

Impact of Robotic Process Automation (RPA) in Human Resource Operations

Basavaraj¹, Hemakumar G²

¹Assistant Professor, Department of Commerce, Sri D Devaraj Urs Govt. First Grade College, Hunsur

²Department of Computer Science, Government College for Women (Autonomous), Mandya

Abstract—Human resource management is one of the most important parts of a business organization. Human Resources processes are also an integral part of the business industry. “HR automation is a process of improving the efficiency of the human resource department by freeing employees from tedious manual tasks and allowing them to focus on more complex tasks such as decision-making and strategic planning. By automating standard and repetitive HR activities, organizations can reduce the cost and time they spend on HR planning and implementation”. The Robotic automation process can be applied using robotic technologies in businesses to automate and perform repetitive and continuous operations. It makes more time for employees to focus on high-quality tasks. As a result, it affects improving productivity and gets more efficiency in the various functions in a business organization. The research paper emphasizes the impact of robotic process automation (RPA) on human resource operations. The study also highlights the role of RPA in HR operations. The present study depends mainly on secondary data and the required research data is collected from reports and websites. Data were analyzed using a statistical tool such as percentages.

Index Terms—Human resource operations, HR department, Robotic Process Automation, Software and Technology.

I. INTRODUCTION

Robotic process automation has to turn into an exhortation in the business industry and the reason is apparent. “Robotic Process Automation (RPA) is a technology that interacts with digital systems and software to make and manage software robots. Robotic Process Automation makes a robot capable of understanding what’s on a screen, completing the right keystrokes, navigating systems, identifying and extracting data, and performing a wide range of distinct actions.” It reduces staffing costs and human error. The major aim of this robotics process automation is to reinstate more repetitive and

bookkeeping tasks performed by employees with implicit personnel. “HR could be one of the maximum impact areas for RPA. There are multiple tasks, handled by the HR department, that are repetitive and should be automated. For example, onboarding processes, such as onboarding, leave management, termination, retirement, etc, could all be automated”. Several RPA companies are flourishing in the market.

II. LITERATURE REVIEW

Anusha, Rawat, and Vijayshree (2019), a paper entitled "RPA for Human Resource Operations RPA Technology". The study revealed that the design of the system was intended to reflect the duplication of equipment. It can be replaced by robotic technology and how easily and simply the work is done with software developed by the right platform and how perfect the work is, each output is higher and the cost of work spent in this process is much lower and necessary task is completed by the robots proficiently and errorless done. Fernandez and Aman (2021), a study entitled “The Influence of Robotic Process Automation (RPA) towards Employee Acceptance”, discussion and research results have shown that the robotic automation process has significantly hindered further employee recognition. These study outcomes were discussed on five basics such as job intimidation, career change, technology adaptation, career development, occupational health balance, and job satisfaction. The result has shown that workers need to adapt to changes due to new technological advances. In addition, changes that take place in the position should be clearly established to maintain the status of their work and the success of the organization.

Somendra Yadav(2021), in a research paper entitled "RPA's Role (Robotic Process Automation) in

Human Resource (HR) Operations". His study concluded that it offers various benefits to each business such as increased efficiency, reduced costs, better distribution of resources, higher profitability in investment etc. However, in this research paper the researcher also pointed out that many of the benefits of this RPA are mainly in the HR department.

III. STATEMENT OF THE PROBLEM

Approximately 93% of human resource time is spent a lot of repetitive and transactional tasks such as manual data entry, monitoring, and record-keeping within processes etc. The Robotic automation process is a very essential and important HR tool. The right time for the business industry to start is to focus on the new technology and then adapt it.

IV. OBJECTIVES OF STUDY

To study the role and influence of robotic process automation technology in human resource operations.

To know the uses of RPA in human resource operations.

To analyze the impact of RPA in human resource operations.

V. METHODOLOGY OF THE STUDY

The present research study is analytical and descriptive in nature. It based on mainly secondary data. The required data for the study have been collected from various reports and websites. The study is confined only to the impact of robotic process automation (RPA) in human resource operations. In order to analyze the collected data and draw conclusions in this study, statistical tools like percentages were used.

Role of robotic process automation in human resources: It is an excellent way to improve the ability to manage data better in human resources. The Robotic automation process by software bots automatically automates rule-based processes, which are highly interactive in the HR department that requires little or no intervention. This includes activities such as on boarding for new hires, payroll, registration of benefits, and compliance reporting that requires a significant amount of manual and repetitive work. Although better accuracy and

speed of data processing, it can help reduce related costs.

VI. DISCUSSION AND FINDINGS

Uses of robotic process automation in human resource operations

Use Cases of RPA in HR



A. Data Management and HR Analytics

It should manage data group that is present and past employee information, compliance and control, etc. Managing that data manually is very problematic. Although very simple and very easy to automate data management. This will ensure that the data is readable, copied, and comparable quickly and completely error-free. In addition, complete and accurate data means better implementation

B. Applicant Sourcing and Tracking

It can be very profitable for business organizations. There are various sites and programs used. However, robots can be much faster and more accurate.

C. Employee On boarding

More ordering requires more time and attention during the ride process. Alternatively, the automatic Robotic process in human resources is one of the most important and desirable conditions for use. It can focus on an employee while bots are being cared for through a business management process.

D. Payroll Management

It is tough work, especially for a large business organization. The results of the revitalization of the robotic system in human resource studies have shown

that it can be up to 90% of this new process, thus reducing significant effort, time, and errors.

E. Expense and Travel Management

The personnel team faces the toughest challenges when it comes to cost and travel management. There are a few wrong and inaccurate receipts, spreadsheets, delayed shipping, delayed payments, and unnecessary spending. Without a doubt, it can overcome these challenges by conducting validation and approval process based on approved policies and expenditures.

F. Exit Management

It is a legal process and is like a ride, and then it requires more manual labour. That is why automation using robots in human resource operation can be of great help to the HR team.

G. Impact of RPA on Human Resource Operations

In the Fourth Industrial Revolution, It is a technological milestone. It promotes growth in business organization productivity, operational efficiency, and streamlining process flow. According to Grand view Research, "the Robotic automation industry is expected to reach \$3.11 billion by 2025". The RPA is invigorating humans from in repetitive work and also provides jobs and companies that work hard for a competitive framework. According to the Intelligent Operations report, "global RPA acceptance by the human resource is 8% on the full scale and 17% on active use of RPA".

H. Increased productivity

It can relieve human resources to perform high-value functions such as employee commitment and retention responsibilities. It will be dedicated directly to the company's strategic goals, thereby enhancing overall productivity and efficiency.

I. Low-Risk and Easily Integrated

It could be very low-risk and non-confined technology. It can be easily applied to existing applications. It allows working groups to build a platform and continues to grow with the development of refined algorithms and machine learning tools.

J. Scalability

The cost per effort of an automatic process can be very low if run on a scale and can accumulate

directly up and down depending on the needs of the system. It leads to wasted effort or rests time of the entire system.

K. Consistency

It is designed for complete duplication and error-free operation and performance, which can eliminate output variations during operation.

L. Reliability

Robotic process automation does not need unwell days, it is working 24*7 in 365 days.

M. Flexibility

Robotic process automation is industry know-nothing and can pursue planned procedures irrespective of the operation surroundings.

N. Accuracy

It provides the specific output and taking decisions very quickly when it comes to the appreciation of data analytics in its value for computer computing, which far surpasses its human counterparts.

O. Duration

The project runs for nine to twelve months, with a return on investment of 30% to 200% in the first year.

VII. CONCLUSION AND FUTURE SCOPE OF THE STUDY

Robotic process automation is becoming a very big sensation in human resource operations. It can bring required inventive solutions for the human resource process. It changes the way it conducts its operations. It can provide several benefits to the entire business industry such as increased efficiency, reduced costs, increased resource allocation, increased return on investment, etc. Robotic Process Automation plays a vital role in tech solutions and also helping businesses to grow.

The scope of robotic process automation in human resources is increasing and is not limited to a specific element in the organization. Technology can see many benefits such as lower costs, reduce cycle times, save workers from repetitive tasks, and improve productivity. It can be seen as a game-changer when it comes to building a better and more productive team of human resources.

ACKNOWLEDGMENT

We would like to thank colleagues from our institution who provided imminent and knowledge that significantly assisted the research. Also we thank for friends, reviewers and editorial staff for their help in preparing this research paper.

REFERENCES

- [1] Mukherjee, S. (2018). Robotics in HR: Current trends and impact, July 31.
- [2] Anusha, R., & Vijayshree. (2019). RPA for human resource operations. International Journal of Engineering Research & Technology (IJERT), ISSN:2278-0181,8(04, April).
- [3] Kaur, J. (2020). Robotic process automation (RPA) in. Human Resource Management, June 04.
- [4] Fernandez, D., & Aman, A. (2021). The Influence of Robotic Process Automation (RPA) towards Employee Acceptance. International Journal of Recent Technology and Engineering ISSN: 2277-3878, 9(5, January), 295–299.
- [5] Yadav, S.(2021).Role of RPA (Robotic Process Automation) in Human Resource (HR) Operations, published article at Zenesys technologies.
- [6] <https://www.zenesys.com/blog/role-of-rpa-in-hr-operations>.
- [7] <https://www.zenesys.com/robotic-process-automation>
- [8] <https://marutitech.com/rpa-in-hr/>
- [9] <https://www.uipath.com/resources/automation-whitepapers/rpa-in-hr-operations>.
- [10] <https://kissflow.com/hr/hr-process-guide/>
- [11] www.zenesys.com
- [12] www.tlnt.com