
Artificial Intelligence in Employee Well-Being and Human Resource Management

OPJU Business Review

Volume 4, Issue 1 (2025)

ISSN: 2583-729X (Online)

Published online in OPJU India

[\(http://www.opju.ac.in/opjubr/\)](http://www.opju.ac.in/opjubr/)

Himani Agarwal

Independence Researcher and Visiting Faculty (Human Resource Management & Organizational Behavior)

agarwalhimani.14@gmail.com

Abstract

The efforts would be on how Artificial Intelligence be essential in the well-being of employees and Human Resource department in a consortium and therefore why such department should do planning to adopt Artificial Intelligence and what conceivable the role and challenges for the employees in the area of Human Resource and why it has become important to understand about Artificial Intelligence would be answered by highlighting the motivation for Artificial Intelligence, Artificial Intelligence can be adopted for any department but this paper try to emphasize on what Artificial Intelligence can contribute in Employee well-being. Artificial Intelligence is transforming Human Resource Management by enhancing employee wellness and optimizing workforce management. Artificial Intelligence-driven tools help organizations improve Recruitment, Performance Evaluation, Employee Engagement, and overall, Job satisfaction. In employee well-being, Chatbots and virtual assistants driven by Artificial Intelligence provide real-time mental health support, while sentiment analysis tools assess workplace morale by analyzing employee feedback. Wearable technology and Artificial Intelligence -driven wellness programs further aid in stress management and Work-Life balance. In Human Resource Management, Artificial Intelligence streamlines talent acquisition through automated resume screening, predictive analytics for candidate selection, and bias reduction in hiring. Artificial Intelligence -powered learning platforms personalize training programs, boosting employee skill development. Furthermore, Artificial Intelligence enhances workforce analytics by identifying trends in employee performance, absenteeism, and attrition risks, allowing Human Resource professionals to implement proactive strategies. Despite its benefits, Artificial Intelligence adoption in Human Resource Management uplift concerns about data safety, algorithmic bias, and ethical considerations in decision-making. The upcoming era of Artificial Intelligence in Human Resource Management lies in generating a balanced approach that leverages Artificial Intelligence's analytical power while maintaining the human touch in employee interactions. By fostering a data-driven, employee-centric approach, Artificial Intelligence contributes to a more engaged, healthier, and productive workforce, ultimately leading to improved organizational performance and job satisfaction.

Keywords: *AI-Powered Recruitment, Employee Well-Being, Human Resource Analytics, Workforce Optimization, Sentiment Analysis, Artificial Intelligence.*

Citation: Agarwal, H. (2025). Artificial Intelligence in Employee Well-Being and Human Resource Management. *OPJU Business Review*, 4(1), 91-101. <https://doi.org/10.63825/opjubr.2025.4.1.07>

Introduction

Organizations deal with staff members and employees by the way inspired by artificial intelligence and enhance employee well-being. By integrating AI into Human Resource Management (HRM), companies can streamline recruitment, improve performance evaluation, and encourage a more supportive work environment. AI-powered tools such as Chatbots, virtual assistants, and predictive analytics are transforming traditional HR procedures, increasing their effectiveness and data-driven. Employee well-being is a acute aspect of organizational success, and AI plays a important role in monitoring and improving it. AI-driven sentiment analysis tools assess employee feedback, helping HR professionals identify workplace concerns and take proactive measures. Wearable technology and AI-enabled wellness programs track stress levels, suggest personalized well-being strategies, and promote work-life balance. Additionally, AI-powered mental health applications provide real-time support and early intervention, reducing workplace burnout and enhancing overall job satisfaction. In HRM, AI enhances talent acquisition by automating resume screening, using predictive analytics for candidate selection, and reducing bias in hiring decisions. It also personalizes employee training through adaptive learning platforms, ensuring continuous skill development. Workforce analytics powered by AI helps organizations identify patterns in employee behavior, predict attrition risks, and optimize resource allocation. However, the acquisition of AI in HRM increases moral, social and behavioral concerns regarding algorithmic bias, data privacy and the potential depersonalization of HR functions. Organizations must implement AI responsibly, ensuring transparency and fairness while maintaining a balance between automation and human interaction. As AI continues to evolve, its integration into HRM and employee well-being initiatives has a lot of prospective to create a healthier, more engaged and fruitful personnel, finally driving organizational success in an increasingly competitive business landscape.

Artificial Intelligence is the science and engineering of making intelligent machines (S.L. Andresen, 2022). AI is the study of agents that receive perceptions of the environment and perform actions (Stuart Russell and Peter Norvig, 2010). Artificial intelligence has been booming by word of mouth and bound in every industry and sector, now a day's Artificial intelligence is a very promising tool in development of every industry now it's spreading its roots in business school, social media, and production sector and in human resource. AI has emerged as a radical force in many fields and its application inhuman resource and in employee well-being functions are no exception.

Employee Well Being

Employee well-being is the overall health of an employee, including their physical, mental, and emotional health. It's also influenced by their work-life balance and job satisfaction. According to (Stefania De Simone & Massimo Franco, 2023) Employee well-being is a key element in the growth and survival of organizations. It's based on individual aspects, work setting aspects, and occupational stress. (Mazzetti *et al.* 2021) and (Bakker&Oerlemans 2011) define that Employee well-being is a many faceted facts that direct towards an individual's experience and highest functioning. This view is supported by Waida (2021) who defined Employee well-being is not just physical health of employees but it also includes mental and emotional health. (Chryssa P. van der Merweet *al.* 2024)

Research Objectives

- **To evaluate the impact of AI-driven Human Resource tools on Employee well-being.** Investigate how AI-powered applications, such as Chatbots, mental health monitoring, and workload optimization systems, influence employee satisfaction, stress levels, and thorough well-being in the workplace.
- **To assess the productiveness of AI in Talent Management and Employee Engagement.** Assess how AI enhances HR functions such as recruitment, performance evaluation, career development, and personalized training programs to improve employee engagement and retention.
- **To investigate the ethical and privacy implications of AI in HRM.** Examine the challenges related to data privacy, algorithmic bias, and moral issues associated with AI-driven HR practices and their effect on employee trust and organizational transparency.

Research Methodology

In this study data was gathered from secondary data through various data bases, such as Research Gate, published books pages, and Science Direct, by initial reading of titles and abstract of the papers to identify relevant studies on AI in Employee wellbeing and Human Resource Management. Keywords included such as "artificial intelligence," "sentiment analysis," "recruitment," "employee wellbeing," and "Human Resource,". Incorporated criteria for studies embraced articles those were peer reviewed and published in Research gate, Science Direct, published book pages and those that specifically addressed AI's effect in employee wellbeing, Human Resource function and AI driven challenges and opportunities. Articles were not incorporated that did not focus on AI, employee well-being, recruitment, the impact on job satisfaction and stress management. The study is based on simple methodology by selecting content from past literature.

Result & Findings

Our review identifies that artificial intelligence helps the employees in attaining job satisfaction, relieving from anxiety and fully engaged towards their work. Further study reveals that automated screening of resumes reduced the time of recruitment and placing the right candidate on a right job and provides the candidate a flexible source of knowledge which maximizes the utility of Human Resource managers and they can manage the performance of the employees in an effective manner.

Employee Well-Being through AI

Artificial intelligence's integration into human resource management brings job satisfaction, work engagement and stress management among employees. However, it requires a skillful understanding of technology and its application. (Deepika et al. 2024)



Figure 1: -Role of AI in Employee Wellbeing. (Based on literature Review)

Job Satisfaction

Job satisfaction, a key determinant of employee's performance and retention, is influenced by multiple strands such as job roles, work environment, and right set of circumstances for professional growth. The introduction of AI into the workplace can alter these dynamics in several ways. AI can ease up employees from monotonous and repetitive tasks permit them to focus on more meaningful and innovative facet of their jobs. (Koppala Venugopal.2024)

Work Engagement

If employees are fully engaged towards their work with enthusiasm and whole heartedly, their actions reflect in the performance which is fruitful for the reputation, values, interest and achievement of organizational goals. Today AI has increased employee engagement by automation of repetitive task; modify the learning opportunities as per their needs which motivate them to be engaged toward work.

Employee engagement cannot be part ways from work. Work engagement, which is associated with a positive state of mind, behavior, positive character, dedication, commitment, completeness, and employee well-being in achieving targets or goals and committed to their work. (Ria Emilia Sar *et.al.* 2020).

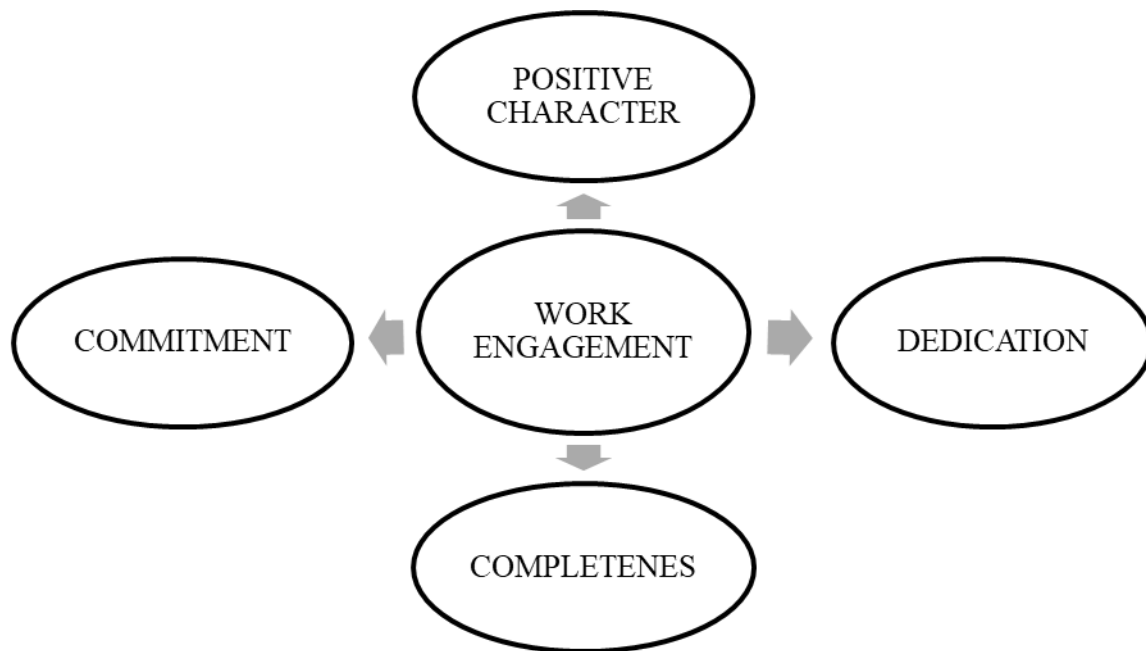


Figure 2: -Characteristics of Work Engagement (Based on literature Review)

Stress Management

Managing stress at workplace is a big task for human resource professionals. If employees are not able to handle workload, pressure of relationships and job insecurity etc., it may lead to them into depression, insomnia, aggressiveness, frustration and many physical and mental anxieties. Today methods, techniques, machine learning and algorithms associated with artificial intelligence detect stress at early stage and resolve these problems at broad levels that too with rigidity, precisely and calmly. (Shivani Mittal *et. al.* 2022).

Artificial Intelligence's Function in Human Resource Management

AI is increasingly framing the coming time of human resource management; AI is when computers and machines mimic human thinking and behavior using tools like natural language processing, machine learning and robotics. And, its growing presence is reshaping the way businesses work and how employees do their jobs with accuracy, efficiency and effectiveness.

Recruitment and Talent Acquisition

- ***Automated Resume Screening:*** AI algorithms can quickly examine resumes, shortlist candidates, and match them to job descriptions, reducing physical effort and bias.
- ***Candidate sourcing:*** AI tools can recognize prospective candidates from various sources, expanding the employee bank.
- ***Interview Process:*** AI-powered chat bots can conduct preliminary interviews, saving time for HR professionals. (Sasi Kiran Parasa, 2024)

Selection

The next process in acquisition of manpower is selection. It typically occurs after the company has completed its initial hiring process, in which it creates a pool of potential qualified candidates. The next step is to choose the best candidate for the position. Human resource managers may quickly find the perfect applicant with the aid of AI, and technology will assist in identifying the best prospects based on the necessary skill sets. (Dr. Priya 2021)

Training and Development

Training and development are an important function of human resource management. It has gained enormous progress by adopting the artificial intelligence tools like AI chat bots which providing employees the quick answer or relevant knowledge of every question whenever they require it. AI has unlimited data storage and recall capacities which saves the time of HR professionals by not giving traditional one to one training and offers the employees more flexible, career progression and productive advice and earn trust and respect. Also, e-learning can be done as per the need and interest of the employees. (Somil Nishar 2023)

Performance Management

Performance assessment is not a yearly custom now but it is ongoing process in the organization to manage the performance of the workforce. Artificial Intelligence is not just a tool but it is a clever partner of HR managers which evaluate the performances of the employees and plays an important role to identify the caliber of employees by providing them quick feedback, improves their performance and enhance equality at the workplace without any discrimination. Managers can provide them suggestions of required skills and training programs accordingly. AI can produce insights that help HR managers anticipate future results and proactively handle

performance issues. HR staffs are empowered to take proactive measures that promote favorable performance outcomes thanks to this forward-thinking approach to performance management. (Ramesh Nyathani. 2023)

Due to fast development technology with great opportunities to make employ more creative and organization more efficient. AI is also used to mechanize existing jobs and help to reduce the unfairness against the employees. There is a positive impact on an employ of AI. Work life balance, work related flexibility, independence and it will help employees with creative and innovative thinking. Due to AI employee physical work has been drastically reduced and AI is help full in the measurement of unbiased work performance. (Shivaji Dattu Mundhe&Ashish Waghe2023)

Table 1: HR Functions & AI Approach.

S. No	HR Functions	AI Approach
1	Recruitment and Talent Acquisition	Automated resume screening, AI Chatbots interviews.
2	Selection	Find the ideal applicant quickly.
3	Training and Development	Tailored training program based on individual need.
4	Performance Management	Innovative solution for performance management and feedback.

Source: -Based On Literature Review.

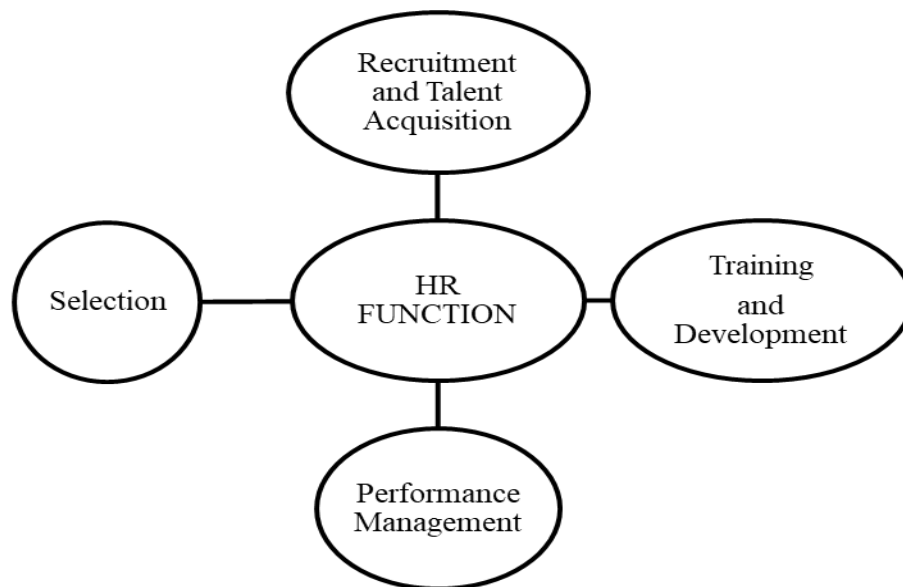


Figure 3: HR Functions (Based on literature Review)

Challenges of AI

Integrating artificial intelligence into HR practices brings significant challenges.

- **Job Displacement:** Artificial intelligence is like a boon now a days but it is integrating with some challenges also like use of machine learning and algorithms' are displacing the human workforce from their jobs due to its advancement and workers those are inexperienced, less qualified and not as much skilled as required are getting displaced which leads to unequal salaries, increased joblessness and many financial and social challenges. (Rudra Tiwari.2023).
- **Lack of Accountability:** A lack of accountability in artificial intelligence (AI) means that there is no clear responsibility for AI actions or that there is no way to hold who is accountable for harmful outcomes. This can lead to negative consequences for individuals and society. (Vivek Singh Sachan. 2024).
- **Environmental Factors:** Due the rapid artificial intelligence global energy demand to train AI tools and models needs a huge amount of electricity cause releasing of carbon di oxide and many harmful gases increasing the higher level of ozone. Next the consumption of water integrated with AI for cooling the server and generating the electricity reducing the level of fresh sources of water. Further to produce metals for AI tools and hardware growing the water and soil pollution. (Sepehr Khajeh Naeeni & Nilofar Nouhi 2023).
- **Dependency:** Artificial intelligence has reduced the thinking capacity of human brain. E-learning has become more powerful through applications like perplexity, and robots etc., which leads the adverse effect on human thinking power, decision making and self-analyzation. Association with AI tools made the human lazy and dependent but some aspects like social behavior, self-consciousness and emotions are some human qualities which cannot be picked by artificial intelligence because it requires a strong historical database for learning patterns. (Sayed Fayaz Ahmad *et.al.*2023).
- **Cyber Security Threats:** Growing technology allows the rapid growth in AI evolution in 21st century. In recent years, Cyber Attacks can be leveraged to research targets, Data breaching, disrupt system operation and algorithm bias caused by bad data. (Md. Fazley Rafy.2024).
- **Data Privacy:** Historical data, which AI systems are trained on, may inherently contain biases pertaining to age, gender, color, and other demographic characteristics. These prejudices have the potential to reinforce and even magnify discriminatory actions in the workplace if they are not addressed. (Reham Ershaid Nusair&Taha Muftah Abuali 2024)

Opportunities

Artificial Intelligence comes with many benefits, for HR managers it is a big task to analyze the smart people which data should be track and analyze, AI made it very easy by reducing manual work and reduced the favoritism while screening the resumes and select the best candidates. (Owais Ahmed 2018). Artificial intelligence has reduced the chances of errors,

human worn out, and mundane work which increase the proficiency of HR managers to look out for more tactic jobs. (Justine Dima.*et.al.*2024)

Conclusion

My analysis is done on the topic "Artificial intelligence in employee wellbeing and human resource" suggests that the association of artificial intelligence in employee wellbeing is providing remarkable satisfaction, work engagement and stress management. However, it is also suggested that role of AI in HRM functions such as hiring, choosing, developing employees and performance management enable HR teams to work effectively and efficiently. Ai's capacity to stimulate human intelligence through algorithms, Chatbots and machine learning tools offers HR professionals the ability to automated screening of candidate, right selection enhance decision making, and optimize processes across various HR functions. But there are drawbacks to this development that must be carefully considered. The challenges related to the adoption of AI are job displacement, data privacy, environmental harms, cyber threats, dependency and security that HR has to manage. These techniques and tools have created many job opportunities for people, reduced physical work, human bias, and fewer errors and increase productivity. To understand the specific applications of these tools and models as per the requirement of different industries and work type more research is needed toward this area.

References

- Andresen, L.S. (2022). John McCarthy: father of AI. 17(5):84 – 85. DOI:10.1109/MIS.2002.1039837.
- Ahmad, F.S., Han, H., Alam, M.M, Rehmat, K.M., Irshad, M., Muñoz, A.M & Montes, A.A. Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanities and Social Sciences Communications*. 10(1). PP. 1-15. Doi: 10.1057/s41599-023-01787-8.
- Ahmed, O. (2018). Artificial Intelligence In HR. *International Journal of Research and Analytical Reviews*. Volume 5, Issue 4.Pg. 971-979. E-ISSN 2348-1269, P- ISSN 2349-5138.
- Bakker, B.A & Oerlemans, M.G.W (2011). Subjective well-being in organizations. Oxford University Press. DOI: 10.13140/2.1.1145.4723.
- Dima, J., Gilbert, D.J, Gauthier, D.J & Giraud, L. (2024). The effects of artificial intelligence on human resource activities and the roles of the human resource triad: opportunities and challenges. *Frontiers in psychology*. DOI:10.3389/fpsyg.2024.1360401.
- Deepika, K., Rambabu, U & Naresh, D. (2024). Role Of Artificial Intelligence In HR- A Theoretical Perspective. IIP Series, Volume 3, Book 2, Part 4, Chapter 1. E-ISBN: 978-93-5747-582-2.

-
- Mazzetti, G., Vignoli, M., Topa, G & Guglielmi.D.(2021). Work Engagement: A meta-Analysis Using the Job Demands-Resources Model. *Psychological Reports*. Vol. 0(0). Pg. 1–38. DOI: 10.1177/00332941211051988.
 - Merwe vander, P.C & Olivier, H.B. (2024). The relationship between employee well-being and organisational effectiveness. *SA Journal of Industrial Psychology*. Pg. 1-13. DOI:10.4102/sajip. v50i0.2169.
 - Mittal, S., Mahendra, s., Sanap, v. & Churi, P. (2022). How can machine learning be used in stress management: A systematic literature review of applications in workplaces and education. *International Journal of Information Management Data Insights*. Volume 2, Issue 2. Pg.1-13. <https://doi.org/10.1016/j.jjime.2022.100110>.
 - Mundhe, D.S & Waghe.A. (2023). *The Impact Of Artificial Intelligence And Innovation On Employee Well-Being. Madhya Bharti- Humanity and Social sciences. UGC Care Group I Journal*. Vol. 84. PP.176-191.ISSN:0974-0066.
 - Naeeni, K.S & Nouhi, N. (2023). The Environmental Impacts of AI and Digital Technologies. *AI and Tech in Behavioral and Social Sciences*. Vol. 1.No. 4. PP.11-18. DOI: 10.61838/kman.aitech.1.4.3.
 - Nishar, S. (2023). The Role of Artificial Intelligence in Transforming Human Resource Management: A Literature Review. *Journal of Artificial Intelligence & Cloud Computing*. Volume 1(3). PP.1-4. DOI: 10.47363/JAICC/2022(1)155.
 - Nusair, E.R &Abuali, M.T. (2024). The Impact of Artificial Intelligence on Human Resource Practices and Employee Experience. *Libyan Journal of Contemporary Academic Studies*.5970-3005: E-ISSN.
 - Nyathani, R. (2023). AI in Performance Management: Redefining Performance Appraisals in the Digital Age. *Journal of Artificial Intelligence & Cloud Computing*. Volume 2(4). PP. 1-5. DOI: 10.47363/JAICC/2023(2)134.
 - Parasa, K.SM. (2024). Impact of AI in Recruitment and Talent Acquisition. *Human Resource and Leadership Journal*. Vol.9, Issue No.3, pp. 78– 83. ISSN: 2791-3252 (Online).
 - Priya. (2021). Role of Artificial Intelligence in Human Resources Management. <https://www.researchgate.net/publication/367654666>.
 - Rafy, F.M. (2024). Artificial Intelligence in Cyber Security. *SSRN Electronic Journal*.PP.1-15. DOI:10.2139/ssrn.4687831.
 - Russell, J.S., & Norvig, P. (2010). pg. viii. Artificial Intelligence A Modern Approach Third Edition. Pearson Education, Inc., ISBN-13:978-0-13-604259-4.
 - Sar, E.R., Purwok, H., Mi, S & Furinto, A. (2020). Artificial Intelligence for a Better Employee Engagement. *International Research Journal of Business Studies*.Vol.12. No.2. Pg. 173-188.<https://doi.org/10.21632/irjbs>.

-
- Sachan, S.V., Arpana Katiyar, A., Somashekher, C., Chauhan, S.A & Bhima, K.C. (2024). The Role of Artificial Intelligence In HRM: Opportunities, Challenges, And Ethical Considerations. *Educational Administration: Theory and Practice*. 30(4). PP.7427-7435. ISSN: 2148-2403.
 - Simone, D.S., & Franco, M. (2023). Employees' Well-Being in Organizational Studies. *American International Journal of Contemporary Research*. Vol. 13, No. 1. Pg. 16-20. doi:10.30845/aijcr. v13n1p3.
 - Tiwari, R. (2023). The impact of AI and machine learning on job displacement and employment opportunities. *International Journal of Scientific Research in Engineering and Management*. Volume: 07 Issue: 01. PP. 1-10. DOI: 10.55041/IJSREM17506.
 - Venugopal, k. (2024). Pg.185-196. Impact of AI Empowerment on Workforce Job Satisfaction. Shiksha Mandal's. First Edition ISBN: 978-81-975949-5-3