ROBOTIC PROCESS AUTOMATION

Shashi Kumar[*1]

[*1]Karnataka State Open University, Mysore, Mukhtagangotri, Karnataka 570006, India.

ABSTRACT

It is a secret that today various strategies have been implemented for the digital transformation of organizations. These roles play an important role in optimizing operations in unconventional ways. It is a constant question to know how we are going to adapt to them and how we are competitive in the different market sectors. One such strategy is robotic process automation, or RPA, which plays the role of human behavior and helps minimize its tasks through specialized software. Mitigate repetitive activities in processes whose variation in each iteration is little or nil. As you will see, its usefulness allows you to enter the term digital workers. Which defines RPA as the use of software that imitates and performs high-volume administrative tasks. Robots are very attractive because they are the best workers you could have. They never stop. They never need a vacation, and best of all, they are very successful in their daily tasks. These bots reduce time and increase value with each operation.

I.   INTRODUCTION

RPA is an acronym for "Robotic Process Automation", which can be translated as Automation of Robotic Processes. When it comes to process automation, as the name suggests, RPA takes it to the next level compared to solutions such as BPM, Workflow or Case Management. Indeed, with RPA, it is a question of automating business processes via robots, also called "bots", in order to eliminate the repetitive tasks, with low added value and tedious, common to all sectors of activity. In reality, RPA delegates to robots the time-consuming tasks that are usually performed "by hand" by employees in the company. The potential of RPA is therefore numerous as much as it has a high impact: rationalization of daily tasks, cost reduction, performance and productivity gains, but also enhancement of human know-how and expertise within the company. .Beyond the productivity benefit, the elimination of repetitive tasks contributes to better employee satisfaction and fulfillment, allowing them to focus on value-added activities within the company. Now mature, this robotic succession is all the more timely in a context where bureaucratic tasks increase in proportion to data, as well as technological innovations, and their appropriation within companies through their digital transformation [1-3].

II.   THE BASIC PRINCIPLES

Entering basic information in forms, copying and pasting this information in several software packages, are all administrative tasks that take a lot of time. Repetitive and laborious, these tasks, now anchored in the company's digital activity, are all the more subject to "human error", typos, inaccuracies, typing in the wrong places ...The basic objective of RPA is therefore to automate manual, tedious, and bulky tasks, such as data entry or information retrieval. Thus, the robot software reproduces human interventions, thanks to the processing of data produced in quantity. The concept of RPA is therefore to replace human intervention, with the risk of errors and the loss of time that it implies, with robots. Robots are software that operate automatically and autonomously on employees' workstations, but also on company servers, or in the back office ...By being pre-defined with precision and automated, these business processes are accomplished in an ultra-responsive way, and with accuracy by software robots. In brief: RPA automates manual and tedious tasks, such as data entry or information retrieval, in large volumes.\Thanks to the processing of data produced in quantity, the software solution that is RPA reproduces human interventions, providing the assurance of speed, accuracy, permanent availability in the accomplishment of these tasks for the benefit of business productivity [1-5].

III.   WHAT ACTIVITIES INVOLVED WITHIN THE COMPANY?

The tasks involved have in common that they are predictable, repetitive, and present in large volumes, in particular through increased company data. These tasks are normally performed manually and time consuming. Some application cases can be cited in different sectors: automatic responses to an e-mail, processing of

customer orders, processing of requests by e-mail, processing of salaries, updates of client profiles, processing of exceptions, payment litigation, patient registration, verification of supplier identification information, processing of customer orders.

IV.   HOW DOES RPA WORK?

RPA facilitates the interaction between systems by using software robots, which perform actions such as copying and pasting data between screens, typing, clicking, opening and closing applications and dialogs. Each of these actions is monitored and recorded in an audit report. The robot performs clicks, or input and processing of information with speed and relevance unmatched by any human intervention.

V.   THE GARTNER FIRM THUS DEFINES RPA IN ITS DEDICATED SURVEY DATED 2017:

In short and at a minimum, the robot clicks and enters the information for the employee. For example, when a banker integrates a new client, he will no longer need to enter a quantity of information about this client in a variety of software databases or information systems. They will no longer have to switch from one system to another, or from one screen to another, to duplicate the same information. Once the basic information has been entered, the robot will take over to supply all of the information in its integrity and in the necessary locations. The robot therefore assists the banker, who can then spend time advising his client, rather than performing these successive seizures. Business processes are automated and accelerated for the benefit of the employee, the customer, and the business in general.

VI.   WHAT ARE THE OPPORTUNITIES FOR THE COMPANY?

Just like humans do, robot software configured by RPA interprets data, initiates actions on it, and interacts with other information systems. The only difference is that robot software can run these processes around the clock, 24/7, with unprecedented speed and flawlessly. The need for employees to navigate between multiple systems is reduced to a minimum. The need to perform manual tasks is completely eliminated. Not only is the productivity gain immense, allowing the company to accomplish these tasks in unprecedented quantities, but it also improves the quality of business processes. The consequence is direct on the significant improvement of the performance of the company, while reducing its costs. The opportunity also lies in valuing human expertise. Human intervention can therefore focus on the relationship with the customer, as well as on exceptions, and activities with high added value, which do not fall within the framework of systematic and repetitive tasks of the company [4-8].

VII.   PROFITS

We can cite, among others:

Reduced execution times

Reduction or even elimination of manual errors

Increased productivity

Promotion of human know-how and expertise

Employee satisfaction / fulfillment

Improving the quality of business processes, and work in general

Improved quality of service

Cost reduction

Permanent availability

Automation of interactions between business applications

Solving compliance and audit issues

Traceability of each action during a process

Increased security

VIII.   WHAT IS THE LINK BETWEEN RPA AND ARTIFICIAL INTELLIGENCE (AI)?

RPA deals with simple tasks that obey predefined rules that the "robot" follows. No notions of understanding or simulation of human intelligence are involved. On the contrary, artificial intelligence is related to human knowledge. Through contextualization, AI is able to process the cognitive attributes, specific to humans, such as language, interpretation, and judgment. It remains to be seen whether RPA is the first step in the transition towards the implementation of artificial intelligence in companies (Machine Learning).In all cases, the RPA is indeed intended to assist employees in the accomplishment of the most repetitive, lapped and tedious tasks of the company, those which obstruct its performance and the quality of the work provided, as well as to the satisfaction of its employees [8-12] .

IX.   CONCLUSION

RPA bots are very important. With figures we could explain that "from 2018 to 2019, it is estimated that global spending on RPA software will increase by 57% to $ 680 million, which shows its popularity as the technology matures." But you can also see that with the COVID-19 situation, this technology has exploited its potential and has contributed in incredible ways to fight this virus. You can read a little more about how bots are currently being used.

For the above, and many more reasons, a large number of companies have adopted this technology as a quick and easy way to automate manual tasks. Too beneficial for reducing errors and increasing quality. It is essential to know the role that Robotic Process Automation plays today. Something that will allow us to identify how we can get much more benefits and how it can contribute to typical business processes.

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