

*Research Article*

# Green HRIS: Innovating Human Resource Information Systems to Promote Sustainable HR Practices in the ESG ((Environmental, Social, and Governance))

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**Abstract:** The purpose of this study is to analyze the strategic role of the Green Human Resource Information System (Green HRIS) in bridging the transformation of human resource management with the demands of Environmental, Social, and Governance (ESG) principles, specifically examining how Green HRIS contributes to sustainable HR practices, organizational performance, and digital HR transformation. Using a Systematic Literature Review (SLR) approach, this study identifies, evaluates, and synthesizes prior research by conducting a structured search across major academic databases—Scopus, Web of Science, Springer, Elsevier, and Wiley—for publications from 2020 to 2025 that address green HRM, HR digitalization, sustainable HR practices, and ESG integration. The review process includes screening titles, abstracts, and full texts, extracting key data, and categorizing findings into environmental, social, and governance dimensions. The results demonstrate that Green HRIS strengthens ESG implementation by reducing paper usage, lowering carbon emissions, and promoting sustainable HR practices such as digital recruitment and e-learning, while also improving governance through enhanced transparency, accountability, regulatory compliance, and real-time reporting. Empirical evidence indicates that Green HRIS fosters employee engagement, organizational innovation, and the development of green competitive advantages. Practically, the study highlights how organizations, policymakers, and HR managers can utilize Green HRIS to optimize digital transformation and meet ESG requirements, thereby reinforcing legitimacy and long-term competitiveness within the green economy. This research offers originality as one of the first systematic reviews addressing Green HRIS in the ESG era, integrating theories such as the Resource-Based View, Technology Acceptance Model, and organizational sustainability theory, while also mapping trends, best practices, and gaps for future research.

**Keywords** Green HRIS, ESG, Sustainable HRM, HR digitalization, Human resource analytics

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## 1. Introduction

The era of Environmental, Social, and Governance (ESG) emphasizes the importance of corporate responsibility not only in terms of profitability but also in contributing to environmental protection, social welfare, and good governance. Normatively, the implementation of ESG principles has been institutionalized through various global and national policies, such as the Sustainable Development Goals (SDGs) 2030, which encourage sustainable business practices, as well as regulations issued by the Indonesian Financial Services Authority (OJK), which require companies to prepare sustainability reports as part of governance transparency. International regulatory trends increasingly demand that corporations integrate green practices across all management functions, including human resource management (HRM) [12], [22]. The normative dimension positions sustainability as both a legal and ethical obligation that organizations must fulfill.

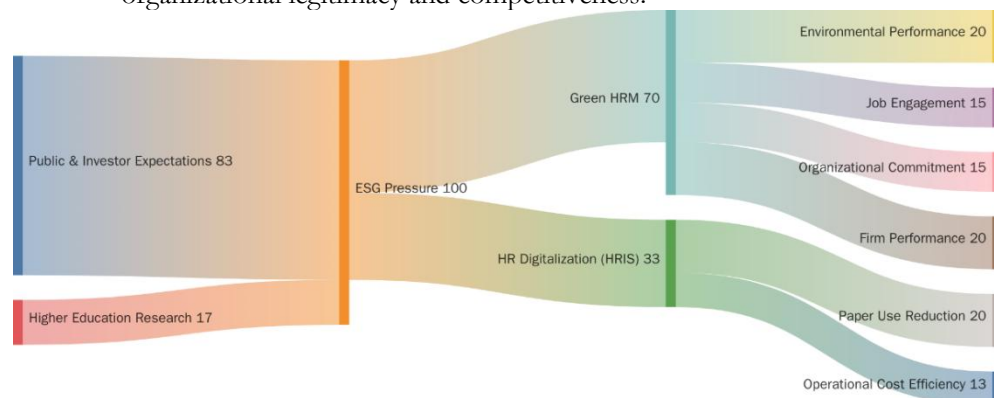
Public and investor expectations toward companies integrating ESG continue to grow. A PwC (2022) report indicates that 83% of global investors prefer firms with strong ESG strategies, while research in the higher education sector found that green HRM and green innovation significantly contribute to environmental performance [1]. Traditional HRM

practices that rely heavily on manual procedures generate considerable environmental impacts, particularly in terms of excessive paper consumption. In contrast, the digitalization of HR through HRIS has been proven to reduce paper use by more than 60% and lower operational costs [23]. Green HRM enhances work engagement [2], strengthens organizational commitment [4] and improves firm performance across various sectors [5], [6].

The adoption of Green HRIS can be explained through several theoretical perspectives. The Resource-Based View (RBV) highlights human resources as strategic assets capable of creating sustainable competitive advantage [7]. Technology adoption within organizations is further clarified by the Technology Acceptance Model (TAM), which emphasizes the role of perceived ease of use and perceived usefulness in driving HRIS adoption [3]. Theory underscores the importance of integrating environmental, social and governance aspects into business strategy, with Green HRIS functioning as a digital platform that operationalizes sustainability values into HRM practices [9], [29].

[4] demonstrated that organizational support and green commitment mediate the relationship between green HRM and innovation, while [14] highlighted the significance of top management's environmental awareness in fostering green ambidexterity innovation. Similarly, [15] argue that green HRM practices contribute to building green competitive advantage and [28] the integration of strategic HRM to advance the sustainability agenda. Green HRIS as a strategic enabler in the development of sustainable human resources.

Green HRIS thus emerges as a strategic response to the challenges of HRM in the ESG era. Normatively, it reflects compliance with regulations and global standards; empirically, it has been shown to enhance environmental performance, operational efficiency and employee engagement and theoretically, it reinforces the foundations of sustainable HRM by positioning human resources as the central asset for creating green competitive advantage [18], [24], [26], [30]. Therefore, the implementation of Green HRIS should not be viewed merely as a digital administrative transformation, but rather as a long-term sustainability strategy that strengthens organizational legitimacy and competitiveness.



**Figure 1:** Empirical relationship between ESG, green HRM, and HR digitalization

The growing role of ESG expectations in shaping organizational practices. According to PwC (2022), more than 80% of global investors prefer companies with strong ESG strategies, showing clear external pressure on businesses to adopt sustainable practices. In the higher education sector, research has found that green HRM and green innovation significantly contribute to environmental performance. These findings demonstrate that ESG is not just a theoretical framework but a measurable force influencing strategic decision-making across industries.

At the organizational level, ESG pressure flows into two main responses: adopting green HRM and implementing HR digitalization through HRIS. Green HRM practices have been shown to enhance environmental performance, job engagement, organizational commitment, and overall firm performance. Meanwhile, HR digitalization significantly reduces paper usage and increases cost efficiency, addressing both environmental and economic concerns. Together, these pathways show how ESG expectations are operationalized into concrete outcomes that benefit organizations, employees, and the environment simultaneously.

## 2. Metodologi Studi

The research methodology employs a Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize the literature related to the application of Green HRIS in supporting sustainable human resource management practices and the ESG agenda. The SLR approach was chosen because it enables a systematic, transparent, and replicable analysis, allowing this study to map research trends, best practices, as well as conceptual and empirical gaps in the implementation of Green HRIS [1], [5], [7], [10]. The research process begins with the formulation of research questions specifically directed at how Green HRIS contributes to sustainable HR management, its impact on organizational and employee performance, and its integration with HR digitalization through HRIS and HR-analytics. The literature analyzed met certain inclusion criteria, namely publications from reputable international journals such as Scopus, Web of Science, Springer, Elsevier, and Wiley within the last five years (2020–2025), relevant to green HR practices and the digitalization of HR management, while less relevant articles or those with weak methodology were excluded through the screening process.

The literature search strategy was carried out using electronic databases with keywords such as “Green HRIS,” “Green Human Resource Management,” “ESG,” “Sustainable HRM,” “HR digitalization,” and “green innovation” [1], [5], [7], [10], [18]. The initial stage involved screening titles and abstracts to assess relevance, followed by full-text reviews to evaluate methodological quality and research suitability. Key data were extracted from each article, including the Green HRIS concepts employed, the sustainable HRM practices applied, performance indicators, impacts on employees, and the digital tools supporting HRIS integration. Thematic analysis was conducted to categorize findings into environmental, social, and governance dimensions in order to identify patterns, trends, and contributions of prior research [1], [5], [10], [18].

The synthesis of the reviewed literature demonstrates that Green HRIS plays a significant role in supporting the ESG agenda and enhancing the effectiveness of sustainable HRM practices. For instance, [1] highlights the positive influence of Green HRM and green innovation on environmental performance, [2] underscores the relationship between Green HRM and employee engagement and [3] emphasizes the importance of integrating HRIS and HR-analytics into sustainable HRM digitalization. Furthermore, [4] show that organizational support and green commitment facilitate innovation, while [5] provide empirical evidence that sustainable HR practices improve organizational performance in the tourism sector. Thus, through the SLR approach, this study not only maps the conceptual and empirical development of Green HRIS but also identifies research gaps and provides strategic directions for advancing adaptive, digital, and sustainable HR practices within the ESG context [6], [7], [10], [18], [27].

### 2.1 Study Questions

- a. How does the implementation of Green HRIS influence the environmental and social dimensions within organizations, particularly in reducing ecological impacts such as paper consumption and carbon footprint, monitoring business travel and face-to-face training, while simultaneously supporting employee engagement, well-being, job satisfaction, flexible work practices, and sustainable e-learning programs?
- b. To what extent does Green HRIS strengthen the governance dimension of organizations by enhancing transparency, accountability, compliance with human resource regulations, as well as data security and real-time reporting that foster stakeholder trust?
- c. How does the integration of sustainable HR reporting through Green HRIS function as a governance mechanism to reinforce organizational relationships with investors, regulators, and society (outcome variable)?

### Search Strategy

The databases utilized include Scopus, Web of Science, ScienceDirect, SpringerLink, SAGE, Wiley, JSTOR, DOAJ and Google Scholar. The inclusion criteria comprise articles published between 2020 and 2025, focusing on learning management systems, gamification, learning analytics and artificial intelligence.

### Criteria Inclusion/ Exclusion

- a. Peer-reviewed articles in English or Indonesian, published between 2020 and 2025, that address Green HRIS, Green HRM, or HR digitalization within the ESG context. Studies must discuss environmental dimensions (energy efficiency, paper reduction, carbon footprint), social dimensions (employee engagement, well-being, job satisfaction) and governance dimensions (transparency, accountability, regulatory compliance, sustainability reporting).
- b. Non-peer-reviewed articles, studies not relevant to Green HRIS or ESG, publications focusing on non-HR sectors, articles discussing technology without HR relevance, studies lacking conceptual or empirical frameworks, or papers not available in full-text.

## 2.2 Findings Thematic and Synthesis

### Green HRIS and Environmental Dimensions

Green HRIS represents a strategic innovation in human resource management that supports the environmental dimension through the full digitalization of HR processes, thereby reducing paper usage, lowering the carbon footprint, and enhancing organizational efficiency. This system functions not only as an administrative tool but also as a mechanism that reinforces Green HRM practices capable of fostering green innovation, raising employees' environmental awareness, and cultivating a sustainability-oriented organizational culture [1], [7], [14], [15]. Green HRIS has been proven to make a significant contribution to creating green competitive advantage through the utilization of real-time data for evaluating environmental policies and integrating sustainable business strategies [19], [21], [26], [28], [29]. Thus, Green HRIS emerges as a key instrument in driving organizational transformation toward environmentally friendly practices in the digital era.

### Green HRIS and Social Dimension

Green HRIS integrates digital technology with Green HRM practices to enhance employee engagement, satisfaction, and well-being through an inclusive, transparent, and data-driven platform [2], [3], [6]. The system supports flexible work practices and continuous e-learning while facilitating real-time monitoring of engagement, retention, and employee contributions to sustainability programs [5], [8], [18]. Green HRIS further strengthens an organizational culture grounded in social values and shared responsibility, enabling employee participation in green innovation and internal CSR initiatives while fostering stakeholder trust [1], [4], [9], [28]. Green HRIS functions as a strategic tool to manage human resources efficiently while simultaneously integrating social sustainability principles into employee management practices [3], [6], [29], [30].

### Green HRIS and Governance Dimensions

The Green Human Resource Information System (Green HRIS) represents the integration of HR information technology with environmentally friendly practices that support ESG-based sustainability governance through transparency, accountability and policy consistency. Green HRIS has been proven to enhance environmental performance [1], strengthen employee engagement [2] and serve as a bridge between organizational interests and socio-environmental demands [9]. Furthermore, this instrument facilitates the use of ESG-based measurement tools [12] and is reinforced by green innovation and top management commitment [14], positioning Green HRIS not merely as an administrative tool but as a governance strategy that strengthens organizational legitimacy, creates green competitive advantage and promotes long-term sustainability [3].

### 3. Integration of HR Sustainability Reporting through Green HRIS

The integration of sustainable HR reporting through Green HRIS functions as a strategic governance mechanism to strengthen organizational relationships with key stakeholders, including investors, regulators, and society, as the system enables organizations to transparently report on sustainable HR performance, environmental initiatives, and compliance with ESG principles. Green HRIS serves not only as a digital tool for monitoring and managing employee data but also as a means to measure the impact of Green HRM practices on organizational performance and environmental sustainability, thereby ensuring that the information conveyed to stakeholders is more credible and trustworthy [1], [3], [12], [18]. The integration of ESG reporting modules within HRIS allows organizations to present metrics related to carbon footprint reduction, employee engagement in green programs, and the implementation of inclusive HR policies, which in turn enhance corporate reputation and attract investors prioritizing sustainable investments [4], [6], [14].

Moreover, sustainable HR reporting through Green HRIS strengthens internal governance mechanisms by facilitating accountability and transparency in managerial decision-making. Integrated data within HRIS enables management to conduct evidence-based analysis of the effectiveness of Green HRM policies, the relationship between employee performance and sustainability practices, as well as the identification of gaps and risks in ESG implementation [5], [7], [10], [18]. With accurate and real-time information, regulators can better assess organizational compliance with environmental and social regulations, while society gains greater confidence that the organization is practicing ethically and ecologically responsible business [9], [12], [19].

This integration fosters constructive interaction between organizations and external stakeholders through the delivery of standardized and accessible sustainability reports, thereby supporting social legitimacy and strengthening public trust. Investors who obtain detailed information on sustainable HR initiatives are able to make more informed investment decisions, while regulators can formulate data-driven policies relevant to advancing green business practices. Organizations that adopt Green HRIS and sustainable HRM practices tend to demonstrate stronger reputations, higher levels of employee engagement and improved environmental and social performance, which in turn enhances long-term organizational competitiveness [2], [4], [8], [14], [27].

### 4. Optimalisasi Data untuk SDM Berkelanjutan

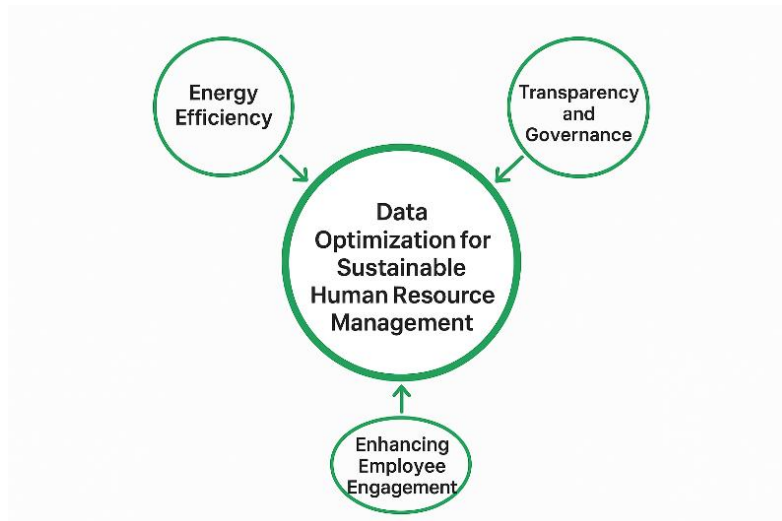
Data optimization in sustainable human resource management (HRM) is a strategic approach that integrates information technology, Green HRM practices, and HR analytics to enhance efficiency, sustainability, and employee well-being within organizations. The use of digital systems such as the Human Resource Information System (HRIS), integrated with analytic features, enables organizations to monitor HR performance, work behavior and the environmental impact of HR operational activities, including energy consumption, paper usage, and business travel. Thus, organizations can make data-driven decisions that not only improve productivity but also support sustainability objectives. Research indicates that integrating Green HRM with digital innovation significantly improves environmental performance through carbon footprint reduction and resource efficiency [1], [3], [14].



Data optimization further supports the implementation of flexible work practices and sustainable e-learning, which promote employee well-being while increasing engagement and job satisfaction. HRIS systems equipped with real-time dashboards allow monitoring of social and environmental indicators, including compliance with sustainability policies, employee participation rates in digital training programs, and the effectiveness of flexible work strategies. This aligns with findings that Green HRM supported by HR analytics contributes to enhanced employee environmental commitment, sustainable innovation and participation in internal corporate social responsibility (CSR) programs [2], [4], [6], [10].

In addition, data integration in sustainable HRM strengthens organizational governance by increasing transparency, accountability, and compliance with regulations. HR analytics enable organizations to conduct periodic evaluations of HR policies, risk detection, and predictions of employee retention and loyalty based on sustainability indicators. Studies show that HRM digitalization and ESG-based data utilization increase stakeholder trust and promote sound governance practices [12], [18], [23], [24]. This data optimization also supports the strategic transformation of HR toward long-term sustainability, ensuring that HR decisions focus not only on operational efficiency but also on achieving broader social and environmental goals [7], [20], [28].

The Green HRIS system facilitates real-time HR data analysis, allowing more accurate and evidence-based decisions regarding competency development, training, and career planning. This data optimization is critical for enhancing employee engagement, fostering innovative behavior, and strengthening workforce loyalty to the organization [2], [4], [6], [8]. Furthermore, integration in green HRM strengthens organizational commitment to sustainability while improving environmental and social performance [1], [9], [10], [14], [15]. In Indonesia, the adoption of sustainable HR information systems has also been shown to improve organizational performance in both the public and tourism sectors [5], [11], [16], [25]. Green HRIS thus plays a strategic role as a bridge between digital data utilization, the reinforcement of sustainable HR practices, and the achievement of organizational competitive advantage in the ESG era.



Data optimization serves as a critical foundation for achieving sustainable human resource management. Through the effective utilization of data, organizations are able to improve energy efficiency by reducing resource-intensive manual practices while simultaneously supporting the adoption of environmentally friendly digital systems. This digitalization process not only reduces operational costs but also generates positive impacts by lowering the company's carbon footprint, thereby aligning with global sustainability commitments under the ESG framework.

In addition, data optimization plays a significant role in strengthening transparency and governance while fostering employee engagement in sustainability practices. Data transparency enables more accountable and evidence-based decision-making, while employee involvement increases as they perceive themselves as part of a fair, open, and progressive system. This model demonstrates that organizational success in the sustainability era depends

not only on business strategies but also on the integration of intelligent data that harmoniously balances environmental, social, and governance dimensions.

## 5. Policy Implications and Strategic Recommendations

The policy implications of implementing Green HRIS lie in the strengthening of ESG regulations within human resource management, where the system serves as a crucial instrument to ensure corporate compliance with sustainability principles, particularly in terms of transparency, accountability and standardized reporting. In this regard, national regulations such as those mandated by the Financial Services Authority of Indonesia (OJK), as well as global standards such as the Global Reporting Initiative (GRI), can incorporate Green HRIS indicators into the framework of sustainable HR reporting. The adoption of Green HRIS further implies the need for digital transformation policies in human resource management as a national agenda, which should not only focus on administrative efficiency but also support environmental and social sustainability goals in response to global demands.

Equally important is the strengthening of human resource data governance, as Green HRIS emphasizes the significance of transparent, secure, and evidence-based data management, thereby necessitating national policies regulating data security, cross-functional digital integration and the application of ESG metrics in organizational performance evaluation. From a policy perspective, Green HRIS also contributes to enhancing employee well-being and engagement by supporting the implementation of flexible work practices, the provision of continuous e-learning programs, and active participation in sustainability initiatives, which collectively foster a healthy, productive and inclusive work environment while reinforcing organizational legitimacy in the eyes of stakeholders.

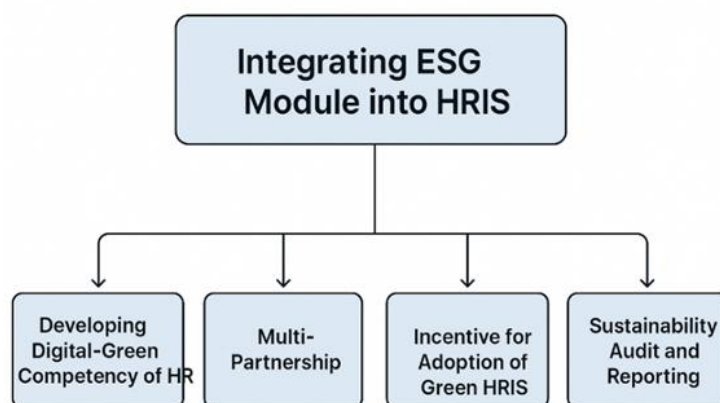


Figure 3: Strategic Recommendations

The integration of ESG into Human Resource Information Systems (HRIS) represents a strategic step in embedding sustainability into organizational human resource management. By incorporating environmental, social, and governance dimensions, HRIS evolves from a conventional administrative tool into a comprehensive platform that enables organizations to monitor, evaluate, and report their sustainability performance in a structured and transparent manner. The inclusion of features such as digital-green competency development, multi-partnership collaboration, adoption incentives, and sustainability audits ensures that HRIS is aligned with broader ESG agendas while simultaneously strengthening accountability and compliance with international standards. This transformation further supports organizations in addressing the growing demands from regulators, investors and society for sustainable business practices.

Green HRIS fosters long-term value creation by linking employee management with sustainable outcomes. The system facilitates the continuous development of digital and green skills, promotes collaborative networks through multi-partnership initiatives, and incentivizes the adoption of environmentally responsible practices within HR functions. In addition,

integrated sustainability audit and reporting modules within HRIS enhance organizational transparency, enable real-time tracking of ESG-related performance indicators and strengthen stakeholder trust. Through this integration, Green HRIS not only improves organizational efficiency and resilience but also positions human capital as a key driver of sustainable innovation and competitive advantage in the ESG era.

## 6. Conclusion

The implementation of Green HRIS has proven to be a strategic innovation capable of addressing the challenges of human resource management in the ESG era by integrating environmental, social, and governance dimensions into sustainable digital HR practices. This system not only makes a significant contribution to reducing carbon footprints, enhancing operational efficiency, and strengthening governance transparency, but also improves employee engagement, satisfaction, and well-being while reinforcing the organization's social legitimacy in the eyes of stakeholders. Green HRIS underscores the role of human resources as a strategic asset capable of creating a green competitive advantage through evidence-based data utilization, green innovation, and the integration of sustainability practices into long-term business strategies.

Organizations are advised not to perceive Green HRIS merely as a digital administrative instrument, but as a strategic framework for strengthening ESG-oriented HR governance. The development of integrated sustainability reporting modules, the optimization of HR analytics to predict performance trends and employee retention, and the enhancement of digital-green competencies among human resources should become key priorities. In addition, national policy support and international regulations should be directed toward incentivizing the adoption of Green HRIS, fostering cross-sector collaboration and establishing transparent sustainability audit mechanisms so that organizations can enhance global competitiveness while maintaining their commitment to environmental and social sustainability. Green HRIS can thus serve as a key driver of adaptive, inclusive and resilient HR transformation in navigating the dynamics of the future green economy.

## Referense

- [1] A. A. Zahrani, "The influence of green human resource management and green innovation on environmental performance: Evidence from higher education," *Cogent Business & Management*, 2024.
- [2] A. Gupta and S. Jangra, "Green human resource management and work engagement: Linking HRM performance attributions," *Sustainable Futures*, vol. 7, p. 100174, 2024.
- [3] A. Pawar, A. Misal, B. Pramono, and F. S. Wahyudin, *HRM, HRIS & HR-analytics: Foundation for technological integration in human resources*. Garut, Indonesia: CV. Aksara Global Akademia, 2023.
- [4] A. Yunaningsih, A. Johan, and R. Rahmayanti, "Fostering innovation through green HRM: The mediating role of organizational support and green commitment," *Asian Management and Business Review*, vol. 4, no. 2, pp. 293–307, 2024.
- [5] Emelinda and M. Ikhsan, "Manajemen Sumber Daya Manusia Berkelanjutan dan Dampaknya terhadap Kinerja Organisasi di Sektor Pariwisata Kerinci," *Jurnal Bisnis Kreatif dan Inovatif*, vol. 1, no. 2, pp. 199–208, 2024.
- [6] F. A'la An Nasher, "Green HRM, Inclusive Leadership, And Job Satisfaction as Predictors of Innovative Behavior in The 4-Star Hospitality Sector," *Indonesian Management & Accounting Research (IMAR)*, 2024.
- [7] F. L. Cooke, "From Strategic HRM to Sustainable HRM? Exploring a perspective of common good HRM," *Human Resource Management*, Wiley, 2023.
- [8] G. Cachón-Rodríguez, A. Blanco-González, C. Prado-Román, and C. Del-Castillo-Feito, "How sustainable human resources management helps in the evaluation and planning of employee loyalty and retention: Can social capital make a difference?," *Evaluation and Program Planning*, vol. 95, p. 102171, 2022.
- [9] I. Campos-García, M. N. Basterretxea, dan I. Albareda, "Human resource management and sustainability: Bridging and integrating the fields," *Corporate Social Responsibility and Environmental Management*, Wiley, 2024.
- [10] I. D. Bimo and E. Sulistyaningsih, "Greening the workforce: a systematic literature review of determinants in green HRM," *Cogent Business & Management*, vol. 11, no. 1, art. no. 2429793, Dec. 2024.
- [11] I. H. Yakin, *Manajemen sumber daya manusia*. Garut, Indonesia: CV. Aksara Global Akademia, 2023.
- [12] I. S. Vinnikova, M. P. Prokhorova, T. V. Krylova, A. A. Shkunova, dan J. N. Zhulkova, "Human Resource Management Tools for Companies Based on ESG Guidelines," dalam *Sustainable Development of the Agrarian Economy Based on Digital Technologies and Smart Innovations*, E. G. Popkova, A. V. Bogoviz, B. S. Sergi, O. V. Kaurova, dan A. N. Maloletko, Eds. Cham: Springer, 2024, hlm. 191-197.



- [13] J. C. Choi, "Predicting ESG ratings by machine learning and strategy implication," in *Proceedings of the ACM*, 2024.
- [14] J. Martínez-Falcó, E. Sánchez-García, B. Marco-Lajara, and P. Zaragoza-Sáez, "Green human resource management and green ambidexterity innovation in the wine industry: exploring the role of green intellectual capital and top management environmental awareness," *Discover Sustainability*, vol. 5, no. 1, pp. 1–19, 2024.
- [15] K. Mustafa, M. B. Hossain, F. Ahmad, F. Ejaz, H. G. A. Khan, and A. Dunay, "Green human resource management practices to accomplish green competitive advantage: A moderated mediation model," *Heliyon*, vol. 9, no. 11, e21830, 2023.
- [16] K. Prihantoro and L. Y. Prakoso, *Manajemen sumber daya manusia: Jilid 1*. Garut, Indonesia: CV. Aksara Global Akademia, 2023.
- [17] K. Prihantoro and L. Y. Prakoso, *Manajemen sumber daya manusia: Jilid 2*. Garut, Indonesia: CV. Aksara Global Akademia, 2023.
- [18] L. Ruiz, J. Benítez, A. Castillo, and J. Braojos, "Digital human resource strategy: Conceptualization, theoretical development, and an empirical examination of its impact on firm performance," *Information & Management*, vol. 61, no. 4, p. 103966, 2024.
- [19] L. Ruan, L. Yang, and K. Dong, "Corporate green innovation: The influence of ESG information disclosure," *Journal of Innovation & Knowledge*, vol. 9, no. 4, p. 100628, 2024.
- [20] M. Dabić, J. F. Maley, J. Švarc, and J. Poček, "Future of digital work: Challenges for sustainable human resources management," *Journal of Innovation & Knowledge*, vol. 8, no. 2, art. no. 100353, 2023.
- [21] M. Huang, "Sustainable human resource management practices and corporate sustainable supply chain performance: Evidence and implications," *International Journal of Logistics Research and Applications*, 2024.
- [22] M. S. Khamisu and R. A. Paluri, "Emerging trends of environmental social and governance (ESG) disclosure research," *Cleaner Production Letters*, vol. 7, art. no. 100079, Dec. 2024.
- [23] R. N. Vadithe, "Impact of HR Digitalisation on HR Transformation," *HR Review*, 2025.
- [24] S. I. K. Abu Hilal et al., "The Impact of Digital Human Resource Management on Sustainability of Private Universities in Jordan," dalam *Artificial Intelligence, Sustainable Technologies, and Business Innovation: Opportunities and Challenges of Digital Transformation*, *Studies in Computational Intelligence*, vol. 1171. Cham: Springer, 2025, bab 39.
- [25] S. Sundari and H. Z. Almubaroq, *Manajemen pengembangan sumber daya manusia*. Garut, Indonesia: CV. Aksara Global Akademia, 2023.
- [26] T. Van Waeyenberg, "Different Shades of Green? The Role of Green HRM and Its Limits," *Business & Society*, 2024.
- [27] V. Patil, "Green human resource management enabled business sustainability in service industries: A systematic appraisal," *Employee Relations*, 2022.
- [28] W. Ren, F. L. Cooke, G. K. Stahl, D. Fan, dan A. R. Timming, "Advancing the sustainability agenda through strategic human resource management: Insights and suggestions for future research," *Human Resource Management*, Wiley, vol. 62, no. 3, 2023.
- [29] X. Liang and J. Li, "Sustainable human resource management and employee performance: A conceptual framework and research agenda," *Human Resource Management Review*, vol. 35, art. no. 101060, 2024.
- [30] Y. Griep, S. D. Hansen, J. M. Kraak, U. Sherman, and S. Bankins, "Sustainable human resource management: The good, the bad, and making it work," *Organizational Dynamics*, vol. 54, no. 2, p. 101112, 2024.