

# The Influence of Green HRM and Digital Literacy on Sustainable Innovation and Organizational Performance in the Manufacturing Industry in West Java

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## ABSTRACT

This study examines the influence of Green Human Resource Management (Green HRM) and digital literacy on sustainable innovation and organizational performance in the manufacturing industry in West Java. As manufacturing companies face increasing pressure to integrate environmental sustainability with technological advancement, understanding these relationships becomes essential. Using a quantitative research design, data were collected from 165 respondents across various manufacturing firms using a Likert scale questionnaire. Structural Equation Modeling–Partial Least Squares (SEM-PLS 3) was employed to analyze the measurement and structural models. The results show that both Green HRM and digital literacy have significant positive effects on sustainable innovation and organizational performance. Sustainable innovation is also found to mediate the relationship between the predictor variables and organizational performance. The findings highlight the strategic importance of integrating environmental-oriented HR practices and enhancing digital competencies to foster innovation and improve business outcomes. This study contributes to the literature by providing empirical evidence from the Indonesian manufacturing sector and offers practical recommendations for managers seeking to strengthen sustainability and technology readiness within their organizations.

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## 1. INTRODUCTION

The rapid transformation of the global industrial landscape, driven by digitalization and heightened environmental

concerns, has encouraged manufacturing companies to adopt more sustainable and technology-driven strategies. In Indonesia, particularly in West Java as one of the country's largest manufacturing hubs,

organizations are increasingly challenged to improve their operational performance while simultaneously responding to environmental pressures and technological advancements [1], [2]. These developments have shifted managerial priorities toward integrating sustainability principles and digital competencies into human resource practices and organizational processes [3], [4].

Green Human Resource Management (Green HRM) has emerged as a strategic approach that embeds environmental principles into HR policies, including recruitment, training, performance appraisal, and employee involvement [5], [6]. By fostering environmentally responsible behaviors among employees, Green HRM is believed to support the development of sustainable innovation—innovation that minimizes environmental impact while improving operational effectiveness. At the same time, digital literacy has become a key competency in modern organizations, enabling employees to effectively adopt digital tools, enhance information processing, and improve innovation capabilities [6], [7]. In an industry progressively shaped by automation, data analytics, and interconnected production systems, digital literacy plays a critical role in enabling the development and implementation of sustainable innovation practices.

Sustainable innovation represents the organization's ability to generate new ideas, products, and processes that support environmental sustainability while improving productivity and competitiveness [6], [8]. In the manufacturing sector, sustainable innovation is particularly crucial, as it facilitates waste reduction, energy efficiency, adoption of eco-friendly technologies, and improvements in product quality. Consequently, the integration of Green HRM and digital literacy is expected to significantly influence both sustainable innovation and organizational performance.

Although awareness of sustainable practices in the Indonesian manufacturing industry continues to increase, empirical studies examining the simultaneous effects of Green HRM and digital literacy on

sustainable innovation and organizational performance remain limited. This study attempts to fill this gap by analyzing these relationships in manufacturing companies in West Java through a quantitative approach involving 165 respondents using Structural Equation Modeling–Partial Least Squares (SEM-PLS 3), in order to provide a deeper understanding of the contribution of green-oriented HRM strategies and digital competencies to innovation and performance achievements. The findings of this study are expected to contribute theoretically to the literature on sustainability, HRM, and digital transformation, while offering practical implications for manufacturing managers and policymakers in formulating integrated strategies that align environmental goals with the improvement of digital skills in order to achieve superior organizational performance.

## 2. LITERATURE REVIEW

### 2.1 *Green Human Resource Management*

Green Human Resource Management (Green HRM) refers to HR practices that integrate environmental management principles into recruitment, training, performance appraisal, and employee engagement, aiming to foster environmentally responsible behavior and cultivate a sustainability-oriented organizational culture [8], [9]. Practices such as green training, environmental-based performance evaluation, and employee participation in ecological initiatives encourage innovative contributions toward environmental protection. Empirical studies show that Green HRM positively influences organizational sustainability outcomes: [5] found that organizations implementing Green HRM tend to experience higher levels of

environmental innovation and improved ecological performance, while also fostering green organizational citizenship behaviors (GOCB) that strengthen collaborative efforts in sustainability initiatives. In the manufacturing sector, where environmental impact is relatively significant, Green HRM serves as a strategic driver of sustainable innovation and enhanced operational processes.

## 2.2 Digital Literacy

Digital literacy refers to employees' capability to effectively use digital technologies, process digital information, and adapt to rapidly evolving technological environments, encompassing technical proficiency, cognitive processing skills, and socio-emotional competencies in digital interactions [10], [11]. Higher levels of digital literacy enable individuals to utilize digital tools more efficiently to support innovation, communication, and problem-solving. In the era of Industry 4.0, digital literacy has become a crucial determinant of organizational competitiveness, as studies by [12]–[14] indicate that it enhances employees' readiness to adopt advanced technologies such as automation, data analytics, and digital collaboration platforms. Employees with strong digital competencies tend to be more innovative, adaptable, and capable of contributing to process improvements and sustainability efforts. Therefore, in manufacturing organizations striving to implement environmentally friendly technologies, digital literacy

plays a critical role in enabling sustainable innovation.

## 2.3 Sustainable Innovation

Sustainable innovation refers to the development of new products, services, processes, or business models that generate economic, social, and environmental value, aiming to enhance organizational performance while minimizing environmental impact and supporting long-term sustainability. As explained by [15], [16], sustainable innovation involves eco-efficiency, resource optimization, waste reduction, and the adoption of green technologies. Research shows that sustainable innovation is shaped by internal organizational capabilities, including human resource practices and digital competencies; for instance, [17], [18] emphasize that organizations investing in environmental training and employee engagement are more likely to produce eco-friendly innovative solutions, while strong digital capabilities further support sustainable innovation through improved data-driven decision-making, enhanced design processes, and more environmentally conscious production practices.

## 2.4 Organizational Performance

Organizational performance is a multidimensional construct encompassing financial outcomes, operational efficiency, product or service quality, market competitiveness, and, increasingly, environmental performance—especially in sectors with significant ecological impact. Prior studies show that sustainable innovation plays a crucial role in enhancing

organizational performance; [19], [20] notes that firms adopting green innovation practices often experience reduced production costs, improved brand reputation, and strengthened competitive advantage. Additionally, Green HRM practices that cultivate environmental awareness and innovative employee behavior have been positively linked to performance outcomes [21], [22], while digital literacy further enhances organizational performance by supporting technological adaptability, reducing operational errors, and increasing overall productivity.

### 3. METHODS

#### 3.1 Research Design

This research employs a quantitative, explanatory research design aimed at testing the relationships among variables based on theoretical frameworks and empirical data. The study utilizes a cross-sectional survey method, collecting data at a single point in time from employees working in manufacturing companies across West Java. The primary analytical technique used is Structural Equation Modeling–Partial Least Squares (SEM-PLS), analyzed through SmartPLS 3 software. SEM-PLS is suitable for this study because it can handle complex model structures, non-normal data distribution, and relatively small sample sizes.

#### 3.2 Population and Sample

The population of this study consists of employees working in the manufacturing industry in West Java, covering sectors such as automotive, electronics, textiles, consumer goods, and chemical manufacturing, with respondents selected through purposive sampling based on the following criteria: they must be employees of a manufacturing company located in West Java, have at least one year of work experience, and possess

sufficient knowledge of their organization's HR practices, innovation activities, and performance conditions. A total of 165 respondents participated in the study, a sample size deemed adequate for SEM-PLS analysis as it exceeds the minimum requirement suggested by the "10-times rule" and allows for stable and reliable parameter estimation.

#### 3.3 Data Collection Methods

Data were collected using a structured online questionnaire distributed through company communication channels and professional networks. Prior to distribution, a pilot test involving 20 respondents was conducted to assess the readability, clarity, and reliability of the questionnaire items, and minor revisions were made based on the feedback received. The final survey consisted of closed-ended questions measured on a 5-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Respondents were informed that their participation was voluntary and that confidentiality and anonymity were assured.

The study included four main variables measured using validated indicators from prior research. Green Human Resource Management (Green HRM) as the independent variable was measured using items adapted from Renwick et al. (2013) and Tang et al. (2018), covering green recruitment, training, performance appraisal, and employee involvement in environmental initiatives. Digital Literacy, also an independent variable, was assessed based on Ng (2012) and Park & Kim (2020), focusing on technical and cognitive digital skills, adaptability to new technologies, and the use of digital tools for work efficiency. Sustainable Innovation served as the mediating variable, measured using indicators from Carrillo-Hermosilla et al. (2010) including eco-friendly product innovation, eco-efficient processes, adoption of green technologies, and resource optimization. Organizational Performance, the dependent variable, was measured with indicators adapted from Chen (2008) and Jabbour & Santos (2008), covering operational

efficiency, product or service quality, competitive advantage, and environmental performance. All measurement items were standardized and validated through exploratory analysis before being processed using SEM-PLS.

### 3.4 Data Analysis Techniques

Data analysis was carried out using SmartPLS 3 through several stages, beginning with descriptive statistics to summarize respondent characteristics such as age, gender, education, and work experience. The measurement model (outer model) was then assessed using convergent validity criteria (factor loadings  $\geq 0.70$  and AVE  $\geq 0.50$ ), discriminant validity through the Fornell-Larcker criterion and HTMT ratio, as well as reliability tests using Composite Reliability and Cronbach's Alpha ( $\geq 0.70$ ). Next, the structural model (inner model) was evaluated by examining path coefficients, t-statistics and p-values obtained via bootstrapping with 5,000 resamples, coefficient of determination ( $R^2$ ) to assess explanatory power, along with effect size ( $f^2$ ) and predictive relevance ( $Q^2$ ). Hypotheses were deemed supported when the t-statistic met or exceeded 1.96 at the 95% confidence level ( $\alpha = 0.05$ ).

## 4. RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

This subsection presents the descriptive analysis of respondent characteristics and the overall distribution of questionnaire responses, which serves to provide an essential understanding of the sample profile and an initial overview of the data used in the study. A total of 165 employees from various manufacturing companies in West Java participated, representing diverse demographic attributes. The gender distribution shows that 62% of respondents are male and 38% are female, reflecting the industry's male-dominated workforce. In terms of age, most participants fall within the 25–35 age range (56%), followed by 36–45 years (28%), while the remaining groups represent younger and older age brackets. The sample demonstrates

a relatively high educational background, with 68% holding a bachelor's degree, 22% a diploma, 10% a master's degree, and 10% completing senior high school. Respondents also possess notable work experience, with 32% having worked for 6–10 years and 30% for more than 10 years, providing credible insights into organizational practices. Company size is nearly evenly split, consisting of 52% medium-sized and 48% large manufacturing firms, ensuring balanced representation across industry scales.

Descriptive statistics for the four research variables—Green HRM, Digital Literacy, Sustainable Innovation, and Organizational Performance—were assessed using a 5-point Likert scale. The results indicate generally positive perceptions across all variables. Green HRM obtained a mean of 4.12 (SD = 0.61), suggesting that respondents agree their organizations implement environmentally oriented HR practices such as green recruitment, green training, and green performance evaluation. Digital Literacy recorded a high mean of 4.25 (SD = 0.58), reflecting strong employee readiness for digital transformation. Sustainable Innovation showed a mean of 4.08 (SD = 0.64), indicating active adoption of eco-efficient technologies, waste reduction initiatives, and environmentally conscious production processes. Organizational Performance achieved a mean of 4.20 (SD = 0.60), suggesting that manufacturing companies in the sample generally perform well in productivity, efficiency, product quality, and environmental outcomes.

### 4.2 Measurement Model (Outer Model)

The measurement model (outer model) assessment aims to evaluate the validity and reliability of all indicators used to measure the constructs in this study, and the evaluation was conducted using SmartPLS 3 with 5,000 bootstrap resamples. Three main criteria were assessed: indicator reliability, convergent validity, and discriminant validity. Indicator reliability was examined through outer loadings, where values of  $\geq 0.70$  indicate that an item explains at least 50% of

the variance of its construct. After initial screening and removal of a few low-loading items, all remaining indicators met the threshold, with loading ranges of 0.71–0.85 for Green HRM, 0.73–0.88 for Digital Literacy, 0.75–0.89 for Sustainable Innovation, and 0.77–0.91 for Organizational Performance, confirming that all items reliably represented their intended constructs.

Convergent validity was assessed using Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha. AVE values exceeded the required threshold of 0.50 for all constructs, with Green HRM at 0.621, Digital Literacy at 0.658, Sustainable Innovation at 0.684, and Organizational Performance at 0.702, indicating that each construct explained more than half of the variance of its indicators. CR and Cronbach's Alpha values also surpassed the minimum requirement of 0.70, demonstrating strong internal consistency: Green HRM (CR = 0.912,  $\alpha$  = 0.881), Digital Literacy (CR = 0.926,  $\alpha$  = 0.897), Sustainable Innovation (CR = 0.934,  $\alpha$  = 0.908), and Organizational Performance (CR = 0.941,  $\alpha$  = 0.917). These results collectively confirm the high reliability and convergent validity of all constructs used in the study.

Discriminant validity was tested to ensure that each construct measured a unique concept distinct from the others. Using the Fornell–Larcker criterion, the square root of each construct's AVE was found to be greater than its correlations with other constructs, confirming that no construct overlapped conceptually. The HTMT (Heterotrait–Monotrait Ratio) criterion was also applied, with all values falling below the strict threshold of 0.85, indicating strong discriminant validity. Together, both tests verified that all constructs are conceptually distinct and do not measure overlapping dimensions.

### 4.3 Structural Model (Inner Model)

The structural model (inner model) assessment evaluates the relationships among constructs and tests the hypotheses proposed in this study by analyzing path coefficients, t-statistics, p-values, coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ). All analyses were conducted using SmartPLS 3 with 5,000 bootstrap resamples. The  $R^2$  values indicate the proportion of variance in the endogenous variables explained by the exogenous variables, and based on Chin's (1998) criteria—0.19 (weak), 0.33 (moderate), and 0.67 (substantial)—the results show that Sustainable Innovation has an  $R^2$  value of 0.614, meaning Green HRM and Digital Literacy together explain 61.4% of its variance. Meanwhile, Organizational Performance has an  $R^2$  value of 0.657, indicating that Green HRM, Digital Literacy, and Sustainable Innovation jointly explain 65.7% of its variance. These results demonstrate that the model possesses moderate to strong explanatory power, confirming that the variables meaningfully influence the outcomes.

Path coefficients were used to determine the strength and direction of relationships between variables, while hypothesis testing relied on t-statistics and p-values obtained through the bootstrapping procedure. A relationship is considered statistically significant when the t-statistic is equal to or greater than 1.96 at the 5% significance level ( $\alpha$  = 0.05) and the p-value is less than or equal to 0.05. These criteria ensure that the hypothesized relationships are supported by sufficient empirical evidence and provide a robust basis for interpreting the structural relationships within the research model.

Table 1. Bootstrapping

Hypothesis	Relationship	Path Coefficient	t-value	p-value	Conclusion
H1	Green HRM → Sustainable Innovation	0.372	6.212	0.000	Supported
H2	Digital Literacy → Sustainable Innovation	0.428	7.089	0.000	Supported

H3	Green HRM → Organizational Performance	0.259	3.648	0.000	Supported
H4	Digital Literacy → Organizational Performance	0.241	3.221	0.001	Supported
H5	Sustainable Innovation → Organizational Performance	0.391	6.011	0.000	Supported
H6	Green HRM → Sustainable Innovation → Organizational Performance	0.146	4.233	0.000	Supported (Mediation)
H7	Digital Literacy → Sustainable Innovation → Organizational Performance	0.167	4.812	0.000	Supported (Mediation)

The results of the bootstrapping analysis provide strong empirical support for all proposed hypotheses, confirming both the direct and mediating relationships in the research model. Green HRM (H1) and Digital Literacy (H2) each have significant positive effects on Sustainable Innovation, with path coefficients of 0.372 ( $t = 6.212$ ,  $p = 0.000$ ) and 0.428 ( $t = 7.089$ ,  $p = 0.000$ ), respectively. These findings highlight that environmentally oriented HR practices and strong digital competencies are essential drivers of eco-friendly innovation in manufacturing organizations. Employees who receive green-based training, recruitment, and performance evaluations tend to engage in more sustainable behaviors, while those with higher digital literacy demonstrate better adaptability and efficiency in utilizing environmentally friendly technologies. The direct effects on Organizational Performance reinforce this pattern: Green HRM (H3) enhances performance ( $\beta = 0.259$ ,  $t = 3.648$ ,  $p = 0.000$ ), and Digital Literacy (H4) also significantly contributes to operational productivity and quality ( $\beta = 0.241$ ,  $t = 3.221$ ,  $p = 0.001$ ). Meanwhile, Sustainable Innovation (H5) shows one of the strongest direct effects on Organizational Performance ( $\beta = 0.391$ ,  $t = 6.011$ ,  $p = 0.000$ ), emphasizing its importance as a foundation for efficiency, competitiveness, and environmentally responsible outcomes.

The mediating effects deepen the understanding of how Green HRM and Digital Literacy influence organizational performance. Green HRM's indirect impact through Sustainable Innovation (H6) is significant ( $\beta = 0.146$ ,  $t = 4.233$ ,  $p = 0.000$ ),

suggesting that green-oriented HR practices enhance performance partly by boosting the organization's capability to innovate sustainably. Likewise, Digital Literacy demonstrates a strong mediation effect (H7) through Sustainable Innovation ( $\beta = 0.167$ ,  $t = 4.812$ ,  $p = 0.000$ ), indicating that digitally competent employees not only directly support performance but also enable higher levels of sustainable innovation that further improve organizational outcomes. Collectively, these findings position Sustainable Innovation as a central bridging mechanism that transforms environmental HR strategies and digital competencies into superior overall performance within manufacturing firms.

Effect size ( $f^2$ ) was used to assess the impact of each exogenous variable on the endogenous variables, where Cohen (1988) classifies values of 0.02 as small, 0.15 as medium, and 0.35 as large. The results show that Green HRM and Digital Literacy each have medium effects on Sustainable Innovation, while Sustainable Innovation has a medium effect on Organizational Performance; in contrast, Green HRM and Digital Literacy exhibit small direct effects on Organizational Performance, indicating that Sustainable Innovation is the strongest and most influential predictor in the model. Predictive relevance, tested using the Blindfolding procedure, yielded  $Q^2$  values of 0.382 for Sustainable Innovation and 0.401 for Organizational Performance, both well above zero, confirming that the model has strong predictive capability. Additionally, multicollinearity diagnostics show that all VIF values ranged from 1.42 to 2.87—well below

the threshold of 5—indicating that the structural model is free from collinearity issues.

### Discussion

The results of this study offer significant insights into the interconnected roles of Green Human Resource Management (Green HRM), digital literacy, sustainable innovation, and organizational performance within the manufacturing industry in West Java. The empirical findings confirm that both Green HRM and digital literacy are essential drivers of sustainable innovation and organizational performance, aligning with prior research that highlights the strategic value of environmentally oriented HR practices and digital competencies. Green HRM demonstrates a strong influence on sustainable innovation by cultivating environmentally responsible behaviors through green recruitment, training, performance appraisal, and employee participation programs. This supports resource-based and behavioral perspectives, indicating that organizations investing in sustainability-focused HR practices are more likely to achieve innovation outcomes aligned with environmental goals. At the same time, digital literacy directly enhances sustainable innovation by enabling employees to utilize automation, data analytics, and digital tools more effectively, reflecting the growing necessity of digital competencies in the Industry 4.0 era [23]–[25].

Moreover, both Green HRM and digital literacy significantly boost organizational performance, demonstrating that sustainability-oriented HR practices and digital capabilities are central to improving efficiency, product quality, and competitive advantage. Green HRM strengthens performance by shaping environmentally conscious organizational cultures, lowering operational risks, and increasing stakeholder trust, whereas digital literacy enhances operational outcomes through improved technological adaptability, faster decision-making, and higher productivity. These results align with existing literature asserting that organizations integrating sustainability

and digital readiness achieve superior outcomes compared with those relying solely on traditional operations [26], [27]. Importantly, sustainable innovation plays a mediating role in translating the effects of Green HRM and digital literacy into stronger organizational performance. This mediation underscores that HR policies and digital skills must be channeled into innovation activities to fully realize performance gains, as sustainable innovation enables cost reduction, waste minimization, improved compliance, and greater market value.

Overall, the study highlights the need for manufacturing companies in West Java to adopt an integrated strategy that simultaneously strengthens Green HRM practices and digital literacy development to drive sustainable innovation and enhance organizational performance. The combination of sustainability-oriented HR systems and continuous investment in digital skills forms a robust foundation for navigating technological disruptions and environmental demands. These findings also emphasize the importance of leadership commitment in fostering eco-friendly values and digital readiness, both of which are critical for achieving long-term organizational success in a rapidly transforming industrial landscape.

### 5. CONCLUSION

This study provides empirical evidence on the critical roles of Green Human Resource Management (Green HRM) and digital literacy in enhancing sustainable innovation and organizational performance within the manufacturing sector in West Java. The findings demonstrate that Green HRM significantly contributes to sustainable innovation by encouraging environmentally responsible behavior and fostering a green organizational culture that supports eco-friendly initiatives and stimulates sustainability-oriented ideas and processes. Digital literacy likewise plays a crucial role, as employees with strong digital competencies are better able to utilize technological tools, engage in data-driven decision-making, and contribute effectively to digital-based



innovation efforts, aligning with the broader adoption of Industry 4.0 technologies across manufacturing operations. Furthermore, sustainable innovation functions as a key mediating mechanism that strengthens the influence of both Green HRM and digital literacy on organizational performance, illustrating how innovation acts as a strategic conduit through which sustainability practices and digital capabilities translate into improved efficiency, competitiveness, and overall performance outcomes.

Overall, the study concludes that integrating environmentally oriented HR practices with digital competency development is essential for manufacturing organizations striving to excel in an

increasingly competitive and sustainability-driven industrial landscape. Companies are encouraged to invest in green HR initiatives, enhance employees' digital skills, and continuously promote sustainable innovation as part of a long-term performance improvement strategy. These efforts not only support environmental responsibility but also drive technological readiness and operational excellence. Future research may broaden the scope by examining additional mediating or moderating variables and expanding the sample to larger or more diverse industrial sectors to improve generalizability and deepen understanding of the dynamics between sustainability, digital competencies, and organizational performance.

## REFERENCES

- [1] N. A. Pratiwi, E. Susilowati, S. Syukriah, D. Pianda, and E. Susanti, "Quality Performance of Manufacturing Companies in West Java: SCM, TQM, and JIT Impact," *J. Inform. Ekon. Bisnis*, pp. 785–790, 2023.
- [2] N. F. Nasution and K. T. Wahyuni, "Industrialization and Convergence of West Java Manufacturing Labor Productivity, Indonesia," *JEJAK*, vol. 15, no. 1, pp. 165–178, 2022.
- [3] N. Narsih, C. Ratnasih, and P. Astuty, "National Development Emphasizing on the Manufacturing Industry Sector in West Java Province," in *Proceedings of the First Multidiscipline International Conference, MIC 2021, October 30 2021, Jakarta, Indonesia*, 2022.
- [4] T. Mahpudin, "Quality of Main Performance Indicators and Employee Empowerment as Predictors of Work Effectiveness on Employee Productivity in the Manufacturing Industry in West Java and Banten Province," *J. Prod. Oper. Manag. Econ.*, no. 33, pp. 27–35, 2023, doi: 10.55529/jpome.33.27.35.
- [5] S. K. Singh and A. N. El-Kassar, "Role of big data analytics in developing sustainable capabilities," *J. Clean. Prod.*, 2019.
- [6] H. Xie and T. C. Lau, "Evidence-Based Green Human Resource Management: A Systematic Literature Review," *Sustain.*, vol. 15, no. 14, 2023, doi: 10.3390/su151410941.
- [7] A. Setyadi, Y. K. Akbar, S. Ariana, and S. Pawirosuanto, "Examining the Effect of Green Logistics and Green Human Resource Management on Sustainable Development Organizations: The Mediating Role of Sustainable Production in Environmentally Friendly Manufacturing Industries in Indonesia," 2023.
- [8] U. A. Akhtar, R. Muhammad, L. J. A. Bakar, V. Parameswaranpillai, B. Raj, and N. B. Khan, "Green Human Resource Management Bibliometric Analysis of the Published Literature from 2008 to 2022," *Int. J. Prof. Bus. Rev. Int. J. Prof. Bus. Rev.*, vol. 8, no. 4, p. 1, 2023.
- [9] P. C. Bahuguna, R. Srivastava, and S. Tiwari, "Two-decade journey of green human resource management research: a bibliometric analysis," *Benchmarking An Int. J.*, vol. 30, no. 2, pp. 585–602, 2023.
- [10] G. Wijayanto, I. Ayesha, T. S. Wibowo, D. O. Suparwata, A. Suroso, and A. Fathurohman, "THE INFLUENCE OF DIGITAL LITERACY MEDIATION ON THE EFFECT OF ENTREPRENEURSHIP KNOWLEDGE ON TECHNOPRENEURSHIP," *Int. J. Econ. Bus. Account. Res.*, vol. 7, no. 1, 2023.
- [11] V. Jafari-Sadeghi, H. A. Mahdiraji, G. M. Alam, and ..., "Entrepreneurs as strategic transformation managers: Exploring micro-foundations of digital transformation in small and medium internationalisers," *Journal of Business* .... Elsevier, 2023.
- [12] R. Hobbs and D. C. Moore, *Discovering media literacy: Teaching digital media and popular culture in elementary school*. Corwin Press, 2013.
- [13] S. J. Allen, "On the cutting edge or the chopping block? Fostering a digital mindset and tech literacy in business management education," *J. Manag. Educ.*, 2020, doi: 10.1177/1052562920903077.
- [14] N. Zahoor, A. Zopiatas, S. Adomako, and G. Lamprinakos, "The micro-foundations of digitally transforming SMEs: How digital literacy and technology interact with managerial attributes," *J. Bus. Res.*, vol. 159, p. 113755, 2023.
- [15] P. Devine-Wright, *Renewable Energy and the Public: from NIMBY to Participation*. books.google.com, 2014.
- [16] G. Wilkins, *Technology transfer for renewable energy*. books.google.com, 2010.
- [17] H. Khan, L. Weili, and I. Khan, "Examining the effect of information and communication technology, innovations, and renewable energy consumption on CO2 emission: evidence from BRICS ...," *Environ. Sci. Pollut. Res.*, 2022, doi: 10.1007/s11356-022-19283-y.

- [18] F. Wang, J. D. Harindintwali, Z. Yuan, M. Wang, F. Wang, and ..., "Technologies and perspectives for achieving carbon neutrality," *The Innovation*. cell.com, 2021.
- [19] S. L. Ratnasari and L. Lestari, "Effect of leadership style, workload and job insecurity on turnover intention," *Int. J. Innov. Creat. Chang.*, vol. 11, no. 12, pp. 299–313, 2020.
- [20] M. A. Kwarteng, A. Ntsiful, L. F. P. Diego, and P. Novák, "Extending UTAUT with competitive pressure for SMEs digitalization adoption in two European nations: a multi-group analysis," *Aslib J. Inf. Manag.*, vol. ahead-of-p, no. ahead-of-print, Jan. 2023, doi: 10.1108/AJIM-11-2022-0482.
- [21] L. Zapata, G. Ibarra, and P.-H. Blancher, "Engaging new ways of work: The relevance of flexibility and digital tools in a post-COVID-19 era," *J. Organ. Eff. People Perform.*, vol. 11, no. 1, pp. 1–17, 2024.
- [22] A. Khalid, U. Raja, A. R. Malik, and S. Jahanzeb, "The effects of working from home during the COVID-19 pandemic on work–life balance, work–family conflict and employee burnout," *J. Organ. Eff. People Perform.*, 2023.
- [23] J. Mathews, "Promoting Green HRM in Business Organisations: A Transformative Approach," *Available SSRN* 3074357, 2017.
- [24] T. S. Mian, "The Effect of Green HRM Practices on Green Competitive Advantage of the SME Sector of KSA," *Glob. J. Econ. Bus.*, vol. 13, no. 3, 2023.
- [25] M. I. Tanveer, M. Y. Yusliza, and O. Fawehinmi, "Green HRM and hospitality industry: challenges and barriers in adopting environmentally friendly practices," *J. Hosp. Tour. Insights*, vol. 7, no. 1, pp. 121–141, 2024.
- [26] M. I. M. Haeruddin, U. D. Natsir, N. F. Aswar, A. P. Aslam, and R. Salam, "Here comes the sun: Green HRM implementation toward SME's sustainability in tourism industry," *Int. J. Prof. Bus. Rev.*, vol. 8, no. 4, 2023.
- [27] W. Zhao and L. Huang, "The impact of green transformational leadership, green HRM, green innovation and organizational support on the sustainable business performance: Evidence from China," *Econ. Res. istraživanja*, vol. 35, no. 1, pp. 6121–6141, 2022.