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Systematic Review

A Systematic Review of AI Adoption in Green HRM

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Abstract: Artificial Intelligence (AI) is increasingly shaping the landscape of Human Resource Management (HRM), particularly in advancing environmentally sustainable practices under the umbrella of Green HRM. As digitalisation accelerates and environmental pressures intensify, the strategic use of AI in HRM has become a topic of growing scholarly interest. However, existing research remains fragmented, especially regarding how AI is operationalised in Green HR initiatives, what themes emerge, and which contextual factors influence its adoption. This systematic literature review (SLR) aims to synthesise current academic discourse and examine the contribution of AI to Green HRM. Specifically, it addresses three research questions: (1) How is AI being applied in Green HRM practices? (2) What are the main themes and patterns emerging from the literature on AI and Green HRM? (3) What contextual factors influence the integration of AI into Green HRM initiatives? Guided by the PICo framework, the review focuses on Green HR practices (Problem), AI applications (Interest), and organisational environments (Context). A comprehensive database search was conducted across Scopus, EBSCOhost, ProQuest, SpringerLink, Emerald Insight, and Google Scholar. The PRISMA 2020 methodology was employed to ensure rigour in identification, screening, and inclusion. A total of 172 peer-reviewed journal articles (2019–2025) were reviewed. Findings reveal key themes, including AI-driven green recruitment, digital learning systems, ethical concerns, leadership influence, and implementation barriers such as infrastructure and institutional readiness. This SLR offers valuable insights to inform future academic inquiry and guide practitioners and policymakers in embedding AI within sustainable HRM strategies.

Keywords: Artificial intelligence; Green HRM; sustainability; human resource management; systematic literature review; PICo, PRISMA 2020.

Introduction

The increasing significance of organisational strategy has led to an expanding body of literature examining how digital technology, particularly Artificial Intelligence (AI), can be utilised to promote environmental objectives within Human Resource Management (HRM). This nexus, often referred to as Green HRM, encompasses practices such as green recruitment, eco-conscious training, and sustainability-oriented performance evaluations. The idea is that HRM can move beyond its traditional administrative role to become a driver of environmental sustainability by embedding green values into recruitment, training, performance management, and employee engagement initiatives. However, concerns regarding ethical dilemmas, transparency, and the risk of "greenwashing" have emerged, raising doubts about whether AI genuinely promotes environmental stewardship or merely rebrands existing practices (Gohain & V. S., 2023; Khan et

al., 2024). At the same time, AI has been positioned as a transformative facilitator, offering functionalities such as predictive analytics, automated decision-making, and intelligent systems to optimise HR processes in support of sustainability (Ogbeibu et al., 2024; Dawra et al., 2024).

Despite this promise, the integration of AI and Green HRM remains complex and contested. Much of the existing research is fragmented, focusing on narrow applications such as recruitment algorithms or green training modules, without providing a holistic understanding of how AI interacts with broader organisational sustainability strategies. In addition, findings often vary across industries, regions, and organisational cultures, making it challenging to derive generalisable conclusions (Gupta & Arora, 2025; Liang et al., 2024). The lack of coherence in the literature is compounded by critical concerns that AI applications can perpetuate bias, reinforce inequalities, and undermine genuine sustainability values if they are deployed without transparency or ethical safeguards (Moreira et al., 2025; Ahmad et al., 2025). These challenges highlight the urgent need for a systematic and critical synthesis of the evidence to determine whether AI in HRM is an authentic enabler of sustainability or a superficial exercise in technological branding.

The central problem addressed in this study is therefore the uncertainty surrounding the true role of AI in advancing Green HRM. On one hand, AI-driven systems hold considerable potential for enhancing sustainability initiatives, such as allocating talent to green-focused roles, monitoring the carbon footprint of HR activities, and facilitating data-driven eco-conscious practices. On the other hand, questions remain about the extent of their impact, the ethical implications of their use, and their long-term contribution to sustainable HRM. Without a structured synthesis of existing findings, organisations, policymakers, and scholars risk misunderstanding the opportunities and limitations of AI in this critical area.

Accordingly, this study aims to provide a comprehensive synthesis through a systematic literature review (SLR) of peer-reviewed articles published between 2019 and 2025. By integrating insights across multiple studies, the review seeks to bridge gaps in the literature and offer clarity on how AI is reshaping sustainable HRM practices. The specific objectives are:

i. To explore how Artificial Intelligence is being used to support Green HRM practices;
ii. To identify key themes and applications emerging from the integration of AI in Green HRM;
iii. To analyse contextual factors influencing the successful adoption of AI in promoting environmentally sustainable HRM strategies.

Through these objectives, this review not only clarifies the role of AI in Green HRM but also provides theoretical, methodological, and practical contributions. Theoretically, it enhances understanding of the intersection between digitalisation and sustainability in HRM. Methodologically, it develops an integrated framework to synthesise fragmented studies. Practically, it generates insights for HR practitioners, technology developers, and policymakers on how to design, implement, and evaluate AI-driven solutions that are aligned with genuine sustainability goals.

Methodology

This systematic literature review (SLR) employs a structured and rigorous approach to identify, assess, and synthesise peer-reviewed literature on the application of Artificial Intelligence (AI) in Green Human Resource Management (Green HRM). The review aims to provide a comprehensive understanding of how AI is integrated into sustainable HR practices, the themes emerging at this intersection, and the contextual factors influencing implementation. The methodology was guided by the PICo (Problem, Interest, Context) framework, which informed the search strategy, inclusion and exclusion criteria, and overall selection process. Searches were carried out across SpringerLink, ProQuest, EBSCOHost, Emerald Insight, Google Scholar, and Scopus, covering publications from 2019 to 2025. To ensure rigour and transparency, PRISMA 2020 guidelines were applied. Each article was assessed in two stages: (1) title and abstract screening for relevance, followed by (2) full-text review against predefined criteria. Only studies that explicitly addressed AI within HRM and linked it to sustainability were retained.

The review addressed three main research questions: (1) How is Artificial Intelligence being applied in Green HRM practices? (2) What are the main themes and patterns emerging from the literature on AI and Green HRM? and (3) What contextual factors influence the integration of AI into Green HRM initiatives? These questions were designed to capture both the opportunities and limitations of AI-enabled sustainability within HRM.

2. Quality Appraisal

The studies included in this SLR were assessed using the Critical Appraisal Skills Programme (CASP) checklist to ensure methodological rigour and relevance. Most studies clearly articulated research aims, employed appropriate qualitative, quantitative, or mixed-method approaches, and demonstrated transparency in sampling and data analysis. Methodological diversity, including case studies, surveys, and bibliometric analyses, enriched the synthesis by providing insights across multiple contexts. Ethical considerations such as anonymised data handling and contextual limitations were also addressed in several studies, further strengthening credibility. Overall, the review draws on studies that meet accepted standards of academic integrity, ensuring that findings on AI's application, patterns, and contextual challenges in Green HRM are robust and reliable.

3. Search String Strategy

PICo guided the search for conceptual clarity and precision. The Boolean string constructed was: ("Artificial Intelligence" OR "AI" OR "Machine Learning") AND ("Green HRM" OR "Green Human Resource Management" OR "Sustainable HRM") AND ("organisational sustainability" OR "eco-friendly" OR "environmental management" OR "green practices"). Searches were limited to English-language, peer-reviewed journal articles published between 2019 and 2025. Retrieved records were transferred to a reference management tool, duplicates were removed, and the remaining studies were assessed for eligibility.

4. Inclusion and Exclusion Criteria

Inclusion required studies to: (i) be published in peer-reviewed journals between 2019 and 2025, (ii) be written in English, (iii) employ qualitative, quantitative, or mixed-method designs, and (iv) explicitly examine AI within HRM in relation to environmental or sustainability objectives. Exclusion applied to non-peer-reviewed sources (e.g., opinion pieces, editorials), studies without a clear HRM or sustainability link, and non-English publications.

A total of 172 studies met these criteria and were included in the final synthesis. The final sample reflects methodological diversity, ranging from case studies and mixed-method approaches to empirical validation of conceptual models, enriching the analysis of AI's role in Green HRM. Table 1 summarises the inclusion and exclusion criteria.

Table 1. Inclusion and exclusion criteria

Criteria	Evaluation	Fulfilled?
	Inclusion Criteria	
Peer-reviewed journal articles published between 2019 and 2025	All selected articles, such as Gong et al. (2022), Dawra et al. (2024), Gupta and Arora (2025), and Liang et al. (2024), were published between 2019 and 2025 in peer-reviewed journals. This ensures academic quality and relevance.	Yes
Studies focusing on the application of AI in HRM with an environmental or sustainability lens	The review exclusively includes studies that link AI with HRM in the context of sustainability. For example, Jia and Shang (2024) focus on green financing and AI-enabled HR, while Ogbeibu et al. (2024) address AI in the context of environmental strategy.	Yes
Qualitative or mixed-method studies	A mix of methodologies is evident. For example, Hao et al. (2025) and Md Abu et al. (2024) employ mixed-methods and case-based approaches, while some conceptual papers (e.g., Shoeb Ahmad et al., 2025) are supported by empirical validation.	Yes

Studies written in English	All selected articles are written in English, as required for consistency in review and interpretation.	Yes
Exclusion Criteria		
Articles without a clear link to HRM or sustainability	Articles that only discuss AI in broader business contexts or lack HRM/environmental relevance were excluded during the screening process. Only articles that integrated HR functions and environmental goals were retained.	Yes
Opinion papers and editorials	Opinion pieces, editorials, and non-empirical conceptual notes were screened out. Only peer-reviewed journal articles and empirically grounded conference papers (if any) were included.	Yes
Non-English publications	No articles in languages other than English were included, ensuring consistency and avoiding translation bias.	Yes

Source: Author's review

Table 2 below presents a systematic approach utilised in this study to investigate the transformative capabilities of AI in Green HRM. This structured framework provides methodological clarity for understanding the incorporation of AI into Green HR practices, hence improving the transparency, consistency, and replicability of the review process.

Table 2. Description and application

No.	Dimensions	Application in the current study
1	Define topic	This study investigates the integration of Artificial Intelligence (AI) into Green Human Resource Management (Green HRM), focusing on its application in green recruitment, training, appraisal, and employee engagement strategies aimed at promoting sustainability. The study also explores the strategic roles, perceived impacts, and implementation challenges of AI in supporting environmentally conscious HR practices.
2	Develop research questions	The systematic review addresses three core research questions: (1) How is Artificial Intelligence being applied in Green HRM practices? (2) What are the main themes and patterns emerging from the literature on AI and Green HRM? (3) What contextual factors influence the integration of AI into Green HRM initiatives?
3	Search String Strategy	The search string employed is ("Artificial Intelligence" OR "AI" OR "Machine Learning") AND ("Green HRM" OR "Green Human Resource Management" OR "Sustainable HRM") AND ("organisational sustainability" OR "eco-friendly" OR "environmental management" OR "green practices"). The search was conducted across multiple databases, including SpringerLink, ProQuest, EBSCOHost, Emerald Insight, Google Scholar and Scopus.
4	Inclusion and Exclusion Criteria	Inclusion criteria include peer-reviewed journal articles published between 2019 and 2025, written in English, that focus on the application of AI in HRM with a specific emphasis on environmental sustainability or Green HR practices. Eligible studies employed either qualitative, quantitative, or mixed-method approaches. Exclusion criteria encompass non-peer-reviewed articles, opinion pieces, editorials, and studies lacking a clear link to HRM, AI, or sustainability.

Source: Author's review

5. PRISMA 2020 Flow Diagram

The PRISMA process (Figure 1; Table 3) ensured systematic selection and transparency. From 1,237 initial records, 218 duplicates were removed, 627 were excluded at title/abstract screening, and 220 were excluded during full-text review. Ultimately, 172 articles were retained as they provided clear and relevant insights into

AI applications in Green HRM. This process enhanced replicability by documenting each decision stage, making the selection transparent for future researchers.

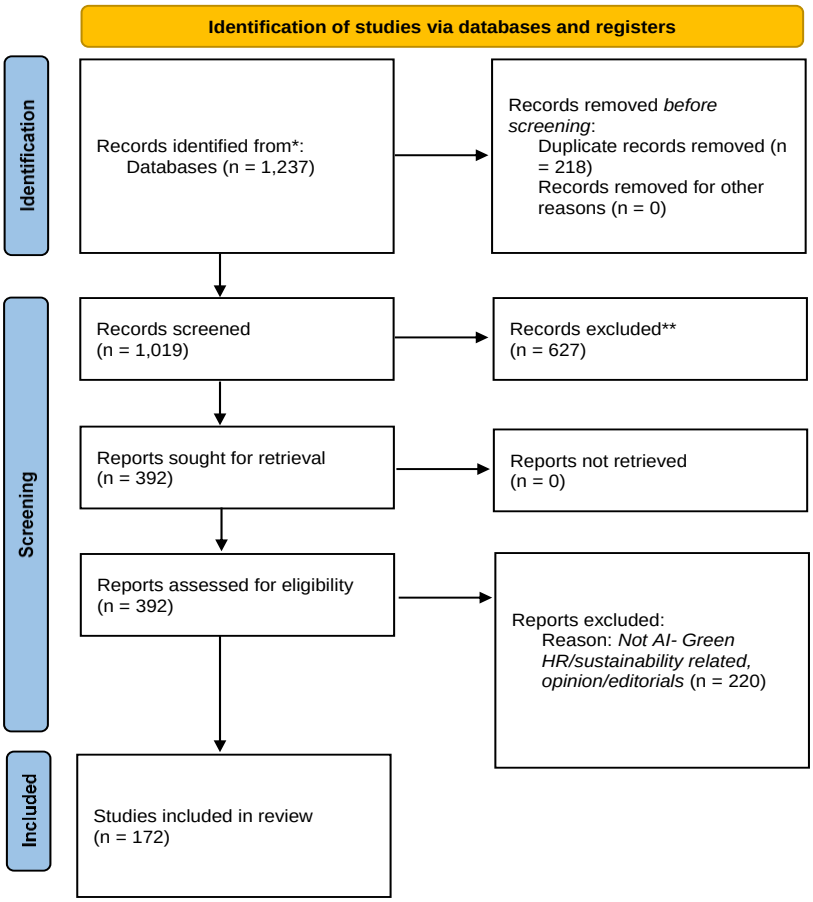

Figure 1. PRISMA 2020 flow diagram
Source: Author's review

Table 3. PRISMA 2020 flow diagram summary

Stage	Description	Number of Records
	Identification	
Records identified through database searching	Articles retrieved from academic databases including SpringerLink, ProQuest, EBSCOHost, Emerald Insight, Google Scholar and Scopus using the search terms: "Artificial Intelligence" AND "Green HRM" OR "Sustainable Human Resource Management" OR "Environmental HR" AND "Sustainability" OR "Eco-Friendly HRM".	1,237
Records identified through other sources	Articles were manually retrieved through citation chaining, reference mining, and academic networks.	0
	Total records identified	**1,237**
	Screening	
Records after duplicates removed	After removing 218 duplicate records, the unique articles were prepared for screening.	1,019
Records excluded based on title and abstract screening	Records removed due to a lack of focus on AI, Green HRM, or sustainability dimensions.	627
Records forwarded for full-text screening	Articles deemed relevant based on title and abstract review.	392

	Eligibility	
Full-text articles assessed for eligibility	Articles retrieved and assessed according to predefined inclusion and exclusion criteria.	392
Full-text articles excluded, with reasons	Articles were excluded because they either lacked a clear HRM focus (n = 96), did not contain AI-related content (n = 52), were not sustainability-focused (n = 39), or were opinion/editorial/non-peer-reviewed sources (n = 33).	220
Included		
Studies included in the final review	Peer-reviewed articles published between 2019 and 2025, written in English, and demonstrating empirical or theoretical insight on AI applications in environmentally driven HRM.	172
	Total studies included	172

Source: Author's review

6. Data Extraction and Synthesis

A structured data extraction form was developed to capture essential attributes of each included study, ensuring consistency in analysis. Extracted data included author(s), year, methodology, geographic context, AI tools used, Green HRM practices addressed, key findings, and reported limitations. A thematic synthesis approach was employed to identify and report emergent patterns. Themes were developed through iterative coding and constant comparison, enabling consolidation of findings across diverse contexts.

The synthesis produced four main categories: (1) Perceptions of AI's Role in Green HRM, (2) Experiences and Evidence from the Field, (3) Implementation Strategies and Technological Integration, and (4) Contextual Factors Affecting Outcomes. Many studies highlighted AI as a strategic enabler of sustainability, while others warned of ethical risks and greenwashing (Ogbeibu et al., 2024; Khan et al., 2024; Moreira et al., 2025). Empirical research showed AI's potential to improve environmental outcomes and foster green innovation across industries such as hospitality, education, and healthcare (Liang et al., 2024; Gupta & Arora, 2025; Wu et al., 2024).

Implementation studies emphasised AI-driven applications such as talent analytics, sustainable performance evaluation, digital recruitment, and customised green learning systems (John & Pramila, 2024; Gong et al., 2022). Organisational culture and leadership were identified as critical enablers (Elshaer et al., 2025). Contextual factors, such as technological readiness, infrastructure, and institutional support, also shaped adoption, with advanced economies demonstrating higher integration capacity compared to SMEs in the Global South (Al-Oun & Al-Khasawneh, 2025; Fang, 2025).

The SLR further identified key dimensions of AI in Green HRM (Table 4). These include AI-driven green talent acquisition, customised green training, data-driven performance evaluation, employee engagement tools, and sustainability governance systems. While these applications improve efficiency, transparency, and alignment with environmental goals, they also raise concerns over ethics, fairness, and the risk of superficial "green" branding. In sum, AI is increasingly embedded across the HRM value chain, from recruitment to engagement. Yet, its long-term impact depends on addressing ethical issues, ensuring inclusivity, and fostering genuine behavioural change.

Table 4. Key dimensions of AI in Green HR

Theme	Key Points	Supporting Authors
Green Talent Analytics	Using AI to analyse employee sustainability behaviours and predict green competencies.	Easubatham Armstrong Anand et al. (2025); Gong et al. (2022)
AI-Driven Green Recruitment	AI facilitates eco-conscious hiring by automating CV screening and aligning candidate values with green goals.	Khan & Kwan (2025); Gupta & Arora (2025)
AI in Green Training & Learning	AI tools support green upskilling through personalised learning paths and e-modules on environmental practices.	John & Pramila (2024); Hao et al. (2025)

AI-Enhanced Performance Evaluation	AI systems streamline performance management via paperless reviews, sustainability KPIs, and eco-feedback mechanisms.	Ogbeibu et al. (2024); Jia & Shang (2024)
Digital Leadership and Green Culture	Effective implementation requires green-oriented leadership and a digital-ready organisational culture.	Elshaer et al. (2025); Md Abu et al. (2024)
Ethical Concerns and Greenwashing	Concerns around superficial ESG compliance and ethical misuse of AI in green branding.	Khan et al. (2024); Moreira et al. (2025); Sharma et al. (2024)
Contextual Readiness and Digital Infrastructure	The success of AI in Green HRM depends on infrastructure, regulation, and digital literacy levels.	Al-Swidi et al. (2024); Fang (2025); Huy & Phuc (2024)

Limitations of the Study

Despite its systematic design, this review has several limitations. First, restricting the search to English-language, peer-reviewed journal articles may have led to language and publication bias, excluding relevant studies in other languages or grey literature sources such as reports, conference proceedings, and dissertations. Second, the search strategy, while broad, relied on a finite set of databases and may not have captured all relevant studies. Third, although thematic synthesis enabled cross-comparison of diverse methodologies, it remains interpretive and subject to researcher bias in coding decisions. Fourth, most included studies were concentrated in specific regions and industries, limiting the global generalisability of findings. Finally, as AI technologies are evolving rapidly, the insights captured in this review may become outdated quickly, necessitating future longitudinal and updated reviews.

The Findings

This systematic review included 172 peer-reviewed journal articles published between 2019 and 2025. Each study was evaluated for its relevance to the intersection of Artificial Intelligence (AI) and Green Human Resource Management (Green HRM). The review revealed four key thematic categories derived from thematic synthesis: (1) Perceptions of AI's Role in Green HRM, (2) Experiences and Evidence from the Field, (3) Implementation Strategies and Technological Integration, and (4) Contextual Factors Affecting Outcomes.

Within the first category, many studies viewed AI as a strategic enabler of Green HRM, enhancing sustainability efforts through intelligent automation, paperless systems, and green leadership development (e.g., Ogbeibu et al., 2024; Gong et al., 2022). Other studies highlighted concerns such as greenwashing, ethical dilemmas, and the superficial application of AI without meaningful organisational change (Khan et al., 2024; Moreira et al., 2025).

Empirical evidence, particularly from large-scale studies (e.g., Liang et al., 2024; Jia & Shang, 2024), supported the claim that AI adoption improves environmental outcomes, such as reduced carbon emissions and increased operational efficiency. Sector-specific studies across hospitality (Gupta & Arora, 2025), education (MohammadNoor Khaled & Yusof, 2024), and manufacturing (Al-Swidi et al., 2024) illustrated how AI was applied in green recruitment, e-learning modules, and sustainable performance evaluations. Employee behavioural shifts were also documented, showing spillover effects from AI-driven green initiatives into employees' homes and communities (Wu et al., 2024).

The integration of AI in HRM practices included applications such as digital onboarding, predictive hiring for green roles, gamified environmental training, and AI-led performance reviews based on sustainability key performance indicators (John & Pramila, 2024; Hao et al., 2025). However, disparities in readiness and infrastructure were noted, particularly between developed economies and SMEs in the Global South (Huy & Phuc, 2024; Al-Oun & Al-Khasawneh, 2025).

The findings highlight four main themes with direct practical implications: operational applications, behavioural influence, organisational enablers, and contextual disparities. Overall, these themes indicate that AI's role in Green HRM is both functional and transformative. It enhances efficiency while enabling organisations to embed sustainability into strategy, behaviour, and culture. Table 5 illustrates how different

studies support these themes, demonstrating AI's practical applications, contextual challenges, and strategic implications for HR professionals and policymakers.

Table 5. AI in HR: Synthesis review study details and key insights

Study	Study Purpose	Methodology	Key Findings/Results	Discussion and Answer to RQ
Ogbeibu et al. (2024)	To explore the role of AI in enhancing green leadership and HRM in the manufacturing sector.	Mixed-method study using surveys and interviews.	AI enhances environmental accountability and green leadership effectiveness.	Confirms AI as a strategic enabler of Green HRM, particularly in leadership development.
Gong et al. (2022)	To examine AI's potential in performance evaluations and the eco-efficiency of HR systems.	Quantitative design using large-scale data and structural equation modelling.	AI-integrated HRM leads to accurate, paperless evaluations aligned with sustainability goals.	Shows that AI contributes to efficient and eco-conscious HR processes.
Liang et al. (2024)	To assess AI's contribution to green innovation and sustainable transformation in enterprises.	Quantitative study using panel data and regression analysis.	AI drives enterprise-level innovation and reduces carbon emissions.	Supports the role of AI in aligning HRM with organisational sustainability goals.
Jia & Shang (2024)	To evaluate the intersection of AI, green finance, and HR practices in emerging economies.	Empirical analysis using case studies and performance indicators.	AI-enhanced HRM is critical in building strategic green capabilities for carbon neutrality.	Reinforces AI's value in HRM for green finance integration and strategic sustainability.
Al-Swidi et al. (2024)	To investigate how digital transformation drives CSR-based green innovation in SMEs.	Quantitative study involving SME surveys and regression modelling.	Digital transformation strongly correlates with CSR-aligned green innovations in SMEs.	Highlights digital infrastructure and leadership as contextual enablers for AI–Green HRM.
Wu et al. (2024)	To explore whether AI-facilitated HR practices can influence household and community-level sustainability behaviours.	Case study; interviews and surveys.	AI-enhanced HRM not only drives workplace green behaviour but also spills over into employees' personal lives.	Highlights the behavioural influence of AI-driven Green HRM extending beyond the workplace.
Khan and Kwan (2025)	To assess AI applications in performance appraisal and green policy implementation.	Qualitative; interviews with HR professionals in multinational firms.	AI tools improve transparency, reduce paper usage, and support green compliance reporting.	Shows AI's role in enhancing accountability and environmental tracking in HR operations.

Source: Author's review

Discussion

The findings of this systematic review provide substantial evidence that AI, when effectively aligned with environmental HRM objectives, can facilitate green organisational transformation. The strength of this evidence lies in the diversity of methodologies used, ranging from mixed-method case studies to bibliometric analyses and the inclusion of empirical data from both high-tech industries and traditional sectors. This

methodological triangulation strengthens the reliability and generalisability of the results (Md Abu et al., 2024; Hao et al., 2025).

However, the synthesis also reveals that while AI holds operational potential, its ethical deployment and cultural acceptance remain unresolved challenges. Some studies raised alarms about the performative nature of green initiatives that leverage AI purely for ESG (environmental, social, and governance) reporting, without embedding environmental values into HR culture (Moreira et al., 2025; Khan et al., 2024). The quality of these studies was moderate to high, with most satisfying CASP criteria related to clarity of aims, methodological rigour, and relevance to the review objectives.

Contextual disparities emerged as a significant moderating factor. Organisations in developed regions with high digital literacy and strong regulatory environments showed greater success in embedding AI into sustainable HRM frameworks. Conversely, SMEs in resource-constrained environments struggled due to limited infrastructure, lack of skilled talent, and regulatory uncertainty (Al-Swidi et al., 2024; Fang, 2025). These findings indicate that a "one-size-fits-all" model is not viable and that contextual adaptation is necessary for successful AI-Green HRM integration.

Future research should address these limitations by incorporating longitudinal data, experimental designs, and cross-country comparative studies to deepen understanding of AI's long-term impact on sustainability. Moreover, the growing intersection of AI, ethics, and sustainability warrants further exploration to safeguard against unintended consequences such as algorithmic bias or data misuse in the name of green transformation. Policymakers, therefore, must consider regulatory frameworks that encourage ethical AI deployment aligned with genuine environmental objectives. This review thus contributes not only a synthesis of current evidence but also a roadmap for strengthening AI's role in sustainable HRM through practice, policy, and scholarship.

Conclusion

This SLR of 172 peer-reviewed articles (2019–2025) demonstrates that the strategic and ethical integration of AI into Green HRM can generate significant sustainability gains by embedding eco-conscious practices into recruitment, training, performance assessment, and employee engagement. The findings resonate with prior research showing that HR practices, such as training, feedback, and recognition, are central drivers of performance outcomes (Ameen & Baharom, 2022) and that organisational commitment remains a crucial mediator of employee retention and long-term engagement (Wan Sharazad et al., 2023). The review contributes by synthesising evidence across four dimensions: perceptions, experiences, implementation strategies, and contextual factors, thereby offering both theoretical insights and practical guidance for HR professionals, technology developers, and policymakers. Nonetheless, several limitations should be acknowledged: the focus on English-language peer-reviewed articles may have introduced publication and language bias; reliance on a limited number of databases may have excluded relevant studies; and the thematic synthesis, while systematic, remains interpretive and subject to researcher bias.

Furthermore, the dominance of studies from particular regions and industries constrains the global applicability of findings, while the rapid pace of AI innovation means that insights may quickly become outdated. These limitations point to clear directions for future research, including incorporating non-English and grey literature, expanding database coverage, conducting sector- and region-specific investigations, and adopting longitudinal and experimental designs. By addressing these gaps, future studies can build on the present synthesis to deepen understanding of AI-enabled sustainability in HRM, ensure more globally representative insights, and strengthen the ethical and practical frameworks necessary for advancing Green HRM in an era of rapid digital transformation.

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Conflicts of Interest: The authors declare no conflict of interest.

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