



## **‘The Application of AI as a Game Changer for Reshaping Human Resource Management Process’**

Mr. Akashdeep, Research Scholar, Deptt. of Commerce, S.N.D.B. Govt. P.G. College, Nohar (Raj.)  
Dr. Sanjeev Kumar Bansal, Associate Professor, Deptt. of Commerce, S.N.D.B. Govt. P.G. College, Nohar (Raj.)

### **Abstract**

The present era is the era of science. Science has continuously set new records of development. Every day some experiment is happening in science. One such successful experiment has also taken place in Artificial Intelligence (AI). In the current technological innovation, Artificial Intelligence is a fundamental element that concerns itself with the emulation of human intelligence in computational equipment and systems. Currently almost every industry is using AI technologies to implement digital revolution that has changed the way we live our lives. The widespread adoption of AI in businesses and corporations is helping them streamline their processes, increase productivity, increase efficiency, and reduce costs. Today organizational growth depends on how well it integrates its labour, resources, processes and machinery to generate value at low cost. Human resource technology has also advanced towards this innovation, one of these technologies is Artificial Intelligence. The objective of this study is to assess the benefits of AI in human resource management and how AI is applied in human resource management. The possible challenges and impacts related to this have to be evaluated. It is paramount for companies and professionals to understand how this technology works and what is its role in various HRM functions. The present study focuses on giving a theoretical framework on the role of AI in Human Resource Management in the recent era through which AI is bringing changes in the field of Human Resource Management. This study highlights the key benefits, hidden challenges of AI when applied to HRM and also shows its future prospects.

**Keywords:- Artificial Intelligence, Human Resource Management, AI-HRM Integration;**

### **INTRODUCTION**

The modern Business world is changing rapidly through technology innovations. Given the possibilities of AI in the development of the country, it seems that the AI has the ability to introduce new sources of development and change the way of working in industries. AI has become an essential part of human resource management. As companies try to remain competitive and efficient, they are turning to AI-operated solutions to streamline their procedures and make maximum optimum use of resources. Artificial intelligence is an emerging field of computer science that focused on the development and study of intelligent machines that are one of the most changes in modern times. AI is bringing revolution in human resource departments around the world, from automated recruitment systems that identify top talents, from automated recruitment systems and to providing personal materials for training and development of Personnel.

**Artificial Intelligence:-** Artificial intelligence is a technique that develops a human -like logic and decision -making ability in machines that is a set of AI technologies that computers have different types of advanced tasks such as reading, understanding and translating the language written and spoken, Enabled to analyze data recommendations. The father of Artificial intelligence is Dr. John McCarthy who coined the word 'Artificial Intelligence' at a scientific conference at Dartmouth College in 1956, Marwin Minsky, called AI "the science of doing such things with machines, which would have required intelligence if humans had done. Machines can learn through AI, solve problems, decide, so AI machines can be learned from data, identifying patterns and making decisions, estimating on information like human brain and solving any problem Enables to do the most optimal for any complex problems in it Using algorithms to detect various potential routes to find solutions involves. In fact, the purpose of AI is to create systems that can work without human intervention.



**Human Resource Management:-** The most important field in the management is human resource management. which is responsible for general functions of employees. Capital, labor, organization and entrepreneurship are prominent in the construction and development of any organisation. And manpower is also the most important among them. Because human beings have the courage to do something new and only man power give energy to capital, organization and entrepreneur. HRM is a skillful and consistent approach to managing the most valuable resources of an organization that are working there and contributing to the achievement of business objectives individually and collectively. Human resource management is a process by which an organization adds value to its organization by providing value to its employees. Human resource management is an organizational work that helps to manage people, work culture and environment. Human resource management deals with the recruitment, selection, performance appraisal, compensation, training and overall organizational development of skilled employees in an organization that helps the organization to meet short term and long term objectives.

## LITERATURE REVIEW

**Budhwar et al., (2022)**, found that AI and other related automation technologies provide several opportunities for HRM functions, especially to attract excellent protesters, increase training effectiveness, identify skill-interlocutors and any necessary training and development for employees Recommendation, help Employees play an important role in strengthening activities, making effective decisions on employees, taking effective decisions on employees, executing the effectively of tasks, etc. Based on the review study of **Pan and Froese (2022)**, AI is one of the most influential techniques changing the AI labor market. On the one hand, AI can have negative consequences, such as reducing all job opportunities and increasing social inequality, on the other hand it will also provide this benefit such as upgrading jobs. It is advisable to say that AI will have a significant impact on the future of HRM, the development of AI-based HR devices depends on progress in technical fields, actually AI has great ability to shape HRM and the future of work. **Chukwuka et al., (2024)**, Found that Artificial Intelligence has a positive and significant impact on the HR function of employee performance evaluation. A-manual assessments not only enable encouragement, but also ensure accuracy throughout the process. Organizations and the nation should successfully adopt AI-operated HR management system in future, and can invest in human capital. And can increase output. Which can make the technical scenario more prosperous. **Balamourougane R et al., (2019)** AI has a great impact on every field of human resource management. Big companies are spending huge amounts of money and time on recruitment. During the time of recruitment, a company receives thousands of resumes which are a difficult task for recruiters. The major area of recruitment where AI is used, screening resumes, data collection and analysis , Communication with candidates and sending results to Applicants etc with the help of AI, it not only reduces the workload in all tasks, but it can eliminate 45% extra workload of the recruitment process. **Jiaxing Du (2024)** Development of AI-HRM integration emerged through several stages in the 1960s. This journey has not only streamlined HR practices, but has also increased the area to a strategic level, adaptability to algorithms and Artificial Intelligence help to transformational effects with Transparency in decision making. Should be AI implementation in organization to achieve positive results with efficiency and productivity, which offer a roadmap for responsible and effective AI-HRM integration. **Sonika Singh et al., (2023)** found that the use of Artificial Intelligence has helped organizations to increase their performance and helped to get competitive benefits. The use of AI machine learning in the workplace, evaluation of talent and evaluation of challenges related to forecasting business includes collection and analysis of digital data AI in HR processes. The application of AI is bringing revolution in the current



scenario. AI is originally changing the nature of the job, this will also generate brand-new technological innovation-based employment, and the overall economy will benefit from this technology. **Bilal Hmoud (2021)** From HRM perspective, emerging AI-based solutions are rapidly dependent on the processing of time-taking and complex functions within HRM functionalities. The study sample included 186 Senior Human Resource Professionals drawn from members of the Jordanian Human Resource Management Association. Results showed that top management support and performance expectations are important attitude of intention to adopt AI, a significant positive impact on the intention of adopting AI has been found for the HR role of the "change agent", HR managers have increasing the efficiency And quality, so that A positive mentality towards a possible role of AI. **Gupta (2021)** Companies monitor their employees' activities using AI application. AI app also help organizations to motivate employees for green practice by using performance evaluation software and data analytics. Companies assess the performance of employees on daily, quarterly and annual basis, various AI applications like chatbots help employees to solve their questions about leave and organization systems, which saves a lot of time for counsellors and mentors, That time Can be used in other Productive activities. These applications are not only friendly to the employee, but also help in improving the relationship, solving complaints and developing green corporate culture. Companies manage their operations such as manufacturing process, warehouse management, and supply chain management from AI applications that are smart and help reduce waste and save energy and resources. The use of AI-operated applications and technologies reduces the chances of error and companies can easily adopt green HRM practices. **Alsaif and Aksoya (2023)** AI has an important role in human resource management in today's competitive business environment. AI has the ability to revolutionize HRM practices by automatic by automating worldly functions, streamlining procedures and providing adapted solutions to HR managers. By taking advantage of AI technology, the HR department can be more efficient and effective in managing its employees. HR departments with AI-operated applications can provide better employee service by optimizing costs. AI HR enables departments to automate the selection process, making it easier to identify the right candidates for the job. AI Technologies have rapidly replaced all various HRM activities such as human resource strategy and planning, recruitment and selection, training, performance management and compensation management etc. **Pandey (2020)** One such business capacity where the application of AI is taking place at a very fast pace is human resource. It will be seen soon that HRM is moving from its generally reputed administrative capabilities to self-automation, robotics and artificial intelligence. AI has actually entered every area of human activity and is completely changing the Human Resource Department of different regions globally. **Baldegger et al., (2020)** The dynamic environment requires more efficiency and innovations to maintain management. Human resource sector is expecting changes and promotion due to AI. The study tested the perceptions of AI in HRM through members of HR section Romande. A general positive perception to adopt AI in HRM. And "AI becomes an indispensable tool for survival market trends", AI's introduction depends a lot on a company's interpreting orientation. Companies considering adopting AI in HRM were mainly advised to evaluate three dimensions- Innovativeness, Proactiveness, and Risk Taking. **Dr. Tanvi Rana, (2018)** The study has suggested a collaborative approach by highlighting the complementary role of human resource management in effective use of AI. AI and HR's dependence on each other suggests that organizations apply to AI as an accessories for HR to HR The focus should be focused on and eliminates the role of HR Should not do. **Kaushik et al., (2023)** The automation of HR functions through AI has improved the accuracy and speed of the recruitment process. As the human resource industry is developing, organizations must be favorable to remain competitive.





## OBJECTIVES

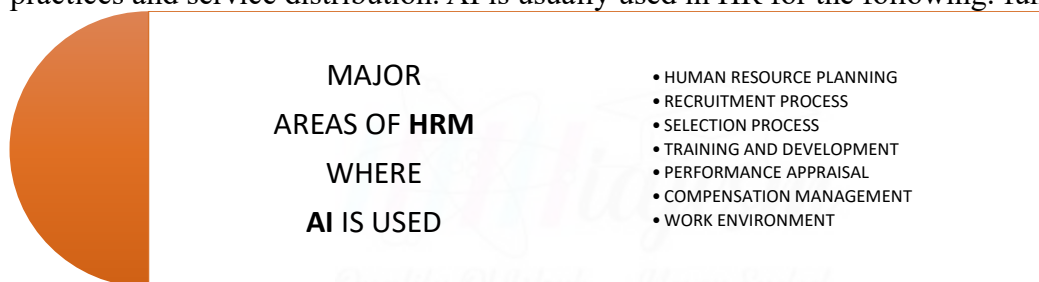
1. To study the concept of artificial intelligence And Human Resource Management Process.
2. To understand the Participation and Role of AI in the present era of Human Resource Management.
3. To Examine the business outputs of HRM through application of Artificial intelligence.
4. How it can help organizations save time and money as well as improve employee development.

## RESEARCH METHODOLOGY

This study examines a conceptual approach on artificial intelligence, as well as observing the relationship between human resource management and AI. Represents a descriptive study of the impact of AI in the development of human resource management in the organization.

## RESULTS AND DISCUSSION

**Major Areas Where AI Is Used In HRM:-** AI is leading us to an Era of comprehensive automation and it will help to efficiently automate many back-office tasks for reliable HR practices and service distribution. AI is usually used in HR for the following: functions.



1. **Human Resources Planning:-** Manpower planning is related to developing human resources in such a manner, so that employees can be used correctly in the right time on the right job. The success of any organization depends only on the proper planning of manpower in it. AI provides accurate information to employers about the total requirements of the workforce on the basis of analyzing organizational strategy, performance data, the need of the market trends and total workload in the organization.
2. **Recruitment Process:-** In the dynamic world of talent acquisition, the integration of AI has changed the recruitment process. The AI is committed to the employer's unprecedented efficiency and effectiveness in joining the right talent. AI has converted from recruitment manual procedures (individual networks and print advertisements) to technology-operated approaches (online job boards and applicant tracking systems) AI-operated Sourcing Tool Analysis from online profiles, resumes and job posting to employers By doing it fast Potential candidates are helpful in identifying. For the participation of candidates, chatbots, instant messaging tools help for general information related to recruitment and for seeking inquiries. With the application of AI, employers can increase the visibility and access of the organization, and attract more high-qualified applicants.
3. **Selection process:-** Selection is the process of selecting the most qualified and skilled person for a specific job position within an organization. This includes evaluating the skills, qualifications and experiences of potential candidates for the job, so that the most qualified persons for the organization can be selected. The selection process consists of application form, resume sorting, screening test, interview assessment, reference and background check, selection decision, job contracts, are involved. In which Matching the job qualification and job description through applicant tracking system, resume check, online activity analysis by application of AI. Appropriate and efficient talent can be selected using AI tools like online computer based exams, video conferencing interviews, chatboats etc.



4. **Training and Development:-** means developing skills within employees to perform a job successfully. So that they can do their work with efficiently and effectively. Through training, technical knowledge, intelligence and skills are increase among the Employees of the Organization. AI has converted traditional training into modern methods in employee training and development. AI techniques include machine learning algorithms, natural language processing (NLP), forecasting analysis and robotic process automation (RPA). AI provides customized materials assembled based on the skills of an employee's, learning preferences, work nature and projects. AI provides experience of virtual reality (VR) and Augmented reality (AR), which leads employees to practice real -life scenarios in a safe environment. AI is capable of providing virtual learning coaches 24/7, and micro learning materials to employees.
5. **Performance Appraisals:-** Evaluation of employee's work achievements. This includes the performance qualitative and quantitative analysis and assessment performed by all the employees and the team working in the organization, which reviews the specific role of the employee and its contribution to the organization, The traditional performance management was a manual process consisting of paper-based evaluation, long response discussions and annual performance reviews. But with the introduction of AI-based technology, this process is becoming more automatic and database. It measures work performance by extracting the performance score or rating by automatic performance review using data analytics and machine learning. With the help of AI, the information of all tasks and personnel is collected, organized and accessible in one place. AI records the functioning of the employees in some real time and records without any kind of individuality and prejudice during the evaluation. And a fair and more accurate evaluation also ensures.
6. **Compensation Management:-** It is a process of managing and determining compensation given by the employer to given to employees in exchange for their work. This includes management, analysis and determination of incentives, salary, bonuses, pension, share options, healthcare, life insurance and other benefits etc. This increases employee productivity and reduces the employees turnover. AI can improve accuracy by eliminating the requirement of manual data entry in compensation management and reduces the risk of human error, AI helps to compensation calculations by automatic payroll software based on employees presence, work productivity, data entry, time tracking and tax calculations. it helps to time and cost savings as well as by ensuring timely and accurate payment compensation, the employee satisfaction also increases.
7. **Work Environment:-** It means the environment in which a person works, AI is used to create virtual reality training simulation that can help employees prepare for dangerous conditions. Discrimination at the workplace remains an important challenge, which often appears in prejudices related to appointment, promotion, salary and unfair behavior. AI helps to solve these issues by enabled more objective, data-operated decisions and create a fair, transparent environment. When it comes to safety in the work environment, the AI-operated sensor can help in monitoring the employee's behavior and prevent possible risks and prevent future accidents. AI-controlled robots are being deployed to work in very dangerous atmosphere for humans. (eg. more temperature, Toxic environment) The AI-operated cameras and sensors in the emergency response plan now play an important role in recognizing potential hazards. These devices constantly scan the environment, helping security personnel to prevent risk by immediately informing them in the risky situation.

**Key challenges in using AI in HRM:-** Along with bringing the field of human resource management by Artificial Intelligence, it has some challenges; like - Threat of unemployment.,



Growing inequalities between HR, Lack of Data security and privacy Technology addiction , such as all employee collected of the data through AI devices and ensuring the privacy and security of the data. AI's development and automation Left and There are concerns of increasing economic inequality. For employees, it has become important to build the necessary skills for success in the job market in which the Human Resource Department will have to implement the programs of their employees. AI should be seen as a tool that enhances human abilities, not as a job replacement. By adopting AI as a valuable tool by organization and managers, the focus should be on human-AI cooperation. And by solving possible challenges, the Human Resource Department can create a more efficient, data-driven and employee-focused future for its organizations.

## CONCLUSION

The development of AI has emerged as a transformational force in changing human resource management, an organization can apply AI technologies to make streamline HR process the best quality and increase productivity. AI plays a role in database based, quality, well organized and automated to various functional areas of human resource management such as recruitment, selection, training and development, performance, compensation management and work environment etc. This study has presented a descriptive approach to assess the benefits of AI in human resource management and presented how the participation of AI in human resource management in the modern era has a profound impact. AI enhances human abilities to process large amounts of data, identify patterns and automate tasks to automatically, allowing workers to focus on more complex and strategic activities. In the business world, there may be some challenges about the application of AI and there is a possibility of future opportunities. Organizations and nations must give top priority to education and training that meets work specifications and skill-Building qualifications for success in the application of AI. The study concludes that Artificial Intelligence is having positive and significant impact by interfering in various dimensions of the human resource management process.

## REFERENCES

1. Budhwar et al., (2022) Artificial intelligence – challenges and opportunities for International HRM: a review and research agenda, The International Journal of Human Resource Management, 33:6, 1065-1097, DOI: 10.1080/09585192.2022.2035161
2. Pan and Froese (2022) An interdisciplinary review of AI and HRM: Challenges and future directions, 1053-4822/© 2022 Elsevier Inc., <https://doi.org/10.1016/j.hrmr.2022.100924>
3. Chukwuka et al., (2024), Strategic Role Of Artificial Intelligence (AI) On Human Resource Management (HR) Employee Performance Evaluation Function, International Journal of Entrepreneurship and Business Innovation 7(2), 269-282. DOI: 10.52589/IJEBI-HET5STYK
4. Balamourougane R et al., (2019) Literature Review On The Role Of AI In HRM, Think India Journal ISSN:0971-1260
5. Jiaxing Du (2024) Unlocking the Potential: Literature Review on the Evolving Role of AI in HRM, Paradigm Academic Press Frontiers in Management Science, ISSN 2788-8592, doi:10.56397/FMS.2024.02.05
6. Sonika Singh et al., (2023) How Does the Use of AI in HRM Contribute to Improved Business Performance? : A Systematic Review, 2023, IGI Global. DOI: 10.4018/978-1-6684-6745-9.ch008
7. Bilal Hmoud (2021) The Adoption Of Artificial Intelligence In Human Resource Management, Forum Scientiae Oeconomia Volume-9 DOI: 10.23762/FSO\_VOL\_NOI\_7



8. Gupta (2021) The Role of Artificial Intelligence in Adopting Green HRM Practices, Reinventing Manufacturing and Business Processes Through Artificial Intelligence ISBN 9781003145011, DOI: 10.1201/9781003145011-1
9. Alsaif and Aksoya (2023) AI-HRM: Artificial Intelligence in Human Resource Management: A Literature Review, Journal of Computing and Communication Vol.2 , No.2 , PP. 1-7,
10. Pandey (2020) Exploring the role of Artificial Intelligence (AI) in transforming HR functions: An Empirical Study in the Indian Context, International Journal of Scientific Research and Engineering Development Volume 3 - Issue 5, ISSN : 2581-7175
11. Baldegger et al., (2020) Correlation between Entrepreneurial Orientation and implementation of AI in Human Resource Management (HRM), Technology Innovation Management Review, <http://doi.org/10.22215/timreview/1348>
12. Dr. Tanvi Rana, (2018) The Future of HR in the presence of AI: A Conceptual Study, <http://dx.doi.org/10.2139/ssrn.3335670>
13. Kaushik et al., (2023) HR Functions Productivity Boost by using AI, International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, DOI: <https://doi.org/10.17762/ijritcc.v11i8s.7672>
14. Justine Dima et al., (2024) The effects of artificial intelligence on human resource activities and the roles of the human resource triad: opportunities and challenges, Front. Psychol. 15:1360401. doi: 10.3389/fpsyg.2024.1360401
15. Ahmed, (2018) ARTIFICIAL INTELLIGENCE IN HR, www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

*Quality Of Work... Never Ended...*