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Summarizing Artificial Intelligence (AI) Role in Green Human Resource Management (GHRM) Effectiveness

Ishaq Ibrahim[1], Rany Abu Eitah[2]

[1] Faculty of Leadership and Management, Universiti Sains Islam Malaysia, Nilai 71800, Malaysia
[2] Faculty of Business, Middle East University, Amman 11831, Jordan

Corresponding Author Email: ishaq@usim.edu.my

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ABSTRACT

This research aims to review existing articles published exclusively in the Scopus database. Using a review research design, 88 papers containing both Artificial Intelligence (AI) and green human resource management (GHRM) in their titles were initially identified. After several filtering phases, only 35 papers were included in the review. The study found that AI plays a positive role in GHRM, which is highlighted and explained within the context of the analyzed articles. However, this positive role depends on having appropriate employees, abilities, skills, resources, and an enabling environment for integrating AI into GHRM. Conversely, AI can have negative effects on GHRM if employees, abilities, skills, resources, and environmental preparations for AI adoption are inadequate. Strategic and planned integration of AI and GHRM is the optimal approach to achieving sustainable performance in the current context.

1. INTRODUCTION

Artificial Intelligence (AI) holds significant transformative potential for human resource (HR) functions across organizational levels. It is particularly relevant in areas such as talent acquisition, career development, compensation management, green recruitment and training, and green incentive structures. AI enables the timely evaluation of candidates and the assessment of their suitability, a necessity in an era marked by accelerated digital transformation. AI has emerged as a pervasive global phenomenon, fundamentally altering traditional approaches to employee recruitment, training, and development. The business landscape is evolving rapidly from big data analytics to machine learning and AI, yet there remains a gap between theoretical rhetoric and practical implementation, necessitating new methodological approaches [1].

Nonetheless, many organizations have yet to fully embrace even basic big data analytics in HR management, despite widespread acknowledgment of its potential. AI facilitates faster and more efficient task execution, prompting organizations to increasingly incorporate advanced technologies into HR planning and other functions [2].

The growing complexity and pace of market shifts demand agile responses [3]. In response, HR organizations, particularly in Western economies, are investing in research and development to maintain a competitive advantage. AI offers a robust theoretical framework for reengineering HR functions such as training, recruitment, selection, performance appraisal, development, and incentive administration. It also enables continuous monitoring of employee behaviours such as online activity, project engagement, and communications, allowing HR departments to improve talent retention and accessibility strategies [4]. By anticipating workforce needs and enhancing performance tracking, AI-powered HR systems serve as strategic tools for optimizing human capital [5].

Thus, HR professionals must develop a comprehensive understanding of these technologies and their practical applications to effectively navigate and leverage the evolving digital ecosystem. AI-driven solutions are becoming increasingly vital in green human resource management (GHRM).

This study reviews the integration advantages and threat of AI into GHRM practices within corporate settings, emphasizing its role in promoting organizational sustainability as well. The matter of unlikely replacing inherently human aspects of management, such as interpersonal communication and emotional intelligence. In GHRM, a critical component of organizational effectiveness AI's growing presence signifies a major turning point. One of the most visible challenges is the sheer volume of applications received for corporate roles, which burdens HR professionals during initial screening stages [6]. However, there remains a gap in scholarly literature concerning the long-term consequences of AI integration with GHRM.

1.1 Green human resource management (GHRM)

GHRM is the concept of environmental awareness practiced by human resource departments in firms, aligning with the

latest approaches adopted worldwide [3]. Recently, HR departments have been adopting green practices to align with ongoing organizational strategies. Connecting HR departments to this concept is crucial and is reflected in organizational performance and sustainability [7, 8]. Sustainable performance can be achieved by implementing modern concepts and approaches in firms; GHRM and AI are among the most prominent emerging concepts globally [9, 10].

1.2 Artificial Intelligence (AI)

AI needs to be integrated into all departments toward the attainment of competitive advantage, sustain organizational performance, and work based on the global systems [11, 12]. Thus, all existing AI technologies in the market currently should be utilized to achieve organizations' goals and enable companies to access the international market [13, 14].

All industries are calling for the adoption of AI in their processes due to rapid changes and environmental requirements, in order to present business value and strategies. AI became the only tool to be noticed, heard, and considered convincing by competitors, suppliers, and customers [15, 16].

Mainly, AI is integrated into human resources in every field to add more value to to the industries, whereas departments must focus on resilience and agility to control the role of AI in improving the outcomes, accuracy, automation, efficiency, and the effectiveness of task achievement [17].

2. METHODOLOGY

This research employed a qualitative design, reviewing existing articles published and indexed in the SCOPUS database (https://www.scopus.com/pages/home?display=basic&zone=header&origin=sbrowse#basic) as of 1 June 2025.

The search found 88 papers written in English, identified on 1 June 2025.

The inquiry used for the research was "artificial AND intelligence AND green AND human AND resource AND management".

The papers were filtered to include only those focusing on HRM and AI in their findings, resulting in 46 papers.

The next round excluded two duplicate papers, reducing the total to 44 papers.

Another filtering round found that certain papers addressed either GHRM or AI, whereas in this study both topics needed to be addressed together. Finally, 35 papers were reviewed and sorted by authors, year of publication, title, and findings.

The researcher combined the coding and theming in Table 1 to present each paper with the findings. Hence, the research is a narrative review paper where the coding and theming of the papers could cause bias and fragmentation in the review [18]. There is only a theoretical framework supporting the existence of the relationship between the variables. Firstly, Resource-Based View (RBV) theory is the essential supportive body to the idea of the paper which posits that an organization's unique resources such as technology (AI) and human capital can provide a strategic advantage. Integrating AI into GHRM is seen as leveraging these resources to achieve both organizational performance and sustainability goals [19]. Secondly, Organizational Learning Theory highlights organizations' capacity to generate, disseminate, and use knowledge to adapt and innovate. The role of AI in GHRM can be seen as providing intelligent data analysis tools that help organizations learn how to better integrate and refine green practices, improving sustainability outcomes over time [19]. The Technology Acceptance Theory (TAM) is an influential framework used to predict and explain how individuals accept and use new technology systems. TAM suggests that two key beliefs primarily shape users' decisions to embrace or reject a technology: one is perceived usefulness (PU) defined as the degree to which someone believes that using a specific system will enhance their job performance. Another is perceived ease of use (PEOU) defined as the degree to which a person believes that using the technology will be free from effort [20].

These beliefs influence a user's attitude toward using the technology, which forms their behavioral intention to use it, ultimately determining actual technology use. TAM is underpinned by the Theory of Reasoned Action, which emphasizes that attitudes predict intentions, and intentions predict behaviors. TAM remains a foundational theory for investigating user acceptance of technology, offering valuable insights not only in general IT adoption but also in emerging fields like AI-enabled GHRM and enhancing the ability of HR functions to implement green practices efficiently, turning sustainable HR practices into a competitive advantage.

3. FINDINGS AND DISCUSSION

The researcher reviews the articles, highlighting the authors, year, title, and main findings of each study. Most importantly, the use of AI in GHRM has both negative and positive effects, depending on how each organization and its management integrate AI into GHRM functions. Table 1 and Figure 1 below presents the reviewed articles.

Table 1. Articles review

Reference	Title	Findings
[21]	Natural Resources and Green Economic Growth: The Role of Artificial Intelligence	In the normal economic situation AI worsen the employee's performance and organizational sustainability. and mitigate the green HRM in specific critical cases.
[22]	Analysis the Future of Artificial Intelligence in Green Human Resource Management and Its Talent Applications	Technology playing a critical blockchain variables toward the success and sustainable human resources departments.
[23]	Application of Artificial Intelligence for Sustaining Green Human Resource Management	AI play a fundamental role in enhancing Green HRM practices by automating processes like candidate screening, employee engagement, and career development. Adopting AI can lead to greater efficiency, reduced resource usage, and decrease in the overall environmental impact of HR operations, demonstrating the potential for technology to create more sustainable HR.
[24]	Artificial Intelligence Application in Human Resource Management: The Way forward	AI reshaped the human resource management and needed for practical implementation toward higher efficiency and greater job satisfaction.

[25]	Artificial Intelligence and the Future of Human Resource Management	Challenges such as transparency, bias mitigation, and skill upgrading encourage the researchers to argus that AI is positioning HR as a more strategic and data-driven partner within organizations.
[26]	Navigating the Future: The Role of Artificial Intelligence in Shaping Recruitment Practices	Recruitment practices going to be the highly affected by AI in the future of GHRM.
[27]	Assessing the Influence of Artificial Intelligence on Human Resource Management Practices	AI and GHRM shall concern the data security and organizational ethical frame.
[28]	Building a Sustainable Future: The Nexus Between Artificial Intelligence, Renewable Energy, Green Human Capital, Geopolitical Risk, and Carbon Emissions Through the Moderating Role of Institutional Quality	Working environment shall consider the human being through the implementation of the sustainability and goal's achievement.
[29]	AI in Green HR Practices: Sustainable Workforce Management	GHRM and AI amongst the most important and crucial factors to be explored for the sake of future fields sustainability.
[30]	AI Adoption for Green Performance: An Understanding of Moderated Mediation Model	GHRM maximizing employee motivation, abilities and commitment as well as the technological additions embodied by AI very important nowadays to the business body.
[31]	The Impact of Artificial Intelligence on Corporate Green Innovation: Can "Increasing Quantity" and "Improving Quality" Go Hand in Hand?	AI increases employees efficiency and environmental information transparency and enhancing the resilience against the external rapid changes.
[32]	Towards a Conceptual Model of AI-Mediated Knowledge Sharing Exchange of HRM Practices: Antecedents and Consequences	The integration of AI with knowledge in the organizations resulted in higher organizational outcomes, job satisfaction, motivation and more effectiveness.
[33]	Fostering Sustainability Through Technological Brilliance: A Study on the Nexus of Organizational STARA Capability, GHRM, GSCM, and Sustainable Performance	AI enhance the sustainable performance and positive connections in the organizations. Where embracing technological advancements and tools obtain the operational sustainability as well as supportive for policymakers in the manufacturing sector.
[34]	Human-Artificial Intelligence Collaboration in HR: Applications and Challenges	AI improves recruitment, training, and performance evaluation, enhancing efficiency and fairness which its GHRM practices.
[35]	Human Resource Management and AI: Does it Really Help?	AI found efficiency in recruitment, training, and performance management, while also addressing crucial concerns like potential job displacement, ethical implications, and the need for human oversight to ensure fairness and ethical conduct in AI-driven HR processes.
[36]	Cemetery: More Human, Intelligent, and Sustainable	The scientific-human collaboration is needed to be environmentally conscious and respectful of cultural needs.
[37]	Utilizing AI in Sustaining Green HRM Practices-A Digital Initiative Towards Socially Responsible and Environment Sustainability	Social responsibility and environmentally sustainable practices within organizations can be optimized by AI in various HR processes, such as recruitment, employee management, and policy application, to reduce resource consumption and foster ecological stability, transforming corporate HR into a greener and more sustainable model.
[38]	E-Recruitment with AI in GHRM for Corporate University Sustainability to Improve Organization Performance: Systematic Literature Review	AI can streamline recruitment processes, improve talent acquisition, and friendly HR practices. Giving long-term sustainability and success. There are some potential challenges, such as data privacy, new skills, careful implementation and continuous evaluation of these technologies.
[39]	Exploring The Moderating Role Of Technological Competence And Artificial Intelligence In Green HRM	Finding that these factors significantly influence how Green HRM benefits environmental sustainability.
[40]	CEO AI Orientation, Human Resources and Green Innovation: An Attention-Based View	Importantly, human resource slack is found to influence this relationship, causing the peak of green innovation to be reached sooner when there are more excess employees.
[41]	AI-Based Green Technology Implementation Simulation for Achieving Carbon Neutrality: Exploring the Role of Subsidies and Knowledge Management	Surprisingly, findings suggest higher education might not always increase enthusiasm for AI-based GTI, but optimal subsidy levels are crucial in balancing promoting environmentally friendly behaviors with adopting new technologies.
[42]	Artificial Intelligence and Remote Work: Transforming Human Resource Management in a Post-Pandemic World	AI's capability to automate routine tasks, optimize processes like recruitment and performance evaluation, and enhance employee engagement through tools like chatbots and personalized support. Address ethical concerns, such as data privacy, algorithmic bias, and ensuring fairness in AI implementation to fully realize AI's potential in creating more efficient and rewarding remote work environments.
[43]	Artificial Intelligence (AI) Framework in Human Resource Management (HRM): A Systematic Review	AI can enhance employee efficiency and contribute to competitive advantage by being applied across various HRM processes, such as recruitment, learning, performance management, and employee engagement. Despite benefits like reducing bias and automating routine tasks, the study also acknowledges challenges like ethical concerns and the need for further research into the long-term impact and human-AI interaction.
[44]	Artificial Intelligence for Sustaining Green Human Resource Management: A Literature Review	AI is improving employee performance, retention, sustainability and GHRM implementation. There are some challenges coming with technology adoption.

[45]	Artificial Intelligence-Based Green Human Resource Management for Organization's Operation Model	AI-GHRM reduces employee turnover, increase job satisfaction, and significant decreases in energy consumption and carbon emissions.
[46]	Demystifying the Roles of Organisational Smart Technology, Artificial Intelligence, Robotics and Algorithms Capability: A Strategy for Green Human Resource Management and Environmental Sustainability	There is a complex interplay between technology, HR practices, and environmental outcomes. Whereas technology negatively effecting HR practices and environmental outcomes.
[47]	Artificial Intelligence v/s Human Intelligence: A Relationship Between Digitalization and international Trade	AI offers efficiency while human intelligence is essential for in-depth analysis, theoretical grounding, and contextual understanding.
[48]	A Study on the Impact of How AI-Powered Green Development Influence Employee Green Behavior Within an Organization	AI-driven approaches significantly enhance employee environmental awareness, ultimately leading to environmentally conscious behavior and providing insights for integrating AI into corporate sustainability efforts, particularly in developing economies.
[49]	Examining the Application of Strategic Management and Artificial Intelligence, with a Focus on Artificial Neural Network Modeling to Enhance Human Resource Optimization with Advertising and Brand Campaigns	A people-based approach where employees at all levels contribute to green initiatives, supported by management strategies and AI technologies.
[50]	Strategic Integration of Analytics and Artificial Intelligence in Sustainable Human Resource Management: Fostering HR Excellence	AI governance and transparent communication key success ethical implementation of the advancements in HR.
[51]	Study on the Impact of AI-Powered GHRM Practices on Employee Behavior and Organizational Performance: Evidence from SMEs of Pakistan	AI investments, transparency in its use, and customization significantly influence employee actions, including environmental responsibility, organizational performance, and job satisfaction. AI implementation in GHRM can drive both sustainability and business success.
[52]	The Intersection of Artificial Intelligence and Human Resources: Transforming Journey Using Natural Language Processing	Ai tools are essential for innovation and job satisfaction. The existence of AI is creating engaging workplaces.

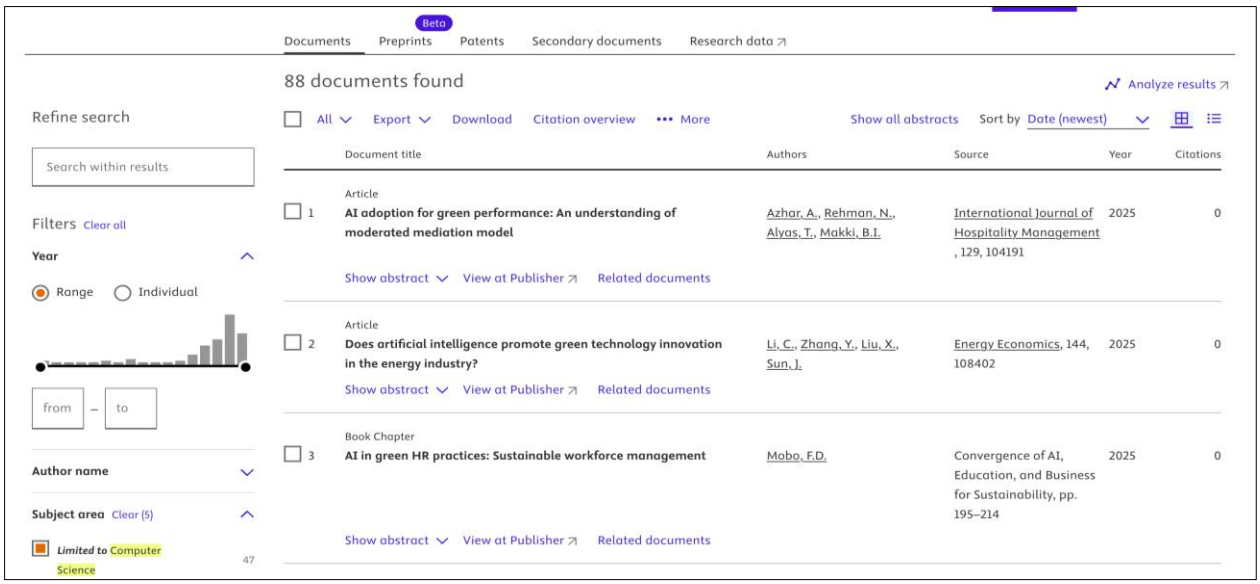

Figure 1. Scopus relevant papers
Source: Database screenshot

The first aspect to be discussed is the positive role of AI in GHRM which contains several points. Figure 2 presents the points that AI could play an effective role, which it could surely lead the organizations toward higher sustainability. AI enhances employees' commitment in organizations, especially in today's technology-driven industries where employees are eager to use AI in their daily tasks. Accordingly, more commitment, motivation and abilities within the usage of AI would be reflected on more retention and higher performance which could contribute to organizational sustainability. Furthermore, AI is one of the most important learning tools today; knowledgeable employees will be aware of the new strategies and working manners.

The existence of AI improves the rewards scheme and enables the managers to monitor task achievement. Managers could smoothly make the appropriate decisions. The use of AI turns the working environment into an environmentally conscious workplace, where employees and managers communicate effectively and efficiently. Finally, such a stable workplace helps organizations attract talent and maintain a sustainable HRM process.

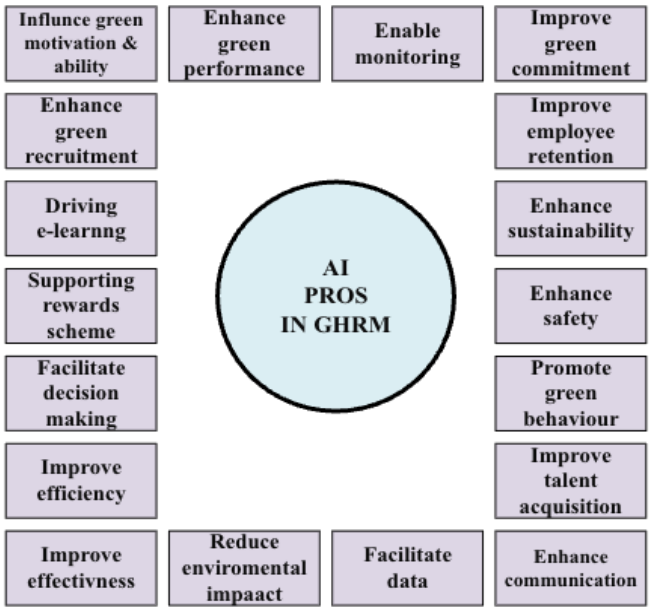

Figure 2. AI pros in GHRM
Source: Developed by researcher

Accordingly, managers and employees must be aware of the integration process and clearly define its aspects to maximize the positive impact of AI in firms' GHRM implementations. Such awareness ensures the effectiveness of AI-powered GHRM in driving higher performance and sustainability.

On the other hand, AI can also pose challenges and threats to GHRM in organizations as elaborated in Figure 3. Not all employees welcome the use of AI, due to concerns about being replaced by it. Furthermore, one of the most common challenges of technology adoption in organizations is bias and ethical concerns, which can significantly influence employees' psychological well-being. Integrating AI into organizations requires skilled employees to operate it, which is considered an additional burden on firms. Employees are also aware of the accountability associated with such systems, as they often come with more restrictions and limitations. Finally, it remains challenging to balance objective performance—measured by indicators such as metrics—and subjective performance—related to environmental concerns and organizational stability.

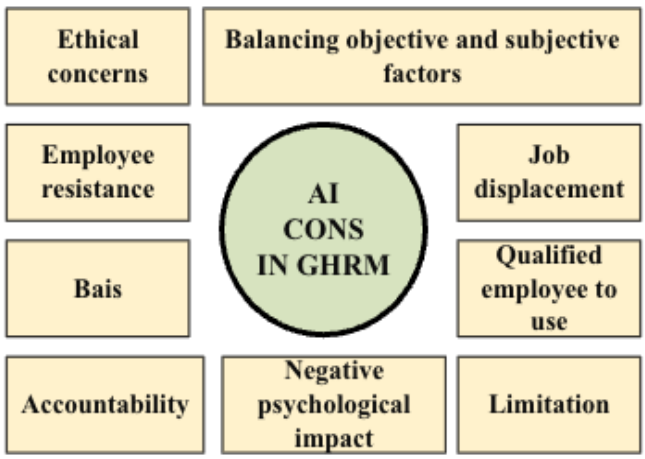

Figure 3. AI cons in GHRM
Source: Developed by researcher

Apparently, the utilization of AI requires accurate planning and analysis of an organization's goals, resources, and capabilities. AI can serve GHRM effectively under certain environmental conditions, while it may present threats under others. These results are based on the articles reviewed, with each point presented in the figures above supported by specific references, as can also be verified in the table.

To achieve sustainable firm performance and competitive advantage, organizations should examine their environment, resources, and existing capabilities to determine precisely what is needed to integrate AI in a way that maximizes its positive role while minimizing potential threats and negative impacts.

Therefore, this review paper's discussion and comparison of the reviewed studies will not be addressed in this section, as all findings have been derived from the reviewed literature. Instead, the paper will propose a model to be analyzed and investigated in future research. Figure 4 illustrates two categories of independent variables: the first relates to the utilization of AI—such as decision-making, communication, talent acquisition, monitoring, and knowledge management—while the second focuses on the effects of AI on employees, including green behavior, commitment, recognition, and rewards.

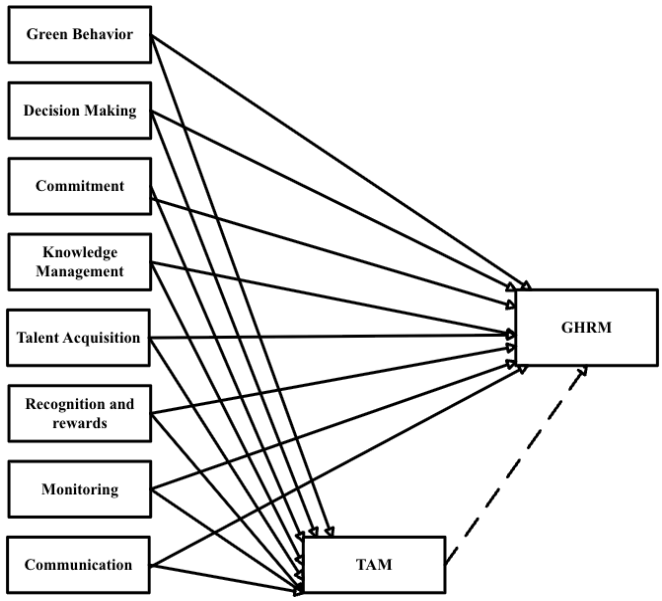

Figure 4. Proposed conceptual framework
Source: Developed by researcher

In addition, based on the papers reviewed, TAM facilitates both PU and PEOU, playing the role of mediators in the developed model above.

4. CONCLUSION

The review concludes the fact that AI can have either a positive or a negative role on GHRM based on certain reasonable perceptions and observations in different industries. Accordingly, readiness of organizations to integrate AI is reflected on organizational and performance sustainability, which is the top goal for organizations in the current competitive business world. The insight of the current paper is to enable employees to utilize AI with full awareness, education, skills of optimal method to use it. This brief developed the theoretical base for future research to overlook on high number of studies and comperhensive perception of

the previous research which is all concentrated on the features of AI role in GHRM. Additionally, this research proposed conceptual framework to be examined and explored by future research. The study recommends awareness about the purpose of using AI to specify what kind of environment is needed in the firms. Thus, the proposed model needs to be examined in future research according to the importance of mode's contents. In addition, firms recommended to embrace the model to be adopted in their organizational culture and daily practices.

REFERENCES

[1] Arslan, A., Cooper, C., Khan, Z., Golgeci, I., Ali, I. (2021). Artificial Intelligence and human workers interaction at team level: A conceptual assessment of the challenges and potential HRM strategies. International Journal of Manpower, 43(1): 75-88. https://doi.org/10.1108/ijm-01-2021-0052

[2] Ibrahim, I., Ali, K., Awais, I., Al-Tahitah, A., Almahallawi, W., Abdul Aziz, A.R. (2023). Educational arrangements toward human capital development: Evidence from the Malaysian and Jordanian universities. https://ssrn.com/abstract=4385567.

[3] Ibrahim, I., Eitah, R.A. (2025). Measuring the influence of green HRM, lean HRM, and agile HRM on sustainable manufacturing. Heritage and Sustainable Development, 7(1): 371-384. https://doi.org/10.37868/hsd.v7i1.1079

[4] Aaron Beldiq, E., Callula, B., Aprila Yusuf, N., Rahmania Az Zahra, A. (2024). Unlocking organizational potential: Assessing the impact of technology through SmartPLS in advancing management excellence. APTISI Transactions on Management, 8(1): 40-48. https://doi.org/10.33050/atm.v8i1.2195

[5] Ibrahim, I., Ali, K., Zumrah, A.R., Altahitah, A.N., Kanaker, O., Abd Rahman, R. (2024). Swot analysis of Al-Areen Wear Ltd: Case study. In International Conference on Da'wah and Islamic Management (IC-DAIM 2024), Malaysia, pp. 67-72.

[6] Pereira, V., Hadjielias, E., Christofi, M., Vrontis, D. (2023). A systematic literature review on the impact of Artificial Intelligence on workplace outcomes: A multi-process perspective. Human Resource Management Review, 33(1): 100857. https://doi.org/10.1016/j.hrmr.2021.100857

[7] Ibrahim, I., Alzubi, M.M.S. (2024). The impact of green human resource management practices (GHRMPs) on turnover intention (TI): Moderated by work-health balance (WHB) and work-family balance (WFB). Journal of Ecohumanism, 3(7): 2618-2634. http://doi.org/10.62754/joe.v3i7.4405

[8] Khan, S., Faisal, S. (2023). Green human resource management and organizational sustainability: A systematic literature review and bibliometric analysis. International Journal of Sustainable Development and Planning, 18(4): 1255-1262. https://doi.org/10.18280/ijsdp.180430

[9] Albloush, A., Alharafsheh, M., Hanandeh, R., Albawwat, A., Abu Shareah, M. (2022). Human capital as a mediating factor in the effects of green human resource management practices on organizational performance. International Journal of Sustainable Development and Planning, 17(3): 981-990. https://doi.org/10.18280/ijsdp.170329

[10] Ibrahim, I., Mohammed, A., Abdulaali, H.S., Mohammad, M.M., Ali, K. (2023). Does digital balanced scorecards lead to the sustainable performance amongst the Jordanian SMEs? International Journal of Professional Business Review, 8(7): e02173. https://doi.org/10.26668/businessreview/2023.v8i7.2173

[11] Khan, M.H., Muktar, S.N. (2021). What's Next for Green Human Resource Management: Insights and trends for sustainable development. International Journal of Sustainable Development and Planning, 16(1): 181-194. https://doi.org/10.18280/ijsdp.160119

[12] Dalmarco, G., Ramalho, F.R., Barros, A.C., Soares, A.L. (2019). Providing industry 4.0 technologies: The case of a production technology cluster. The Journal of High Technology Management Research, 30(2): 100355. https://doi.org/10.1016/j.hitech.2019.100355

[13] Al-Tamim, S.A., Anssari, M.A.A., Al-Tameemi, M.D. (2025). The impact of applying Artificial Intelligence-based systems on human resource costs in the light of environmental challenges. Heritage and Sustainable Development, 7(1): 245-256. https://doi.org/10.37868/hsd.v7i1.1091

[14] Alzubi, M.M.S., Mohammad Alrifae, A.A., Mahmoud, M.H., Atieh, A.A. (2025). Factors influencing business intelligence adoption by Jordanian private universities. PaperASIA, 41(1b): 148-167. https://doi.org/10.59953/paperasia.v41i1b.378

[15] Fosso Wamba, S., Guthrie, C., Queiroz, M.M., Minner, S. (2023). ChatGPT and generative Artificial Intelligence: An exploratory study of key benefits and challenges in operations and supply chain management. International Journal of Production Research, 62(16): 5676-5696. https://doi.org/10.1080/00207543.2023.2294116

[16] Alobaydi, B.A.A., Alzubi, M.M.S., Alqudah, A.M.A. (2025). Advancing e-commerce adoption among SMEs in Jordan: A path to digital transformation. Heritage and Sustainable Development, 7(1): 467-478. https://doi.org/10.37868/hsd.v7i1.1192

[17] Nawaz, N., Arunachalam, H., Pathi, B.K., Gajenderan, V. (2024). The adoption of Artificial Intelligence in human resources management practices. International Journal of Information Management Data Insights, 4(1): 100208. https://doi.org/10.1016/j.jjimei.2023.100208

[18] Jones, S. (2022). Interpreting themes from qualitative data: Thematic analysis. Eval Academy. https://www.evalacademy.com/articles/interpreting-themes-from-qualitative-data-thematic-analysis.

[19] Bhardwaj, B. (2023). Leveraging AI for the reinforcement of GHRM. In AI and Emotional Intelligence for Modern Business Management. IGI Global, pp. 64-76. https://doi.org/10.4018/979-8-3693-0418-1.ch005

[20] Aljarrah, E., Elrehail, H., Aababneh, B. (2016). E-voting in Jordan: Assessing readiness and developing a system. Computers in Human Behavior, 63: 860-867. https://doi.org/10.1016/j.chb.2016.05.076

[21] Lee, C.C., Xuan, C., Wang, F. (2024). Natural resources and green economic growth: The role of Artificial Intelligence. Resources Policy, 98: 105322. https://doi.org/10.1016/j.resourpol.2024.105322

[22] E, M.K., P.R., R. (2024). Analysis the future of Artificial Intelligence in green human resource management and

its talent applications. In 2024 International Conference on Integration of Emerging Technologies for the Digital World (ICIETDW), Chennai, India, pp. 1-6. https://doi.org/10.1109/icietdw61607.2024.10939893

[23] Garg, V., Srivastav, S., Gupta, A. (2018). Application of Artificial Intelligence for sustaining green human resource management. In 2018 International Conference on Automation and Computational Engineering (ICACE), Greater Noida, India, pp. 113-116. https://doi.org/10.1109/icace.2018.8686988

[24] Gupta, C.P., Kumar, V.V.R. (2024). Artificial Intelligence application in human resource management: The way forward. In 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS), Manama, Bahrain, pp. 1726-1730. https://doi.org/10.1109/icetsis61505.2024.10459605

[25] Benabou, A., Touhami, F., Demraoui, L. (2024). Artificial Intelligence and the future of human resource management. In 2024 International Conference on Intelligent Systems and Computer Vision (ISCV), Fez, Morocco, pp. 1-8. https://doi.org/10.1109/iscv60512.2024.10620146

[26] Alzyoud, A.A.Y., Omar, K.M., Arbab, A. (2024). Navigating the future: The role of Artificial Intelligence in shaping recruitment practices. In 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS), Manama, Bahrain, pp. 516-519. https://doi.org/10.1109/icetsis61505.2024.10459627

[27] Aini, Q., Rusilowati, U., Asfi, M., Sunarya, P.A., Nurafrianto Windiartono Putra, S., Az Zahra, A.R. (2024). Assessing the influence of Artificial Intelligence on human resource management practices. In 2024 3rd International Conference on Creative Communication and Innovative Technology (ICCIT), Tangerang, Indonesia, pp. 1-6. https://doi.org/10.1109/iccit62134.2024.10701158

[28] Iqbal, A., Zhang, W., Jahangir, S. (2025). Building a sustainable future: The nexus between Artificial Intelligence, renewable energy, green human capital, geopolitical risk, and carbon emissions through the moderating role of institutional quality. Sustainability, 17(3): 990. https://doi.org/10.3390/su17030990

[29] Mobo, F.D. (2025). AI in Green HR Practices: Sustainable Workforce Management. In Convergence of AI, Education, and Business for Sustainability. IGI Global Scientific Publishing, pp. 195-214.

[30] Azhar, A., Rehman, N., Alyas, T., Makki, B.I. (2025). AI adoption for green performance: An understanding of moderated mediation model. International Journal of Hospitality Management, 129: 104191. https://doi.org/10.1016/j.ijhm.2025.104191

[31] Dong, X., Zhou, N., Zhao, X., Yang, S. (2025). The impact of Artificial Intelligence on corporate green innovation: Can "increasing quantity" and "improving quality" go hand in hand? Journal of Environmental Management, 376: 124439. https://doi.org/10.1016/j.jenvman.2025.124439

[32] Malik, A., Nguyen, T.M., Budhwar, P. (2024). Towards a conceptual model of AI-mediated knowledge sharing exchange of HRM practices: Antecedents and consequences. IEEE Transactions on Engineering Management, 71: 13083-13095. https://doi.org/10.1109/tem.2022.3163117

[33] Al Masud, A., Islam, M.T., Rahman, M.K.H., Or Rosid, M.H., Rahman, M.J., Akter, T., Szabó, K. (2024). Fostering sustainability through technological brilliance: A study on the nexus of organizational STARA capability, GHRM, GSCM, and sustainable performance. Discover Sustainability, 5(1): 325. https://doi.org/10.1007/s43621-024-00495-w

[34] Gupta, N., Joshi, M., Agarwal, A.K., Kumar Tiwari, M. (2024). Human-Artificial Intelligence collaboration in HR: Applications and challenges. In 2024 International Conference on Computational Intelligence and Computing Applications (ICCICA), Samalkha, India, pp. 30-34. https://doi.org/10.1109/iccica60014.2024.10585171

[35] Al-Omari, M., Rahrouh, M., Karsoo, Y. (2023). Human resource management and AI: Does it really help? In 2023 24th International Arab Conference on Information Technology (ACIT), Ajman, United Arab Emirates, pp. 1-5. https://doi.org/10.1109/acit58888.2023.10453810

[36] Carvalho Agostini, A.L., Manfroi, C., Pereira, R., Da Costa, E.M., Dos Santos, N. (2024). Cemetery: More human, intelligent, and sustainable. In 2024 International Conference on Intelligent Environments (IE), Ljubljana, Slovenia, pp. 132-138. https://doi.org/10.1109/ie61493.2024.10599898

[37] Chand, R., Narula, G.S., Nijjer, S., Jandwani, A. (2023). Utilizing AI in sustaining green HRM practices- A digital initiative towards socially responsible and environment sustainability. In 2023 5th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N), Greater Noida, India, pp. 541-544. https://doi.org/10.1109/icac3n60023.2023.10541407

[38] Fazlurrahman, H., Setyo Nugroho, B., Asha'ari, M.J., Mat Deli, M., Noordiana Wan Hanafi, W., Binti Daud, S. (2024). E-recruitment with AI in GHRM for corporate university sustainability to improve organization performance: Systematic literature review. In 2024 12th International Conference on Cyber and IT Service Management (CITSM), Batam, Indonesia, pp. 1-5. https://doi.org/10.1109/citsm64103.2024.10775838

[39] Abid, U.B., Faisal, M.N., Al-Esmael, B., Farooq, Z.H. (2024). Exploring the moderating role of technological competence and Artificial Intelligence in green HRM. Polish Journal of Management Studies, 29(2): 7-22. https://doi.org/10.17512/pjms.2024.29.2.01

[40] Wang, X., Wu, W. (2024). CEO AI orientation, human resources and green innovation: An attention-based view. Kybernetes. https://doi.org/10.1108/k-04-2024-0964

[41] Ren, J., Abbas, Q., Hussain, J., Hu, D., Li, J. (2024). AI-based green technology implementation simulation for achieving carbon neutrality: Exploring the role of subsidies and knowledge management. Environmental Science and Pollution Research, 31(47): 57685-57700. https://doi.org/10.1007/s11356-024-34966-4

[42] Sahyaja, C., Shankar, C., Zeeshan, K., Nagaraj, P. (2024). Artificial Intelligence and remote work: Transforming human resource management in a post-pandemic worlD. In 2024 3rd International Conference on Automation, Computing and Renewable Systems (ICACRS), Pudukkottai, India, pp. 1555-1560. https://doi.org/10.1109/icacrs62842.2024.10841784

[43] Gupta, N., Shekhar, R., Sehgal, S., Dhaka, S., Malik, A., Mathur, S. (2024). Artificial Intelligence (AI) framework in human resource management (HRM): A systematic review. In 2024 International Conference on Cybernation and Computation (CYBERCOM), Dehradun, India, pp. 256-261. https://doi.org/10.1109/cybercom63683.2024.10803262

[44] Yassin Alzyoud, A.A. (2022). Artificial Intelligence for sustaining green human resource management: A literature review. In 2022 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS), Manama, Bahrain, pp. 321-326. https://doi.org/10.1109/icetsis55481.2022.9888840

[45] Pillai, R.H., S, S., Sastri, A., Adarsh, R., P, P. (2024). Artificial Intelligence-based green human resource management for organization's operation model. In 2024 5th International Conference on Recent Trends in Computer Science and Technology (ICRTCST), Jamshedpur, India, pp. 35-40. https://doi.org/10.1109/icrtcst61793.2024.10578475

[46] Ogbeibu, S., Emelifeonwu, J., Pereira, V., Oseghale, R., Gaskin, J., Sivarajah, U., Gunasekaran, A. (2023). Demystifying the roles of organisational smart technology, Artificial Intelligence, robotics and algorithms capability: A strategy for green human resource management and environmental sustainability. Business Strategy and the Environment, 33(2): 369-388. https://doi.org/10.1002/bse.3495

[47] Aggarwal, V., Karwasra, N. (2025). Artificial Intelligence v/s human intelligence: A relationship between digitalization and international trade. Future Business Journal, 11(1): 1-16. https://doi.org/10.1186/s43093-025-00438-5

[48] Umer, W., Furnaz, R., Sadiq, B., Bashir, T., Naseem, A. (2024). A study on the impact of how AI-powered green development influence employee green behavior within an organization. In 2024 Horizons of Information Technology and Engineering (HITE), Lahore, Pakistan, pp. 1-5. https://doi.org/10.1109/hite63532.2024.10777128

[49] Ruoxing, C., Jianning, W., Basem, A., Hussein, R.A., Salahshour, S., Baghaei, S. (2025). Examining the application of strategic management and Artificial Intelligence, with a focus on artificial neural network modeling to enhance human resource optimization with advertising and brand campaigns. Engineering Applications of Artificial Intelligence, 143: 110029. https://doi.org/10.1016/j.engappai.2025.110029

[50] Menon, S., Yadav, J., Chopra, A., Thomas, J. (2024). Strategic integration of analytics and Artificial Intelligence in sustainable human resource management: Fostering HR excellence. In 2024 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, pp. 1-5. https://doi.org/10.1109/icrito61523.2024.10522141

[51] Umer, W., Furnaz, R., Sadiq, B., Bashir, T., Naseem, A. (2024). Study on the impact of AI-powered GHRM practices on employee behavior and organizational performance: Evidence from SMEs of Pakistan. In 2024 Horizons of Information Technology and Engineering (HITE), Lahore, Pakistan, pp. 1-5. https://doi.org/10.1109/hite63532.2024.10777190

[52] Sharma, C., Chanana, N. (2025). The intersection of Artificial Intelligence and human resources: Transforming journey using natural language processing. Iran Journal of Computer Science. https://doi.org/10.1007/s42044-025-00261-9