



## Opportunities and Challenges of AI Implementation in Human Resource Management: A Systematic Review

**Muskan Dwivedi**

ICFAI University, Jharkhand, India

\* Corresponding Author: **Muskan Dwivedi**

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### Abstract

Artificial intelligence (AI) significantly impacts human resource management (HRM), reshaping the nature of work, workers, and workplaces. Although AI-assisted HRM is viewed as a valuable strategy for enhancing organizational productivity, research on AI technologies in HRM remains limited and fragmented, resulting in a lack of comprehensive understanding of their effects at both organizational and individual levels. To address these gaps, this study presents a systematic literature review (SLR) of 54 relevant articles published in Scopus and Web of Science indexed journals. The findings reveal that intelligent automation offers new methods for managing employees and boosting firm performance while also presenting challenges related to adoption and ethics. Key HRM strategies affected include recruitment, performance evaluation, training, employee engagement, and compensation. The study establishes a strategic framework for integrating research on AI applications in HRM, along with testable propositions for future research.

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### 1. Introduction

Artificial intelligence (AI) is redefining human resource management (HRM) by transforming the nature of work, workers, and organizational practices. As a sub-function of management, HRM encompasses processes such as hiring, training, evaluating, and compensating employees, while addressing labor relations, health and safety, and fairness. AI, a branch of computer science focused on imitating intelligent human behaviour introduces a potentially transformative force that alters management roles and decision-making processes. While human decision-making often relies on experience and intuition, AI utilizes statistical models to provide options with improved speed, objectivity, and accuracy.

The integration of AI in HRM can enhance core competencies and business processes, significantly impacting customer satisfaction and service quality outcomes. Nevertheless, while AI is heralded as a strategic asset in HRM, there is a fragmented understanding of its implications both at the organizational and individual levels. This research seeks to address this gap by systematically reviewing existing literature on AI applications in HRM, focusing on its contributions and the challenges it presents.

The current study emphasizes the importance of understanding the potential impacts of AI on HRM processes and functions, highlighting the need for further exploration of issues such as ethical constraints, employee reactions, and the overall effectiveness of AI in enhancing workplace dynamics. These concerns underscore the necessity for comprehensive research to clarify how AI technologies are experienced within HRM practices and their cost-effectiveness in achieving better employee and organizational outcomes (Malik *et al.*, 2023) <sup>[27]</sup>.

Building on these insights, the objectives of this research are threefold: to explore the potential impacts of AI on various sub-functions of HRM, to identify the key implementation challenges associated with AI in HRM, and to examine the ethical considerations arising from its use.

## 2. Literature Review

Artificial Intelligence (AI) has rapidly evolved into a fundamental component of modern organizations, significantly reshaping Human Resource Management (HRM) by altering the dynamics of work, workers, and workplace practices. Over the past decade, AI tools and digital platforms have emerged as essential assets for businesses, driven by their ability to automate processes, analyze vast data sets, and deliver precise predictions (von Krogh, Roberson, & Gruber, 2023). The introduction of AI in HRM opens new avenues for recruitment, performance management, and employee engagement, fundamentally transforming HR responsibilities and enhancing organizational efficiency.

The scholarship on AI in HRM has seen notable growth in recent years (Budhwar *et al.*, 2022; Chowdhury *et al.*, 2023)<sup>[8,9]</sup>. Research indicates that AI-based machine learning (ML) tools facilitate diversity in hiring, streamline recruitment processes (Pan *et al.*, 2022), and enhance employee experiences through intelligent support systems (Malik *et al.*, 2022)<sup>[32]</sup>. However, ethical concerns persist, such as algorithmic bias leading to discriminatory hiring practices and the deskilling of professional roles. Despite the advantages, there is a fragmented understanding of AI's implications in HRM, necessitating cohesive research to address potential job displacement and ethical considerations (Chowdhury *et al.*, 2022; Kelan, 2023)<sup>[9]</sup>.

AI encompasses various fields, including machine learning, natural language processing, and robotics. AI's capability to analyze big data can surpass traditional human performance, enhancing HRM tasks. AI technologies, such as NLP, facilitate improved communication and learning from data over time, making them valuable for automating HRM processes.

The concept of Industry 4.0 further emphasizes the interconnectivity of machines through AI, driving efficiency in operational decision-making. As organizations navigate the socio-economic challenges posed by these technological advancements, developing HRM strategies that attract talent while fostering an adaptable workforce becomes essential.

Robotic Process Automation (RPA) represents a critical area for HRM, automating repetitive tasks and freeing human employees for strategic roles. While RPA boosts efficiency, it also requires careful attention to the balance between automation and human oversight to address ethical concerns. Despite the numerous advantages of AI in HRM—improving operational efficiency, enhancing recruitment, and providing real-time feedback (Hazem *et al.*, 2024)—challenges remain. Employees may experience fear and resistance to AI adoption, necessitating proper training to ensure effective utilization. Furthermore, organizations must navigate ethical dilemmas surrounding privacy, data security, and algorithmic bias to ensure fair HR practices (Hazem *et al.*, 2024).

In conclusion, the literature on AI in HRM reveals a complex landscape that, while holding significant potential for enhancing HRM processes, also requires a thorough

understanding of the accompanying ethical, practical, and operational challenges. Continued exploration of these themes is vital as organizations integrate AI into their HRM frameworks.

## 3. Research Methodology

The systematic literature review in the current study is based on the preferred reporting items for systematic reviews and meta-analysis (PRISMA) methodology (Page *et al.*, 2021), which helped identify the relevant literature on AI in HRM. The SLR is usually conducted as the synthesis of research articles is transparent and must be documented at each stage (Pereira *et al.*, 2023)<sup>[43]</sup>. In addition, SLR is also required when the subject area is delimited in understanding the current state of the subject area and when the research needs to be context-specific (Pereira *et al.*, 2023)<sup>[43]</sup>. The PRISMA method in SLR follows three stages: Identification, Screening, and Inclusion (Pereira *et al.*, 2023)<sup>[43]</sup>.

### 3.2.1 Stage 1: Identification

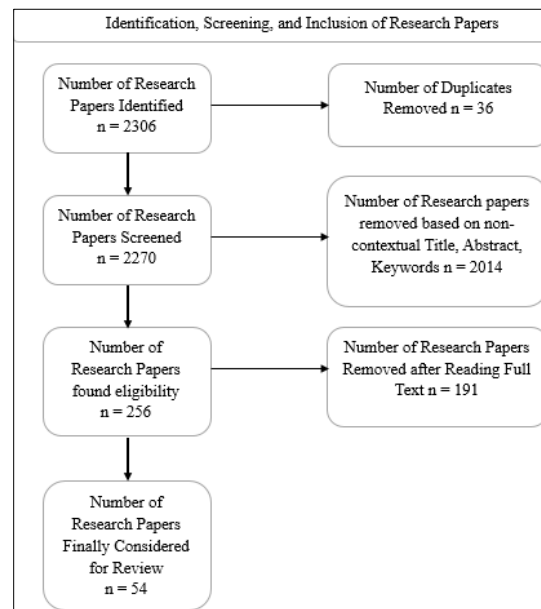
In the first stage, Boolean operators were used to identify relevant articles from Google Scholar database. In the Boolean search strategy, the keywords were 'Artificial Intelligence', 'AI', 'Human Resource Management', 'HRM', 'HR', 'Digitization', 'Automation' with the OR functionality between keywords and the AND functionality within keywords. The publications included only journal articles. The language of the articles was limited to English. The search period was restricted to last 5 years period from 2020 to 2024 to stay focused with only recent articles. As for another restriction, only those research articles were considered for the current study that were indexed with Scopus or Web of Science databases.

### 3.2.2. Stage 2: Screening

The screening stage consisted of going through the title, abstract, and keywords to filter articles that did not satisfy the search context. Screening involved multi-stage filtering using keywords, abstracts, journals, and full-text articles. Out of  $n = 2306$  records, this yielded  $n = 256$  records that discussed the application of AI in HRM in totality or specifically to HR functions like recruitment/ hiring, selection, performance management, learning and development, and rewards, which could be further considered for analysis. After reviewing the literature,  $n = 192$  records that did not satisfy the search criteria were removed.

### 3.2.3 Stage 3: Inclusion

Finally,  $n = 54$  records were considered. Relevant articles from the database and other articles through snowballing references were considered for the study. Figure 1 provides the systematic flowchart based on the PRISMA methodology in identifying the records considered for the literature review. Table 1, Table 2, and Table 3 presents the list of all the 54 research articles under review with title and author details.



**Fig 1:** SLR – PRISMA Method of Reporting Inclusion and Exclusion of Records

**Table 1:** List of all the Research Articles under Review with Title and Author

SL No.	Authors	Research Journal Title	Research Focus Area
1	Avrahami et al. (2022)	Blended Diffusion for Text-driven Editing of Natural Images	Workforce Planning
2	Budhwar et al. (2022)	Artificial intelligence – challenges and opportunities for international HRM: a review and research agenda	Compensation Training & Development Leadership & Decision Making Performance Evaluation Workforce Planning
3	Periera et al. (2021)	Extending the resource and knowledge based view: A critical analysis into its theoretical evolution and future research directions	Employee Health and Well-Being
4	Margherita (2022)	Human resources analytics: A systematization of research topics and directions for future research	Workforce Planning Performance Evaluation Recruitment Recruitment Workforce Planning
5	Bhatt (2022)	AI adoption in the hiring process – important criteria and extent of AI adoption	Recruitment
6	Rantanen et al. (2020)	Classifying online corporate reputation with machine learning: a study in the banking domain	Employee Health and Well-Being Recruitment Employee Engagement
7	Rodgers et al. (2023)	An artificial intelligence algorithmic approach to ethical decision-making in human resource management processes	Employee Health and Well-Being Employee Self Service Recruitment
8	Ore and Sposato (2022)	Opportunities and risks of artificial intelligence in recruitment and selection	Recruitment
9	Pan et al. (2021)	The adoption of artificial intelligence in employee recruitment: The influence of contextual factors	Recruitment
10	Pereira et al. (2023)	A systematic literature review on the impact of artificial intelligence on workplace outcomes: A multi-process perspective	Training & Development Performance Evaluation Recruitment
11	Votto et al. (2021)	Artificial Intelligence in Tactical Human Resource Management: A Systematic Literature Review	Training & Development Performance Evaluation Recruitment Employee Engagement
12	Vrontis et al. (2022)	Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review	Employee Health and Well-Being Training & Development Performance Evaluation Recruitment Recruitment
13	Black and van Esch (2021)	AI-enabled recruiting in the war for talent	Recruitment
14	Demir et al. (2020)	Understanding Human-Robot Teams In Light Of All-Human Teams: Aspects Of Team Interaction And Shared Cognition	Recruitment
15	Kim and Hao (2021)	Artificial intelligence video interviewing for employment: perspectives from applicants, companies, developer and academicians	Recruitment
16	Kshetri (2021)	Evolving uses of artificial intelligence in human resource management in emerging economies in the global South: some preliminary evidence	Recruitment
17	Mirowska and Mesnet (2022)	Preferring the devil you know: Potential applicant reactions to artificial intelligence evaluation of interviews	Recruitment
18	Ochmann and Laumer (2020)	AI Recruitment: Explaining job seekers' acceptance of automation in human resource management	Recruitment
19	Yang (2022)	Artificial intelligence-based organizational human resource management and operation system	Recruitment
20	Rezzani et al. (2020)	An analysis of the literature about the application of Artificial Intelligence to the Recruitment and Personnel Selection	Recruitment
21	da Silva et al. (2022)	Human resources management 4.0: Literature review and trends	Recruitment

**Table 2:** List of all the Research Articles under Review with Title and Author

Sl. No.	Authors	Research Journal Title	Research Focus Area
22	Allal-Ch'arif et al., (2021)	Intelligent recruitment: How to identify, select, and retain talents from around the world using artificial intelligence	Recruitment
23	Malik et al. (2021a)	Elevating talents' experience through innovative artificial intelligence-mediated knowledge sharing: Evidence from an IT-	Employee Engagement
24	Malik et al. (2021b)	Impact of artificial intelligence on employees working in industry 4.0 led organizations	Performance Evaluation
25	Tong et al. (2021)	The Janus face of artificial intelligence feedback: Deployment versus disclosure effects on employee performance	Performance Evaluation
26	Kaushal et al., (2023)	Artificial intelligence and HRM: identifying future research Agenda using systematic literature review and bibliometric analysis	Employee Experience
27	Dutta et al. (2022)	Augmented employee voice and employee engagement using artificial intelligence-enabled chatbots: a field study	Employee Experience
28	Pillai et al. (2023)	Adoption of artificial intelligence (AI) based employee experience (EEX) chatbots	Employee Experience
29	Chowdhury et al. (2023)	Unlocking the Value of Artificial Intelligence in Human Resource Management through AI Capability Framework	Employee Experience
30	Langer and Konig (2023)	Introducing a multi-stakeholder perspective on opacity, transparency and strategies to reduce opacity in algorithm-based human resource management	Employee Experience
31	Malik et al. (2023b)	Artificial Intelligence (AI)-assisted HRM: Towards an Extended Strategic Framework	Employee Experience
32	Kong et al. (2021)	Influences of artificial intelligence (AI) awareness on career competency and job burnout	Employee Experience
33	Malik et al. (2022b)	May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE	Employee Engagement
34	Hmoud (2021)	The adoption of artificial intelligence in Human Resource Management	Leadership & Decision Making
35	Manuti and Monachino (2020)	Managing Knowledge At The Time Of Artificial Intelligence: An Explorative Study With Knowledge Workers	Leadership & Decision Making
36	Nankervis et al. (2021)	Are we there yet? Australian HR professionals and the Fourth Industrial Revolution	Leadership & Decision Making
37	Wang et al. (2022)	How to survive in the age of artificial intelligence? Exploring the intelligent transformations of SMEs in central China	Leadership & Decision Making
38	Pillai and Sivathanu (2020)	Adoption of artificial intelligence (AI) for talent acquisition in IT/ITeS organizations	Training & Development
39	Agarwal (2022)	AI adoption by human resource management: a study of its antecedents and impact on HR system effectiveness	Training & Development
40	Arslan et al. (2022)	Artificial intelligence and human workers interaction at team level: a conceptual assessment of the challenges and potential HRM strategies	Employee Self Service
41	Krakowski et al. (2023)	Artificial intelligence and the changing sources of competitive advantage	Employee Self Service
42	Del Giudice et al. (2022)	Humanoid robot adoption and labour productivity: A perspective on ambidextrous product innovation routines	Employee Self Service
43	Parent-Rochelleau and Parker (2022)	Algorithms as work designers: How algorithmic management influences the design of jobs	Job Design
44	Tursunbayeva and Renkema (2022)	Artificial intelligence in healthcare: implications for the job design of healthcare professionals	Job Design
45	Malik et al. (2022a)	Towards a Conceptual Model of AI-Mediated Knowledge Sharing Exchange of HRM Practices: Antecedents and Consequences	Employee Self Service



**Table 3:** List of all the Research Articles under Review with Title and Author

Sl. No.	Authors	Research Journal Title	Research Focus Area
46	Varma et al. (2022)	Artificial intelligence and people management: A critical assessment through the ethical lens	Leadership & Decision Making
47	Prikshat et al. (2023b)	AI-Augmented HRM: Literature review and a proposed multilevel framework for future research	Leadership & Decision Making
48	Giraud et al. (2022)	The impacts of artificial intelligence on managerial skills	Leadership & Decision Making
49	Johnson et al. (2022)	Digital innovation and the effects of artificial intelligence on firms' research and development – Automation or augmentation, exploration or exploitation?	Leadership & Decision Making
50	Leyer and Schneider (2021)	Decision augmentation and automation with artificial intelligence: Threat or opportunity for managers?	Leadership & Decision Making
51	Pan and Froese (2022)	An interdisciplinary review of AI and HRM: Challenges and future directions	Leadership & Decision Making
52	Hamilton and Davison (2022)	Legal and Ethical Challenges for HR in Machine Learning	Leadership & Decision Making
53	Malik et al. (2020)	Gig Economy, 4IR and Artificial Intelligence: Rethinking Strategic HRM	Leadership & Decision Making
54	Basu et al. (2023)	Artificial Intelligence–HRM Interactions and Outcomes: A Systematic Review and Causal Configurational Explanation	Leadership & Decision Making

#### 4. Findings

The SLR based on context and content analysis of 54 journal articles highlighted that the scope of what AI in HRM comprise of is quite broad, fragmented and diverse. The research articles considered for review discusses the use of AI on diverse areas within the realm of HRM like – compensation, employee engagement, employee experience, employee health and well-being, employee self-service, employee skill development, job design, performance evaluation recruitment, leadership and decision making, and workforce planning.

##### Compensation

AI automates payroll management, efficiently handling employee data and tracking changes (Budhwar *et al.*, 2022) [8]. It helps track the skill supply-demand gap, aiding the development of compensation and benefits plans by calculating salary parameters based on job roles. AI tools ensure equitable compensation based on objective factors such as education and experience while mitigating biases related to gender, race, and age. Establishing operational management practices is critical for training AI to measure fair remuneration effectively and address inequities (Avrahami *et al.*, 2022) [4]. Furthermore, data analytics allow HR departments to maintain ethical compensation practices while focusing on strategic tasks, enhancing trust in the process (Votto *et al.*, 2021) [54].

##### Employee Engagement

AI significantly enhances employee engagement by learning from past patterns to establish benchmarks for engagement and turnover. AI-powered surveys provide actionable insights that boost employee satisfaction and retention. HR practitioners leverage AI to foster internal mobility and assess job satisfaction through tailored feedback mechanisms. AI technologies can predict potential turnover, enabling HR to implement proactive retention strategies. By gauging employee sentiment and providing insights, AI contributes to a positive corporate reputation.

##### Employee Experience

AI technologies, particularly chatbots utilizing natural

language processing (NLP), improve the overall employee experience by managing alerts and ensuring fair decision-making (Varma *et al.*, 2022) [53]. These AI models enhance trust through increased explainability (Chowdhury *et al.*, 2023) [9] and offer personalized feedback, which promotes better interactions between employees and the organization. They enhance HR cost-effectiveness through personalized services (Dutta *et al.*, 2022; Malik *et al.*, 2023b) [27, 13]. These systems streamline communication, enabling rapid responses to employee inquiries and improving organizational efficiency by analysing large datasets (Pereira *et al.*, 2023) [43].

##### Employee Health and Well-Being

AI tools in HRM help minimize risks associated with work-related disorders and improve employee safety and satisfaction (Pereira *et al.*, 2023) [43]. They support work-life balance and address psychological needs, facilitating personalized coaching and career advice. By adapting to employees' habits, AI fosters a supportive environment that enhances job satisfaction and motivation. Additionally, AI technologies can monitor mood and anxiety levels, allowing HR departments to intervene before issues escalate (Deepa *et al.*, 2024).

##### Employee Skill Development

AI analyzes employee skills to recommend tailored training programs, identifying specific training needs based on historical performance data. It supports e-learning systems, offering customized experiences that allow employees to enhance their skills independently (Budhwar *et al.*, 2022) [8]. Real-time feedback from AI reduces HR managers' administrative workload while facilitating skill tracking and internal mobility.

##### Job Design

AI improves job design by automating routine tasks and aligning jobs with necessary skills (Parent-Rochelleau and Parker, 2022; Tursunbayeva and Renkema, 2022) [41, 52]. This streamlining of HR processes, such as candidate pre-screening and interview scheduling, frees HR professionals to focus on strategic planning, enhancing overall task

execution.

### Performance Evaluation

AI optimizes job performance by continuously analyzing employee productivity and engagement levels (Pereira *et al.*, 2023) <sup>[43]</sup>. AI-generated feedback has been shown to be more effective than traditional methods, facilitating personalized employee training and targeted development initiatives.

### Leadership and Decision Making

AI enhances leadership decision-making by providing comparative analyses of management styles and enabling rapid judgments, leading to improved organizational design (Vrontis *et al.*, 2021) <sup>[55]</sup>. Nonetheless, AI must remain subordinate to human judgment, emphasizing the importance of transparency in decision-making (Rodgers *et al.*, 2023) <sup>[50]</sup>.

### Recruitment

AI automates many recruitment tasks, allowing HR to focus on strategic functions (Bhatt, 2022) <sup>[6]</sup>. It efficiently matches candidates to job requirements, reducing administration time and increasing relevance (Pan *et al.*, 2021).

### Workforce Planning

AI tools optimize labor demand and supply through predictive analytics, enhancing workforce collaboration and performance (Pereira *et al.*, 2023) <sup>[43]</sup>. Investing in human capital is essential to maximize AI benefits and ensure effective human-AI interactions.

### Ethical Concerns of Using AI in HRM

The growing adoption of AI-enabled applications in organizations has led to significant discussions around ethics, accountability, trust, fairness, and legal implications in workplace settings. A major concern is related to equity, diversity, and inclusion (EDI), as demonstrated by early AI applications in large tech companies like Amazon, which exhibited biases against women in hiring practices. Similar biases have been noted against people of colour in promotions and career advancements, indicating a pressing need for higher-quality AI applications to mitigate these issues (Budhwar *et al.*, 2022) <sup>[8]</sup>.

Research highlights the need for AI service quality and effective knowledge sharing within organizations to enhance employee experiences and customer satisfaction. However, comprehensive literature reviews addressing these topics remain scarce (Dwivedi *et al.*, 2021; Robert *et al.*, 2020). The responsibility associated with AI decisions presents challenges, particularly when moral values are overlooked. Employees may resist AI-driven decisions perceived as biased against specific groups, raising concerns in diverse organizational settings.

AI performs better than humans in repetitive tasks but falls short in heterogeneous, nuanced scenarios. Thus, defining clear decision-making boundaries for algorithms is crucial for ethical AI deployment. Trust in AI is frequently questioned; cognitive trust can be built through transparency, reliability, and task characteristics (Budhwar *et al.*, 2022) <sup>[8]</sup>. However, empirical research focusing on trust issues surrounding AI adoption in HRM systems remains limited.

## 5. Discussion

AI's computational power enhances human decision-making by augmenting rather than replacing human efforts. This

synergy can improve employees' decision-making capabilities, freeing time for complex tasks and fostering creativity, thereby boosting productivity. Initially perceived as mere tools, AI is evolving into a collaborative partner that embodies "collective intelligence," enabling both machines and humans to create, decide, learn, and evolve together. Effective AI collaboration involves AI systems that can engage in complex problem-solving activities—defining issues, proposing and evaluating solutions, and participating in after-action reviews (Chawdhury *et al.*, 2023).

Challenges arise in socializing AI within organizations, particularly concerning human perceptions of AI teammates. Questions about aesthetics, accountability, and labour division surface, alongside concerns regarding AI's potential for poor decision-making and job losses. Limited consensus exists on the emergence of new jobs due to AI, their meaningfulness, or the redesign of human roles, complicating the integration of AI in the workplace. Knowledge-sharing strategies can mitigate employee scepticism regarding AI by increasing awareness and understanding of AI systems, which in turn can foster collaboration.

To facilitate AI integration, three new job categories are emerging: *trainers*, who prepare AI systems to boost performance; *explainers*, who clarify AI outputs to build stakeholder trust; and *sustainers*, who ensure the ethical governance of AI to mitigate risks. While organizations recognize the potential benefits of AI, many struggle to effectively augment human capabilities due to a lack of understanding of the technology (Budhwar *et al.*, 2022) <sup>[8]</sup>.

Despite recognition of AI's advantages, significant barriers hinder its adoption in HRM. Most pertinent is the opacity in how AI-based systems influence employee-related decisions. A perceived lack of mobility raises fears regarding job stability, exacerbating resistance to new technologies (Budhwar *et al.*, 2022) <sup>[8]</sup>. Addressing employee fears surrounding AI's implementation necessitates meaningful training, which helps alleviate negative perceptions and fosters a more positive attitude towards adaptation. Comprehensive training prepares employees to engage with new technologies, enhancing their comfort and effectiveness in their roles. An organizational culture that embraces continuous adaptation can integrate better with new technologies.

AI's integration into HRM functions, especially in performance management and training, can enhance organizational communication (Budhwar *et al.*, 2022) <sup>[8]</sup>. Companies like IBM leverage clear dialogues between management and employees regarding insights gleaned from AI analytics. A feedback loop is crucial for fostering innovation, and advanced communication technologies can enrich information flow between employees and managers, thereby strengthening collaboration.

AI-enabled HRM can significantly boost employee outcomes, including job satisfaction, commitment, engagement, and overall performance (Budhwar *et al.*, 2022) <sup>[8]</sup>. By automating routine tasks, AI allows employees to engage in more meaningful work, presumably leading to positive experiences in the workplace. However, heightened reliance on AI may also lead to negative consequences such as job insecurity, increased turnover intentions, and stress in response to new technologies.

AI's impact extends beyond individual employees to overall business performance. The adoption of AI in HRM can drive productivity gains, cost reductions, and operational

efficiencies (Budhwar *et al.*, 2022) [8]. Additionally, companies utilizing AI can achieve Cost-Effective Service Excellence (CESE), exemplified by leaders like Amazon and Singapore Airlines. Emerging technologies such as AI and big data offer substantial opportunities to improve service quality, customer experiences, and operational productivity. Despite positive outcomes, there are considerable risks associated with AI in HRM. Misapplication of AI technologies may lead to high turnover rates, and while service robots can enhance market efficiency, they cannot replicate the emotional intelligence required in high-complexity service tasks. Thus, the reliance on AI may undermine employee job security and overall engagement. The advent of various AI technologies, including robotic process automation and natural language processing, presents unique opportunities for organizational redesign and process innovation (Kiron, 2022; Schrage *et al.*, 2023). While AI has revolutionized several functions, clear distinctions between realistic capabilities and exaggerated promises are essential. Effective integration remains a substantial challenge that necessitates rigorous training and contextualization of AI outputs.

Although the AI-HRM intersection is still an emerging field, the increasing understanding of AI's potential benefits enhances employee engagement, satisfaction, and retention. However, potential negative outcomes, such as high turnover and diminished job satisfaction, necessitate careful examination.

Overall, while AI has demonstrated considerable advantages, human workers remain irreplaceable due to their unique abilities in managing complex and nuanced interactions. Augmenting human capabilities with AI rather than complete replacement offers an optimal path forward, as both can thrive together. Although the literature on AI in International HRM remains limited, growing empirical evidence suggests the necessity for organizations to adapt to this evolving landscape.

## 6. Conclusion

AI adoption impacts work design and productivity while may risk to employee well-being. A balanced partnership between AI and human intelligence can enhance productivity, reduce turnover, and improve psychological outcomes. Managers should implement mechanisms to facilitate knowledge sharing about AI processes and create a hybrid knowledge strategy that integrates codification and personalization. This will enable employees to evolve, driving innovation through collaborative knowledge creation. Furthermore, transparent communication regarding job design and the strategic goals associated with AI adoption is essential to foster understanding and trust among employees.

As AI significantly reshapes HRM, future research should explore its effects in international contexts, focusing on how country-specific factors influence AI adoption in HR practices. Understanding the context-dependent efficacy of AI tools is vital for evaluating their integration in global operations. Research on the impact of AI on employee attitudes during organizational changes will be beneficial, particularly from a cross-cultural perspective to capture variations in employee reception.

Exploring customer acceptance of AI technologies is also essential. Insights into customer perceptions and the contexts in which AI enhances service relationships can guide businesses in leveraging these technologies effectively.

Moreover, investigating the time-level effects of AI and robotics on HR processes can unpack the complex dynamics of workforce management, emphasizing the balance between traditional and novel approaches.

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