

Role of Robotics in HR: Currents Trends and Impact

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Abstract: Robotic Automation is challenging the face of Industry and Human Resource (HR) Processes. The industry is implementing the technique of automation to develop the efficiency to increase the Production. While adopting this development there are some positive and negative drawbacks if compared, many Industries adopting the robotic process which develops the fear of losing jobs. This study shows the value-added contribution of robotics to improve the organizational process or to replace human power.

As per the present study of the market, the adoption of robotics increases the production work, increase the revenue, high productivity, improve the organizational decision-making process and higher the economic development of the county. While on the other side robots started replacing the humans and there was reduce in employment and increased the dependability on machines.

Human Resource (HR) is considered as the backbone of any industry. It plays a premeditated role in managing employees, high quality of talent acquisition, employee engagement, retention, Payroll, and compliance management to meet the organizational goal. The adoption of machine technology is going to rule the HR department as per the study which shows the advantages and disadvantages of automation.

Keywords: Human Resource (HR), Robotics, future of Industry, Adoption of technology, Robotic Process Automation (RPA)

Introduction: Robotics is the most important concept at present in the Indian economic system and worldwide. It challenges the human touch in broad perspectives by adapting the technological expansion in the overall growth of the business.

The nature of the business can decide the need for robotics in the industry to decrease the repetitive work, maintaining a large database, save time and effective efficiency as compare to human-related issues. As per the study, robotic is a one-time investment for the business owners, it lowers the cost of hiring employee processes, sick leaves, casual leaves, and salaries, etc.

The employees get the opportunity to focus on other areas of the work than the repetitive task, they can be more centric towards the strategies, policy implementations and diversification in any medium or large-scale business.

The objective of the Study:

- To study the role of robotics in HR.
- To study the advantages and limitations of RPA.
- To study RPA Implementation in HR practices.

Literature Review:

As per the study of Infosys BPM's client is an MNC involved in Information Technology (IT), Outsourcing and Business. Consulting to over 1000 clients across 50 countries The client has employees working in several offices across the world. Its HR functions handles a variety of processes, and each process is composed of several activities, and that were not effort rigorous but also vital for employee satisfaction.

Because the increased size of the client growing rapidly. The challenging part from the HR perspective was handling transactions efficiently, critical need of the business, quality and compliance, and employee satisfaction.

The Infosys BPM's studied the client's HR processes and defined the need of automation and reducing the effort involved in dealing with the important data. Automation reduced the manual intensive aspects of the work while speeding of the work and reducing the errors to almost nil. Below are the few processes that benefited from implementation of automation.

Background verification for new employees:

This process involved in cross verification of employee details such as name, date of birth of each interviewed candidate against a set of multiple databases, each holds hundreds and thousands of records which grows rapidly, and the process is time-consuming. The Infosys planned an RPA bot and received the required database from the available sources, it automatically cross-checks the details with the backend database and create the process report at the end of the operation without any manual support. All the reports are prepared and uploaded in the backend systems in a scheduled manner. This vast process was split across various bots to deliver the result in shorter period.

Generating Appointments letters to new Joiners:

This process entails of various steps which are needed as followed perfectly to avoid the incorrect written communication. As per the Manual touch the process will take per employees 15 minutes to complete the task.

As per the Study, RPA reduce the processing time by 90% and finished the entire process without compromising the Procedural rules and regulations.

Full and Final Settlement of attired employees:

This Payroll process activity requires accurate verification of the pending dues of the employee across the department of the organization. Errors in this report could lead to serious compliance and financial loss issues.

As per the RPA implementation in the business this process followed the bot rules and the processing time increased by 95% without any errors in the end at.

As per the Study Infosys BPM's Implementation of RPA delivered the below benefits:

Human touch is no longer required to perform repetitive task, automation achieved an average manual effort by reducing 70%.

The average handling time has reduced by 55% resulting in quicker processing and better turnaround time. Zero rates of errors and improved accuracy of operations.

Infosys BPM's proficiency in Robotics Process Automation (RPA) has delivered significant gains in productivity and accuracy for the client, and business case for increased use of automation across the client's business processes.

Robotics

Robotics is very well understood as computer mechanisms that perform the task for human beings very intelligently. Robotics is implemented for larger database analysis for quick responses and speedy solutions to business problems.

However, robots exceed the attainment level of the performance of professionals and human experts in the wider facet of the business.

The use of robotics is an advanced level of achievement in industrial settings, while in support functions like HR and other departments have the potential to accept this innovative approach but the uptake has been seen little slower.

Robotics in the industry is very profitable and presently gained grip over a wide application area as companies have realized the potential of investment in robotics technology. Various other sectors like Retail, Manufacturing, Logistics, and supply chain have gained a good market share.

Robotics in HR

It is being continuously doubted that robotics in HR can reduce the workforce in the industry by replacing highly intelligent technology. The HR domain has many transactional activities that are ideally suited for the robotics process. Organizations can computerize HR tasks that are rule-based, repetitive and standardized and as a result to free up the employees to focus on other areas like policy implementation, strategy development, talent development, and retention.

According to *the Deloitte* report, 42% of the employees in the organization have actively participated in the Global Human Capital Trends survey reported that they have fully implemented or made major progress in adopting robotics within their workforce. In another report of *global shared services*, 45% of HR employees have articulated their confidence that the implementation of robotics will lead 10% to 20% in savings to their business. (**A report on Robotic Process Automation in Human Resource by Bernard Marr, 2018**)

This amalgamation has now opened the opportunities for developers to create the software bots to manage the repetitive and task-based work.

Current Trends and Impact of Robotics in HR and Industry

Robotics has progressed and expanded to multiple industrial sectors. Another Perspective of the digitalized industry can enhance the value of robotics.

Low Risk and easily incorporated

Robotic Automation Process (RPA) is a low –risk no insidious technology that can be easily implemented on the existing systems. This helps the employees to create a stage for the continuous progress expansion of machine learning tools.

Increased efficiency

RPA can reduce the level of work and free up the employees to focus on the other areas of high-value work tasks more creatively which can help an organization to meet their goals by increasing their overall efficiency.

Cost

The cost of RPA is insignificantly low which is depending on the need and nature of the business and reduce the cost of other operating sources. RPA is a one-time investment for a longer period.

Accuracy

In data analysis, RPA gives accurate and precise output in comparison to human counterparts.

Productive Work

Many factories use RPA to make their production line more efficient and time-saving. These robots work more precisely and accurately with high quality of work. Their quality ensures their work and makes fewer mistakes than human workers, they can work continuously without pause and break if they have power.

Implementing Lean Process

Robotics is a good way to implement the lean process in an industry. It creates a more effective business by eliminating wasteful practices and improves efficiency. The focus of this method is to improve the products and services on customer's demand. They also reduce the waste material due to high accuracy. Including robots in production will save money as they have a quick return on investment (ROI).

Higher maintenance and Installation cost
Some of the companies introduce the software with minimum overheads; the expansion of robots can be expensive for small and medium enterprises. The total cost of implementing robots into the workplace can create obstacles for those organizations who have limited resources. The purchase, installation, long-term maintenance cost is something were employers and owners must be careful before investing.

Loss of jobs and reduced opportunities

Loss of employment due to the adoption of automation can create a social issue. As technology becomes more advanced in various sectors then the range of potential professionals will decrease, and the role of robots grows in the industry. Even in specialized fields like Medical diagnostics and even surgical care providers may not be safe from the effects of wide spreading workplace automation.

Digitalization in HR

AI can modernize many of the HR Processes. There are many ways of applying AI to the process such as hiring, screening candidates, scheduling Interviews or finding the most suitable profiles for the positions that are offered. As per Forbes articles, Jeanne Meister, states that "HR leaders need to experiment with all the facets of AI to deliver value to their organization".

Creating Employment Opportunities

As Per Gartner report on AI it is estimated that 2.1 million of Job opportunities created by 2020. This figure was calculated by considering the 1.8 million of jobs made simpler by automation. The need of Artificial Intelligence courses was encouraged to do, thus preparing professionals for a new trend in technology by innovations in robotics. As a result, there is a demand for professionals who understands robotics and AI at every stage of development cycle.

As per the study of Capgemini, nearly 80 percent of the 1,000 companies adopting robotics for their new roles.

Business Operations and Decision Support AI can help in many ways to run a business such as scheduling conferences, team meetings, and business trips. As Per the IBM report, very soon AI will assist in the decision-making process by 2025 data-based decision-making tool will be \$2 trillion.

Results/Findings & Interpretation:

The Paper does a gap finding in the adoption of robotics in industries and maps the gaps to possible solutions in implementing high-tech technology or the loss of human touch from the industry. Its analysis various AI users, cost, ROI perspectives, and their pros and cons. The literature review analysis the conceptual framework of robotics but still leave the scope for future researchers. The Study provides a fundamental base for future research work in the field of robotics and AI in HR and Industry.

The future researchers can meet that stage of studying robotics in HR and add to the literature of the said field by conducting an empirical study. Also, the present study can act as a foundation study for some researchers to reflect the presence of AI in varying job profiles.

Conclusion

Robotics is a leading industrial revolution to make an organization more competitive and efficient. It has already become a strategic factor to generate continuous growth and provide a competitive advantage to an organization. Businesses must embrace these technologies and understand that they are the sources of multiple benefits.

By the adoption of automation, companies will be able to free up human capital to focus on the other challenging and creative aspects of a task. Highly qualified people are said as the backbone of any organization reduces their repetitive work and save time to focus on other areas of work through implementing the automation.

The Personnel connects of the human mind is the job of hr; if the entire task is performed by the robots the organization will never be able to sustain employees in the organizations. So, the organization must adopt the robots to assist in their work in a better manner.

The challenge for all is how we manage the changes needed in the organization and the investment needed in the development of skills so that the workforce can adapt to this global trend.

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