, digital transformation.*

I.   Introduction

What exactly is digital transformation? The definition for Digital transformation can be expressed as "the use of technology to radically improve performance or reach of enterprises according to *Capgemini Consulting*. To change customer relationships, internal processes, and value propositions, industries are using digital advances. In the past decade, other executives, seeing how fast digital technology disrupted media industries. They know they need to pay attention to change in their industries now." robotic process automation (RPA) has their own capacity to support digital transformation.
Also, we can also term it as conversion of information from analog to digital form.

This digital transformation process has enabled much of the technology trends today, some of the changes are-
● Internet of Things
● Big data
● Intra machine communication
● Utilization of Cloud based infrastructure
● Digital currencies etc

II. Robotic Process Automation (Rpa)

A software 'robot' is a software application which replicates the interaction between human beings and the user interface of computer system. For example, consider execution of data entry into an ERP system or indeed a full end-to-end business process which would be a typical activity for a software robot. Software robots interpret as the user interface of third party applications . These configure to execute steps identically to a human user. Rather than being programmed using code-based instructions they are configured (or "trained") using demonstrative steps, [1]. RPA "robots" are revolutionizing. They administer business processes, IT support processes, workflow processes, remote infrastructure and back-office work. RPA provides major improvements in accuracy and cycle time. They also increased productivity in transaction processing while it elevates the nature of work by removing people from the repetitive tasks [2].

III. Artificial Intelligence

Artificial Intelligence (AI) is the theory and development of computer systems. They are able to perform tasks which normally requires human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. Artificial intelligence (AI, also machine intelligence, MI) is intelligence exhibited by machines, rather than humans or other animals (natural intelligence, NI). In computer science, the field of AI research defines itself as the study of "intelligent agents". Any device that perceives its environment and takes actions that maximize its chance of success at some goal. The term

"artificial intelligence" is applied when a machine mimics "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving" [3].

IV. Machine Learning (Ml) Process

Machine learning is an application of artificial intelligence system(AI). ML is the ability to learn automatically and improve from their experience without being explicitly programmed. Machine learning focus mainly on the development of computer programs. They can access data and use it learn for themselves. The learning process begins with the observations or data, such as examples, direct experience, or instruction.This helps to look forward for patterns in data and make better decisions in the future which will be based on the examples that we provide.The main aim is to allow the machines to automatically learn themselves without human intervention or assistance and adjust their actions accordingly[4].

a. How is RPA an integral part of Digital transformation?

The two terms RPA and Digital transformation are closely linked. RPA plays a vital role in transforming an organization digitally. RPA helps organization to adapt transformation digitally.

b.What changes does will this digital transformation bring and how is RPA benefitting it?

Areas where RPA help organization-
- In reducing workforce
- In improving quality
- In increasing productivity
- Lesser time to market

These are the key objective of a digitally transformed unit. RPA has now become an important factor within organizations in deciding factor, to get ahead in the race with in industries who want to move fast digitally. RPA works as a propeller to achieve the same. RPA is also being used in backend processes of industries including:
- Banking
- Healthcare
- Travel

RPA plays a major role in behaving itself in terms of time, quality and efficiency.

V. RPA Tools

a. Blue Prism:

Blue Prism is manufactured on the Microsoft .NET Framework. It programs any application and backings any platform such as Mainframe, Windows, WPF, Java, web, etc. presented in a variability of ways such as terminal emulator, thick client, thin client, web browser, Citrix and web services. It has been deliberated for a multi-environment placement model such as development, test, staging, and production with both physical and logical access controls.[2]

b.Automation Anywhere:

Automation Anywhere is a RPA Tool which gives end-to-end business processes for an establishment. It supports the big establishment a simulated workflow with the automation process. By using this Automation Anywhere tool an establishment can cut the total cost of the project, it solves the common human errors; it gives the more flexible working atmosphere. Robotic Process Automation is the biggest achievement in technology world.

c.UiPath:

UiPath is a software structure to improve automation applications. It runs on Microsoft Windows and it was settled on the top of .Net framework and Windows workflow base tools. Making an automation app using UiPath framework doesn't automatically need programming abilities. If you are a systems analyst looking to use workflow in your app things cannot be simpler. Create a workflow with Studio then appeal it from your code either as in-process function or as an outside process using our launcher.

RPA has vast scope right now and to start career with robotic process automation is fantastic idea.

VI. Innovative Rpa Applications

Now a days industries are constantly looking for more ways to apply automation in their operations. This will help to improve productivity and reduce costs. As technology advances, a greater number of tasks will be performed entirely by the automated workforce. HR, customer service, finance and a wide range of other

fields are already seeing automated processes keep track of receipts, store and retrieve documentation, track timesheets and monitor and even fix IT issues. Today, healthcare providers are even using RPA to analyze population health, coordinate care and monitor patient wellbeing. [1] As technology advances, we will see the list of automated tasks expand significantly, with increasingly few areas not at least partially automated.

Although the digital revolution is already well under way, there is still significant area in which companies can improve their existing systems and increase the application of RPA. As technologies advance and people find new applications for existing solutions, automation and digital initiatives will continue to become more prevalent. There is little chance that the digital transformation will slow down anytime soon, and companies that don't keep up will inevitably be left behind by more adaptable competitors.

VII.   Conclusion

Industries are planning to implement RPA going into coming years. As the becomes more popular and widespread, the uses for it will be more varied. We can see that the digital transformation has lead RPA being used beyond data inputs. Other time consuming processes such as file conversion and email recognition can also utilize RPA. The incorporation of ML and other algorithms apply accurate judgement.They also help to learn how to perform processes at a faster rate. It will also reduce outsourcing as RPA becomes a cheaper solution.

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