

Is Robotic Process Automation Important?

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Abstract: With the introduction of integrated circuits (IC), technology has vastly advanced over the last few decades, and today digitalization, artificial intelligence, and machine learning are the new buzzwords that are revolutionizing the IT industry. This opens up a new realm of hyper-automation., The concept of automation has been around for a very long time. But in recent years, it's become increasingly common to speak about Robotic Process automation, but what exactly we mean by Robotic Process automations in the world of IT What exactly do we mean by that?

Keywords: Hyper automation, Robotic Process Automation, Digitalization.

I. INTRODUCTION

As human, we are progressing from better to best; technological innovation has experienced extraordinary expansion in recent decades, and with this growth, new problems and solutions are changing our Information Technology industry. Furthermore, the expansion in the information technology sector has been considerable, as networking becomes more seamless with each passing day. Organizations nowadays rely on dependable digital network infrastructure to run their day-to-day operations. To accommodate the increased demand for services, business managers are trying to automate day-to-day and simple processes in order to better utilise human capital.

II. BACKGROUND

software robots are automating basic and often mind-numbing tasks previously done by people in almost every industry and across business units, from finance and HR to IT and marketing. It has been regarded as transformative and disruptive in its influence. RPA software, however, is not without pitfalls. To begin with, not every job lends itself to robotic process automation. Technical challenges, security concerns, and vendor unpredictability, for example, might undercut RPA's lauded benefits – or, in the worst-case scenario, lead projects to fail. And, like with any fast-growing, hugely popular technology, there are several misunderstandings regarding RPA.

III. SO WHAT IS ACTUALLY RPA?

RPA is a software technique that makes it simple to design, deploy, and manage software robots that mimic human movements while dealing with digital systems and software. Software robots, like humans, can grasp what's on a screen, complete the correct keystrokes, traverse systems, discover and retrieve data, and do a variety of prescribed operations. 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. [1]

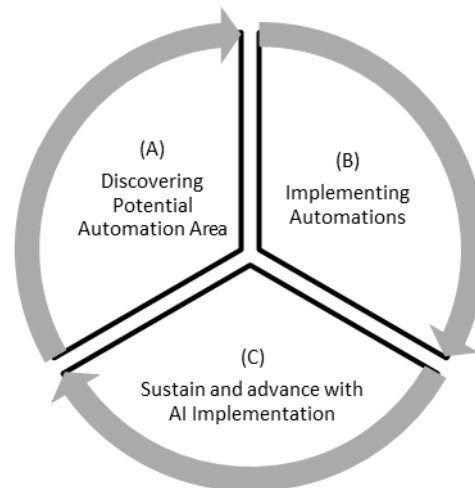
IV. RPA VS CONVENTIONAL AUTOMATION

The skill set required to complete the automation task is the critical difference between RPA and conventional workflow automation methods. In the case of conventional workflow automation, a skilled software developer uses application programming interfaces (APIs) written in programming languages to link the software to the underlying computing infrastructure and establish a series of operations that automate the job. While performing a job in an application's graphical user interface, users of RPA systems often record their activities to create the action list (GUI). Once tasks are logged, the system automatically repeats them in the GUI without the need for human input. [2]

V. EVOLUTION OF RPA AND RPA 2.0

The notion of screen scraping, which can be traced back to early types of malware, has been around for a long time as a sort of automation. RPA, on the other hand, is far more expandable, with API connectivity into other corporate applications, connectors into ITSM systems, terminal services, and even various forms of AI (e.g., Machine Learning) services like picture recognition. It is seen as a significant technical advance in the sense that new software platforms that are sufficiently mature, robust, scalable, and dependable to make this approach practical for application in big enterprises are developing. A major hurdle to self-service adoption is typically technological: retrofitting new interfaces onto old systems is not always practical or economically viable. Furthermore, organisations may desire to overlay a flexible and customizable set of process rules on top of system interfaces that vary depending on market offers and customer type. This just increases the expense and complexity of technology deployment. In this circumstance, robotic automation software provides a practical way of launching new services, as the robots merely mimic human behaviour to execute back-end transcribing or processing. The relative cost-effectiveness of this method stems from the fact that no new IT transformation or investment is required; instead, software robots simply replace humans. [3]. RPA 2.0 refers to the fact that RPA platforms are evolving, collaborating with technologies such as process mining to discover the best RPA candidates and adding machine learning, which enables platforms to automate lengthier and more complicated activities, including whole job functions. [4].

VI. ECO SYSTEM OF ROBOTIC PROCESS AUTOMATION



The three steps that make up the Robotic Process Automation Ecosystem There may be a number of procedures in any business that appear to be frictionless or error-free. This is known as the potential area for automation (A). Here are some tips to assist you identify RPA opportunities in your business where software bots might be effectively deployed. The best place to start is to do an analysis of workforce deployment to identify their performance in the following areas; they must manually access and collect data from several programmes to fulfil their tasks.

Moving data manually from one system to another manually ensuring that data across numerous systems is consistent manually updating the same information across several systems while waiting for alerts or events to start their processes, data corrections across many accounts by hand [5].

Once identified the potential area of automation you can simply create flow charts of the manual process and strategize the implementation of RPA application. Once fully automated they we can also leverage the application machine learning to handle the exception cases using python.

VII. CONCLUSION

The paper concludes by highlighting an efficient and systematic method for using and implementing robotic process automation within an organisation. It is clear from the foregoing that the traditional method of manually processing day-to-day operations jobs is driving up the operational costs of telco organisations, whereas using an automation technique like robotic process automation technology will lower operational costs while also streamlining the process overall.

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