

Artificial Intelligence in Human Resource Management: A Systematic Review of Drivers, Challenges, and Future Pathways

Venkatesh Thulasidoss 

PhD Scholar/Senior Lecturer

School of Management, Hindustan University/ CECOS College London, UK

venkat.tutor@cecos.ac.uk

Mohamed Alfaz 

PhD Scholar/ Programme Manager for MBA, BA, and FDA courses

University of Greater Manchester, UK/ CECOS college London, UK

alfaz@cecos.ac.uk

Min Tamang* 

Business Lecturer

University of Gloucestershire/ CECOS College London, UK

min.tutor@cecos.ac.uk

Corresponding Author*

Type of Research: Review Article

Received: July 03, 2025;

Revised & Accepted: September 29, 2025

Copyright: Author(s), (2025)



This work is licensed under a [Creative Commons Attribution-Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Abstract

Background: In developed countries, recruitment agencies are preferring Artificial Intelligence (AI) technologies in hiring human resources in companies. AI integration has become essential in HRM. AI supports multiple functions such as finding the right employees, setting management goals, maintaining institutional knowledge, and modernising work styles.

Objectives: The study aims to examine the role and benefits of AI in HRM, assess the challenges, ethical concerns, and human–AI collaboration, and explore its practical applications and future directions.

Method: The research applies literature review as methodology to collect evidences regarding the roles and challenges of AI in the recruitment process through the perspective of the Diffusion of Innovation theory.

Findings: Findings shows that AI systems show enhanced efficiency throughout candidate screening processes and skills evaluation however human supervision stands essential to deal with biases and maintain fair recruitment procedures.

Conclusion: The research concludes that future recruitment will evolve into human-AI partnership models instead of machine-only automation while proposing industry standards and ethical frameworks and regulatory policies for implementation-guidance.

Novelty of the study: Unlike previous research, this paper synthesises how AI development is transforming human resource recruitment while also highlighting the barriers that hinder its effective implementation. A key contribution of this review is the introduction of the concept of human-centered AI in HRM, developed in line with Rogers' Diffusion of Innovation theory.

Keywords: artificial intelligence, autonomous hiring, machine learning, human Resources

Introduction

Human Resources Management (HRM) has experienced profound changes through Artificial Intelligence (AI) technologies in recruitment processes ([Upadhyay & Khandelwal, 2018](#)). The adoption of artificial intelligence has become widespread among hiring practices because AI provides both tracking systems and qualification assessment algorithms ([Bogen & Rieke, 2018](#)). The technological advancement prompts critical reflection about recruitment direction along with self-operating hiring systems potential. AI-driven recruitment finds its strongest justification in the information technology (IT) sector because it increases hiring process efficiency ([Hukkeri & Pol, 2025](#)). Modern recruitment systems use both basic keyword search techniques alongside sophisticated machine learning programs which measure candidate suitability through multiple qualifications ([Raghavan, Barocas, Kleinberg, & Levy, 2020](#)). Society remains divided about the path toward self-directed hiring platforms that would conduct the entire recruitment process unassisted yet faces numerous technical hurdles alongside ethical obstacles.

AI integration has become essential in HRM. AI supports multiple functions such as finding the right employees, setting management goals, maintaining institutional knowledge, and modernising work styles. By enhancing the employee experience, AI is revolutionising human resources. For leaders, researchers, and HR professionals looking to leverage technology to improve employee satisfaction and engagement, it offers insightful information ([Jayalakshmi & Jayanthi, 2024](#)). Interest in applying AI to HRM is rising in nations like Oman. AI chatbots have proven useful to employees in answering their questions and problems. Adoption of AI should be a major topic of conversation in organisations since it fits with their objectives. Although AI can pose challenges in employee hiring, it offers many advantages in improving HRM efficiency. AI needs to be included in organisational goals and HR practices ([Al Mandhari, 2024](#)). In manual employee selection, it is very difficult to choose the right person based only on resumes. AI is helpful in solving this problem ([Okeyika, Ibeto, Okere, & Umoh, 2023](#)).

This paper reviews AI adoption in human resource recruitment combined with an analysis of future trends and technological developments, then evaluates the possibility along with desirability of autonomous hiring systems. The study reviews scholarly publications on AI recruitment technology characteristics and explores its impact on fairness as well as diversity and candidate experiences and organisational outcomes. The review examines potential future developments between AI and recruitment professionals and establishes necessary frameworks to deliver technology benefits for all stakeholder groups.

Statement of the Problem

AI recruitment technology continues its rapid adoption path while organisations struggle to grasp its operational mechanisms which will affect their future operations ([Tambe, Cappelli, & Yakubovich, 2019](#)). The research investigation builds its primary focus on three fundamental matters. First, current evidence about the performance of AI recruitment tools versus classic human recruitment systems lacks sufficient documentation especially when recruiting IT specialists who require specialised technical aptitudes ([van Esch, Black, & Ferolie, 2019](#)). Second, organisations fail to overcome difficulties when deciding on AI implementation approaches because they lack comprehensive comparable data. Third, the development of AI recruitment technology has surpassed the development of necessary governance systems along with ethical standards and industry best practices ([Sánchez-Monedero, Dencik, & Edwards, 2020](#)).

Without proper regulations, new recruiting systems may present significant risks for employment discrimination alongside data privacy violations while reducing recruitment success. The path of automated hiring systems remains unclear because science has not determined the optimal relationship between employing human judgment and algorithmic decision making (see [Dastin, 2022](#)). Public and private organisations lack suitable plans to establish artificial intelligence recruitment protocols that combine ethical practices with large-scale hiring processes. Research should focus on how AI can automate HR tasks and help create smarter teams and decisions ([Budhwar, Malik, De Silva, & Thevisuthan, 2022](#)). The literature on AI's usefulness in HR tasks is lacking ([George, Thomas, Anusha, & Joy, 2021](#)). This research will review current AI technology in HRM and evaluates its roles, challenges, and future scope.

Objectives of Study

This research aims to achieve the following objectives:

1. To examine the role and benefit of AI in HRM
2. To assess the challenges, ethical concerns, and Human-Ai Collaboration
3. To explore practical applications and future directions of AI in HRM

Diffusion of Innovation (DOI) and the Integration of AI in HRM

According to [Rogers \(1983\)](#), diffusion is the process by which a new concept or technology gradually gains traction among people using various forms of communication. According to the theory, people adopt new technology in five main steps:

Knowledge: People initially hear about the technology and become familiar with its definition and operation.

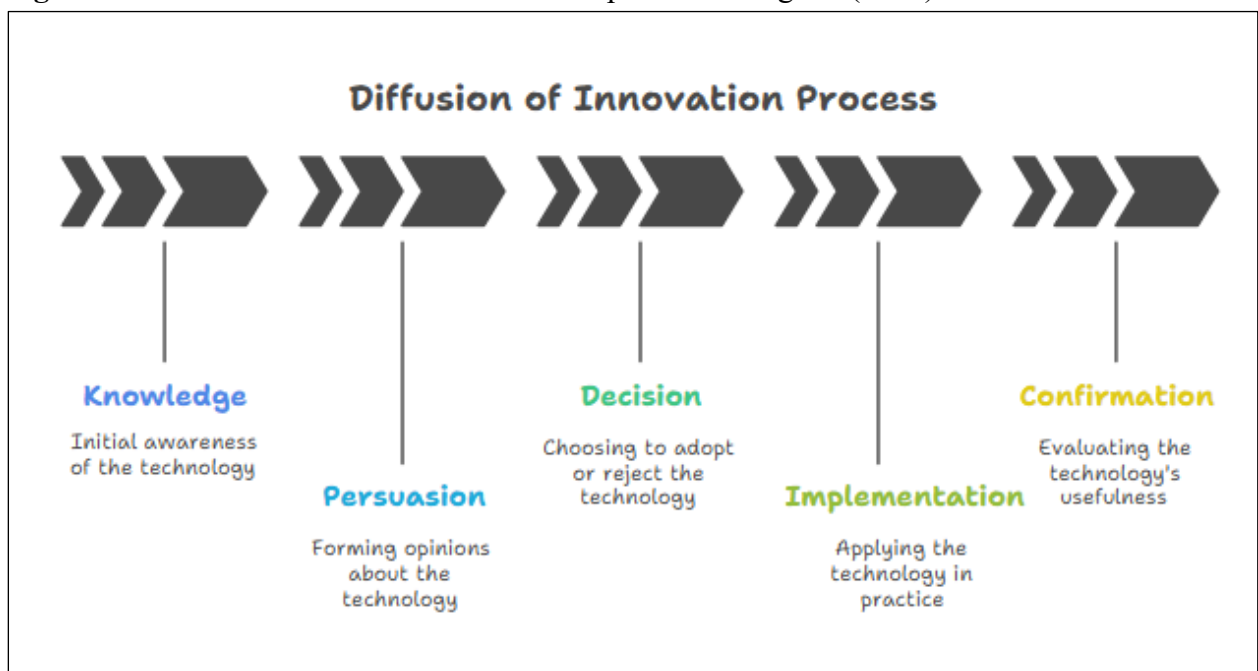
Persuasion: They begin to develop opinions about it; some may find it agreeable, while others may not.

Choice: They decide whether or not to test the technology.

Implementation: They start using it and observe its effects if they choose to use it.

Confirmation: After using it for some time, they consider its usefulness and determine whether to continue or discontinue (Pg. 20)

Figure 1 Diffusion of Innovation Process: Adapted from Roger's (1983)



[Figure 1](#) illustrates the five steps of the DOI theory as propounded by [Rogers \(1983\)](#). Rogers defines diffusion as “the process in which an innovation is communicated through certain channels over time among the members of a social system” ([Sahin, 2006](#), p. 5). This theory has been used in many fields to understand how innovations spread in society and to identify the factors that support or prevent this diffusion ([El Malouf & Bahemia, 2025](#)). When a society is ready to embrace change, new technologies have a greater chance of becoming widely used. Whether a social system accepts or rejects innovation depends on its awareness, cultural values, and financial capacity ([Rogers, 1983](#)). DOI theory does not, however, ensure that innovations will proliferate without incident. For instance, policies, financing, credit availability, education, technology supply, and cultural circumstances all have an impact on the adoption of agricultural technology. The same applies to HRM. Technological advances often benefit those who are already privileged and can afford those ([Peixoto et al., 2021](#)).

In the corporate sector, research should now focus on assessing how Human Resource Information Systems (HRIS) are being used in organisations and how AI is helping to support

this process ([Tariq, Pangil, & Shahzad, 2017](#)). HRIS has improved the way companies operate, but adopting it requires proper IT infrastructure, financial investment, skilled human resources, and a culture that supports innovation ([Tariq et al., 2017](#)). New innovations in institutions can face resistance due to the need for large financial investments and a lack of interest in learning among employees ([Ahmer, 2013](#)). The Diffusion of Innovation (DOI) theory has also been used to study how people in Indian society adopt and use smartphone technology ([Wani & Ali, 2015](#)). In this research's context, the DOI theory helps explain how AI is spreading in HRM practices by identifying opportunities, challenges, and future directions.

Research Methodology

This research employs a literature review methodology to examine studies on HRM, HRM digitisation, and AI innovation in HRM ([Snyder, 2019](#)). We organised the process in accordance with [Snyder's \(2019\)](#) four steps: designing the review, conducting it, analysing the material, and writing the review. 37 of the 57 peer-reviewed studies on AI in HRM published after 2023 out of a total of 57 studies published between 1983 and 2025 were examined. The theoretical underpinnings of this study were largely established by publications prior to 2020, whereas more recent works demonstrated the increasing impact of generative AI, especially after ChatGPT was released in late 2022 ([Haleem et al., 2022](#)). The chosen studies covered a wide geographic range and were written in English.

Because Google Scholar is free, easily accessible, and covers a large number of scholarly publications, relevant articles were found using it ([Younger, 2010](#)). The query AI AND HRM was used in a Boolean search strategy ([Ugwu & Opah, 2023](#)). Three criteria were used to evaluate the publications' quality: (i) their applicability to the study's goals; (ii) their publication in peer-reviewed journals; and (iii) their methodological rigour and transparency (see [Nemec et al., 2020](#)). To direct data management, a review framework was created. Every document was methodically reviewed and documented in an Excel document. Each study was examined, important conclusions and arguments were noted, they were paraphrased, and the relevant citations were added. ATLAS.ti was then used to generate initial codes inductively, which were then combined into more general themes ([Lewis, 2016](#)). The findings, which are shown in the following section, were organised according to these emergent themes.

Current discussions and debates regarding the integration of AI in HRM are reflected in our thematic organisation ([Bin-Qiang et al., 2024](#)). The chosen literature supports the goal of this investigation and directly addresses problems pertaining to AI in HRM. To guarantee academic quality and standards, these works underwent a thorough review process ([Farrukh & Sajjad, 2023](#)). The following section presents the findings organised under thematic headings.

Findings

The research yielded several significant findings regarding the current state and future trajectory of AI in human resource recruitment. These findings are categorised into: *the role and benefits of AI in HRM; Challenges, ethical concerns, and Human-AI collaboration; and practical applications and future directions of AI in HRM.*

The Role and Benefits of AI in HRM

A progressive company is always searching for talented individuals based on merit. According to [AL Daradkeh & Al-Zoubi \(2024\)](#), businesses cannot overlook AI's role in hiring and training in the modern era. AI also helps organisations measure employee performance and contributions by recording, tracking, and analysing employee data. Management is able to better understand employee experiences and enhance the workplace as a result. But in order to advance professionally, staff members must also become familiar with and adjust to AI tools used by their company ([AL Daradkeh & Al-Zoubi, 2024](#)). Accuracy and data automation are just two advantages of using AI in HR. Additionally, it saves management money and time when hiring new staff ([Nawaz et al., 2024](#)). AI is being used more and more in HRM to improve the intelligence and efficiency of processes. It is especially useful in candidate sourcing, screening, assessments, and engagement ([George et al., 2021](#)). [Ahmed \(2018\)](#) informed AI robots like Sophia can interact with people using human-like expressions. Robotic tools are increasingly used in recruitment and HR functions. These tools help predict how a candidate could support the growth of an organisation.

[Orosoo et al. \(2023\)](#) admitted that companies are always looking for skilled and market-ready employees. The AI revolution has made this easier by automating the selection process in HR functions. It is also important to bridge the gap between AI and HRM because AI supports staff planning, job description development, staff capacity building, and task distribution. AI also helps analyze HR data. Therefore, AI plays a vital role in institutional HR functions. [Hijazi \(2025\)](#) agreed that AI supports HRM in three key areas: recruitment, performance evaluation, and employee engagement planning. It positively impacts HRM by helping managers build better relationships with staff. AI also offers personalised suggestions and feedback. Using data to predict future trends allows management to plan employee development and achieve organisational goals.

The use of AI in organisations is widespread due to globalisation and rising competition. [Haridasan \(2023\)](#) persuaded that companies are increasingly prioritising HRM to recruit the right candidates and promote employee growth. Traditional HR strategies are being replaced by technology for talent hunting, managing employees, offering benefits, and tracking organisational knowledge. However, many institutions still rely on manual communication due to a lack of AI awareness. AI helps screen candidates, plan employee training and development, and significantly reduce hiring costs since external consultants are not needed. AI also enables continuous staff appraisal without overburdening managers.

AI is increasingly used in HRM in both national and international organisations. [Budhwar et al. \(2022\)](#) agreed that AI has improved team efficiency and business outcomes. In HRM, AI helps make long-term decisions and find solutions to problems. More research is needed to understand how AI can improve HRM practices. In large organisations, AI is also used to develop virtual assistants to interact with customers. Many institutions are using AI-based intelligent technologies to manage their human resources. This innovation supports organisational growth and helps define a clear vision. However, AI should not only be used for

selecting employees. It also has many unexplored uses that could benefit organisations ([Palos-Sánchez et al., 2022](#)).

Numerous HR tasks, such as hiring, work division, staff engagement, and appraisal, are routine in organisations. These tasks take time and effort. AI can manage them effectively, negating the need for specialised personnel. It also helps screen CVs more effectively, lowering the burden on the HR team. Many organisations are now using AI-based recruitment systems to select the best candidates ([Bhagyalakshmi & Maria, 2020](#)). Developing human capital is a key priority for any organisation, and AI can help. It facilitates career advancement, skill development, and individualised learning. AI makes employees more efficient and creates a positive work environment by reducing bias. AI systems can detect which employees are meeting their goals and suggest training for those underperforming. AI is crucial for smart working, quick report generation, and achieving organisational goals ([Ghedabna et al., 2024](#)). Technological advancements have improved HR management in both public and private sectors. [Shastri \(2024\)](#) admired that AI is helpful in managing employees and making key decisions with organisational goals in mind. It saves human labour by assisting with talent screening, shortlisting applicants, and interview scheduling. Ensuring ethical practices, avoiding bias, and ensuring AI benefits all employees are the challenges. Research on how to completely incorporate AI into HRM is still lacking ([Shastri, 2024](#)). AI makes recruitment easier and saves time and resources. [Rismayadi \(2024\)](#) claimed that AI helps in performance tracking and employee skill development through personalised learning. AI tools support evidence-based HR planning with in-depth data analysis.

AI is widely used in HR management. Companies use AI to train staff and support their career growth. This improves employee efficiency and helps streamline the HR process in business environments ([Masa'd et al., 2024](#)). HR can benefit from AI in five main areas: task automation, efficient use of HR data, improving human capabilities, workplace relationship transformation, and work environment redesign ([Dima et al., 2024](#)). [Dima et al. \(2024\)](#) further added that AI integration should be a top priority in organisations. Important stakeholders who support AI should help create a suitable environment for its adoption. More research is needed to understand how AI is transforming HRM and boosting organisational performance. HRM in the 21st century is no longer traditional. [Fenwick et al. \(2024\)](#) clarified that AI uses data-informed decision-making systems and is supported by technology to meet market demands. The rise of AI is systematically changing the roles of HR professionals. These days, they must evaluate data, forecast future labour requirements, and establish ambitious HR objectives that complement overarching business objectives. AI integration is generally favoured since these developments are contributing to increased value creation in organisations. However, prior research on this topic is scarce ([Fenwick et al., 2024](#)).

AI enables businesses to generate value in a cutthroat market and become more customer-focused. It supports automation in various areas, including HR ([Mehrotra & Khanna, 2022](#)). After COVID-19, remote work and online communication became common. AI made these practices more efficient. AI is utilised in HR for hiring, training, assigning tasks, monitoring

performance, and organising staff development. It is anticipated that AI's contribution to HRM will only increase in the future ([Priya, 2021](#)). AI has changed how employees and employers interact. It supports HR by making learning and development more accessible, which keeps teams motivated. AI is now used in strategic HR planning to obtain data-driven insights for HR functions such as job design ([Tuffaha et al., 2021](#)). AI also aids in employee retention because it can forecast employee turnover and analyse data, which enables businesses to make better plans and create more welcoming workplaces to keep employees from quitting ([Azeem et al., 2024](#)). AI is useful in designing different training modules for employees that can improve their performance and help achieve organisational goals. It can also assist in planning better staff welfare programs. These positive changes in the workplace can strengthen the team and improve the organisation's ability to compete in the market ([Shi, 2021](#)).

The five stages of AI's diffusion in HRM are explained by [Rogers' \(1983\)](#) DOI theory, which also highlights the advantages and functions of AI. Organisations learn about AI's potential during the knowledge stage, as evidenced by robots exhibiting human-like interactions ([Ahmed, 2018](#)). The next step is persuasion, where advantages like cost savings, automation, and accuracy promote adoption ([Nawaz et al., 2024](#)). AI supports career development, talent screening, and interviews during the decision stage, which entails tangible choices ([Shastri, 2024](#); [Ghedabna et al., 2024](#)). AI applications in staff planning, performance monitoring, and training are the main areas of implementation ([Hijazi, 2025](#); [Rismayadi, 2024](#)). Lastly, companies acknowledge AI's long-term strategic value during the confirmation stage and integrate it into HR procedures to boost competitiveness ([Mehrotra & Khanna, 2022](#)).

Challenges, Ethical Concerns, and Human-AI Collaboration

AI's application in HRM is not a panacea. The use of AI in human welfare-related fields, such as hiring, is frequently questioned from an ethical standpoint. Maintaining a human-centered hiring process becomes increasingly difficult as AI takes over ([Gupta, 2024](#)). HR performs a variety of tasks, such as hiring, recruiting, and performance reviews, according to [Saxena \(2020\)](#). AI devices still need human supervision, and a human-AI partnership frequently produces superior outcomes. Internal resistance and a lack of knowledge or expertise among employees have caused many organisations to adopt AI slowly. To meet the changing goals and workforce needs of their organisations, HR professionals need to stay up to date on AI technologies.

[Saraswathi et al. \(2023\)](#) praised that AI can interpret staff data, and HR teams can use it to make informed decisions, align staff capabilities with institutional goals, and improve performance. But AI might be biased, which would raise questions about transparency and data privacy. Many workers worry that automation will cause them to lose their jobs. AI in HRM brings many benefits like building a competitive work culture, making smarter decisions, and customising HR practices to fit individual needs. But there are organisational challenges too, which is called institutional inertia that resists change in the organisation ([Samadi et al., 2024](#)). According to [Rosário \(2025\)](#), AI algorithms may exhibit bias that is incompatible with fairness, and organisational resistance can impede the adoption of new technology. The integrity of an

institution may be threatened by problems like data transparency. Workers may also feel uneasy because they believe AI will cut down on their working hours. Technology, people, transparency, and equity must be the main priorities of AI integration in HRM. Organisations need to keep up with changing times by adopting technological innovations to stay competitive. [Soni \(2022\)](#) added that innovation in HRM determines how an organisation performs among its competitors. That's why many companies are using AI, automation, and robotics to work more effectively. This has reduced their workload. AI and HR teams are now working together to develop a technological strategy that is human-centered. AI aids in monitoring worker performance and directing their professional development. To fully benefit from AI, however, most employees must adjust as they are not yet properly trained in its use.

With the use of technologies like chatbots, robotics, and predictive analytics, AI is also assisting in business decision-making. However, [Sucipto \(2024\)](#) discovered that there are difficulties in incorporating AI into HR, particularly when it comes to employee training. Many worry that AI will replace them or that they won't adapt. By resolving issues that were previously handled by human interaction, AI may also erode teamwork. AI must therefore be used in conjunction with human-centered strategies to foster development and collaboration. Because machines lack human emotions and comprehension, managing humans with machines can be difficult. This could result in a dehumanising work environment where employees lose their emotional connection to their jobs and feel like robots ([Bujold et al., 2023](#)).

Due to its increased efficiency, AI is taking over many human jobs. Employees fear that as businesses rely more on AI and robots, human input will become less necessary. AI should be used as a tool to help, not as a substitute. To guarantee moral judgements and lessen prejudice in AI systems, human supervision is required ([Rana, 2018](#)). AI has increased organisational effectiveness and decision-making. But issues like data privacy and algorithm bias could hurt long-term goals ([Ahmad, 2024](#)). AI systems can be biased due to how they are programmed. Ethical concerns like data privacy and transparency must be considered ([Ghedabna et al., 2024](#)). Despite the multiple organisational challenges, using AI in HR is becoming unavoidable ([Ahmad, 2024](#)).

The challenges and ethical concerns of human-AI collaboration can be seen through [Rogers' \(1983\)](#) DOI stages. In the knowledge stage, Although AI helps with HR tasks, human supervision is still necessary ([Saxena, 2020](#)). Organisations understand the advantages of persuasion, including better performance and decision-making ([Saraswathi et al., 2023](#)). The decision stage raises dilemmas, with ethical issues in recruitment and the need for a human-centered approach ([Gupta, 2024](#)). During implementation, resistance, bias, and fears of job loss appear, making transparency and fairness essential ([Rosário, 2025](#)). In confirmation, long-term worries emerge as AI replaces human roles, stressing the importance of oversight to ensure ethical use and sustainability ([Rana, 2018](#)).

Practical Applications and Future Directions of AI in HRM

AI innovation needs to be practically implemented in an organisational setting. However, [Williams et al. \(2024\)](#) argued that many institutions are still hesitant to adopt AI in HRM

because they lack knowledge about its use and potential benefits. Without proper employee capacity-building plans, they continue using traditional methods. Additionally, HR employees lack modern skills. Nonetheless, organisations that use AI in HRM can boost worker productivity and lessen stress at work. Despite fears of job loss, [Williams et al. \(2024\)](#) added that many organisations now use AI for smart communication systems, personalised learning, self-service tools, and staff development. This technological shift greatly enhances workplace productivity and planning.

AI is useful for making strategic decisions. It ensures the team understands the decisions being made and how they will be affected ([Albloush et al., 2025](#)). AI in HRM aids in the assessment of employee pay increases as well. However, current technology is not very effective at addressing employee satisfaction or including it in HR strategies. It's important that employees are happy to remain productive, but AI has limitations in this area ([Afzal et al., 2023](#)). In some cases, robots have begun working alongside humans in HR. The goal of these human-robot partnerships is to enhance overall performance through HR planning and tasks ([Mathushan et al., 2023](#)). The majority of offices are now digital. AI uses filters to rapidly screen candidates, and physical resumes are no longer used. HR departments now devote more of their time to strategic planning and less to hiring. Tools like 360-degree feedback have made the hiring process faster and more effective ([Arora & Kumari, 2021](#)). AI helps organisations become more customer-focused and create value in a competitive environment. It supports automation in various areas, including HR ([Mehrotra & Khanna, 2022](#)).

To get the most out of this technological revolution, it is important to address the negative perceptions that exist regarding AI in HRM. Workers may worry about losing their jobs as a result of automation. AI also necessitates a large financial investment and highly qualified personnel ([Rismayadi, 2024](#)). Employees must therefore receive training and ongoing engagement in order to adjust to AI. Institutions should also make plans like partnering with universities, developing talent, and involving employees in AI implementation to strengthen HRM ([Rismayadi, 2024](#)). In a similar vein, [Saraswathi et al. \(2023\)](#) proposed that in order to overcome these deterrents, employees should constantly enhance their technological proficiency and organisations should close the gap between AI and human labour.

AI is a breakthrough for HRM, enabling predictive analysis and better documentation of employee experiences. For AI to thrive, institutions must adopt a data-driven culture and develop strong data governance. [Pandey & Sharma \(2023\)](#) are optimistic that AI is expected to take over many jobs, but human intelligence is still important for decision-making because it includes emotional and cultural understanding. AI makes fast, data-based decisions, but both AI and humans need to work together for the best outcomes. Their cooperation should promote organisational development, and neither should be in charge.

The future directions and real-world uses of AI in HRM are demonstrated by [Rogers' \(1983\)](#) DOI theory. Adoption is hampered in the knowledge stage by low awareness and inadequate staff training ([Williams et al., 2024](#)). The advantages of AI in digital hiring, candidate screening, and feedback tools are made clear during persuasion ([Arora & Kumari, 2021](#)). The

decision stage identifies obstacles that need to be addressed for effective use, such as unfavourable perceptions ([Rismayadi, 2024](#)). Development of skills and methods to combine AI with human labour are necessary for implementation ([Saraswathi et al., 2023](#)). In conclusion, it is confirmed that AI will play a significant role in the future, but human intelligence is still essential for making culturally sensitive decisions ([Pandey & Sharma, 2023](#)).

Discussion

Scholars agree that AI in HRM brings many benefits such as building a competitive work culture, making smarter decisions, and customising HR practices to fit individual needs. Through improved hiring practices, these innovations are enhancing HR effectiveness and advancing organisational development ([Ahmed, 2018](#)). [Pramod & Jhansi Rani \(2023\)](#) assert that HR serves as a liaison between management and staff, and that communication is essential to fostering collaboration and trust. Employee performance, career advancement, and well-being must be important to management. AI can help with data-driven decision-making, performance monitoring, and automated human resources tasks in this context. In addition to helping with hiring, onboarding, and performance reviews, it can foster a more cooperative workplace. When HR managers use AI tools to find skill gaps through data insights, professional training and development opportunities that support employee retention are made possible. This has increased employee productivity ([Khadka & Khadka, 2024](#)). Because choosing the right team and developing their capabilities is essential to accomplishing organisational goals, using AI is therefore significant in all kinds of businesses today. Business growth depends on meeting customer needs, which is largely accomplished by an astute and focused HR team. To assist with hiring, administrative duties, and employee evaluation, the HR staff requires frequent training in AI, automation, data analytics, and prediction tools ([Priyadarshinee & Baliarsingh, 2023](#)).

At the same time, multiple challenges and ethical concerns exist in integrating AI into HRM. AI is becoming more popular because it helps HR professionals improve their skills ([Veshne & Jamnani, 2024](#)), but not all companies fully trust or use it. Ethics are also a key value in today's business models ([Lama et al., 2025](#)). Some problems are that HR tasks are hard, there isn't enough data, there are moral concerns about fairness and legality, and employees don't like decisions made by AI ([Priyadarshinee & Baliarsingh, 2023](#)). [Lutfi & Mohammadi \(2025\)](#) said that a lot of workers don't know how to use AI, and some would rather do things by hand. Ethical issues also arise because AI may make decisions that are not always fair or rational, and data misuse is a risk if platforms are not secure. Still, the advantages of AI outweigh its drawbacks. Solutions include upskilling employees, promoting ethics in AI use, and combining AI with human-centered approaches to maintain oversight and data privacy. To fully benefit from AI, organisations must empower their workforce and foster a positive work environment ([Chowdhury et al., 2022](#)).

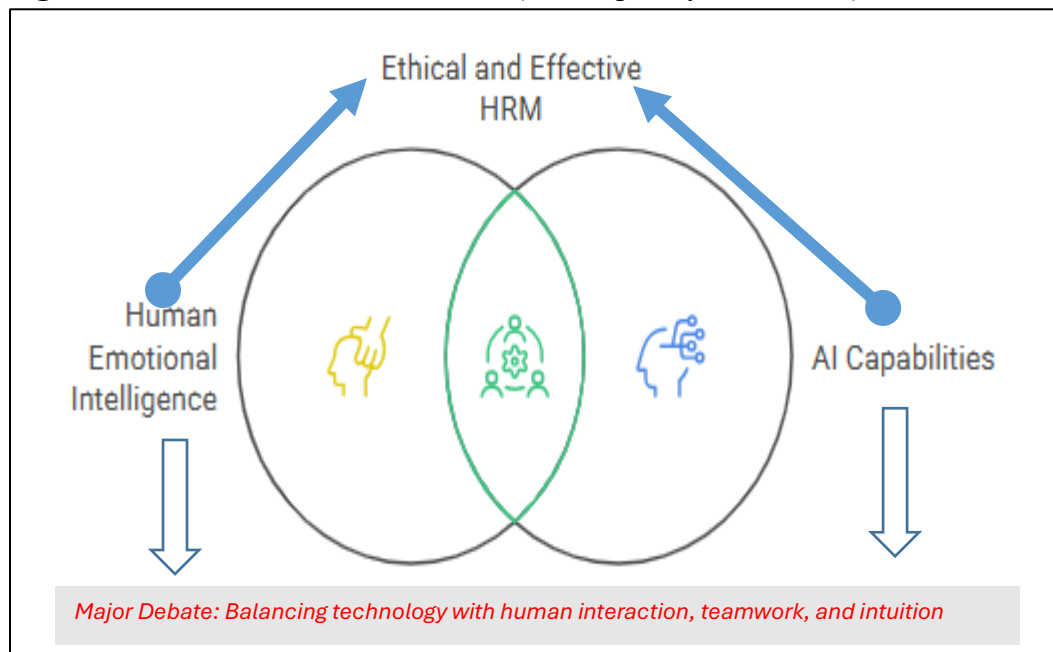
AI is becoming more and more recognised as essential to the expansion and competitiveness of organisations. With AI and machine learning fostering employee professionalism and

enhancing supply chains, it signifies a significant change in HRM. How to balance technology with interpersonal communication, collaboration, and intuition is still the main point of contention, though. Collaboration between humans and AI is crucial for productivity ([Basnet, 2024](#)). The ongoing process of human resource development keeps workers abreast of market demands and boosts their commitment to their jobs ([Chaudhary & Chaudhary, 2022](#)).

According to the DOI theory, incorporating AI into HRM makes businesses more competitive and prepared for the future. Our results demonstrate how AI influences HRM roles and benefits, tackles ethical issues and difficulties in human-AI collaboration, and investigates real-world uses and potential future paths. AI is a new innovation gradually transforming HR work. According to DOI, innovation spreads through communication channels over time among members of a social system, moving through the stages of knowledge, persuasion, decision, implementation, and confirmation (see [García-Avilés, 2020](#)). Findings from this research reveal that AI is rapidly diffusing into HRM practices. While developing nations continue to struggle with issues like inadequate infrastructure, a shortage of skilled labour, and cybersecurity threats, many businesses in developed nations have advanced to the confirmation stage and are integrating AI into HR systems ([Ogba-Amaugo, 2024](#)). These dangers have the potential to harm reputations and result in data leaks. The difference in AI capabilities demonstrates the growing digital inequality that [Rogers' \(1983\)](#) DOI theory cannot adequately account for ([Farahani & Ghasemi, 2024](#)). The HRIS model is still useful, but it needs to be modified to fit the objectives and environment of each company ([Mauro & Borges-Andrade, 2020](#)).

The world is now moving toward Industry 4.0, driven by digital transformation. Concerns remain that growing reliance on technology may push aside human involvement and intelligence. Thus, the relationship between technology, people, and organisational culture is a key area of study for sustainable industrial growth ([Ammirato et al., 2023](#)). The use of information technology in HR also creates competitive advantage and more effective work environments, with positive impacts on HR functions ([Obeidat, 2012](#)). Human–AI collaboration, as shown in [Figure 2](#), can generate better outcomes in HRM, although there is still debate about how to balance technology with human interaction, teamwork, and intuition.

Figure 2 Human-Centered AI in HRM (Developed by the authors)



Conclusion

AI is now widely used in many aspects of human life, including HRM in businesses. It can serve a variety of beneficial purposes, such as hiring the best candidates, organising employee training, and forecasting how to utilise workers' full potential, including securing their long-term commitment. One of the main benefits of AI in HRM, such as enhanced efficiency and accuracy, can be explained in DOI terms as a *relative advantage*. However, there are many obstacles to overcome when implementing AI in HRM. These include a lack of requisite skills, algorithmic bias, institutional resistance to change, ethical concerns, and inadequate AI infrastructure. One type of perceived complexity that erodes adoption trust is algorithmic bias. DOI claims that these obstacles slow down adoption in various contexts by influencing innovations as they progress through the phases of knowledge, persuasion, decision, implementation, and confirmation. These issues may also exacerbate the digital divide between developed and developing countries when it comes to the application of AI in HRM. In the future, human-centered approaches should be given priority in AI applications in HRM. This entails fusing human emotional intelligence with AI's analytical powers to produce better results with less bias, more robust ethical standards, and enhanced data security. Researchers can delve deeper into topics like creating AI-based HRM start-ups that offer readily usable tools, train staff, and encourage human-AI cooperation. In this way, academics, companies, and policymakers can draw on the research's conclusions about the advantages (e.g., relative advantage), difficulties (e.g., perceived complexity), and future directions of AI in HRM—together with insights into how this innovation diffuses across DOI stages—to guide HRM development in the AI era.

Author Contributions

First Author: Conceptualisation; Methodology; Literature search; Data curation; Writing – Original Draft.

Second Author: Literature review validation; Formal analysis; Writing – Review & Editing.

Third Author: Literature review validation; Formal analysis; Writing – Review & Editing; Supervision; Correspondence.

Conflict of interest

We declare that there is no conflict of interest regarding the publication of this article.

References

- Afzal, M. N. I., Shohan, A. H. N., Siddiqui, S., & Tasnim, N. (2023). Application of AI on human resource management: A review. *Journal of Human Resource Management*, 26(1). <https://doi.org/10.46287/FHEV4889>
- Ahmad, H. (2024). A research proposal on the role of artificial intelligence in HR operations: A systematic literature review [Research proposal]. *ResearchGate*. <https://doi.org/10.13140/RG.2.2.31367.82088>
- Ahmed, O. (2018). Artificial intelligence in HR. *International Journal of Research and Analytical Reviews (IJRAR)*, 5(4), 971–978. <https://www.ijrar.org/papers/IJRAR1944797.pdf>
- Ahmer, Z. (2013). Adoption of human resource information systems innovation in Pakistani organizations. *Journal of Quality and Technology Management*, 9(2), 25–50. <https://www.researchgate.net/publication/299471348>
- AL Daradkeh, H., & Al-Zoubi, K. Y. A. (2024). The impact of artificial intelligence on improving human resources competencies in the King Hussein Business Park. *Educational Administration: Theory and Practice*, 30(5), 8755–8761. <https://doi.org/10.53555/kuey.v30i5.4458>
- Al Mandhari, L. S. (2024). AI-enhanced human resources management practices in Sultanate of Oman (Project report). *GSJ: Global Scientific Journal*, 12(1). https://www.globalscientificjournal.com/researchpaper/AI_Enhanced_Human_Resources_Management_Practices_in_Sultanate_of_Oman_.pdf
- Albloush, A., Al-shibly, M., & Alghizzawi, M. (2025). Artificial intelligence research in human resources. *Journal of Information Systems Engineering and Management*, 10(17s), Article 2743. <https://doi.org/10.52783/jisem.v10i17s.2743>
- Ammirato, S., Felicetti, A. M., Linzalone, R., Corvello, V., & Kumar, S. (2023). Still our most important asset: A systematic review on human resource management in the midst of the fourth industrial revolution. *Journal of Innovation & Knowledge*, 8(3), 100403. <https://doi.org/10.1016/j.jik.2023.100403>

- Arora, S., & Kumari, N. (2021). Recruitment search engines for screening resumes through AI by using Boolean search functions. *Journal of Asian Development*, 7(2). <https://doi.org/10.52941/jad.v7i2.23>
- Azeem, M. M., Febriyanto, U., Nurhadi, F. A., & Halid, H. (2024). Unlocking the values of artificial intelligence (AI) in human resource management (HRM) in enhancing employee retention. *Global Business and Management Research: An International Journal*, 16(2s), Article 39. <https://www.gbmrjournal.com/pdf/v16n2s/V16N2s-39.pdf>
- Basnet, S. (2024). Artificial intelligence and machine learning in human resource management: Prospect and future trends. *International Journal of Research Publication and Reviews*, 5(1), 281–287. <https://doi.org/10.55248/gengpi.5.0124.0107>
- Bhagyalakshmi, R., & Maria, E. F. (2020). Artificial intelligence in human resource management. *Studies in Indian Place Names*, 40(40). <https://tpnsindia.org/index.php/sipn/article/view/2479>
- Bin-Qiang, J., Abdullah, H., Gill, S. S., et al. (2024). A thematic review on community governance from 2018 to 2023: Analysis of future research trends. *Journal of Infrastructure, Policy and Development*, 8(5), 3805. <https://doi.org/10.24294/jipd.v8i5.3805>
- Bogen, M. and Rieke, A., 2018. Help wanted: An examination of hiring algorithms, equity, and bias. *Upturn*, December, 7. <https://www.upturn.org/static/reports/2018/hiring-algorithms/files/Upturn%20--%20Help%20Wanted%20-%20An%20Exploration%20of%20Hiring%20Algorithms,%20Equity%20and%20Bias.pdf>
- Budhwar, P., Malik, A., De Silva, M. T. T., & Thevisuthan, P. (2022). Artificial intelligence – Challenges and opportunities for international HRM: A review and research agenda. *The International Journal of Human Resource Management*, 33(6), 1065–1097. <https://doi.org/10.1080/09585192.2022.2035161>
- Bujold, A., Roberge-Maltais, I., Parent-Rochelleau, X., Boasen, J., Sénécal, S., & Léger, P.-M. (2023). Responsible artificial intelligence in human resources management: A review of the empirical literature. *AI and Ethics*, 4, 1185–1200. <https://doi.org/10.1007/s43681-023-00325-1>
- Chaudhary, M. K., & Chaudhary, R. K. (2022). Contribution of HRD practices on employees' commitment: An observation of development banks in Nepal. *Nepal Journal of Multidisciplinary Research*, 5(2), 49–58. <https://doi.org/10.3126/njmr.v5i2.46079>
- Chowdhury, S., Dey, P. K., Joel-Edgar, S., Truong, L., & others. (2022). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, 33(4), 100899. <https://doi.org/10.1016/j.hrmr.2022.100899>
- Dastin, J. (2022). Amazon scraps secret AI recruiting tool that showed bias against women. In B. L. Matthews (Ed.), *Ethics of data and analytics* (1st ed., pp. 296–299). Auerbach Publications. <https://doi.org/10.1201/9781003278290-44>
- Dima, J., Gilbert, M.-H., Dextras-Gauthier, J., & Giraud, L. (2024). The effects of artificial intelligence on human resource activities and the roles of the human resource triad:

- Opportunities and challenges. *Frontiers in Psychology*, 15, Article 1360401. <https://doi.org/10.3389/fpsyg.2024.1360401>
- El Malouf, N., & Bahemia, H. (2025). Diffusion of innovations: A review. In S. Papagiannidis (Ed.), *TheoryHub Book*. <https://open.ncl.ac.uk> / ISBN: 9781739604400
- Farahani, M. S., & Ghasemi, G. (2024, February 21). *Artificial intelligence and inequality: Challenges and opportunities*. Qeios. <https://doi.org/10.32388/7HWUZ2>
- Farrukh, A., & Sajjad, A. (2023). A critical review of literature review methodologies. In S. Rana, J. Singh, & S. Kathuria (Eds.), *Advancing methodologies of conducting literature review in management domain* (Vol. 2, pp. 103–123). Emerald Publishing Limited. <https://doi.org/10.1108/S2754-586520230000002006>
- Fenwick, A., Molnar, G., & Frangos, P. (2024). Revisiting the role of HR in the age of AI: Bringing humans and machines closer together in the workplace. *Frontiers in Artificial Intelligence*, 6. <https://doi.org/10.3389/frai.2023.1272823>
- García-Avilés, J. A. (2020). Diffusion of innovation. In *The international encyclopedia of media psychology* (pp. 1–8). John Wiley & Sons. <https://doi.org/10.1002/9781119011071.iemp0137>
- George, G., Thomas, M. R., Anusha, B., & Joy, A. K. (2021). A systematic review of artificial intelligence and hiring: Present position and future research areas. *Indian Journal of Economics and Business*, 20(2). <https://doi.org/10.5281/zenodo.5407602>
- Ghedabna, L., Ghedabna, R., Imtiaz, Q., Faheem, M. A., Alkhayyat, A., & Hosen, M. S. (2024). Artificial intelligence in human resource management: Revolutionizing recruitment, performance, and employee development. *Nanotechnology Perceptions*. https://www.researchgate.net/publication/384556983_Artificial_Intelligence_in_Human_Resource_Management_Revolutionizing_Recruitment_Performance_and_Employee_Development
- Gupta, R. (2024). Impact of artificial intelligence (AI) on human resource management (HRM). *International Journal for Multidisciplinary Research (IJFMR)*, 6(3). <https://doi.org/10.36948/ijfmr.2024.v06i03.21444>
- Haleem, A., Javaid, M., & Singh, R. P. (2022). An era of ChatGPT as a significant futuristic support tool: A study on features, abilities, and challenges. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 2(4), 100089.
- Haridasan, M. M. (2023). A study on artificial intelligence in human resource – Industry perspective (Undergraduate project report). *Sathyabama Institute of Science and Technology*. https://sist.sathyabama.ac.in/sist_naac/documents/1.3.4/39280069%20MANEESH%20M%20HARIDASAN.pdf
- Hijazi, H. A. (2025). The role of artificial intelligence in supporting human resource management practices: Conceptual framework. *European Journal of Business and Management*, 17(2). <https://doi.org/10.7176/EJBM/17-2-05>
- Hukkeri, P. K., & Pol, S. (2025). AI-driven recruitment in the IT industry: Opportunities, challenges, and the future of hiring practices. *ResearchGate*. https://www.researchgate.net/publication/392206252_Ai-

[Driven Recruitment in the It Industry Opportunities Challenges And the Future of Hiring Practices](#)

- Jayalakshmi, K., & Jayanthi, N. (2024). AI-powered HR: Enhancing employee experience and engagement. In N. V. Suresh & P. S. Buvaneswari (Eds.), *Proceedings of the International Conference on Digital Transformation in Business: Navigating the New Frontiers Beyond Boundaries (DTBNNF 2024)* (Vol. 283). https://doi.org/10.2991/978-94-6463-433-4_20
- Khadka, A. K., & Khadka, S. (2024). Productive employee training and its impact on retention. *Nepal Journal of Multidisciplinary Research*, 7(1), 139–157. <https://doi.org/10.3126/njmr.v7i1.65270139>
- Lama, P. B., Kharel, S., Karki, M., Lamichhane, B. D., & Bhatta, N. (2025). Mapping the evolution of business ethics and corporate governance: A bibliometric analysis. *Nepal Journal of Multidisciplinary Research*, 8(3), 56–70. <https://doi.org/10.3126/njmr.v8i3.7761056>
- Lewis, J. K. (2016). *Using ATLAS.ti to facilitate data analysis for a systematic review of leadership competencies in the completion of a doctoral dissertation*. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2850726>
- Lutfi, L., & Mohammadi, A. (2025, April 2). Challenges of implementation artificial intelligence in human resources management. *International Journal of Academic Research in Business and Social Sciences*, 15(4). <https://doi.org/10.6007/IJARBS/v15-i4/24796>
- Masa'd, F. M., Al-maaitah, T. A., Al-maaitah, D. A., Qawasmeh, E. F., & Qatawneh, N. A. (2024). Harnessing artificial intelligence for human resources management: Tools, advantages, and risks in the energy sector. *E3S Web of Conferences*, 541, 02004. <https://doi.org/10.1051/e3sconf/202454102004>
- Mathushan, P., Gamage, A. S., & Wachissara, V. (2023). Human resource management and artificial intelligence: A bibliometric exploration. *Vidyodaya Journal of Management*, 9(1), 1–29. <https://doi.org/10.31357/vjm.v9i1.6370>
- Mauro, T. G., & Borges-Andrade, J. E. (2020). Human resource system as innovation for organisations. *Innovation & Management Review*, 17(2), 197–214. <https://doi.org/10.1108/INMR-03-2019-0037>
- Mehrotra, S., & Khanna, A. (2022). Recruitment through AI in selected Indian companies. *Metamorphosis*, 21(1), 31–39. <https://doi.org/10.1177/09726225211066220>
- Nawaz, N., Pathi, B. K., & Gajenderan, V. (2024). The adoption of artificial intelligence in human resources management practices. *Journal of Japan Industrial Management Engineering*, 100208. <https://doi.org/10.1016/j.jjime.2023.100208>
- Nemec, J., Wahid, F., Fathana, H., & Raharjo, W. (Eds.). (2020). *Assessing the impact and the quality of research: Manual and selected practice*. Bratislava, Slovak Republic: Printinghouse GUPRESS s.r.o. https://ec.europa.eu/programmes/erasmus-plus/project-result-content/c59cc85a-2859-4475-bac5-0a2f1fa43377/Assessing_the_Impact_and_the_Quality_of_Research_Manual_and_Select ed_Practice_BOOK_.pdf
- Obeidat, B. Y. (2012). The relationship between innovation diffusion and human resource information system (HRIS). *Perspectives of Innovations, Economics & Business*, 12(3), 41–58. <https://doi.org/10.15208/pieb.2012.16>

- Ogba-Amaugo, I. M. (2024). The use of technology in human resources management: Opportunities and challenges for organizations. *International Journal of Research and Innovation in Social Science*, 8(4). <https://dx.doi.org/10.47772/IJRISS.2024.804089>
- Okeyika, K. O., Ibeto, V. C., Okere, A. I., & Umoh, B. (2023). The application of artificial intelligence (AI) in human resource management: Current state of AI and its impact on the traditional recruiting process. *AKU: An African Journal of Contemporary Research*, 4(3). <https://doi.org/10.13140/RG.2.2.25435.54567>
- Orosoo, M., Raash, N., Santosh, K., Kaur, C., Bani-Younis, J. M. A., & Rengarajan, M. (2023). Exploring the influence of artificial intelligence technology in managing human resource management. *Journal of Theoretical and Applied Information Technology*, 101(23). <https://www.jatit.org/volumes/Vol101No23/28Vol101No23.pdf>
- Palos-Sánchez, P. R., Baena-Luna, P., Badicu, A., & Infante-Moro, J. C. (2022). Artificial intelligence and human resources management: A bibliometric analysis. *Applied Artificial Intelligence*, 36(1), e2145631. <https://doi.org/10.1080/08839514.2022.2145631>
- Pandey, P., & Sharma, A. (2023). Humans replaced by AI in HR practices?—A perspective scanner. *International Journal of Advanced Research*, 11(4), 379–385. <https://doi.org/10.21474/IJAR01/16668>
- Peixoto, M., Castro, A. C., & Nascimento, P. P. (2021). Roger's theory of diffusion of innovations and institutional changes in Brazilian rural advisory services. *ResearchGate*. https://www.researchgate.net/publication/354730139_Roger's_Theory_of_Diffusion_of_Innovations_and_institutional_changes_in_Brazilian_Rural_Advisory_Services
- Pramod, B. P., & Jhansi Rani, M. R. (2023). Application of artificial intelligence in human resource management: A study in multi-dimensional perspective across select 'IT' companies in Bengaluru city. *ISBR Management Journal*, 8(2), 1–13. <https://doi.org/10.52184/isbrmj.v8i02.000>
- Priya. (2021). Role of artificial intelligence in human resources management. *Institute of Management Sciences, University of Lucknow*. https://www.researchgate.net/publication/367654666_Role_of_Artificial_Intelligence_in_Human_Resources_Management
- Priyadarshinee, P. S., & Baliarsingh, R. K. (2023). An investigation into the effects of artificial intelligence on human resource management. *International Journal of Humanities Social Science and Management (IJHSSM)*, 3(1), 419–426. https://ijhssm.org/issue_dcp/An%20investigation%20into%20the%20effects%20of%20Artificial%20Intelligence%20on%20Human%20Resource%20Management.pdf
- Raghavan, M., Barocas, S., Kleinberg, J., & Levy, K. (2020). Mitigating bias in algorithmic hiring: Evaluating claims and practices. *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT '20)**, 469–481. Association for Computing Machinery. <https://doi.org/10.1145/3351095.3372828>
- Rana, T. (2018). The future of HR in the presence of AI: A conceptual study [Working paper]. SSRN. <https://doi.org/10.2139/ssrn.3335670>

- Rismayadi, B. (2024). Opportunities and challenges for using artificial intelligence technology in human resource management. *Journal of Data Science*, 2(1), 32–40. <https://doi.org/10.58471/jds.v2i01.4273>
- Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). The Free Press. <https://teddykw2.wordpress.com/wp-content/uploads/2012/07/everett-m-rogers-diffusion-of-innovations.pdf>
- Rosário, C. (2025). Benefits and risks of using AI in human resource management: Literature review. *International Journal of Multidisciplinary and Current Educational Research (IJMCER)*, 7(2), 146–154. https://www.ijmcer.com/wp-content/uploads/2025/04/IJMCER_R0720146154.pdf
- Şahin, I. (2006). Detailed review of Rogers’ diffusion of innovations theory and educational technology-related studies based on Rogers’ theory. *The Turkish Online Journal of Educational Technology (TOJET)*, 5(2), Article 3. https://www.researchgate.net/publication/284675572_Detailed_review_of_Rogers'_diffusion_of_innovations_theory_and_educational_technology-related_studies_based_on_Rogers'_theory
- Samadi, A. H., Alipourian, M., Afroozeh, S., & Panahi, M. (2024). An introduction to institutional inertia: Concepts, types and causes. In *Institutional inertia* (Chapter 3). Springer. https://doi.org/10.1007/978-3-031-51175-2_3
- Sánchez-Monedero, J., Dencik, L., & Edwards, L. (2020, January 27–30). What does it mean to ‘solve’ the problem of discrimination in hiring? Social, technical and legal perspectives from the UK on automated hiring systems. In *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT ’20)** (pp. 458–468). ACM. <https://doi.org/10.1145/3351095.3372849>
- Saraswathi, T., Karthikeyan, M., Balakrishnan, C., Nithya, T., Maheswari, B., & Subramanian, S. (2023). Artificial intelligence in human resource management: Advancements, implications and future prospects. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(11s). <https://doi.org/10.17762/ijritcc.v11i11s.8099>
- Saxena, A. (2020). The growing role of artificial intelligence in human resource. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 6(8). <https://doi.org/10.36713/epra4924>
- Shastri, K. (2024). Traversing traditional to modern: How AI is reshaping HR. In *Futuristic trends in management* (Vol. 3, Book 20, Part 2, Chapter 1). *IIP Series*. https://www.researchgate.net/publication/380001977_Futuristic_Trends_in_Management
- Shi, X. (2021). Big data and artificial intelligence drive human resource management innovation research. *Journal of Physics: Conference Series*, 1955(1), 012011. <https://doi.org/10.1088/1742-6596/1955/1/012011>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Soni, J. (2022). A study on the impact of artificial intelligence on human resource management. *International Journal of Research and Analytical Reviews (IJRAR)*, 9(2), 149–[end page if available]. <https://ijrar.org/papers/IJAR22B1253.pdf>

- Sucipto, H. (2024). The impact of artificial intelligence (AI) on human resource management practices. *Management Studies and Business Journal (PRODUCTIVITY)*, 1(1), 138–145. <https://doi.org/10.62207>
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15–42. <https://doi.org/10.1177/0008125619867910>
- Tariq, M. F., Pangil, F., & Shahzad, A. (2017). Diffusion of innovation theory: Beyond decision stage. *International Journal of Advanced and Applied Sciences*, 4(5), 12–18. <https://doi.org/10.21833/ijaas.2017.05.002>
- Tuffaha, M., Perello-Marin, M. R., & Suarez-Ruz, E. (2021). The role of artificial intelligence in transforming HRM functions: A literature review. In *Proceedings of the 3rd International Conference Business Meets Technology* (pp. 195–200). Universitat Politècnica de València. <https://doi.org/10.4995/BMT2021.2021.13696>
- Ugwu, C., & Opah, A. C. (2023). Use of Boolean search strategy for accessing the databases of university of technology libraries by postgraduate students in South-East, Nigeria. *Journal of Library Services and Technologies*, 5(2), 24–35. <https://doi.org/10.47524/jlst.v5i2.25>
- Upadhyay, A.K. and Khandelwal, K. (2018). Applying artificial intelligence: implications for recruitment. *Strategic HR Review*, 17(5), pp.255-258. <https://doi.org/10.1108/SHR-07-2018-0051>
- van Esch, P., Black, J. S., & Ferolie, J. (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior*, 90, 215–222. <https://doi.org/10.1016/j.chb.2018.09.009>
- Veshne, N., & Jamnani, J. (2024). Role of artificial intelligence in human resource management for optimizing employee productivity. *ITM Web of Conferences*, 68, 01003. <https://doi.org/10.1051/itmconf/20246801003>
- Wani, T. A., & Ali, S. W. (2015). Innovation diffusion theory: Review & scope in the study of adoption of smartphones in India. *Journal of General Management Research*. Centre for Management Studies, Jamia Millia Islamia. <https://www.researchgate.net/publication/281060763>
- Williams, P., Kummer, T.-F., Maskor, M., & Kennon, C. (2024). The state of AI in Australian human resources [Report]. *Australian HR Institute*. <http://doi.org/10.5204/rep.eprints.254106>
- Younger, P. (2010). Using Google Scholar to conduct a literature search. *Nursing Standard*, 24(45), 40–46. <https://doi.org/10.7748/ns2010.07.24.45.40.c7906>

Views and opinions expressed in this article are the views and opinions of the author(s), *Nepal Journal of Multidisciplinary Research* shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.