Vol. 2 No. 6 (2024)
e-ISSN: 2963-7589
Economic and Business Journal | ECBIS
https://ecbis.net/index.php/go/index

STRATEGIC HUMAN RESOURCE MANAGEMENT IN THE AI ERA: A SCOPING REVIEW ON 2024 ADAPTATION STRATEGIES

Andi Rahmawati[1], Muhammad Rijal Alim Rahmat[2]

[1)] Sekolah Tinggi Ilmu Ekonomi Tri Dharma Nusantara
[2)] Universitas Negeri Makassar
E-mail:[1)] andirahmawati959@gmail.com, 2) muhammadrijalalim@unm.ac.id

Submitted:	Revised:	Accepted:
25 January 2025	12 February 2025	15 February 2025

Abstract

The era of artificial intelligence (AI) has brought significant changes in Strategic Human Resource Management (SHRM). This study aims to explore organizational adaptation strategies in facing the integration of AI in SHRM after 2024. Using the Scoping Review method, this study identifies key trends, challenges, and best strategies in implementing AI in HR management. The review results show that AI improves efficiency in recruitment, performance evaluation, and employee skills development, but also presents ethical challenges such as algorithmic bias and personal data protection. In addition, companies that are successful in adopting AI implement reskilling and upskilling strategies to ensure workforce readiness. This study provides insights for academics and practitioners in developing HR policies that balance technological efficiency and a human value-based approach.

Keywords: *Strategic Human Resource Management, Artificial Intelligence, AI in HR, Digital Transformation, Organizational Adaptation*

1. INTRODUCTION

The development of artificial intelligence (AI) has brought about a major transformation in various aspects of management, including in human resource management (HR). Since 2024, the adoption of AI in HR management has increased, driven by the development of machine learning technology, big data, and automation that can increase efficiency in strategic decision-making (Chatterjee et al., 2024). AI is not only used to automate administrative tasks, but also in more complex decision-making such as recruitment, performance evaluation, employee training, and strategic HR planning that is more adaptive to changes in the labor market.

The integration of AI in HR brings not only efficiency but also significant challenges in its implementation. According to Sehgal & Thenmozhi (2024), AI in HRM has evolved from theoretical exploration to empirical studies covering the application of AI technology in various aspects of HR management. These applications include personalized learning,

employee performance prediction, AI-based recruitment processes, and the development of an ethical framework in the implementation of AI in HRM. However, on the other hand, there is debate about the impact of AI on the workforce, especially in terms of job losses due to automation and algorithmic bias in decision making (Sehgal & Thenmozhi, 2024). In addition, the role of data analytics and big data in HR is also growing as part of the broader application of AI. According to Nowicka et al. (2024), the use of data analysis in HRM allows optimization in decision making related to recruitment, selection, training, and employee performance management. The use of big data allows companies to identify HR trends more accurately, estimate workforce needs, and increase efficiency in human resource management. However, challenges such as personal data protection, information security, and data usage ethics are major concerns in the adoption of this technology (Nowicka et al., 2024).

One of the main challenges in HR strategic planning management after AI is how companies can integrate this technology without eliminating human values in the organization. AI is able to analyze employee data faster and more accurately, but AI-based decision making still requires human intervention to consider ethical aspects, organizational culture, and psychological impacts on employees (Chatterjee et al., 2024). Therefore, companies must develop a balanced strategy between the use of AI and a human-centric approach in HR management (Sehgal & Thenmozhi, 2024).

Several large companies have implemented AI in their HR management. IBM uses AI for predictive analytics in workforce planning and employee retention. IBM Watson AI system helps in identifying employees at risk of leaving the company and provides recommendations for retention strategies (Chatterjee et al., 2024). Unilever has adopted AI in its recruitment process by utilizing AI-based video interviews that analyze facial expressions, voice intonation, and the words used by candidates to assess their fit with the company culture (Sehgal & Thenmozhi, 2024). Google uses AI in its internal systems to predict employee performance and provide personalized recommendations for training and skills development (Chatterjee et al., 2024). Amazon also implements AI in managing its warehouse workforce with an automation system that can organize work schedules efficiently based on operational data and employee productivity levels (Nowicka et al., 2024).

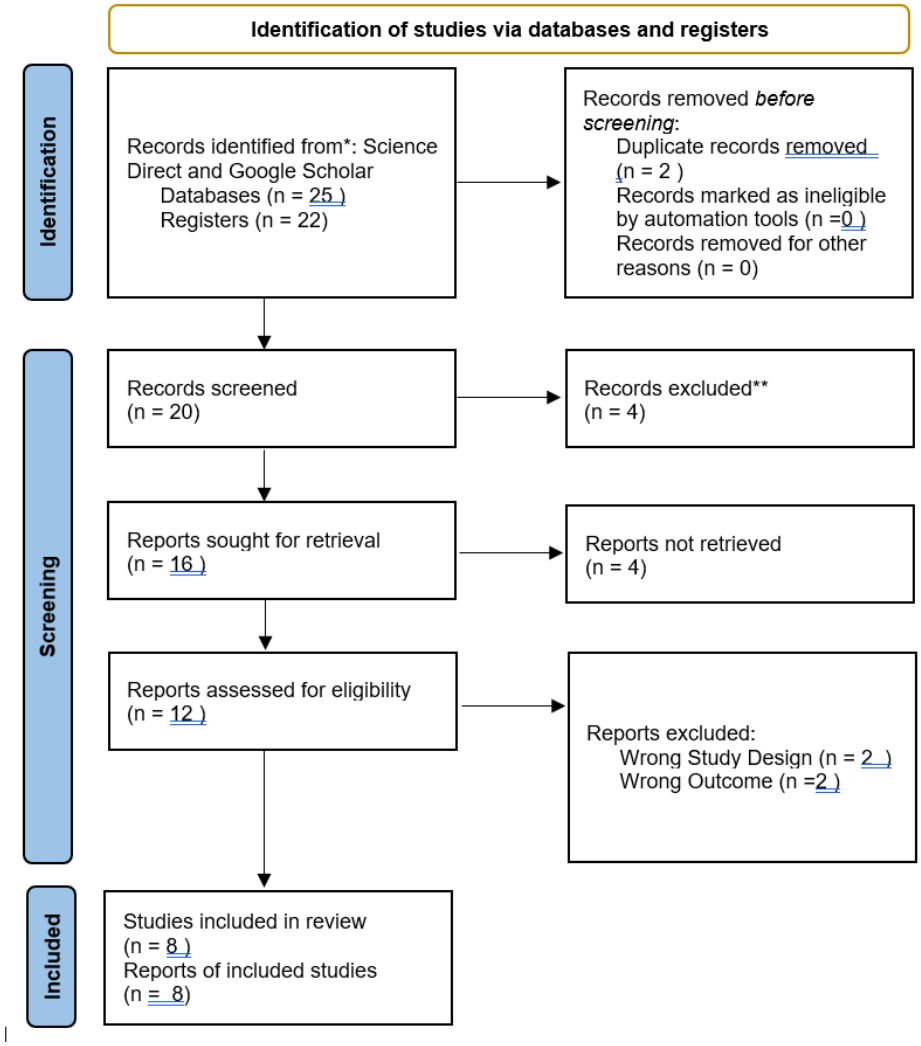
However, behind the efficiency offered by AI, various challenges arise such as employee resistance to technological change, data privacy issues, and uncertainty regarding the role of HR in the future (Chatterjee et al., 2024). According to Nowicka et al. (2024), one of the biggest challenges in the use of big data and AI in HR is employee data protection, potential algorithm-based discrimination, and information security risks. Therefore, this study aims to explore how HR strategic planning management has adapted after 2024 with the integration of AI. With the Scoping Review method, this study will identify key trends, best strategies, and challenges faced in implementing AI in the field of HR management.

Thus, this study is expected to provide insights for academics and practitioners in developing more adaptive and sustainable HR policies in the AI era (Sehgal & Thenmozhi, 2024).

2. RESEARCH METHOD

This study uses the Scoping Review method, which aims to map the available literature related to HR strategic planning management in the AI era after 2024. Scoping Review was chosen because it is able to provide a broad overview of research trends, adaptation strategies, and challenges faced by organizations in managing HR amidst technological change. To identify research questions, this study uses the PCC (Population, Concept, Context) approach, where the population studied is companies and organizations that adopt AI in HR management, the concept studied is HR strategic planning after the implementation of AI, and the context focuses on the period of 2024 in various industrial sectors. With this approach, the main question to be answered in this study is how the HR planning strategy is implemented by the organization after the implementation of AI in 2024. In this study, researchers found, analyzed, evaluated, and interpreted the results of previous studies using the Scoping Review method. Furthermore, researchers conducted a systematic analysis to see the results of previous studies and find research articles that were examined. The PRISMA method, an abbreviation for Report Selection for Systematic Review and Analysis, was used in this study. This journal received 6 Science Direct scores and 19 Google Scholar scores using relevant keywords such as “Strategic Human Resource Management” AND “Artificial Intelligence” AND “2024” and “AI in HR” OR “AI-driven workforce planning.”

Literature was collected from various academic databases such as Scopus, using relevant keywords such as “Strategic Human Resource Management” AND “Artificial Intelligence” AND “2024” and “AI in HR” OR “AI-driven workforce planning.” To ensure the quality and relevance of the studies analyzed, this study established inclusion and exclusion criteria. Articles selected in this study were those published in or after 2024 to be in accordance with current conditions, discussing the application of AI in strategic HR planning in both the private and public sectors, available in English and Indonesian, and using quantitative, qualitative, or mixed-method research methods that provide empirical or conceptual analysis. In addition, only articles that have gone through a peer-review process are included to ensure the validity and credibility of the research. Conversely, articles that only discuss AI from a technical aspect without relevance to HR management, are in the form of opinions or editorials without a basis in academic research, do not have access to the full text, do not mention empirical data, or do not have a clear methodology will be excluded from the analysis. The selection process is carried out in two stages, namely screening the title and abstract to select relevant articles and full-text screening to ensure the relevance of the article to the research objectives. This process is documented using a PRISMA Flowchart to show the number of articles screened at each stage.



3. RESULTS

The following are the results of PRISMA (Preferred Reporting Items for Systematic Review)

Article Title	Author and Year of Publication	Research purposes	Research methods
Opportunities and Challenges for Using Artificial Intelligence Technology in Human Resource Management	The Greatest Showman (2024)	Identifying challenges and opportunities for using AI technology in HR management.	Qualitative (Descriptive)

The Influence of Strategic Human Resource Management and Artificial Intelligence in Determining Supply Chain Agility and Supply Chain Resilience	Yamin et al., 2024	Investigating the factors influencing supply chain agility and resilience in logistics companies with a focus on strategic HR management and AI.	Quantitative (Structural Equation Modeling)
Determinants Influencing the Adoption of Artificial Intelligence in Driving Effective Human Resource Management	Udayanan et al., 2024	Exploring the factors influencing AI adoption in HR management, with a focus on technological, organizational, and environmental readiness.	Quantitative (Regression)
Artificial Intelligence (AI) and Automation in Human Resources: Shifting the Focus from Routine Tasks to Strategic Initiatives for Improved Employee Engagement	Sundari et al., 2024	Analyzing the impact of AI implementation on HR management, particularly in improving operational efficiency and employee engagement.	Qualitative (Literature Study)
Implementation of Artificial Intelligence in Human Resource Management Practices	Rama Devi et al., 2024	Analyze how AI is transforming HR management practices, with a focus on accuracy, automation, and real-time experiences.	Quantitative (Structural Equation Modeling)
Strategic Role of Artificial Intelligence (AI) on Human Resource Management (HR) Employee Performance	Chukwuka & Dibie, 2024	Investigating the strategic role of AI in employee performance evaluation and its impact on employee productivity and satisfaction.	Qualitative (Literature Study)

Evaluation Function			
Human Resource Management in the Age of Artificial Intelligence: Concepts Tools and Steps	Mabrouk, 2024	Investigating the transformative role of AI in improving HR management processes and its contribution to organizational efficiency and employee experience.	Qualitative (Case Study)
A Systematic Review of Artificial Intelligence (AI) And Impact on Human Resource Management (HRM): Challenges, Risks, and Opportunities	Chatterjee et al., 2024	Examining the impact of AI on HRM by highlighting the challenges, risks and opportunities of its implementation.	Mixed-methods (Literature review, quantitative data analysis from organizations that have implemented AI, interviews with HR professionals, employee surveys, and case studies)

Based on the analysis of eight selected journals, it was found that AI plays an important role in improving the efficiency and effectiveness of HR management. In a study conducted by Budi Rismayadi (2024) regarding the opportunities and challenges of using AI in HR management, it was found that AI has increased efficiency in the recruitment process, performance management, and employee skills development. However, the implementation of AI also faces challenges, especially related to maintaining a professional workforce and its impact on low-level jobs. Meanwhile, a study conducted by Yamin et al. (2024) shows that AI in strategic HR management can improve supply chain agility and organizational resilience in facing market changes. This finding emphasizes that AI not only plays a role in the operational aspects of HR, but also contributes to business strategy more broadly.

Furthermore, research by Udayanan et al. (2024) identified that technological and organizational readiness are key factors in the adoption of AI in HR management. Although

AI can improve employee efficiency and engagement, employee resistance to new technologies remains a major challenge that needs to be addressed through effective training and communication. Research conducted by Sundari et al. (2024) also confirmed that AI can increase operational efficiency by up to 30% and enable personalization in employee skill development. However, this study also highlights that the implementation of AI requires a balance between automation and human touch in order to maintain organizational values.

Meanwhile, Rama Devi et al. (2024) in their research on the implementation of AI in HR management practices found that AI can improve the accuracy of employee performance evaluations and provide real-time experience in decision-making. This is in line with research conducted by Chukwuka & Dibie (2024) which highlights that AI plays a role in reducing bias in employee performance evaluations and increasing the accuracy of feedback given to them. However, this study also emphasizes that the success of AI implementation is highly dependent on the transparency of the algorithm and the readiness of the organization to face ethical challenges.

Research conducted by Mabrunk (2024) highlights the transformational role of AI in improving organizational efficiency and employee experience. These findings corroborate the study conducted by Chatterjee et al. (2024), which examines the impact of AI on HR management more broadly, including emerging challenges such as data privacy and employee trust in AI-based systems. From these findings, it can be concluded that AI provides significant benefits for HR management in improving the efficiency and effectiveness of various processes, but also presents challenges that must be overcome through appropriate adaptation strategies. Therefore, companies need to implement a balanced approach between the use of AI technology and HR management based on organizational values in order to achieve long-term sustainability.

4. DISCUSSION

The integration of artificial intelligence (AI) in human resource management (HRM) has shown a significant impact on operational efficiency, decision-making accuracy, and cost savings for organizations. However, on the other hand, the adoption of AI in HRM also poses various challenges, such as reduced employee autonomy, potential job dislocation, and data privacy and security issues (Yamin et al., 2024). In terms of efficiency, AI enables the automation of various administrative tasks that previously required a lot of time and human effort (EJ & KE, 2024). For example, the use of AI in recruitment has increased the accuracy of candidate selection with sophisticated data processing algorithms, thereby reducing human bias in decision making (Chatterjee et al., 2024). In addition, AI-based performance evaluation systems can provide more objective feedback than traditional methods (Yamin et

al., 2024). However, despite the benefits of AI in terms of efficiency and accuracy, research shows that there is still distrust from employees towards AI-based systems, especially in terms of decision transparency and assessment accuracy (EJ & KE, 2024).

One of the major challenges arising from the adoption of AI in HR is the fear of job loss. Studies show that more than 35% of respondents in the study felt that job dislocation due to AI could negatively impact employee motivation and morale (Chatterjee et al., 2024). In addition, AI can also reduce the level of human interaction in the work environment, potentially decreasing employee engagement and loyalty to the company (Yamin et al., 2024). To address these challenges, companies are starting to develop more inclusive adaptation strategies (EJ & KE, 2024). One of the proposed strategies is the implementation of reskilling and upskilling programs, where companies provide retraining to employees to improve their digital skills to stay relevant in an AI-based work environment (Chatterjee et al., 2024). In addition, transparency in AI-based decision-making is an important factor in building employee trust (Yamin et al., 2024). Organizations that are successful in adopting AI tend to combine this technology with human-based decision-making to ensure a balance between efficiency and organizational values (EJ & KE, 2024).

In addition to the challenges mentioned above, the study also found that AI has the potential to increase inclusivity in employee recruitment and management (Chatterjee et al., 2024). By removing subjective factors such as name, gender, and age from the selection process, AI can help create a fairer, competency-based recruitment process (Yamin et al., 2024). However, it is important for organizations to continuously evaluate and adjust AI algorithms so as not to perpetuate biases that may be present in the historical data used to train the system (EJ & KE, 2024).

Overall, although AI provides great benefits for HR management, its implementation must be carried out with a balanced and ethical approach (Chatterjee et al., 2024). Companies that successfully adopt AI in HR are those that not only focus on increasing efficiency but also pay attention to employee well-being and engagement through appropriate adaptation strategies (Yamin et al., 2024).

4. CONCLUSION

Based on the results of this review, strategic HR management in the AI era after 2024 must adopt innovative adaptation strategies to face emerging challenges. AI has been shown to improve operational efficiency and accelerate decision-making in HR management, but its implementation must be carried out with a balanced approach so as not to have a negative impact on the workforce (Chatterjee et al., 2024). Companies that want to be successful in adopting AI in HR must prioritize employee reskilling and upskilling to ensure the readiness of the workforce to face automation (Yamin et al., 2024). In addition, transparency in AI-based processes is an important factor in building trust and reducing employee uncertainty about their future roles (EJ & KE, 2024).

Effective strategic HR management in the AI era requires a combination of technology and human-centric approaches. Organizations need to implement policies that support employee well-being, ensuring that AI is used not only for efficiency but also to enhance employee work experience and satisfaction. With the right steps, companies can optimize the benefits of AI in HR without compromising ethical values and workforce sustainability, thereby creating a more productive, equitable and inclusive work environment in the evolving AI era.

REFERENCES

Chatterjee, S., & Jemima, A.G. (2024). A Systematic Review of Artificial Intelligence (AI) And Impact on Human Resource Management (HRM): Challenges, Risks and Opportunities. 28(1).

Determinants Influencing the Adoption of Artificial Intelligence in Driving Effective Human Resource Management. (2024). Journal of Informatics Education and Research.https://doi.org/10.52783/jier.v4i2.828

E. J., C., & KE, D. (2024). Strategic Role of Artificial Intelligence (AI) on Human Resource Management (HR) Employee Performance Evaluation Function. International Journal of Entrepreneurship and Business Innovation, 7(2), 269–282.https://doi.org/10.52589/IJEBI-HET5STYK

Mabrouk, A. (2024). Human Resource Management in the Age of Artificial Intelligence: Concepts Tools and Steps. Solo International Collaboration and Publication of Social Sciences and Humanities, 3(01), 1–12.https://doi.org/10.61455/sicopus.v3i01.216

Nowicka, J., Pauliuchuk, Y., Ciekanowski, Z., Falda, B., & Sikora, K. (2024). The Use of Data Analytics in Human Resource Management. EUROPEAN RESEARCH STUDIES JOURNAL, XXVII(Issue 2), 203–215.https://doi.org/10.35808/ersj/3380

Rama Devi, P., Anusuya, S., Saraswathi, S., Sandra Carmel Sophia, M., Chacko Jose, P., Jayachandran, T., & Girimurugan, R. (2024). Implementation of artificial intelligence in human resource management practices. ITM Web of Conferences, 68, 01025.https://doi.org/10.1051/itmconf/20246801025

Rismayadi, B. (2024). Opportunities and Challenges for Using Artificial Intelligence Technology in Human Resource Management. Resource Management, 2(01).

Sehgal, W. (nd). Artificial Intelligence (AI) in Human Resource Management (HRM): A Bibliometric Research.

Sundari, S., Silalahi, VAJM, Wardani, FP, Siahaan, RS, Sacha, S., Krismayanti, Y., & Anjarsari, N. (2024). Artificial Intelligence (AI) and Automation in Human Resources: Shifting the Focus from Routine Tasks to Strategic Initiatives for Improved Employee Engagement. East Asian Journal of Multidisciplinary Research, 3(10), 4983–4996.https://doi.org/10.55927/eajmr.v3i10.11758

Yamin, MA, Almuteri, SD, Bogari, KJ, & Ashi, AK (2024). The Influence of Strategic Human Resource Management and Artificial Intelligence in Determining Supply Chain Agility and Supply Chain Resilience. Sustainability, 16(7), 2688.https://doi.org/10.3390/su16072688