

## A STUDY ON THE IMPACT OF ARTIFICIAL INTELLIGENCE ON HUMAN RESOURCE MANAGEMENT

Dr. C. Meera\*<sup>1</sup>, Ms. J. Shanmugapriya\*<sup>2</sup>, Mr. G. Shridharshan\*<sup>3</sup>

\*<sup>1</sup>Associate Professor, Department Of Management Studies, Dr. N. G. P. Institute Of Technology, Coimbatore, India.

\*<sup>2,3</sup>PG Student, Department Of Management Studies, Dr. N. G. P. Institute Of Technology, Coimbatore, India.

### ABSTRACT

This competitive world demands for the human resources as a mandatory asset in order to improve the organizational performance. The organizations have to strive for adopting the innovative HR practices to improve their performance and be different among its competitors. In near future, HRM is moving from the traditional way of HR practices to more advanced progress like automation, augmented intelligence, robotics and AI. AI has been proved as life – changing for us. From automation of mundane and time-consuming tasks, to the augmentation and amplification of human capabilities, AI has the potential to drastically transform the way we live and work. For HR, this is not just an opportunity but also an urgency to adapt and adopt. The HR professionals today are more towards optimizing the combination of human and automated work to gain a simple and intuitive work environment. It provides them enough time to deliver the enhanced employee performance. To compete with AI and advanced machines, the real challenge now lies within the respective HR department that how will they train and re-transform their workforce in understanding the AI and collaborating and working with AI and robotics.

**Keywords:** Artificial Intelligence, Human Resource Management.

### I. INTRODUCTION

Tecuci (2012) mentions that Artificial Intelligence (AI) is a rapidly evolving technology, made possible by the Internet, that will soon have major impacts on our daily lives. The name of Artificial Intelligence was verified in 1956 (Stuart & Norvig, 2016). AI traditionally refers to an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language. Such traits allow AI to bring immense socio-economic opportunities, and socio-economic challenges.

As AI is an Internet enabled technology, the Internet Society recognizes that understanding the opportunities and challenges associated with AI is critical to developing an Internet that people can trust. As machine learning is used more often in products and services, there are some significant considerations when it comes to users' trust in the Internet.

Several issues must be considered when addressing AI, including, socio-economic impacts; issues of transparency, bias, and accountability; new uses for data, considerations of security and safety, ethical issues; and, how AI facilitates the creation of new ecosystems. At the same time, in this complex field, there are specific challenges facing AI, which include: a lack of transparency and interpretability in decision-making; issues of data quality and potential bias; safety and security implications; considerations regarding accountability; and, its potentially disruptive impacts on social and economic structures.

In evaluating the different considerations and understanding the various challenges, the Internet Society has developed a set of principles and recommendations in reference to what we believe are the core “abilities” that underpin the value the Internet provides. Artificial intelligence (AI) has received increased attention in recent years. Innovation, made possible through the Internet, has brought AI closer to our everyday lives.

These advances, alongside interest in the technology's potential socio-economic and ethical impacts, brings AI to the forefront of many contemporary debates. Industry investments in AI are rapidly increasing, and governments are trying to understand what the technology could mean for their citizens.

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### **HUMAN RESOURCES MANAGEMENT**

Human resource management is a separate and specialized function which all managers need to perform. It is that branch of management which is concerned with the recruitment, selection, development and the best use of employees. Thus, human resource management ensures that every employee makes his maximum contribution to the achievement of organizational goals.

The human resource management that we find today is the result of a number of significant inter-related developments since the era of industrial revolution. With the emergence of trade union movements, need for a person who could act as an important link between management and workers was strongly felt. Such a role was initially performed by Labour Welfare Officer confined only to the welfare activities of the employees.

With the passage of time, factory system was introduced. Thousands of persons were employed under one roof. The need for employing more and more employees had arisen. And the role for filling and giving people for the organization was given to a person known as 'Personnel Officer'. His main function was to recruit, select and place the employees. As time went by, fast changing technological development necessitated new skill development and training to existing and new employees. Human relations approach recognized people as the most valuable source in any organization.

The traditional concept of Labour welfare and Personnel Management had to be replaced with Human Resource Management. Presently, all these aspects viz recruitment, selection, placement and labour welfare etc. are concern of Human Resource Management. Keeping the foregoing in view, it can be concluded that human resource management has replaced the traditional concept of Labour Welfare and Personnel Management.

### **ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT**

AI technologies offer significant opportunities to improve HR functions, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, access policies and procedures. We are living in an era in which AI capabilities are reaching new heights and have a major impact on how we operate our business.

Human resources executives have faith that merging AI into HR administration functions will benefit and improve the overall employee experience. This will provide more capacity, more time and budget, and more accurate information for decisive people management. According to Nilsson (2005) machines should be able to do most of the jobs that human intelligence demands.

Humans and learning machines are working together to produce an ever-increasing amount of HR data in the cloud, and the use of artificial intelligence analyses offer better insight into how to execute and operate. The success of any organization depends on how effectively it combines people, process and technology intelligently to deliver transformational value at optimized cost.

AI will help to efficiently automate many back-office functions for reliable HR transactions and service delivery. This document is focused on conversational AI capabilities for HR transactions and provides insight about intelligent automation via the technology-agnostic chatbot. The adoption of AI in HRM and in recruiting can be called as the new age of HR.

Since AI changes the recruitment industry by replacing routine tasks that have been conducted by human recruiters (Upadhyay & Khandelwal, 2018).

If organizations wish to remain competitive in today's global economy, they will need to look at ways to incorporate conversational AI for HR transactions in their decision-making process. Organizations should rely on AI to perform administrative duties so that HR departments may become more efficient.

HR professionals will be able to focus more on strategic planning on an organizational level. AI processes data more quickly than the average human. It is also able to cast a wider net, bringing attention to people who employers might not have considered or who may not even be looking for work.

Having more qualified candidates from the beginning shortens the process, enabling managers to dedicate more time to analyzing HR data and improving strategic planning.

**OBJECTIVES OF THE STUDY**

- [1] The objective of this study is to know the impact of Artificial Intelligence on Human Resource Management
- [2] To identify the role of AI based software in hiring the best talent from industry
- [3] To evaluate the function of AI based software specifically towards the screening process which is the primary process of hiring and cost of using such systems
- [4] To understand the effect of AI based software on recruiters' job

**PURPOSE OF THE STUDY**

The purpose of this study is to know what impact the Artificial Intelligence has on Human Resource Management in the current era or how AI will affect HRM in the future. As a concept, artificial intelligence has been used around decades. But from last 20 years, the successful application of machine learning enabled the boom of AI. This study is important because AI, today, has begun to engage the workforce. It is helping the staff to manage their time effectively and add the strategic value to the organization. AI has the potential and capability to solve many business problems as well as to make shift in productivity of the industries by introducing automation for tedious, time consuming, mundane and repetitive tasks. HR is one of the core functions of any organization. Adopting AI in technology in HR might give both short term as well as long term gains. Some have been witnessed already while others are expected to be witnessed in the near future.

**STATEMENT OF THE PROBLEM**

To study the Impact of Artificial Intelligence on Human Resource Management.

**II. REVIEW OF LITERATURE**

Scott W. O'Connor (2020): In the article titled Artificial Intelligence in Human Resource Management, the author clearly says that artificial intelligence will continue to positively shape the field of human resources management in the coming years. HR professionals should also be more aware of the challenges that they might face. Thus, to prepare for the future of human resource management, professionals should take the necessary steps to learn about the current trends in the field, as well as lay a strong foundation of HR knowledge that they can build upon as the profession evolves.

Prasanna Vatsa and Kusuma Gullamjji (2019): In the paper titled "To Study the Impact of Artificial Intelligence on Human Resource Management", it is clearly stated that the integration of HR practices with AI based applicants definitely have a stronger impact in enhancing the organizational performance. The study depicts that AI is everywhere in HR, be in recruitment, training, on boarding, performance analysis, retention and so on, but many of the organizations are still lagging in integrating AI to its HR - practices because of its cost associated in integration.

**III. RESEARCH METHODOLOGY**

This paper is built around a review of secondary data found in articles, periodicals, books, and journals, both printed and online, as well as the researchers' own experience, knowledge, and observations.

**Research Design**

On the general term, the research design is viewed from two perspectives, quantitative research design or qualitative research design. They can both be used or applied distinctively or together. A quantitative research design is used to examine the relationship between variable by using numbers and statistics to explain and analyze its findings and there are four types of quantitative research design.

**Data Collection**

This study utilized both primary and secondary data. The primary data was gathered with the help of a structured questionnaire. The questionnaire was distributed to 150 respondents. After considering the reliability and the plausibility of the data, 19 completely filled questionnaires were used for data analysis. The secondary data was collected from articles, journals and PDF's. Primary and secondary data was interpreted and analyzed to arrive at logical conclusion.

**Data Analysis Tool**

SPSS tools was used for data analysis. Cronbach's alpha was used to determine the reliability and internal

consistency of the questionnaire. Then the data was analyzed using multiple linear regression. This analysis was conducted to determine the effectiveness of the research model in assessing the impact of Artificial Intelligence on HRM and HR practices and also to find out if the impact was significant.

#### IV. LIMITATIONS OF THE STUDY

In order to conduct this study, the following research limitations have been recognized by the researcher: The main limitation of this research was that a low number of recruitment professional participated in the survey/questionnaire. Of the 150 Google forms sent out to professionals, only 19 replies were received. However, response rate of 20% is acceptable if the information collected is of good quality. In order to collect and analyze.

#### V. FINDINGS

- [5] Majority of the organizations have adopted the AI in their Human Resource Management practices.
- [6] There is a positive response from the respondents that they are likely to accept the introduction of AI at various stages of HR based functions.
- [7] Organizations are using the third party software, in house software, Omnidocs, Ezioka, etc as AI software in HRM.
- [8] Majority of the organization is positive for the fact that AI is the future of HR.

#### VI. SUGGESTIONS

Researchers would like to suggest that companies devise a simple and concise organizational strategy to integrate AI into their recruitment process, based on the results of this study. Researcher would like to recommend that recruiters should replace easy and time-consuming tasks with smart AI technology, allowing recruiters and HR managers to concentrate more on strategic functions. Further more, developers of smart AI technologies needs to develop such platforms keeping in mind the budgetary issue of small to medium organization as well, so that they can adopt AI in their recruitment process.

#### VII. CONCLUSION

The incorporation of HR activities for candidates based on AI undoubtedly has a greater effect in enhancing the efficiency of the organisation. Although AI applications do not possess emotional and cognitive abilities like humans, these powerful AI-based HR applications may be able to interpret, forecast, diagnose, and it is a powerful tool for any kind of organization. Yet the real concern that is overwhelming the Global workforce is how AI is demonstrating its impact in cutting jobs across various industries around the world. But, the truth is that it's not the advanced technologies that replace humans, but it's more about how humans can adapt and use these developments in wealth and prosperity development. In the true sense, the AI-based functions would affect certain percentage of workers, and it is the responsibility of HR leaders and companies to reflect on their employee needs and future outcomes. And, eventually, based on our research, most companies effectively incorporate AI-related methods into recruitment, but AI is everywhere in HR in the near future: May be in recruitment, training, on boarding, performance analysis, retention etc., But most companies are still lagging behind in incorporating AI into their HR activities due to their integration-related costs. In conclude, the application of AI should be regarded as a positive opportunity, because AI improves life, AI produces a better future if it is clearly understood and properly used.

#### VIII. REFERENCES

- [1] Prasanna Vatsa and Kusuma Gullamjji (August, 2019), To Study the Impact of Artificial Intelligence on Human Resource Management
- [2] Jennifer Johansson and Senja Herranen (May, 2019), The Application of Artificial Intelligence in Human Resource Management
- [3] Albert Christopher (September, 2019), Use of Artificial Intelligence in Human Resource Management Anupam Jauhari (2017), How AI and machine learning can affect hr practices today
- [4] Barbara van pay ( sep 30, 2018): In this article how AI is reinventing HR
- [5] <https://medium.com/@albertchristopherr/use-of-artificial-intelligence-in-human-resource-management-ddb4e4de9c6e>

- [6] <https://www.businessmanagementideas.com/management/essay-on-human-resource-managementhrm/2348#:~:text=Essay%20on%20Human%20Resource%20Management!&text=It%20is%20that%20branch%20of,the%20achievement%20of%20organizational%20goals>.
- [7] Bhardwaj, G., Singh, S. V., & Kumar, V. (2020, January). An empirical study of artificial intelligence and its impact on human resource functions. In 2020 International Conference on Computation, Automation and Knowledge Management (ICCAKM)(pp. 47-51). IEEE.
- [8] Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California management review*, 61(4), 5-14.