

Leveraging Artificial Intelligence in Decision Support Systems for Strategic Human Resource Management: A Systematic Literature Review

Bara Aldino^{1*}, Sujoko²

Universitas Teknologi Yogyakarta, Indonesia

Email: 6230111006.bara.aldino@student.uty.ac.id¹, sujoko@staff.uty.ac.id²

*Corresponding Author: Bara Aldino

Abstract: *This study examines the integration of Artificial Intelligence (AI) into Decision Support Systems (DSS) for Strategic Human Resource Management (SHRM) through a systematic literature review (SLR). The research investigates how AI technologies enhance various HR functions, such as recruitment, training, performance evaluation, and talent management. The findings indicate that AI significantly improves operational efficiency, decision-making accuracy, and the overall speed of HR processes. However, challenges such as ethical concerns, data privacy issues, and potential algorithmic bias in decision-making are highlighted. The paper aims to provide a conceptual framework for the effective application of AI in SHRM and identifies key trends, challenges, and opportunities in AI adoption within HR functions. By synthesizing existing research, this study offers valuable insights into optimizing the use of AI in DSS for SHRM, emphasizing the importance of aligning AI implementation with ethical principles and organizational goals. The research advances theoretical and practical understanding of AI's role in HRM and encourages further exploration of its impact across various organizational contexts.*

Keywords: *Artificial Intelligence; Decision Support Systems; Strategic Human Resource Management; Systematic Literature Review; Operational Efficiency; Strategic Decisions.*

INTRODUCTION

In the Industrial Revolution 4.0 era, technological developments such as artificial intelligence (AI) have changed various aspects of life, including how organizations manage human resources (HR). One of the further methods in HR management that relates to achieving the organization's long-term goals is *Strategic Human Resource Management (SHRM)*. SHRM emphasizes the importance of alignment between human resources and business strategy to maintain a competitive advantage. Strategic decision-making becomes important in this case, especially in employee recruitment, development, and retention. However, HR management is increasingly vulnerable due to the business environment that continues to change dynamically. (Kim et al., 2022) (Ren et al., 2023)

Facing these changes, HR management requires a more sophisticated approach to support data-driven decision-making and technological innovation. AI is important in helping companies meet these challenges by providing predictive analytics tools and process automation. This innovation allows companies to improve operational efficiency and effectiveness in managing talent and make more accurate and faster decisions. AI enhances an organization's analytical capabilities, enables data processing at scale ((Aguinis et al., 2024) (Ammer et al., 2023) *Big data*), and creates deep insights that aid the strategic decision-making process (Abasaheb & Subashini, 2024).

One of the areas of application of AI that is very useful in HR management is the *Decision Support System (DSS)*. AI-powered DSS can integrate *big data* to support strategic decisions, such as recruitment, training, and career development (Aydın & Turan, 2023). In the context of SHRM, DSS is an analytical tool and a supporter of strategic planning that ensures

alignment between organizational goals and employee needs (Bettayeb & Balbaa, 2023). This combination provides a significant competitive advantage for organizations in an increasingly dynamic and complex business environment. The utilization of AI in DSS for SHRM has great potential in delivering broad-scale benefits, such as improving the efficiency of the recruitment process, identifying training needs with better precision, and making performance management more measurable. In addition, AI supports the reduction of bias in decision-making, making the process more transparent and fair in treating employees. (Ammer et al., 2023) (Bankins et al., 2022)

Nevertheless, the use of AI in DSS for SHRM is accompanied by challenges, such as data privacy, resistance to technological change, and digital skills development in the workforce. In addition, the risk of dehumanization in decision-making can arise if these technologies are not implemented ethically and inclusively. Therefore, more research is needed to explore how AI and DSS can be optimally applied in SHRM while addressing those challenges (Chowdhury et al., 2024) (Bankins et al., 2022).

This study aims to fill the gap in the literature by conducting a *Systematic Literature Review* (SLR) regarding the use of AI in DSS for SHRM. This study will provide an in-depth insight into this topic's trends, challenges, and opportunities. Drawing on the current literature indexed in SCOPUS, this article seeks to construct a conceptual framework based on empirical evidence, identify trends, and provide recommendations for the use of AI in DSS for SHRM. This research is expected to make a valuable contribution that can help practitioners and academics understand the impact of the use of AI in DSS for SHRM.

The integration of Artificial Intelligence (AI) into decision support systems (DSS) in the field of Strategic Human Resource Management (SHRM) presents significant opportunities and challenges. As organizations strive to remain competitive in an increasingly complex and dynamic business environment, AI can enhance decision-making, particularly in HR functions like recruitment, performance evaluation, and workforce planning. However, despite the potential benefits, many organizations hesitate to adopt AI in HRM due to concerns about data privacy, algorithmic bias, and resistance to technological change. Therefore, exploring the effective application of AI in SHRM, particularly through DSS, is essential to understand how AI can improve decision-making and address these concerns.

Moreover, there is limited research on the specific impacts and challenges of AI adoption within the context of SHRM. The lack of a comprehensive framework to guide organizations in implementing AI in their HR practices leaves a gap in understanding AI's real-world applications, benefits, and pitfalls. Existing studies have primarily focused on AI in isolated HR functions without integrating it into a broader strategic framework, leading to a fragmented understanding of its potential. This research aims to address these gaps by providing a more holistic view of AI's role in SHRM, particularly in the context of decision support systems.

Given the rapid pace of technological advancements and the growing need for data-driven decision-making in HRM, organizations must adopt AI-based DSS solutions. As businesses increasingly rely on data to make strategic HR decisions, AI offers the ability to process large volumes of information, generate actionable insights, and improve the efficiency of HR functions. However, organizations risk implementing ineffective or biased systems without a structured understanding of AI's role and the ethical considerations surrounding its

use. The urgency lies in exploring how AI can be leveraged for SHRM and developing clear frameworks that ensure its ethical, fair, and effective use.

Numerous studies have explored AI's application in various HRM functions, but these studies often focus on isolated aspects rather than a comprehensive approach. For example, Chowdhury et al. (2024) highlighted the potential of AI to streamline recruitment and selection processes, while Ammer et al. (2023) demonstrated how machine learning models improve performance evaluations. Additionally, Bettayeb and Balbaa (2023) discussed the integration of AI in talent management, which provides a strategic advantage for organizations. Despite the promising findings, many of these studies focus on specific HRM areas without exploring the integration of AI across the entire HR strategy. Moreover, data privacy, algorithmic bias, and ethical concerns in AI implementation remain underexplored.

While previous research has explored the application of AI in HRM, there is a noticeable gap in understanding how AI can be integrated into decision support systems for Strategic HRM as a whole. Specifically, there is a lack of comprehensive studies that address the integration of AI in multiple HR functions and its alignment with organizational strategy. Furthermore, research on the long-term impact of AI on organizational culture, employee engagement, and retention is scarce. This research aims to bridge these gaps by evaluating AI's potential in enhancing HRM decision-making processes across various functions.

This study introduces a novel perspective by providing a holistic framework for the application of AI in SHRM through decision support systems. While existing studies have explored AI in specific HR functions, this research expands the focus to understand the broader impact of AI on strategic HR decisions, such as workforce planning, talent management, and performance evaluation. Additionally, the study addresses ethical concerns such as fairness, transparency, and bias, which are often overlooked in AI adoption. By synthesizing current literature, this study provides a conceptual framework that organizations can use to implement AI in HRM effectively.

The primary objective of this research is to explore the application of AI-driven decision support systems in strategic human resource management. The study aims to analyze how AI technologies can be integrated into various HR functions to improve decision-making, reduce bias, and enhance operational efficiency. Additionally, the research will provide a conceptual framework for organizations to adopt AI in their HR practices while ensuring ethical considerations are met.

This research will provide valuable insights into the integration of AI in strategic HRM, offering a structured approach for organizations to enhance their HR decision-making processes. The findings will help HR professionals understand how AI can improve recruitment, performance evaluation, and talent management while addressing ethical concerns such as data privacy and bias. Additionally, this research will contribute to the development of policies and frameworks that ensure the effective and fair use of AI in HRM. The study will also provide a foundation for future research in AI's role in HRM and its broader implications for organizational success.

MATERIALS AND METHODS

This study uses an SLR approach to identify and analyze the literature related to the use of AI in DSS for SHRM. The SLR approach was chosen because it can provide a

comprehensive and structured picture of research trends, findings, and gaps in the existing literature (Budhwar et al., 2022).

The SLR process begins with the formulation of a specific research question, namely, how AI in DSS can improve the effectiveness of SHRM. Then, a systematic search was carried out on academic databases using *the Publish or Perish* application with the keywords "Artificial Intelligence, Decision Support System, and Strategic Human Resources Management". The inclusion criteria include articles published in the SCOPUS-indexed journal between 2021 and 2024, focusing on AI and DSS topics in SHRM. Irrelevant articles, such as those that discuss AI in a non-HR context, are excluded.

Although the SLR approach has many advantages, this research has limitations. One limitation is the potential for publication bias, where only articles published in indexed journals are analyzed, so that it may ignore contributions from other sources such as industry reports or conferences. However, these limitations are minimized by using a comprehensive range of databases and systematic search strategies (Deviprasad et al., 2023).

RESULTS AND DISCUSSION

Results

In the article search stage, 142 articles were found relevant to the research topic. The article's relevance is based on search engine search results with keywords. The next step is to conduct a screening to ensure that the selected article can be used to answer the research questions that have been set. From the results of this screening, 56 articles were obtained. Furthermore, a quality assessment was conducted on the 56 articles using the inclusion and exclusion criteria set. The quality assessment results produced 22 articles in accordance with the inclusion and exclusion criteria set, and data extraction was carried out on these articles, with the results shown in Table 2.

Table 1. SLR Data Extraction Results

Ye s	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
1	Aydın, Erdoğan; Turan, Firm	An AI-Based Shortlisting Model for Sustainability of Human Resource Management	SVM-based learning model	(2023)	AI speeds up the employee selection process, reduces data noise, and improves candidate compatibility with the company	Speed up the recruitment process through AI-based selection features
2	Song, Yuegang; Wu, Ruibing	Analysing human- computer interaction behaviour in a human resource management system based on artificial	Deep learning- based simulations	(2021)	BPNN model achieves high accuracy in predicting HRM data	Optimizing human-computer interaction in HRM

Ye s	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
		intelligence technology				
3	Ammer, Mohammed Abdullah Ahmed, Zeyad A.T. Alsubari, Saleh Nagi Aldhyani, Theyazn H.H. Almaaytah, Shahab Ahmad	Application of Artificial Intelligence for Better Investment in Human Capital	Machine learning analytics	(2023)	AI helps in personality classification to create more effective and harmonious work teams	Emphasizing the importance of AI in building high- performing work teams
4	Chilunjika, Alouis "Come on, I am going to take care of you. Chilunjika, Sharon R.	Artificial intelligence and public sector human resource management in South Africa: Opportunities, challenges and prospects	Thematic analysis	(2022)	AI reduces bias in public recruitment and enables greater efficiency in the public sector	Focus on the opportunities and challenges of AI adoption in the public sector
5	Votto, Alexis Megan Valecha, Rohit Najafirad, Peyman Rao, H. Raghav	Artificial Intelligence in Tactical Human Resource Management: A Systematic Literature Review	Systematic literature review	(2021)	AI improves the process of recruitment, performance evaluation, and training in HRM	Identifying research gaps in T-HRIS applications
6	Vrontis, Vrontis, Demetris Christofi, Michael Pereira, Vijay Tarba, Shlomo Makrides, Anna Trichina, Greece	Artificial intelligence, robotics, advanced technologies, and human resource management: a systematic review	Systematic literature review	(2022)	The integration of advanced technologies, including AI, creates opportunities and challenges in HRM strategies	Discuss the ethical and operational challenges in the adoption of AI technology
7	Yang, Yang	Artificial intelligence- based organizational	Data mining- based	(2022)	The application of AI in HRM improves operational	Strengthen data- driven decision- making in HRM

Years	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
		human resource management and operation system	implementation study		efficiency and decision-making quality	
8	Wuisan, the Goddess of the Sun Sunardjo, Richard Andre Aini, Qurotul Yusuf, Natasya Aprila Rahardja, Profit	Integrating Artificial Intelligence in Human Resource Management: A SmartPLS Approach for Entrepreneurial Success	PLS-SEM Analysis	(2023)	AI improves decision-making in HRM and supports business success	Focus on AI integration in supporting entrepreneurial success
9	Rožman, Maja Oreški, Dijana Tominc, Poland	Integrating artificial intelligence into a talent management model to increase the work engagement and performance of enterprises	Empirical studies	(2022)	AI supports hiring, training, and organizational culture to improve employee engagement	Focus on AI-driven talent management
10	Lawande, Navy	Exploring the Trends of Artificial Intelligence in Recruitment: A Bibliometric Study	Bibliometric studies	(2024)	AI is changing the way organizations recruit talent, increasing efficiency in the recruitment process	Highlighting global trends in AI-driven recruitment
11	Yamin, Mohammad Ali Almuteri, Sultan Dakhilallah Bogari, Khaled Jamil Ashi, Abdulrahim Khaled	The Influence of Strategic Human Resource Management and Artificial Intelligence in Determining Supply Chain Agility and Supply Chain Resilience	Model SEM	(2024)	AI supports strategic HR management and improves supply chain agility	Focus on integration between AI and HR management for supply chain effectiveness
12	Chowdhury, Soumyadeb	Unlocking the value of artificial	Systematic literature review	(2023)	The AI capability framework helps	Providing strategic

Ye s	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
	Dey, Prasanta Joel-Edgar, Sian Bhattacharya , Sudeshna Rodriguez- Espindola, Oscar Abadie, Amelie Truong, Linh	intelligence in human resource management through an AI capability framework			organizations maximize the potential of technology to improve HR performance	guidance for AI adoption in HRM
1 3	Huang, Xiaoyu Yang, Fu Zheng, Jiaming Feng, Cailing Zhang, Lihua	Personalized human resource management via HR analytics and artificial intelligence: Theory and implications	Conceptual studies	(2023)	AI analytics enable personalized HR solutions, improving employee experience and engagement.	Integrate person- organization fit theory to improve job satisfaction and employee retention.
1 4	Raman, Raghu Venugopalan , Mural Kamal, Anju	Evaluating human resources management literacy: A performance analysis of ChatGPT and Bard	Comparativ e studies	(2024)	ChatGPT performs better in HR tasks than Bard, especially in accuracy and efficiency.	The great potential of generative AI in optimizing daily HRM tasks.
1 5	Monod, Emmanuel Lissillour, Raphael Köster, Antonia Jiayin, Qi	Does AI control or support? Power shifts after AI system implementatio n in customer relationship management	Case study	(2023)	AI improves the efficiency of CRM but changes the balance of power in the organization, strengthening management control.	In-depth study of the social implications of AI in technology- based CRM systems.
1 6	Charlwood, Andy; Guenole, Nigel	Can HR adapt to the paradoxes of artificial intelligence?	Theoretical studies	(2022)	AI can create a paradox between efficiency and fairness, emphasizing the need for an ethical approach in AI-based HR	Discusses positive and negative scenarios in AI adoption, highlighting the risks of bias and injustice

Years	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
17	Budhwar, Pawan Malik, Ashish De Silva, M. T. Thedushika Thevisuthan, Praveena	Artificial intelligence—challenges and opportunities for international HRM: a review and research agenda	Systematic literature review	(2022)	AI accelerates digital transformation in multinational organizations, delivering efficiencies, but poses cultural challenges	Propose a conceptual framework for AI-based HRM in an international environment
18	Faqihi, Ali; Miah, Shah Jahan	Artificial Intelligence-Driven Talent Management System: Exploring the Risks and Options for Constructing a Theoretical Foundation	Artifact design methodology	(2023)	TOE and DOI-based frameworks improve talent management through AI integration	Underlining the need for practical solutions for AI integration in talent management
19	Bettayeb, Abderrahmane; Balbaa, Muhammad	Success Factors in Adopting AI in Human Resource Management in UAE Firms: Neutrosophic Analysis	AHP Neutrosophic Analysis	(2023)	Technology, organization, and ecosystem are key factors for the success of AI adoption in HR	Using Neutrosophic AHP to address uncertainty in technology implementation
20	Majumder, Soumi; Mondal, Atreyee	Are chatbots useful for human resource management?	Empirical studies	(2021)	Chatbots speed up communication but have limitations in complex HRM tasks	Examining the advantages and limitations of chatbots in HRM systems
21	Arslan, Ahmad Cooper, Cary Khan, Zaheer Golgeci, Ismail Ali, Imran	Artificial intelligence and human workers' interaction at the team level: a conceptual assessment of the challenges and potential HRM strategies	Conceptual studies	(2022)	AI helps team collaboration but poses challenges in performance evaluation and trust between members	Emphasizing the importance of building trust in human and AI teams
22	Konovalova, Valeriya Scott, Elena	The Impact Of Artificial Intelligence	Systematic literature review	(2022)	AI in HRM improves efficiency,	AI in HRM can potentially improve

Ye s	Author Name	Article Title	Research Methods	Year	Research Results	Critical Studies
	Mitrofanova, Alexandra Gevorgyan, Rita	On Human Resources Management Strategy: Opportunities For The Humanisation And Risks			personalization, and engagement, but risks dehumanization.	efficiency, but it triggers the risk of bias, low transparency, data privacy, and dehumanization.

Discussion

Based on the results of data analysis from 22 reviewed articles, it was found that Artificial Intelligence (AI) plays an important role in various aspects of Human Resource Management (HRM). One of AI's key contributions is speeding up the recruitment and selection process of employees. Studies show that AI-based algorithms can screen candidates more efficiently and accurately, reduce noisy data, and ensure a better match between candidates and organizations. (Aydın & Turan, 2023; Lawande, 2024)

In addition, AI also plays a role in improving employee training and development. The AI-based platform allows personalization in training modules tailored to individual needs, thereby increasing learning effectiveness and employee engagement. This is reinforced by an AI capabilities-based framework that provides strategic guidance in adopting this technology for human resource development. (Chowdhury et al., 2023) (Budhwar et al., 2022)

On the other hand, performance evaluation has also undergone a significant transformation with the help of AI. Chatbots and AI-based evaluation models can provide more objective, real-time feedback, reducing human bias in the evaluation process. However, the ethical challenge of maintaining fairness and transparency in performance evaluations remains a significant concern. (Majumder & Mondal, 2021) (Konovalova et al., 2022)

In the context of talent management, AI supports the process of identifying and developing talent. The AI model can map employees' potential for strategic roles, supporting the organization's long-term success. These findings align with studies showing that integrating AI in talent management models improves employee engagement and overall organizational performance outcomes. (Faqihi & Miah, 2023) (Chowdhury et al., 2024)

However, the adoption of AI in HRM is inseparable from challenges. Several studies underscore the risks of injustice and algorithmic bias, especially in recruitment and performance evaluation. In addition, data privacy and employee information protection are significant challenges that require serious attention in the implementation of this technology. (Bankins et al., 2022) (Konovalova et al., 2022)

The study's results also highlight the potential of AI in improving operational efficiency in the public and private sectors. In the public sector, AI has been shown to reduce bias in recruitment and improve service efficiency. Meanwhile, in the private sector, AI supports faster and more accurate data-driven decision-making (Chilunjika et al., 2022) (Aydın & Turan, 2023).

Overall, the study shows that AI speeds up the HRM process and improves the quality of strategic decisions within organizations. However, the implementation of this technology must be accompanied by policies and strategies that ensure the ethical and inclusive use of AI.

Further recommendations are needed to mitigate risks and optimize the benefits of these technologies in strategic HR management.

CONCLUSION

This study demonstrates that Artificial Intelligence (AI) plays a crucial role in enhancing the efficiency and effectiveness of various Human Resource Management (HRM) functions. By incorporating AI into Decision Support Systems (DSS), organizations can automate and optimize key HR processes such as recruitment, training, performance evaluation, and talent management. The findings highlight that AI offers faster, more accurate solutions that support data-driven decision-making, improving organizational productivity and fostering a more inclusive work environment that adapts to the individual needs of employees. However, the implementation of AI in HRM also presents significant challenges, particularly concerning ethics, data privacy, and the risk of bias in decision-making processes. This underscores organizations' need to adopt AI technology thoughtfully, ensuring its deployment aligns with fairness, transparency, and accountability principles.

In conclusion, AI can be a highly effective tool in supporting Strategic Human Resource Management (SHRM) if integrated appropriately into organizational processes. However, successful adoption requires a careful alignment between technology, organizational culture, and employee competencies. Future research should examine the long-term effects of AI in HRM across various sectors, including public and private organizations, and in different organizational cultures. This research will help develop sustainable strategies for AI integration, ensuring that AI contributes positively to human resource development and organizational success in the long run. Further exploration into the ethical implications and the potential for bias in AI-driven HR systems should also be prioritized to ensure fairness and inclusivity in future applications.

REFERENCES

- Abasaheb, S. A., & Subashini, R. (2024). Enhancing HR Efficiency Through the Integration of Artificial Intelligence and Internet of Things: A Study on AI Implementation in Human Resource Management. *EAI Endorsed Transactions on Scalable Information Systems*, *11*(2), 1–11. <https://doi.org/10.4108/eetsis.4208>
- Aguinis, H., Beltran, J. R., & Cope, A. (2024). How to use generative AI as a human resource management assistant. *Organizational Dynamics*, *53*(1), 101029. <https://doi.org/10.1016/j.orgdyn.2024.101029>
- Al-Shammari, M., Al Bin Ali, F., AlRashidi, M., & Albuainain, M. (2024). Big Data and Predictive Analytics for Strategic Human Resource Management: A Systematic Literature Review. *International Journal of Computing and Digital Systems*, *17*(1), 1–9. <https://doi.org/10.12785/ijcds/1571015706>
- Ammer, M. A., Ahmed, Z. A. T., Alsubari, S. N., Aldhyani, T. H. H., & Almaaytah, S. A. (2023). Application of Artificial Intelligence for Better Investment in Human Capital. *Mathematics*, *11*(3). <https://doi.org/10.3390/math11030612>
- Apascaritei, P., & Elvira, M. M. (2022). Dynamizing human resources: An integrative review of SHRM and dynamic capabilities research. *Human Resource Management Review*, *32*(4), 100878. <https://doi.org/10.1016/j.hrmr.2021.100878>

- Arslan, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2022). Artificial intelligence and human workers' interaction at the team level: a conceptual assessment of the challenges and potential HRM strategies. *International Journal of Manpower*, 43(1), 75–88. <https://doi.org/10.1108/IJM-01-2021-0052>
- Aydin, E., & Turan, M. (2023). An AI-Based Shortlisting Model for Sustainability of Human Resource Management. *Sustainability (Switzerland)*, 15(3), 2737. <https://doi.org/10.3390/su15032737>
- Bankins, S., Formosa, P., Griep, Y., & Richards, D. (2022). AI Decision Making with Dignity? Contrasting Workers' Justice Perceptions of Human and AI Decision Making in a Human Resource Management Context. *Information Systems Frontiers*, 24(3), 857–875. <https://doi.org/10.1007/S10796-021-10223-8/FIGURES/3>
- Bettayeb, A., & Balbaa, M. E. (2023). Success Factors in Adopting AI in Human Resource Management in UAE Firms: Neutrosophic Analysis. *International Journal of Neutrosophic Science*, 21(3), 154–165. <https://doi.org/10.54216/IJNS.210315>
- 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. In *International Journal of Human Resource Management* (Vol. 33, Issue 6, pp. 1065–1097). Routledge. <https://doi.org/10.1080/09585192.2022.2035161>
- Cai, C., & Chen, C. (2021). Optimization of Human Resource File Information Decision Support System Based on Cloud Computing. *Complexity*, 2021(1), 8919625. <https://doi.org/10.1155/2021/8919625>
- Cai, F., Zhang, J., & Zhang, L. (2024). The Impact of Artificial Intelligence Replacing Humans in Making Human Resource Management Decisions on Fairness: A Case of Resume Screening. *Sustainability (Switzerland)*, 16(9), 3840. <https://doi.org/10.3390/su16093840>
- Charlwood, A., & Guenole, N. (2022). Can HR adapt to the paradoxes of artificial intelligence? *Human Resource Management Journal*, 32(4), 729–742. <https://doi.org/10.1111/1748-8583.12433>
- Chilunjika, A., Intauno, K., & Chilunjika, S. R. (2022). Artificial intelligence and public sector human resource management in South Africa: Opportunities, challenges and prospects. *SA Journal of Human Resource Management*, 20(0), 12. <https://doi.org/10.4102/sajhrm.v20i0.1972>
- Chowdhury, S., Budhwar, P., & Wood, G. (2024). Generative Artificial Intelligence in Business: Towards a Strategic Human Resource Management Framework. *British Journal of Management*, 35(4), 1680–1691. <https://doi.org/10.1111/1467-8551.12824>
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023). Unlocking the value of artificial intelligence in human resource management through an AI capability framework. *Human Resource Management Review*, 33(1), 100899. <https://doi.org/10.1016/j.hrmr.2022.100899>
- Deviprasad, S., Madhumithaa, N., Vikas, I. W., Yadav, A., & Manoharan, G. (2023). The Machine Learning-Based Task Automation Framework for Human Resource Management in MNC Companies†. *Engineering Proceedings*, 59(1), 63. <https://doi.org/10.3390/engproc2023059063>
- Eshete, S. K., & Birbirssa, Z. A. (2024). Strategic Human Resource Management (SHRM) in Creating Inclusive Workplace: Systematic Review. *SAGE Open*, 14(4). <https://doi.org/10.1177/21582440241287667>
- Faqihi, A., & Miah, S. J. (2023). Artificial Intelligence-Driven Talent Management System: Exploring the Risks and Options for Constructing a Theoretical Foundation. *Journal of Risk and Financial Management*, 16(1), 31. <https://doi.org/10.3390/jrfm16010031>

- Gong, Y., Zhao, M., Wang, Q., & Lv, Z. (2022). Design and interactive performance of human resource management system based on artificial intelligence. *PLoS ONE*, *17*(1 January). <https://doi.org/10.1371/journal.pone.0262398>
- Goswami, M., Jain, S., Alam, T., Deifalla, A. F., Ragab, A. E., & Khargotra, R. (2023). Exploring the antecedents of AI adoption for effective HRM practices in the Indian pharmaceutical sector. *Frontiers in Pharmacology*, *14*, 1215706. <https://doi.org/10.3389/fphar.2023.1215706>
- Gupta, S., Modgil, S., Bhattacharyya, S., & Bose, I. (2022). Artificial intelligence for decision support systems in operations research: review and future scope of research. *Annals of Operations Research*, *308*(1–2), 215–274. <https://doi.org/10.1007/s10479-020-03856-6>
- Huang, X., Yang, F., Zheng, J., Feng, C., & Zhang, L. (2023). Personalized human resource management via HR analytics and artificial intelligence: Theory and implications. *Asia Pacific Management Review*, *28*(4), 598–610. <https://doi.org/10.1016/J.APMRV.2023.04.004>
- Kim, S., Vaiman, V., & Sanders, K. (2022). Strategic human resource management in the era of environmental disruptions. *Human Resource Management*, *61*(3), 283–293. <https://doi.org/10.1002/hrm.22107>
- Konovalova, V., Mitrofanova, E., Mitrofanova, A., & Gevorgyan, R. (2022). The Impact Of Artificial Intelligence On Human Resources Management Strategy: Opportunities For The Humanisation And Risks. *Wisdom*, *2*(1), 88–96. <https://doi.org/10.24234/wisdom.v2i1.763>
- Korzynski, P., Mazurek, G., Altmann, A., Ejdy, J., Kazlauskaitė, R., Paliszkiwicz, J., Wach, K., & Ziemia, E. (2023). Generative artificial intelligence as a new context for management theories: analysis of ChatGPT. *Central European Management Journal*, *31*(1), 3–13. <https://doi.org/10.1108/CEMJ-02-2023-0091>
- Lawande, N. (2024). Exploring the Trends of Artificial Intelligence in Recruitment: A Bibliometric Study. *International Journal of Supply and Operations Management*, *11*(3), 351–366. <https://doi.org/10.22034/IJSOM.2024.110284.3016>
- Majumder, S., & Mondal, A. (2021). Are chatbots really useful for human resource management? *International Journal of Speech Technology*, *24*(4), 969–977. <https://doi.org/10.1007/s10772-021-09834-y>
- Monod, E., Lissillour, R., Köster, A., & Jiayin, Q. (2023). Does AI control or support? Power shifts after AI system implementation in customer relationship management. *Journal of Decision Systems*, *32*(3), 542–565. <https://doi.org/10.1080/12460125.2022.2066051>
- Raman, R., Venugopalan, M., & Kamal, A. (2024). Evaluating human resources management literacy: A performance analysis of ChatGPT and bard. *Heliyon*, *10*(5), e27026. <https://doi.org/10.1016/j.heliyon.2024.e27026>
- Ren, S., Cooke, F. L., Stahl, G. K., Fan, D., & Timming, A. R. (2023). Advancing the sustainability agenda through strategic human resource management: Insights and suggestions for future research. *Human Resource Management*, *62*(3), 251–265. <https://doi.org/10.1002/hrm.22169>
- Rožman, M., Oreški, D., & Tominc, P. (2022). Integrating artificial intelligence into a talent management model to increase the work engagement and performance of enterprises. *Frontiers in Psychology*, *13*, 1014434. <https://doi.org/10.3389/fpsyg.2022.1014434/BIBTEX>
- Song, Y., & Wu, R. (2021). Analysing human-computer interaction behaviour in human resource management system based on artificial intelligence technology. *Knowledge Management Research and Practice*. <https://doi.org/10.1080/14778238.2021.1955630>
- Stanford University. (2024). *AI Index Report 2023 Stanford University*. <https://aiindex.stanford.edu/report/>

- Votto, A. M., Valecha, R., Najafirad, P., & Rao, H. R. (2021). Artificial Intelligence in Tactical Human Resource Management: A Systematic Literature Review. *International Journal of Information Management Data Insights*, 1(2), 100047. <https://doi.org/10.1016/J.JJIMEI.2021.100047>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *International Journal of Human Resource Management*, 33(6), 1237–1266. <https://doi.org/10.1080/09585192.2020.1871398>
- Wuisan, D. S. S., Sunardjo, R. A., Aini, Q., Yusuf, N. A., & Rahardja, U. (2023). Integrating Artificial Intelligence in Human Resource Management: A SmartPLS Approach for Entrepreneurial Success. *APTISI Transactions on Technopreneurship*, 5(3), 334–345. <https://doi.org/10.34306/att.v5i3.355>
- Yamin, M. A., Almuteri, S. D., Bogari, K. J., & Ashi, A. K. (2024). The Influence of Strategic Human Resource Management and Artificial Intelligence in Determining Supply Chain Agility and Supply Chain Resilience. *Sustainability (Switzerland)*, 16(7), 2688. <https://doi.org/10.3390/su16072688>
- Yang, Y. (2022). Artificial intelligence-based organizational human resource management and operation system. *Frontiers in Psychology*, 13, 962291. <https://doi.org/10.3389/fpsyg.2022.962291>



© 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).