

Artificial Intelligence in Human Resource Management: A Literature Review

Rableen Kaur Rao^{1*} | Prof. (Dr.) Urvashi Sharma²

¹Research Scholar, Department of Commerce, Delhi School of Economics, University of Delhi, Delhi.

²Professor, Department of Commerce, Delhi School of Economics, University of Delhi, Delhi.

*Corresponding Author: rableenkaur@gmail.com

Citation: Rao, R. & Sharma, U. (2026). Artificial Intelligence in Human Resource Management: A Literature Review. *International Journal of Advanced Research in Commerce, Management & Social Science*, 09(01(II)), 206–209. [https://doi.org/10.62823/IJARCMSS/9.1\(II\).8719](https://doi.org/10.62823/IJARCMSS/9.1(II).8719)

ABSTRACT

Artificial intelligence technology is the new norm in contemporary economic and is a upward developing trend. The rapidly developing fields of automation, machine learning, and artificial intelligence (AI) have greatly increased the role of IT in business processes. From an HRM standpoint, new AI solutions are becoming utmost necessary in order to handle difficult and time-consuming activities related to HRM functions. The way Indian organizations find, develop, engage, and retain people is changing so as to use AI into HRM. India's HR landscape is changing as a result of driven technologies and practices. The study analyses key issues about AI adoption are consistently used in lots of HR functions such as hiring, talent management, workforce planning based on published data and the results indicate that whereas big Indian businesses, especially in the manufacturing, IT, and BFSI sectors, are gradually implementing AI-enabled HR tools, the shift is still unequal across sectors and organizational sizes.

Keywords: Artificial Intelligence, Human Resource Management, HRIS.

Introduction

Academics have been occupied by the phenomena of IT adoption, and considered as main topics of HRM. One of the main elements that significantly contributed to the transformation of HRM was IT advances. Organizations have been able to digitally process, store, and distribute all information which are related to HR used within their internal as well as external stakeholders thanks to transition from HRIS (Human Resource Information Systems) and e-HR (Electronic-HR). However, the adoption and put to use of automation, interconnectivity, and solution which are AI enabled in HR processes like talent acquisition has become apparent and is rising quickly. Even though there is abundance literature which talks about integrating AI with HRIS, and also talks about research on the factors which are influencing its acceptance is rare, despite the fact that AI in HRM poses significant changes to traditional HRM practices. The potential use of AI in HR functions, such as hiring, was extensively investigated in early theoretical studies.

In India, AI has quickly acted as a force which is disruptive in nature for a majority of industries, including business, healthcare, education, and governance (NASSCOM, 2025) AI is changing the way Human Resource Management used to work traditionally. Predictive modelling, intelligent automation, and data-driven decision making have been made possible by the growing HRM field of AI (KPMG India, 2021). The growing application of AI has numerous potential advantages and implementation issues that merit scholarly research for India's sizable and diversified workforce. AI adoption in HRM is aimed at more than just database maintenance and payroll automation. Recruitment is carried out through resume parsing tools, also intelligent chatbots are used for onboarding, natural language processing is used for employee sentiment analysis and predictive analysis is performed for performance appraisal all are being

impacted (Tambe et. al., 2019). With the adoption of new technologies there is tremendous boost in productivity, lessen prejudice, and offer insights in real time. While many medium-sized and small businesses in India are still in the early phases of testing, significant organizations in industries like banking to e-banking, information technology and telecom grasped first mover advantage for implementing solutions which are AI enabled (NASSCOM, 2025).

Concerns about data privacy, explainability, and labor displacement continue despite increased enthusiasm, especially in a nation where employment rights in the technology sector are still developing and digital literacy is uneven. AI in HRM needs to be critically examined as social and ethical phenomenon that affects workforce well-being and employment equity in addition to being a tool for operational efficiency. This study uses a qualitative methodology based on a Literature Review and limits itself to the Indian environment.

Literature Review

AI is said to form the foundation of both the future lifestyle and industrial 4.0. Without a doubt, the use of AI is becoming more broadly recognized than it was previously, and many businesses are paying close attention to its advancement. AI has grown in significance for a number of reasons, including the drastic, all-encompassing changes it has imposed on company operations, profitability, and competitiveness. Even while the debate about the advantages and risks of AI is growing, the early discussion over how dependent humans should be on AI has lost credibility as attention has shifted to its applications. The phrase artificial intelligence (AI) dates back to the middle of the 20th century.

“Warren McCulloch and Walter Pitts' 1943 model of artificial neurons and Marvin Minsky and Dean Edmonds' 1950 creation of the SNARC, the first neural network computer, marked the beginning of the development of artificial intelligence.”

Therefore, Alan Turing's paper "Computing Machinery and Intelligence" can be considered the most influential early AI study (Stuart J. & Peter, 2010). Turing, who is regarded as the father of computer science, introduced the Turing Test, which is connected to genetic algorithms and machine learning, in an effort to address the issue, "Can machines think?" (Lucci & Kopec, 2016).

In Indian academic literature, AI in HRM talks about Shortlisting according to need, predictive recruiting, interaction using chatbot, recommendations which is customised according to training needs, and performance feedback based on the real time job performed are just a few of the HR-related applications of AI (Kaur & Mehta, 2020).

Some researchers explain that Indian organizations are still mostly in the "transactional AI" stage by distinguishing between "transformational AI," which urges and in decision-making for more important strategic HR function, and "transactional AI," which automates or assists in completing routine HR tasks (Gupta & Arora, 2021).

An increasing amount of Indian research criticizes the careless use of AI techniques without sufficient risk assessment. Academics draw such opaque decision-making, and lots of dependence for outside suppliers for crucial HR tasks (Chatterjee & Bhattacharya, 2022). Concerns regarding data security, permission, and equity in AI-based hiring have also been voiced by legal experts, particularly in light of the lack of a specific national legislative (Tripathi, 2022).

As per the previous studies read there is a huge gap in the Indian academic discourse despite increased attention. First, there is little empirical support for the majority of the existing literature, which is conceptual or practitioner oriented. Second, there aren't many long-term studies monitoring how AI deployment affects HR outcomes like retention, inclusiveness, and organizational learning. Third, formal research rarely documents the viewpoints of employees, who are the systems' end users (Sridharan & Bose, 2023).

Research Methodology

This study examines how the adoption of AI is having an impact on HRM in India utilizing a qualitative research methodology and doing literature review. Use of secondary data, which was published before 2025, as contrast to primary research, which uses surveys or interviews. The literature review was conducted to have an integration of diverse viewpoints from various research, the identification of recurrent themes, and the development of a more profound comprehension of the subject. Additionally, it enables the researcher to look at how AI-led HRM practices have changed in India across industries, regions, and organizational sizes.

Objectives

- To determine how AI techniques are being applied to HR procedures in Indian companies
- To examine the prospects and obstacles that Indian businesses have when integrating AI into HRM
- To comprehend the opinions of Indian scholars and thought leaders regarding fairness, ethics, and employee welfare by adopting systems
- To identify gaps in current knowledge & propose research for future and practice directions

Conclusion

Though its implications are still little understood in the policy, academic, and organizational domains, AI in HRM is currently gaining popularity in India. This study talks about how AI is modifying and filtering various practices followed by HR in businesses and industry working in India. One of the study's primary contributions is that it focuses on and discusses India, a country that is making significant progress in digital transformation and is also greatly impacted by sociocultural diversity, the workforce, and legislative changes. There is minimal direct application to India in the vast majority of worldwide research on AI and HRM, which is based on Western cultures (NASSCOM, 2025).

By examining sectoral trends, and local debate, this research helps in understanding relationship within organisations in India and their usage of HR related activities based on AI. Second, the study draws attention to important gaps in the present narrative that organisations are reluctant to used AI weather from employee perspective or employer perspective. Finally, the paper's conclusions may be useful to lawmakers and HR educators who are trying to have integration among various fields taking into account conditions in order to utilizing global innovation.

Limitation of Study

It may ignore very recent business practices that have not yet been documented because it only draws from published literature. Primary data, such employee comments or interviews, are absent from the study. Due to a dearth of localized research, regional variations only exist inside India's borders would not be sufficiently represented. Despite these shortcomings, the SLR approach is useful for gaining an understanding of the conceptual framework that explains how AI is transforming HRM in India.

References

1. Armstrong, M. (2006). A Handbook of HUMAN MANAGEMENT RESOURCE PRACTICE. In *Anaesthesia* (10 th edit). Kogan Page Limited.
2. Azadeh, A., & Zarrin, M. (2016). An intelligent framework for productivity assessment and analysis of human resource from resilience engineering, motivational factors, HSE and ergonomics perspectives. *Safety Science*, 89, 55–71
3. Bondarouk, T., Parry, E., & Furtmueller, E. (2017). Electronic HRM: four decades of research on adoption and consequences. *International Journal of Human Resource Management*, 28(1), 98–131.
4. Burgess, A., & Burgess, A. (2018). AI in Action. *The Executive Guide to Artificial Intelligence*, 73– 89.
5. Charlier, R., & Kloppenburg, S. (2017). Artificial Intelligence in HR: a No-brainer. In *Pwc*. www.pwc.nl
6. Chatterjee D, Bhattacharya A. Ethical implications of AI in Indian HR practices. *Indian J Hum Resour Dev*. 2022;39(2):45-57.
7. Das, S., & Dayal, M. (2016). Exploring determinants of cloud-based enterprise resource planning (ERP) selection and adoption: A qualitative study in the Indian education sector. *Journal of Information Technology Case and Application Research*, 18(1), 11–36.
8. Gangwar, H., Date, H., & Raoot, A. D. (2014). Review on IT adoption: Insights from recent technologies. *Journal of Enterprise Information Management*, 27(4), 488–502.
9. Gupta, P., Fernandes, S. F., & Jain, M. (2018). Automation in recruitment: a new frontier. *Journal of Information Technology Teaching Cases*, 8(2), 118-125.

11. Gupta R, Arora P. AI adoption in Indian HR departments: Trends and barriers. *South Asian J Manag.* 2021;28(4):77-91.
12. Kaur H, Mehta R. Emerging technologies in HR: A review of AI applications in Indian organisations. *Asian J Manag Stud.* 2020;25(3):33-48.
13. KPMG India. The future of HR in the new reality; 2021. Available from: <https://home.kpmg/in/en/home/insights/2021/02/future-of-hr.html>
14. NASSCOM. AI adoption in India: Trends and opportunities; 2025. Available from: <https://nasscom.in/knowledge-center/publications/ai-adoption-india>
15. Seal, C. (2019). The Agile HR Function: Redesigning HR as A Strategic Business Partner.
16. Sivathanu, B., & Pillai, R. (2018). Smart HR 4.0—how industry 4.0 is disrupting HR. *Human resource management international digest*, 26(4), 7-11.
17. Sridharan V, Bose T. The promise and perils of AI in Indian workplaces. *Hum Cap Rev India.* 2023;12(1):9-19.
18. Subramaniam, A., Smith-Jackson, T. L., & Heidel, R. E. (2021). Artificial intelligence in workplace ergonomics: A review of current trends and future research directions. *J. Occup. Health Psychol*, 26(2), 135-146.
19. Tambe P, Cappelli P, Yakubovich V. Artificial intelligence in human resources management: Challenges and a path forward. *California management review.* 2019 Aug;61(4):15-42.

