

## Application of AI-Integrated HRM Practices

**Dr. Pragya Priyadarshini Harsha\***

Associate Professor, DMS, JIET Jodhpur.

\*Corresponding Author: [pragya.harsha@jiетjodhpur.ac.in](mailto:pragya.harsha@jiетjodhpur.ac.in)

*Citation: Harsha, P. (2025). Application of AI-Integrated HRM Practices. International Journal of Global Research Innovations & Technology, 03(04), 139–151.*

### ABSTRACT

*The rapid advancement of artificial intelligence (AI) has significantly transformed human resource management (HRM), enabling data-driven decision-making, automation, and predictive workforce analytics. Despite the growing volume of research, existing studies on AI-enabled HR practices remain fragmented across functions and contexts. This study conducts a systematic literature review of 86 peer-reviewed journal articles published between 2015 and 2025, following the PRISMA 2020 guidelines, to synthesize current knowledge on the application of AI in HR practices. Drawing on studies retrieved from Scopus and Emerald Insight databases, a thematic analysis identifies five dominant themes: AI in recruitment and selection, HR analytics and strategic decision-making, workforce planning and predictive HR, employee experience and well-being, and ethical, legal, and governance issues. The findings reveal a strong emphasis on recruitment and analytics-driven HR functions, alongside growing concerns regarding algorithmic bias, transparency, and employee trust. The review highlights critical research gaps, including the lack of longitudinal studies, limited employee-centric perspectives, and insufficient empirical examination of ethical AI governance. By integrating technological and behavioral insights, this study contributes to the HRM literature and offers actionable implications for managers seeking to adopt AI responsibly in HR practices*

**Keywords:** Artificial Intelligence, Human Resource Management, HR Analytics, Ethical AI.

### Introduction

Artificial intelligence (AI) is increasingly transforming human resource management (HRM), enabling data-driven decision-making and automation of routine tasks. Scholars note that leading firms have rapidly embraced AI tools in HR: for example, 99% of Fortune 500 companies now use AI-powered applicant-tracking systems in hiring (Hina *et al.*, 2025). This trend reflects the broader adoption of analytics and machine learning to enhance workforce planning, talent management, and performance evaluation (Di Lauro *et al.*, 2025; Hina *et al.*, 2025). Indeed, advances in big data and predictive algorithms promise greater efficiency and strategic insight in HR functions, from recruitment and training to employee engagement and retention (Di Lauro *et al.*, 2025; Benabou & Touhami, 2025). At the same time, these technologies raise new ethical and human-centric considerations (Mori *et al.*, 2025; Minbaeva, 2021), underscoring the need for holistic understanding.

Given the growing scope of AI applications in HRM and the recent surge of related research, a comprehensive review is warranted to synthesize existing knowledge. Several recent studies have surveyed aspects of AI-HRM, noting an exponential increase in publications since the mid-2010s (Ubeda García *et al.*, 2025) and rapid emergence of new topics (Prikshat *et al.*, 2023). This proliferation spans technical developments (e.g. machine learning in recruitment), managerial domains (e.g. AI in workforce planning), and concerns (e.g. algorithmic fairness) (Benabou & Touhami, 2025; Mori *et al.*, 2025). Because HR departments are now experimenting with AI in virtually every function, from staffing to performance appraisal (Hina *et al.*, 2025; Mori *et al.*, 2025), it is timely to map this evolution. By tracing AI's penetration into HR practice and scholarship, we can clarify trends, identify gaps, and inform future

research. This review therefore examines the historical trajectory of AI in HRM, drawing exclusively on the 86 studies from our systematic set.

### Evolution of AI in HRM

In the early 2000s, AI was largely absent from mainstream HR research, as HR systems focused on data management rather than intelligent analysis. Initial applications were limited to expert systems or decision-support tools, and empirical studies were scarce (Prikshat *et al.*, 2023). Interest picked up in the 2010s with the rise of “people analytics” and big data. Mid-decade research began exploring predictive analytics for workforce outcomes and basic AI-driven recruitment screening. For example, early HR analytics efforts used data mining to forecast staffing needs, and the concept of HR as a strategic partner gained traction (Di Lauro *et al.*, 2025). However, literature reviews from this period note that robust theory and large-scale evidence remained uncommon (Prikshat *et al.*, 2023; Minbaeva, 2021).

After about 2016, the field underwent a marked acceleration. Studies report an **exponential increase** in publications on AI and HRM since 2016, with a particularly sharp rise following the COVID-19 pandemic (Ubeda García *et al.*, 2025). This era saw AI tools become widely applied in routine HR functions. Recruitment and selection, for instance, became a major focus: AI algorithms for resume screening, chatbots, and video interviewing were adopted to speed hiring (Mori *et al.*, 2025; Suen & Hung, 2023). At the same time, HR planning and analytics advanced. AI-enabled workforce planning tools emerged, offering predictive scheduling and skills-gap analysis (Di Lauro *et al.*, 2025). Research identified AI-driven employee management systems and performance management platforms that use machine learning to personalize training and monitor engagement (Benabou & Touhami, 2025; Di Lauro *et al.*, 2025). Scholars also began highlighting the benefits of coupling AI with human expertise: Hina *et al.* (2025) advocate collaborative AI–human workflows in recruitment, where AI handles repetitive screening while HR specialists focus on judgment and empathy.

The COVID-19 period (2020–2022) further intensified AI adoption in HR. Remote work and rapid organizational change spurred demand for digital HR solutions. The literature notes that pandemic disruptions accelerated digitalization and flexible work practices, positioning AI as a key enabler of resilience (Minbaeva, 2021; Trenerry *et al.*, 2021). HR functions expanded to include crisis response and employee well-being, sometimes using AI-driven monitoring for health or productivity. Concurrently, ethical and human-centered issues became prominent. Reviews emphasize rising attention to fairness, transparency and employee trust in AI systems (Mori *et al.*, 2025; Feldkamp *et al.*, 2024). For example, Feldkamp *et al.* (2024) find that employees perceive algorithmic hiring tools as potentially biased or unfair, reducing trust in automated selection. Researchers argue that algorithmic transparency and governance must accompany technological gains. Moreover, studies of employee engagement under AI illustrate novel challenges: AI tools can boost engagement by personalizing experiences, but also risk technostress if mismanaged (Prasad & De, 2024; Ljungholm & Popescu, 2023).

Most recently (2023 onward), the advent of generative AI has introduced a new phase in HRM. Groundbreaking tools like large language models began to be examined for HR use cases. Aguinis *et al.* (2024) demonstrate that ChatGPT and similar systems can assist overburdened HR professionals by automating drafting and analytics tasks, provided prompts are carefully crafted. Several studies consider “AI assistants” and virtual HR agents, exploring how these can handle strategic and operational HR activities. Research also turns to trust and user experience with generative tools: Prasad and De (2024) show that employee perceptions of ChatGPT hinge on ease of use and usefulness, which influence engagement and performance through trust. Meanwhile, academic work is developing frameworks for responsibly integrating generative AI in HR (Ljungholm & Popescu, 2023).

Across these phases, certain HR domains stand out as being most impacted. Recruitment and selection remain consistently prominent in the literature, with dozens of studies on automated interviews, candidate assessment algorithms, and ethical hiring (Mori *et al.*, 2025; Suen & Hung, 2023; Feldkamp *et al.*, 2024). Performance management and employee development have also been major targets: AI-driven learning platforms and productivity analytics are frequently discussed (Benabou & Touhami, 2025; Prikshat *et al.*, 2023). Other functions, such as payroll and routine administration, have seen incremental AI adoption (Benabou & Touhami, 2025). A recurring research theme is the distinction between “routine” tasks (where AI is readily applied) and strategic or relational tasks (which require careful human–AI collaboration) (Hina *et al.*, 2025; Prikshat *et al.*, 2023).

In sum, the evolution of AI in HRM has moved from isolated experimental projects in the 2000s to ubiquitous organizational adoption today. Technological shifts (from rule-based systems to deep

learning and now generative AI) and global events (notably COVID-19) have driven waves of research and application. The reviewed studies reveal a trajectory of increasing integration of AI across HR functions, balanced by growing concern for ethical, legal and human factors. This historical view underscores both how rapidly HR work is changing under AI, and how scholarly attention is evolving to keep pace with new opportunities and challenges in managing people with advanced technology.

### Research Methodology

This study adopts a Systematic Literature Review (SLR) approach following the **PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) 2020 guidelines**. The objective is to systematically identify, screen, evaluate, and synthesize existing scholarly literature on the application of Artificial Intelligence (AI) in Human Resource (HR) practices.

The study's objectives are to examine the key HR functions where AI is applied and highlight research gaps and future research directions.

The literature search will be conducted using reputable academic databases, Scopus and Emerald Insight, to ensure quality and reliability.

### Search Strategy

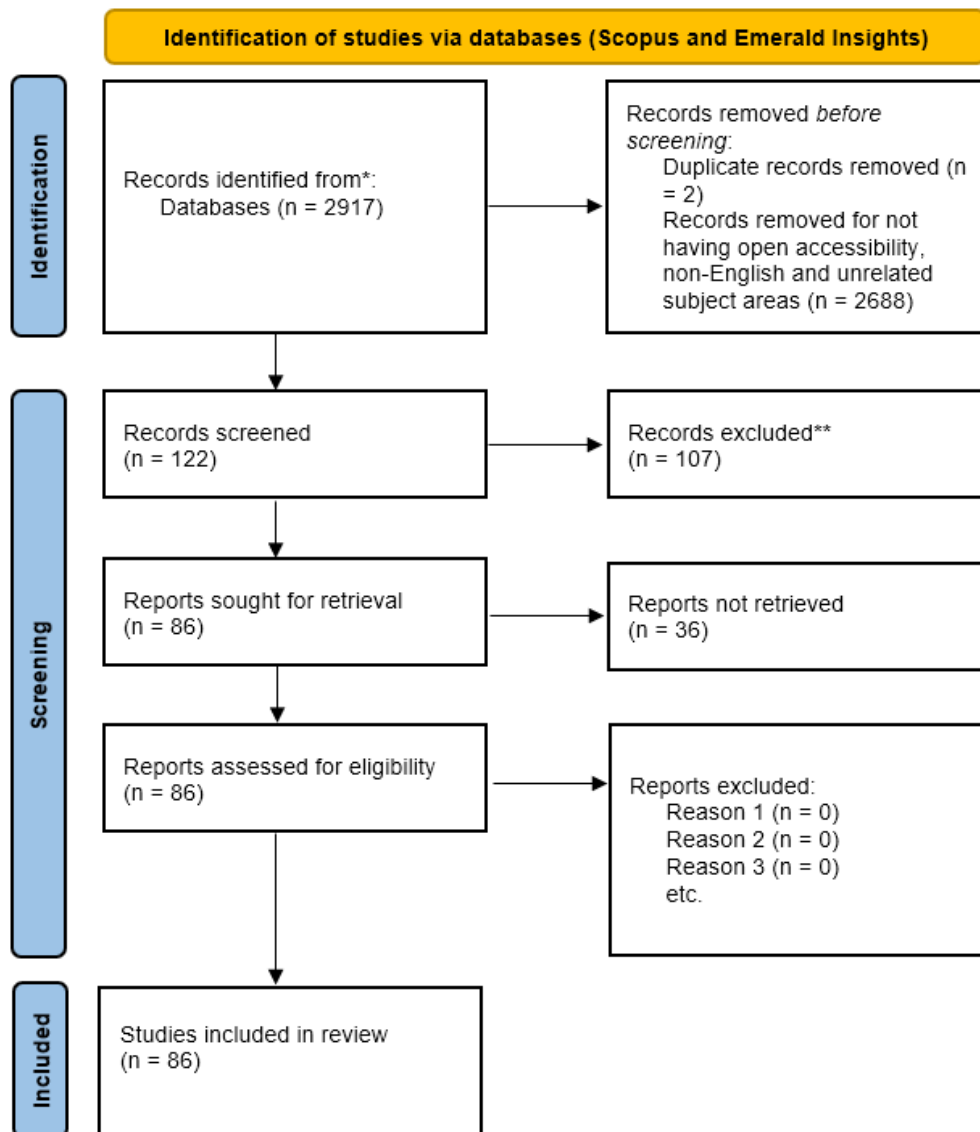
The key concepts identified are artificial intelligence, human resource management, and HR practices/functions. Search strings using Boolean logic are "Artificial Intelligence" OR "AI" OR "Machine Learning" OR "HR Analytics", "Human Resource Management" OR "HRM" OR "Human Resources", and "Recruitment" OR "Selection" OR "Training" OR "Performance Management" OR "Employee Engagement" OR "Talent Management". Search is applied to title, abstract, and keywords only. The study includes peer-reviewed English journal articles published between 2015 and 2025, excluding conference papers, theses & dissertations, articles unrelated to the research area, and non-English papers.

### PRISMA Screening Process

**Table 1: Screening Process**

Stage	Number of Articles (Example)
Records identified	2917
Open-access	231
Duplicates removed	2
Records screened	229
Records excluded (Title & Abstract)	107
Full-text assessed	122
Final studies included	86

Source: Author's compilation.



**Figure 1: PRISMA Screening Flow Chart**

Source: Author's compilations.

A total of 182 records were identified from the Scopus database 47 records from Emerald Insights. After the removal of duplicates, all records were retained for screening. Title and abstract screening resulted in the exclusion of 107 articles due to a lack of relevance to AI applications in human resource practices. The remaining 122 articles were considered eligible for full-text assessment. Of these, 36 articles were excluded as they did not demonstrate a clear application of artificial intelligence or analytics in human resource practices. Consequently, 86 studies were retained for final inclusion from Scopus and Emerald Insight databases. For each selected article, the information extracted is author(s), year, country, journal, HR function studied, AI technology used, methodology, key findings, limitations, and future research suggestions.

The study uses Thematic Analysis to classify AI applications across HR functions and includes AI in Recruitment & Selection, AI in Training & Development, AI in Performance Management, AI in Employee Engagement, and Ethical, Legal, and Bias Concerns.

### **Thematic analysis of AI in HR Practices**

A thematic analysis was conducted on the 86 studies included in the final review to identify dominant patterns, applications, and research streams related to the use of artificial intelligence (AI) in human resource (HR) practices. Using an inductive coding approach, themes were developed by systematically analyzing abstracts, keywords, and full-text insights (where available). Five major themes emerged, reflecting both operational and strategic applications of AI in HR.

#### **Theme 1: AI in Recruitment and Selection**

A substantial proportion of the reviewed studies focus on the application of AI in recruitment and selection processes. These studies highlight the use of machine learning algorithms, natural language processing, chatbots, automated résumé screening, social media analytics, and predictive hiring tools to enhance hiring efficiency and decision quality.

AI-driven recruitment systems are reported to reduce time-to-hire, improve candidate–job fit, and enhance employer branding. Several studies emphasize AI-enabled social media recruitment and digital hiring platforms that leverage big data to analyze candidate behavior and engagement patterns. However, ethical concerns—particularly algorithmic bias, transparency, and fairness—are consistently highlighted, suggesting the need for governance mechanisms and explainable AI models in recruitment decisions. Representative studies include Al-Dmour et al., 2025; Alnsour et al., 2024 ; Anghel, 2023; Aryasinghe et al., 2025 ; Bazrkar et al., 2024; Chheda et al., 2025; Dalain & Yamin, 2025; Espinoza-Acero et al., 2024; Gupta & Mishra, 2022; Kot et al., 2021; Koteczki et al., 2025; Ligeiro et al., 2024; Melliani et al., 2024; Nain & Shyam, 2024; Nowak, 2025; Oncioiu et al., 2022; Pessach et al., 2020; Răb-Kettler & Lehnervp, 2019; Revillod, 2024; Rigotti & Fosch-Villaronga, 2024; Rukadikar & Khandelwal, 2024; Soleimani et al., 2021; Soleimani et al., 2025; Sony et al., 2025; Tay et al., 2024; Tursunbayeva et al., 2025; Wulandari & Diko, 2024; Zheng et al., 2024, among others.

##### **Key focus areas:**

- Automated résumé screening
- AI-driven candidate matching
- Chatbots and virtual recruitment assistants
- Bias, fairness, and explainability in hiring algorithms

#### **Theme 2: HR Analytics and Strategic Decision-Making**

Another dominant theme relates to HR analytics and data-driven strategic decision-making. Studies under this theme examine how AI and advanced analytics transform HR from a support function into a strategic partner by enabling evidence-based decisions.

Research highlights the role of predictive analytics, dashboards, and algorithmic models in workforce planning, performance management, and strategic talent decisions. Several studies propose frameworks, maturity models, and capability-building mechanisms for successful HR analytics adoption. The findings consistently indicate that AI-enabled HR analytics enhances organizational performance, decision accuracy, and alignment between HR initiatives and business objectives. Representative studies include Aguinis et al., 2024; Bindra et al., 2025; Di Prima et al., 2024; Falletta & Combs, 2020; Kinowska & Sienkiewicz, 2022; Ozkanli & Gök, 2025; Prima et al., 2023; Rana & Sachdeva, 2025; Sony et al., 2025, among others.

##### **Key focus areas:**

- Predictive HR analytics
- HR analytics maturity models
- Evidence-based HR decision-making
- HR's strategic role enabled by AI

#### **Theme 3: Workforce Planning, Performance Management, and Predictive HR**

This theme captures studies that apply AI to workforce planning, performance management, and predictive HR outcomes, including employee turnover, productivity, and skill demand forecasting. Machine learning models are frequently used to predict attrition risk, identify high-performing employees, and optimize workforce allocation.

The literature suggests that AI-driven predictive tools enable proactive HR interventions, such as targeted retention strategies and personalized development plans. However, scholars caution that excessive reliance on algorithmic predictions without contextual judgment may lead to employee distrust and unintended consequences. Representative studies include Alayed & Awamleh, 2025; Aydın & Turan, 2023; B et al., 2025; Benabou et al., 2025; Egasmara et al., 2025; Johnson et al., 2020; Moyo et al., 2018; Rigamonti et al., 2024; Sharma et al., 2025; Úbeda-García et al., 2025; Wenting et al., 2024, among others.

**Key focus areas:**

- AI-based attrition and turnover prediction
- Performance forecasting
- Workforce demand–supply analytics
- Proactive talent management

**Theme 4: Employee Experience, Engagement, and Well-being**

An emerging yet significant theme relates to the use of AI in enhancing employee experience, engagement, and well-being. Studies document the application of sentiment analysis, emotion recognition, and AI-powered feedback systems to monitor employee attitudes, engagement levels, and workplace well-being.

AI-enabled tools are shown to support personalized employee experiences through virtual assistants, real-time support systems, and adaptive learning platforms. While these technologies offer efficiency and responsiveness, concerns regarding employee surveillance, privacy, and data misuse are widely discussed. Representative studies include Al-Dmour et al., 2025; Bisht & Sethi, 2025; G & G, 2025; Jia & Hou, 2024; Malik, 2024; Passalacqua et al., 2025; Prentice et al., 2023; Qawasmeh et al., 2024; Rožman et al., 2023; Vereb et al., 2024; Weiyyu et al., 2025, among others.

**Key focus areas:**

- AI-driven employee engagement analytics
- Sentiment and emotion analysis
- Personalized employee experience
- Privacy and ethical concerns

**Theme 5: Ethics, Bias, Governance, and Human–AI Collaboration in HR**

The final theme addresses ethical, legal, and governance issues, along with the evolving nature of human–AI collaboration in HR practices. Many studies emphasize the risks associated with biased algorithms, opaque decision-making, and misuse of employee data.

This theme highlights the need for ethical AI frameworks, transparency, accountability, and regulatory compliance in HR analytics systems. Several studies argue that AI should augment—not replace—human judgment, advocating for hybrid decision-making models where HR professionals retain oversight and contextual interpretation. Representative studies include Arslan et al., 2021; Curzi & Ferrarini, 2023; Faiz et al., 2024; Hina et al., 2025; McCartney & Fu, 2022; Mwita & Kitole, 2025; Peeters et al., 2020; Sharif & Ghodoosi, 2022; Stavbunik, 2025; Tursunbayeva et al., 2025, among others.

**Key focus areas:**

- Algorithmic bias and fairness
- Data privacy and employee consent
- Explainable and responsible AI
- Human–AI collaboration in HR decision-making

**Research Gaps & Future Directions**

Despite the growing body of literature on the application of artificial intelligence (AI) in human resource (HR) practices, the systematic review reveals several important research gaps that warrant further scholarly attention.

- **Limited Longitudinal and Outcome-Based Evidence**

Most existing studies adopt cross-sectional designs or rely on short-term organizational outcomes such as efficiency, time-to-hire, or cost reduction. There is a clear lack of longitudinal research examining the long-term impact of AI-enabled HR practices on employee performance, career progression, organizational culture, and firm sustainability. Future studies should employ longitudinal and panel data approaches to assess how AI-driven HR decisions evolve over time and influence enduring organizational outcomes (Alsalman, 2025; Autasadee et al., 2024; Baranyi, 2025; Espegren, 2024; Grigoryan et al., 2025; Ogbeibu et al., 2021).

- **Overemphasis on Recruitment and Analytics**

The literature is disproportionately concentrated on AI in recruitment, selection, and HR analytics, while other critical HR domains—such as compensation management, industrial relations, leadership development, and employee voice—remain underexplored. Future research should extend AI applications beyond talent acquisition to examine its role across the entire HR value chain (Espegren & Hugosson, 2023; Grigoryan et al., 2025; Marinakou et al., 2024; Zhang & Yim, 2025).

- **Insufficient Behavioral and Employee-Centric Perspectives**

While technological efficiency dominates the discourse, relatively few studies examine employee perceptions, trust, resistance, and psychological responses to AI-driven HR systems. There is a significant gap in integrating behavioral science theories such as trust, justice, and technology acceptance—into AI–HR research. Future studies should explore how employees interpret and react to algorithmic HR decisions and how these reactions influence engagement and well-being (Grigoryan et al., 2025; McCartney & Fu, 2022).

- **Ethical, Legal, and Governance Gaps**

Although ethical concerns such as bias, fairness, and data privacy are frequently acknowledged, most studies remain conceptual rather than empirical. There is limited evidence on how organizations operationalize ethical AI principles in HR practices. Future research should empirically test ethical AI governance frameworks, examine regulatory compliance across jurisdictions, and investigate mechanisms for ensuring transparency and accountability in algorithmic HR decisions (Fadi, 2025; Gravili et al., 2023; Grigoryan et al., 2025; Patil & Priya, 2024; Pourhosein & Sabokro, 2025; Sarbadhikari & Pradhan, 2020).

- **Contextual and Cross-Cultural Limitations**

The majority of empirical studies are concentrated in developed economies and specific sectors, limiting the generalizability of findings. Emerging economies, public sector organizations, and small and medium enterprises (SMEs) are underrepresented. Future research should adopt comparative and cross-cultural approaches to understand how institutional, cultural, and regulatory contexts shape AI adoption in HR (Bentvelzen et al., 2024; Grigoryan et al., 2025; Otmakhova et al., 2022; Panda et al., 2023; Wang et al., 2025).

## **Conclusion & Managerial Implications**

### **Conclusion**

This systematic literature review synthesizes evidence from 86 peer-reviewed studies to examine the application of artificial intelligence in human resource practices. The findings demonstrate that AI has transformed HR functions by enabling data-driven recruitment, predictive workforce planning, strategic decision-making, and enhanced employee engagement. At the same time, the review highlights persistent challenges related to ethical risks, algorithmic bias, transparency, and employee trust.

Overall, the study concludes that AI in HR should be viewed not merely as a technological tool, but as a socio-technical system that reshapes HR roles, decision authority, and employment relationships. The effectiveness of AI-driven HR practices depends critically on organizational capabilities, ethical governance, and meaningful human oversight.

### **Managerial Implications**

The findings offer several important implications for HR managers, organizational leaders, and policymakers:

- First, managers should adopt AI in HR as a decision-support mechanism rather than a decision-replacement system. Human judgment remains essential to interpret algorithmic outputs, contextualize decisions, and ensure fairness.

- Second, organizations must invest in HR analytics capabilities and upskilling. HR professionals need competencies in data interpretation, analytical thinking, and ethical decision-making to effectively leverage AI tools.
- Third, ethical governance should be embedded into AI-enabled HR systems. Managers should establish clear guidelines for data privacy, bias mitigation, transparency, and employee consent to build trust and legitimacy.
- Fourth, organizations should actively engage employees during AI adoption. Transparent communication, participatory design, and feedback mechanisms can reduce resistance and improve acceptance of AI-driven HR practices.
- Finally, policymakers and regulators should collaborate with organizations to develop responsible AI frameworks tailored to HR contexts, balancing innovation with employee protection and social responsibility.

### Contribution of the Study

Additionally, this study offers a structured foundation for future empirical research by integrating technological, behavioral, and ethical perspectives on AI-enabled HRM. By systematically consolidating fragmented research, this study contributes to the HRM and AI literature by:

- Offering a comprehensive thematic synthesis of AI applications in HR
- Identifying critical research gaps for future inquiry
- Providing actionable managerial insights for responsible AI adoption

### References

1. Aguinis, H., Beltran, J. R., & Cope, A. (2024). How to use generative AI as a human resource management assistant. *Organizational Dynamics*, 53(1), 101029. <https://doi.org/10.1016/j.orgdyn.2024.101029>
2. Alayed, H. M., & Awamleh, F. T. (2025). Artificial intelligence applications in improving Human Resources Practices: The mediating role of business intelligence Tools. *Economics*, 13(4), 241–256. <https://doi.org/10.2478/eoik-2025-0094>
3. Al-Dmour, R., Al-Dmour, H., Al-Dmour, A., Amin, E. B., & Al-Dmour, Y. (2025). AI and big data-driven social media recruitment: the mediating role of talent acquisition and employee engagement in bank performance. *Digital Transformation and Society*, 1–19. <https://doi.org/10.1108/dts-02-2025-0042>
4. Alnsour, A. S., Kanaan, O. A., Salah, M., Alfayyad, L., Hijazi, Y., & Alsharif, D. (2024). The impact of implementing AI in recruitment on human resource management efficiency and organizational development effectiveness. *Journal of Infrastructure Policy and Development*, 8(8), 6186. <https://doi.org/10.24294/jipd.v8i8.6186>
5. Alsaman, A. I. (2025). The impact of technological advancements on HR practices in Saudi Arabian organizations. *Journal of Ecohumanism*, 4(1). <https://doi.org/10.62754/joe.v4i1.5880>
6. Anghel, D. (2023). New perspectives for human and artificial intelligence interactions for leadership e-Recruitment. *Societies*, 13(3), 55. <https://doi.org/10.3390/soc13030055>
7. Arslan, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2021). Artificial intelligence and human workers interaction at team level: a conceptual assessment of the challenges and potential HRM strategies. *International Journal of Manpower*, 43(1), 75–88. <https://doi.org/10.1108/ijm-01-2021-0052>
8. Aryasinghe, S., Carenzo, C., Barnett, K., Khalid, R., Greenaway-Harvey, K., Sherlock, C., Clark, L., Croft, K., Orchard, T., & Mayer, E. (2025). Increasing the ethnic diversity of senior leadership within the English National Health Service: using an artificial intelligence approach to evaluate inclusive recruitment strategies in hospital settings. *Human Resources for Health*, 23(1), 24. <https://doi.org/10.1186/s12960-025-00991-8>
9. Outsadee, Y., Jeevan, J., Salleh, N. H. M., & Othman, M. R. (2024). Digital wind of changes: navigating competitiveness in the maritime sector through the transformation in human resource development. *Maritime Business Review*, 9(3), 204–228. <https://doi.org/10.1108/mabr-11-2023-0079>



10. Aydın, E., & Turan, M. (2023). An AI-Based Shortlisting Model for Sustainability of Human Resource Management. *Sustainability*, 15(3), 2737. <https://doi.org/10.3390/su15032737>
11. B, N., C, H., & P, P. (2025). Unveiling the future of artificial intelligence in talent acquisition: A bibliometric analysis of emerging trends and future directions. *Sustainable Futures*, 10, 101410. <https://doi.org/10.1016/j.sfr.2025.101410>
12. Baranyi, V. (2025). Systematic literature review on the digital transformation of the personnel selection process. *German Journal of Human Resource Management Zeitschrift Für Personalforschung*. <https://doi.org/10.1177/23970022251363012>
13. Bazrkar, A., Moradzad, M., & Shayegan, S. (2024). The use of artificial intelligence in employee recruitment in the furniture industry of Iran according to the role of contextual factors. *Studia Universitatis „Vasile Goldis” Arad – Economics Series*, 34(2), 86–109. <https://doi.org/10.2478/sues-2024-0009>
14. Benabou, A., Touhami, F., & Sabri, M. A. (2025). Predicting employee turnover using machine learning techniques. *Acta Informatica Pragensia*, 14(1), 112–127. <https://doi.org/10.18267/j.aip.255>
15. Bentvelzen, M., Boon, C., & Hartog, D. N. D. (2024). A person-centered approach to individual people analytics adoption. *Journal of Organizational Effectiveness People and Performance*, 12(5), 60–82. <https://doi.org/10.1108/joepp-07-2023-0276>
16. Bindra, S., Bhattacharya, S., & Bhattacharya, S. (2025). Traditional to digital: human resource management transformation. *Journal of Work-Applied Management*. <https://doi.org/10.1108/jwam-02-2025-0019>
17. Bisht, N., & Sethi, D. (2025). Mapping the Human Experience in Digital Workspaces: A scoping review on employee engagement, Work-Life balance and stress in the IT sector. *International Journal of Accounting and Economics Studies*, 12(2), 321–329. <https://doi.org/10.14419/x1t5eg38>
18. Chheda, K., Thakur, U., J, R., Das, G. P., Parashar, M. K., & Reddy, K. (2025). AI-Powered Human Resource Management for enhancing employee recruitment efficiency and talent retention in organizations. *Management*, 3, 165. <https://doi.org/10.62486/agma2025165>
19. Curzi, Y., & Ferrarini, F. (2023). High-performance work systems and firm innovation: the moderating role of digital technology and employee participation. Evidence from Europe. *Management Research Review*, 47(13), 51–68. <https://doi.org/10.1108/mrr-11-2022-0751>
20. Dalain, A., & Yamin, M. (2025). Examining the Influence of AI-Supporting HR Practices Towards Recruitment Efficiency with the Moderating Effect of Anthropomorphism. *Sustainability*, 17(6), 2658. <https://doi.org/10.3390/su17062658>
21. Di Prima, C., Cepel, M., Kotaskova, A., & Ferraris, A. (2024). Help me help you: How HR analytics forecasts foster organizational creativity. *Technological Forecasting and Social Change*, 206, 123540. <https://doi.org/10.1016/j.techfore.2024.123540>
22. Di Prima, C., Kotaskova, A., Yildiz, H., & Ferraris, A. (2023). How to survive social crises? An HR analytics data-driven approach to improve social sustainable operations' effectiveness. *Management Decision*, 62(7), 2064–2084. <https://doi.org/10.1108/md-06-2023-0973>
23. Egasmara, F., Rahayu, A., Wibowo, L. A., Rofaida, R., Sofia, A., & Fauziyah, A. (2025). Workforce planning optimization utilising AI to improve firm performance: a systematic literature review using VOSviewer. *Journal of Work-Applied Management*, 1–13. <https://doi.org/10.1108/jwam-06-2025-0102>
24. Espegren, Y. (2024). Reasons for HR analytics adoption in public sector organisations: evidence from Swedish public administrations. *Personnel Review*. <https://doi.org/10.1108/pr-03-2024-0219>
25. Espegren, Y., & Hugosson, M. (2023). HR analytics-as-practice: a systematic literature review. *Journal of Organizational Effectiveness People and Performance*, 12(5), 83–111. <https://doi.org/10.1108/joepp-11-2022-0345>
26. Espinoza-Acero, H., Galarza-Minaya, T., & Vidal, E. (2024). Exploring the role of chatbots in the recruitment process in Latin America. *Revista De Gestão Social E Ambiental*, 18(1), e07047. <https://doi.org/10.24857/rgsa.v18n1-166>

27. Fadi, S. (2025). Enhancing Organizational Performance through AI-Driven HRM Practices and Performance Metrics: Evidence from European Multinational Enterprises. *Management and Production Engineering Review*. <https://doi.org/10.24425/mper.2025.156147>
28. Faiz, M., Sarwar, N., Tariq, A., Jordao, R., & Memon, M. A. (2024). Strategic human capital analytics and new venture performance: role of dual nationality founding member. *Journal of Intellectual Capital*, 25(7), 151–175. <https://doi.org/10.1108/jic-02-2024-0033>
29. Falletta, S. V., & Combs, W. L. (2020). The HR analytics cycle: a seven-step process for building evidence-based and ethical HR analytics capabilities. *Journal of Work-Applied Management*, 13(1), 51–68. <https://doi.org/10.1108/jwam-03-2020-0020>
30. G, G., & G, P. (2025). Artificial intelligence-driven human resource practices and employee well-being: Examining the mediating effect of employee engagement. *Problems and Perspectives in Management*, 23(4), 247–263. [https://doi.org/10.21511/ppm.23\(4\).2025.18](https://doi.org/10.21511/ppm.23(4).2025.18)
31. Gravili, G., Hassan, R., Avram, A., & Schiavone, F. (2023). Big data and human resource management: paving the way toward sustainability. *European Journal of Innovation Management*, 26(7), 552–590. <https://doi.org/10.1108/ejim-01-2023-0048>
32. Grigoryan, A., Melkumyan, A., Karapetyan, L., Sahakyan, M., Badalyan, M., & Gabrielyan, B. (2025). Challenges and opportunities of artificial intelligence adoption in human resources management within the ICT industry in Armenia. *Problems and Perspectives in Management*, 23(4), 147–158. [https://doi.org/10.21511/ppm.23\(4\).2025.11](https://doi.org/10.21511/ppm.23(4).2025.11)
33. Gupta, A., & Mishra, M. (2022). Ethical concerns while using artificial intelligence in recruitment of employees. *Business Ethics and Leadership*, 6(2), 6–11. [https://doi.org/10.21272/bel.6\(2\).6-11.2022](https://doi.org/10.21272/bel.6(2).6-11.2022)
34. Hina, M., Azad, N., & Islam, N. (2025). Enablers and inhibitors of AI assimilation in hiring: mitigating the effects of inhibitors through human–AI collaboration. *Information Technology and People*, 38(8), 73–96. <https://doi.org/10.1108/itp-06-2024-0808>
35. Jia, X., & Hou, Y. (2024). Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement. *Discover Sustainability*, 5(1). <https://doi.org/10.1007/s43621-024-00214-5>
36. Johnson, R. D., Stone, D. L., & Lukaszewski, K. M. (2020). The benefits of eHRM and AI for talent acquisition. *Journal of Tourism Futures*, 7(1), 40–52. <https://doi.org/10.1108/jtf-02-2020-0013>
37. Kinowska, H., & Sienkiewicz, Ł. J. (2022). Influence of algorithmic management practices on workplace well-being – evidence from European organisations. *Information Technology and People*, 36(8), 21–42. <https://doi.org/10.1108/itp-02-2022-0079>
38. Kot, S., Hussain, H. I., Bilan, S., Haseeb, M., & Mihardjo, L. W. W. (2021). THE ROLE OF ARTIFICIAL INTELLIGENCE RECRUITMENT AND QUALITY TO EXPLAIN THE PHENOMENON OF EMPLOYER REPUTATION. *Journal of Business Economics and Management*, 22(4), 867–883. <https://doi.org/10.3846/jbem.2021.14606>
39. Koteczki, R., Csikor, D., & Balassa, B. E. (2025). The role of generative AI in improving the sustainability and efficiency of HR recruitment process. *Discover Sustainability*, 6(1). <https://doi.org/10.1007/s43621-025-01484-3>
40. Ligeiro, N., Dias, I., & Moreira, A. (2024). Recruitment and selection process using artificial intelligence: How do candidates react? *Administrative Sciences*, 14(7), 155. <https://doi.org/10.3390/admsci14070155>
41. Malik, A. (2024). A study on the relationship of artificial intelligence applications in HR processes for assessing employee engagement, performance, and job security. *International Review of Management and Marketing*, 14(5), 216–221. <https://doi.org/10.32479/irmm.16838>
42. Malik, A., Budhwar, P., Mohan, H., & R, S. N. (2022). Employee experience –the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management*, 62(1), 97–115. <https://doi.org/10.1002/hrm.22133>
43. Marinakou, E., Giousmpasoglou, C., & Papavasileiou, E. F. (2024). The use of artificial intelligence (AI) in talent acquisition: the case of Greek luxury hotels. *Strategic Change*, 34(4), 533–543. <https://doi.org/10.1002/jsc.2632>

44. McCartney, S., & Fu, N. (2022). Promise versus reality: a systematic review of the ongoing debates in people analytics. *Journal of Organizational Effectiveness People and Performance*, 9(2), 281–311. <https://doi.org/10.1108/joepp-01-2021-0013>
45. Melliani, H., Mouhtat, I., Kerfal, W., & Razouk, A. (2024). Artificial intelligence in Recruitment: Navigating the era of Web 4.0. *Qubahan Academic Journal*, 4(2), 558–568. <https://doi.org/10.48161/qaj.v4n2a283>
46. Moyo, S., Doan, T. N., Yun, J. A., & Tshuma, N. (2018). Application of machine learning models in predicting length of stay among healthcare workers in underserved communities in South Africa. *Human Resources for Health*, 16(1), 68. <https://doi.org/10.1186/s12960-018-0329-1>
47. Mwita, K. M., & Kitole, F. A. (2025). Potential benefits and challenges of artificial intelligence in human resource management in public institutions. *Discover Global Society*, 3(1). <https://doi.org/10.1007/s44282-025-00175-8>
48. Nain, V., & Shyam, H. S. (2024). EMPIRICAL ANALYSIS OF THE ROLE OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCES RECRUITMENT AND SELECTION. *Proceedings on Engineering Sciences*, 6(2), 817–826. <https://doi.org/10.24874/pes06.02a.008>
49. Nowak, M. (2025). Grey clustering machine learning model for predicting voluntary employee turnover. *Grey Systems Theory and Application*, 15(4), 771–791. <https://doi.org/10.1108/gst-02-2025-0020>
50. Ogbeibu, S., Jabbour, C. J. C., Burgess, J., Gaskin, J., & Renwick, D. W. (2021). Green talent management and turnover intention: the roles of leader STARA competence and digital task interdependence. *Journal of Intellectual Capital*, 23(1), 27–55. <https://doi.org/10.1108/jic-01-2021-0016>
51. Oncioiu, I., Anton, E., Ifrim, A. M., & Mândricel, D. A. (2022). The influence of social networks on the digital recruitment of human resources: an empirical study in the tourism sector. *Sustainability*, 14(6), 3693. <https://doi.org/10.3390/su14063693>
52. Otmakhova, Y. S., Devyatkin, D. A., & Tikhomirov, I. A. (2022). Methods for Evaluation of the Region's Needs for Human Resources based on Statistics and Patent Landscapes. *Economy of Regions*, 18(2), 569–580. <https://doi.org/10.17059/ekon.reg.2022-2-19>
53. Ozkanli, F. M., & Gök, S. (2025). HR analytics maturity indicators: developing a measurement scale. *Journal of Work-Applied Management*, 1–16. <https://doi.org/10.1108/jwam-05-2025-0083>
54. Panda, G., Dash, M. K., Samadhiya, A., Kumar, A., & Mulat-Weldemeskel, E. (2023). Artificial intelligence as an enabler for achieving human resource resiliency: past literature, present debate and future research directions. *International Journal of Industrial Engineering and Operations Management*, 6(4), 326–347. <https://doi.org/10.1108/ijieom-05-2023-0047>
55. Passalacqua, M., Pellerin, R., Magnani, F., Joblot, L., Rosin, F., Yahia, E., & Léger, P. (2025). Safeguarding worker psychosocial well-being in the age of AI: The critical role of decision control. *International Journal of Human-Computer Studies*, 205, 103649. <https://doi.org/10.1016/j.ijhcs.2025.103649>
56. Patil, B., & Priya, S. R. (2024). HR data analytics and evidence based practice as a strategic business partner. *Vilakshan – XIMB Journal of Management*, 21(1), 114–125. <https://doi.org/10.1108/xjm-07-2023-0148>
57. Peeters, T., Paauwe, J., & Van De Voorde, K. (2020). People analytics effectiveness: developing a framework. *Journal of Organizational Effectiveness People and Performance*, 7(2), 203–219. <https://doi.org/10.1108/joepp-04-2020-0071>
58. Pessach, D., Singer, G., Avrahami, D., Ben-Gal, H. C., Shmueli, E., & Ben-Gal, I. (2020). Employees recruitment: A prescriptive analytics approach via machine learning and mathematical programming. *Decision Support Systems*, 134, 113290. <https://doi.org/10.1016/j.dss.2020.113290>
59. Pourhosein, M., & Sabokro, M. (2025). Unveiling the gaze: deciphering key factors in selecting knowledge workers through eye-tracking analysis. *European Journal of Management Studies*, 30(1), 75–94. <https://doi.org/10.1108/ejms-10-2024-0106>

60. Prentice, C., Wong, I. A., & Lin, Z. (2023). Artificial intelligence as a boundary-crossing object for employee engagement and performance. *Journal of Retailing and Consumer Services*, 73, 103376. <https://doi.org/10.1016/j.jretconser.2023.103376>
61. Qawasmeh, E., Qawasmeh, F., & Daoud, M. K. (2024). Digital transformation in HRM: Leveraging AI and big data for employee engagement and retention. *Journal of Ecohumanism*, 3(3), 2044–2051. <https://doi.org/10.62754/joe.v3i3.3479>
62. Raß-Kettler, K., & Lehnervp, B. (2019). Recruitment in the times of machine learning. *Management Systems in Production Engineering*, 27(2), 105–109. <https://doi.org/10.1515/mspe-2019-0018>
63. Rana, A., & Sachdeva, G. (2025). Exploring human resource analytics in transformative organizational contexts: a comprehensive bibliometric analysis. *Digital Transformation and Society*, 1–15. <https://doi.org/10.1108/dts-07-2025-0218>
64. Revillod, G. (2024). Why do Swiss HR departments dislike algorithms in their recruitment process? An empirical analysis. *Administrative Sciences*, 14(10), 253. <https://doi.org/10.3390/admsci14100253>
65. Rigamonti, E., Colaiacovo, B., Gastaldi, L., & Corso, M. (2024). HR analytics and the data collection process: the role of attributions and perceived legitimacy in explaining employees' fear of datafication. *Journal of Organizational Effectiveness People and Performance*, 12(5), 1–23. <https://doi.org/10.1108/joepp-06-2023-0246>
66. Rigotti, C., & Fosch-Villaronga, E. (2024). Fairness, AI & recruitment. *Computer Law & Security Review*, 53, 105966. <https://doi.org/10.1016/j.clsr.2024.105966>
67. Rožman, M., Tominc, P., & Milfelner, B. (2023). Maximizing employee engagement through artificial intelligent organizational culture in the context of leadership and training of employees: Testing linear and non-linear relationships. *Cogent Business & Management*, 10(2). <https://doi.org/10.1080/23311975.2023.2248732>
68. Rukadikar, A., & Khandelwal, K. (2024). Navigating change: a qualitative exploration of chatbot adoption in recruitment. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2345759>
69. Sarbadhikari, S. N., & Pradhan, K. B. (2020). The need for developing Technology-Enabled, safe, and ethical workforce for healthcare delivery. *Safety and Health at Work*, 11(4), 533–536. <https://doi.org/10.1016/j.shaw.2020.08.003>
70. Sharif, M. M., & Ghodoosi, F. (2022). The ethics of blockchain in organizations. *Journal of Business Ethics*, 178(4), 1009–1025. <https://doi.org/10.1007/s10551-022-05058-5>
71. Sharma, P., Bhattacharya, S., & Bhattacharya, S. (2025). HR analytics and AI adoption in IT sector: reflections from practitioners. *Journal of Work-Applied Management*. <https://doi.org/10.1108/jwam-12-2024-0179>
72. Soleimani, M., Intezari, A., Arrowsmith, J., Pauleen, D. J., & Taskin, N. (2025). Reducing AI bias in recruitment and selection: an integrative grounded approach. *The International Journal of Human Resource Management*, 36(14), 2480–2515. <https://doi.org/10.1080/09585192.2025.2480617>
73. Soleimani, M., Intezari, A., & Pauleen, D. J. (2021). Mitigating cognitive biases in developing AI-Assisted recruitment systems. *International Journal of Knowledge Management*, 18(1), 1–18. <https://doi.org/10.4018/ijkm.290022>
74. Sony, M. a. a. M., Amin, M. B., Ashraf, A., Islam, K. A., Debnath, N. C., & Debnath, G. C. (2025). Bias in AI-driven HRM systems: Investigating discrimination risks embedded in AI recruitment tools and HR analytics. *Social Sciences & Humanities Open*, 12, 102082. <https://doi.org/10.1016/j.ssaho.2025.102082>
75. Stavbunuk, Y. (2025). Application of artificial intelligence in human capital management of the civil service: predicting career trajectories and personalized personnel development. *Periodicals of Engineering and Natural Sciences (PEN)*, 13(4), 859–872. <https://doi.org/10.21533/pen.v13.i4.1156>

76. Tay, C. E., Ying, C. Y., Yeo, S. F., & Cheah, C. S. (2024). Revolutionizing Recruitment: The rise of artificial intelligence in talent acquisition. *PaperAsia*, 40(6b), 191–199. <https://doi.org/10.59953/paperasia.v40i6b.270>
77. Tursunbayeva, A., Fernandez, V., Gallardo-Gallardo, E., & Moschera, L. (2025). Artificial intelligence and digital data in recruitment. Exploring business and engineering candidates' perceptions of organizational attractiveness. *European Management Journal*. <https://doi.org/10.1016/j.emj.2025.03.002>
78. Tursunbayeva, A., Pagliari, C., Di Lauro, S., & Antonelli, G. (2021). The ethics of people analytics: risks, opportunities and recommendations. *Personnel Review*, 51(3), 900–921. <https://doi.org/10.1108/pr-12-2019-0680>
79. Úbeda-García, M., Marco-Lajara, B., Zaragoza-Sáez, P. C., & Poveda-Pareja, E. (2025). Artificial intelligence, knowledge and human resource management: A systematic literature review of theoretical tensions and strategic implications. *Journal of Innovation & Knowledge*, 10(6), 100809. <https://doi.org/10.1016/j.jik.2025.100809>
80. Vereb, D., Krajcsák, Z., & Kozák, A. (2024). The importance of positive employee experience and its development through using predictive analytics. *Journal of Modelling in Management*, 20(1), 51–69. <https://doi.org/10.1108/jm2-02-2024-0057>
81. Wang, N., Zhang, X., Li, S., & Gao, X. (2025). Applications of artificial intelligence in enterprise human resource management. *Information Resources Management Journal*, 38(1), 1–19. <https://doi.org/10.4018/irmj.389707>
82. Weiyu, Z., Qiu, S., Mantovani, G. M., Ghardallou, W., Alazzam, F. a. F., & Comite, U. (2025). AI-Driven workforce productivity in developing economies. *Journal of Global Information Management*, 33(1), 1–27. <https://doi.org/10.4018/jgim.390793>
83. Wenting, L., Hussain, W. M. H. W., Xinlin, J., Na, M., & Alam, S. S. (2024). Analyzing the impact on talent acquisition and performance management. *Journal of Organizational and End User Computing*, 36(1), 1–30. <https://doi.org/10.4018/joeuc.342603>
84. Wulandari, A., & Diko, M. a. I. M. J. (2024). HR Management Transformation in Indonesia MSMEs: The role of AI in SOP making and recruitment. *Journal of Ecohumanism*, 3(7). <https://doi.org/10.62754/joe.v3i7.4641>
85. Zhang, X., & Yim, S. (2025). Assessing the key drivers of acceptance of AI-based employee management across varied levels of employees working in the Australian IT industry. *International Journal of Public Policy and Administration Research*, 12(2), 151–167. <https://doi.org/10.18488/74.v12i2.4269>
86. Zheng, F., Zhao, C., Usman, M., & Poulova, P. (2024). From Bias to Brilliance: The impact of artificial intelligence usage on recruitment biases in China. *IEEE Transactions on Engineering Management*, 71, 14155–14167. <https://doi.org/10.1109/tem.2024.3442618..>

