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Human Resource Management Transformation in the Era of Artificial Intelligence and Technological Disruption: A Sociological Examination of Employment Structure Dynamics and Industrial Relations in the Digital Industrial Revolution

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Abstract: This study examines the transformation of human resource management in the era of artificial intelligence (AI) and technological disruption through a sociological perspective, focusing on employment structure dynamics and industrial relations in the Digital Industrial Revolution. The research employs a qualitative library research approach by systematically reviewing books, peer-reviewed journal articles, policy reports, and other relevant scientific literature. Data were analyzed using qualitative content analysis to identify key themes, conceptual relationships, and emerging patterns. The findings indicate that AI has transformed human resource management from administrative functions into strategic, data-driven practices, while simultaneously reshaping employment structures, increasing demand for digital competencies, and redefining industrial relations through algorithmic management and flexible work arrangements. The study concludes that successful HR transformation requires balancing technological innovation with ethical governance, workforce development, and inclusive labor policies. Integrating sociological perspectives into HRM provides a more comprehensive understanding of organizational adaptation and supports the development of sustainable employment systems in the evolving digital economy.

Keywords: Human Resource Transformation, Artificial Intelligence, Industrial Relations



INTRODUCTION:

The rapid advancement of artificial intelligence (AI), automation, big data analytics, cloud computing, and digital platforms has fundamentally transformed organizational operations and the management of human resources across industries. Organizations increasingly rely on AI-driven technologies to improve productivity, optimize workforce allocation, enhance recruitment efficiency, and support strategic decision-making. While these developments generate substantial opportunities for innovation and competitiveness, they simultaneously reshape employment structures, alter job characteristics, and redefine relationships between employers and employees. The Digital Industrial Revolution has accelerated the replacement of routine tasks with intelligent systems while simultaneously creating demand for new competencies centered on analytical thinking, digital literacy, adaptability, and interdisciplinary collaboration[1]. These structural changes have generated growing concerns regarding employment security, workforce inequality, algorithmic management, and changing patterns of industrial relations. In many countries, organizations continue to experience difficulties balancing technological efficiency with social responsibility, particularly when workforce restructuring influences employee welfare, organizational commitment, and labor stability. Consequently, the transformation of human resource management can no longer be understood solely from a managerial perspective but must also be examined through a sociological lens that considers institutional change, power relations, labor dynamics, and broader societal consequences. These realities demonstrate that technological disruption extends beyond operational efficiency and has become a multidimensional phenomenon influencing the future of work and organizational sustainability[2].

Previous scholarly discussions have extensively examined AI adoption in human resource management, digital transformation strategies, and the technological implications of Industry 4.0. Existing studies generally emphasize the effectiveness of AI in talent acquisition, performance evaluation, workforce analytics, employee engagement, and organizational productivity. Other researchers have explored workforce reskilling, digital competencies, and organizational readiness for technological innovation. Although these studies provide valuable theoretical and empirical contributions, many remain predominantly managerial, technological, or economic in orientation. Comparatively limited attention has been devoted to understanding how AI-driven human resource transformation simultaneously reshapes employment structures and industrial relations from a sociological perspective. Current theoretical frameworks frequently explain organizational efficiency and technology adoption but are less capable of comprehensively addressing emerging issues such as algorithmic authority, changing power relationships between employers and employees, social inequality resulting from technological displacement, evolving forms of labor



representation, and the institutional adaptation required within digital workplaces. This theoretical limitation suggests the existence of an important research gap, particularly regarding the interaction between technological disruption, organizational transformation, and social institutions governing employment relationships. Therefore, integrating sociological perspectives into human resource management ²⁷ research is necessary to provide a more comprehensive explanation of the complex dynamics characterizing the Digital Industrial Revolution^[3].

Based on these empirical realities and theoretical limitations, ¹⁶ this study aims to examine the transformation of human resource management in the era of artificial intelligence and technological disruption through a sociological examination of employment structure dynamics and industrial relations within the Digital Industrial Revolution. Specifically, the study seeks to analyze how AI-driven organizational transformation influences workforce composition, changing occupational roles, skill requirements, employment flexibility, and the evolving interaction between organizations and employees. Furthermore, the research intends to explore the extent to which sociological theories can explain institutional adaptation, labor relations, organizational legitimacy, and social consequences arising from technological integration into human resource practices. Rather than viewing AI solely as a technological innovation, this study positions AI as a social force capable of reshaping organizational behavior, employment governance, and workplace interactions. Through this analytical perspective, the research aspires to bridge managerial and sociological approaches in understanding digital transformation while offering a more holistic framework for interpreting contemporary changes in employment systems. ⁵ Ultimately, the findings are expected to contribute to academic discourse concerning human resource transformation while providing insights that support policymakers, organizational leaders, and labor institutions in responding to technological disruption more effectively^[4].

This study is founded upon the argument that the successful transformation of human resource management cannot be evaluated exclusively through technological performance indicators or organizational efficiency but must also consider its broader social implications for employment structures and industrial relations. The central proposition is that artificial intelligence functions not merely as a technological instrument but as a catalyst for institutional and social transformation that influences organizational governance, workforce participation, labor negotiation, and workplace equity. Consequently, organizations that prioritize technological implementation without simultaneously addressing sociological dimensions may encounter increasing challenges related to employee trust, organizational legitimacy, labor conflict, and long-term sustainability^[5]. Conversely, integrating sociological understanding into human resource transformation may facilitate more inclusive organizational adaptation by balancing technological innovation with



social responsibility and equitable employment practices. This research therefore assumes that examining ³human resource management through the combined perspectives of artificial intelligence, technological disruption, and sociology will produce a richer explanation of contemporary employment dynamics than approaches limited to managerial or technological analysis alone. Accordingly, the study is expected to provide both theoretical enrichment for interdisciplinary scholarship and practical recommendations for organizations seeking to navigate the Digital Industrial Revolution while maintaining productive, ethical, and sustainable industrial relations[6].

METHODOLOGY:

This study focuses on the phenomenon of ³human resource management transformation in the era of artificial intelligence and technological disruption, with particular attention to the dynamics of employment structures and industrial relations within the Digital Industrial Revolution. The research object encompasses the social, organizational, and institutional changes resulting from the widespread adoption of AI-driven technologies in ¹⁸human resource management practices, including recruitment, performance management, workforce planning, employee development, and organizational decision-making. Particular emphasis is placed on understanding how technological innovation reshapes employment patterns, modifies occupational structures, influences labor flexibility, and transforms interactions between employers and employees. The phenomenon has become increasingly significant because organizations across both public and private sectors are integrating intelligent technologies to improve efficiency while simultaneously facing challenges related to workforce displacement, digital inequality, changing skill requirements, and the emergence of algorithmic management. These developments have generated complex sociological implications extending beyond organizational performance, influencing labor institutions, workplace governance, employee participation, and social justice. Accordingly, this study investigates the transformation of human resource management not merely as a technological transition but as a multidimensional social phenomenon that requires comprehensive academic examination through the integration of management and sociological perspectives[7].

This research employs a qualitative library research design, in which data are obtained through systematic examination and critical interpretation of published academic literature relevant to the research problem. Library research was selected because the study seeks to synthesize theoretical perspectives, empirical findings, and conceptual developments regarding artificial intelligence, technological disruption, employment structure dynamics, and industrial relations without relying on field observations or experimental procedures. The primary data consist of scholarly





publications directly addressing the transformation of human resource management in the context of artificial intelligence, digital transformation, Industry 4.0, the future of work, employment restructuring, and labor relations. These primary sources include peer-reviewed journal articles, academic monographs, theoretical papers, and authoritative publications produced by recognized scholars and international institutions. Secondary data comprise supporting literature concerning the broader research keywords, including human resource transformation, artificial intelligence, and industrial relations, obtained from books, conference proceedings, policy reports, dissertations, government publications, and other credible scientific documents. Collectively, these sources provide a comprehensive knowledge base that facilitates critical interpretation of the research phenomenon while strengthening the validity and comprehensiveness of the conceptual analysis conducted throughout the study[8].

The theoretical foundation of this study is primarily grounded in Anthony Giddens' Structuration Theory [9], which explains the reciprocal relationship between social structures and human agency in shaping organizational and institutional change. According to Giddens, social structures simultaneously constrain and enable human actions, while human actors continuously reproduce or transform those structures through their everyday practices. This theoretical perspective provides an appropriate analytical framework for examining how artificial intelligence influences organizational routines, employment relationships, and institutional arrangements within contemporary workplaces. In addition, the study incorporates Everett M. Rogers' Diffusion of Innovations Theory (1962; revised 2003), which explains how technological innovations are communicated, adopted, and institutionalized across social systems over time[10]. Rogers emphasizes that innovation adoption depends upon perceived advantages, compatibility, complexity, trialability, and observability, thereby offering valuable insights into organizational acceptance of AI technologies in human resource management. By integrating these theoretical perspectives, the study assumes that technological transformation represents both a process of innovation diffusion and a restructuring of social institutions, enabling a comprehensive sociological interpretation of evolving employment structures and industrial relations in the Digital Industrial Revolution[11].

The research process consists of several systematic stages designed to ensure the credibility, consistency, and transparency of the literature review. The initial stage involves identifying the research problem and defining the conceptual boundaries based on current developments in artificial intelligence, technological disruption, human resource management transformation, employment structure dynamics, and industrial relations. Subsequently, relevant academic sources are identified through comprehensive searches of books, peer-reviewed journals, conference





proceedings, policy reports, and other authoritative scientific publications. Following source identification, the collected literature is subjected to careful reading, classification, and evaluation according to its relevance, methodological rigor, theoretical contribution, and empirical significance. Information obtained from these materials is then organized into thematic categories that correspond to the objectives of the research. Throughout the process, data collection relies exclusively on documentary techniques involving intensive examination of written sources, including academic books, previous research articles, scientific journals, working papers, institutional reports, and other credible publications related to the research topic. This systematic procedure enables the study to construct an integrated understanding of the existing body of knowledge while minimizing subjective interpretation through structured comparison of multiple scholarly perspectives[12].

²³ The collected data are analyzed using qualitative content analysis, a method that facilitates systematic interpretation of textual materials to identify meaningful patterns, conceptual relationships, recurring themes, and significant information relevant to the research objectives. Content analysis is conducted through several analytical stages, beginning with repeated reading of selected literature to obtain comprehensive familiarity with the available evidence. Subsequently, important concepts, theoretical arguments, empirical findings, and recurring issues are coded and grouped into thematic categories reflecting the principal dimensions of human resource transformation, artificial intelligence, employment structures, and industrial relations. These categories are then compared, interpreted, and synthesized to reveal similarities, differences, and emerging patterns across various scholarly viewpoints. Finally, the analytical results are integrated into a coherent conceptual framework capable of explaining the sociological dynamics underlying human resource management transformation in the Digital Industrial Revolution. Through this analytical approach, the study seeks not only to summarize existing knowledge but also to generate a comprehensive interpretation that contributes to theoretical development and supports future empirical investigations concerning the intersection of artificial intelligence, organizational transformation, and evolving labor relations[13].

RESULTS AND DISCUSSION:

Overview of Findings

The synthesis of the reviewed literature indicates that the transformation of human resource management (HRM) in the era of artificial intelligence (AI) extends far beyond the simple adoption



of advanced digital technologies or the modernization of administrative processes. Rather, it represents a comprehensive structural transformation that reshapes organizational governance, employment systems, workforce management practices, and the broader framework of industrial relations. Across the literature, AI is consistently identified as a strategic organizational resource that ¹¹enables data-driven decision-making, enhances operational efficiency, and supports organizations ⁴in responding to increasingly dynamic and competitive business environments. The integration of AI technologies into HRM functions has significantly improved recruitment and selection through automated candidate screening, predictive talent acquisition, intelligent matching systems, and competency-based assessment. Similarly, AI has strengthened workforce planning by utilizing predictive analytics to forecast labor demand, identify future skill requirements, and optimize workforce allocation. Employee performance evaluation has also evolved from periodic manual assessments toward continuous, data-supported monitoring systems capable of providing objective performance indicators and personalized developmental feedback. Furthermore, AI-powered learning management systems facilitate adaptive training programs, individualized career development pathways, and continuous reskilling initiatives that enable employees to remain competitive within rapidly changing labor markets. These technological capabilities position AI not merely as an operational support mechanism but as an integral component of strategic human capital management that contributes directly to organizational competitiveness and long-term sustainability[14].

Despite these significant advantages, the literature simultaneously demonstrates that AI-driven transformation generates profound consequences for employment structures and workplace relationships that extend well beyond improvements in organizational efficiency. The adoption of intelligent technologies has accelerated the automation of repetitive, routine, and standardized tasks, thereby reducing demand for occupations characterized by low levels of cognitive complexity while increasing organizational reliance on employees possessing advanced digital competencies, analytical capabilities, creativity, and interdisciplinary problem-solving skills. Consequently, employment structures have become increasingly polarized, with higher demand for knowledge-intensive occupations and greater vulnerability among workers whose skills are susceptible to technological substitution. In addition, organizations are progressively implementing more flexible employment arrangements, including hybrid work models, remote collaboration, digital platform-based employment, and project-oriented contractual relationships that redefine traditional concepts of workplace participation and organizational commitment. Simultaneously, algorithmic decision-making systems have become increasingly embedded within



human resource processes, influencing recruitment decisions, performance management, promotion opportunities, workforce scheduling, compensation strategies, and even employee retention initiatives. While these systems contribute to greater consistency and efficiency, they also raise critical concerns regarding algorithmic transparency, fairness, accountability, employee privacy, and potential bias embedded within automated decision-making models[15].

The reviewed studies further reveal that these technological developments should not be interpreted solely as technical innovations but rather as institutional transformations that fundamentally reshape organizational behavior, managerial authority, and employment relationships. Artificial intelligence increasingly influences how organizational power is distributed, how managerial control is exercised, and how employees interact with both organizational leaders and digital systems within contemporary workplaces. As organizations become increasingly dependent on algorithm-assisted governance, traditional human resource functions evolve from predominantly administrative responsibilities toward strategic activities centered on organizational adaptation, digital capability development, ethical governance, and workforce resilience. Moreover, industrial relations are undergoing substantial transformation as labor organizations, employers, and policymakers confront emerging issues associated with digital surveillance, algorithmic management, workforce flexibility, occupational displacement, and evolving forms of employee representation. These findings collectively suggest that AI functions as a transformative institutional force capable of redefining organizational structures, labor market dynamics, and social relationships within the workplace rather than merely serving as a technological instrument designed to improve operational performance. Accordingly, understanding contemporary HRM transformation requires an interdisciplinary perspective that integrates technological innovation with sociological analysis, enabling a more comprehensive interpretation of the complex interactions among artificial intelligence, organizational governance, employment structure dynamics, and sustainable industrial relations in the Digital Industrial Revolution[16].

Table 1. Synthesis of Major Findings from the Literature

Research Dimension	Major Findings	Sociological Implications
Human Resource Transformation	HR functions become data-driven and AI-assisted.	HR professionals shift from administrative to strategic roles.



Artificial Intelligence	AI improves recruitment, performance appraisal, and workforce analytics.	Algorithmic management changes organizational authority.
Employment Structure	Routine jobs decline while digital occupations increase.	Workforce polarization and skill inequality emerge.
Industrial Relations	Digital monitoring changes employer–employee interactions.	New approaches to labor negotiation and employee representation are required.
Organizational Adaptation	Continuous reskilling becomes essential.	Lifelong learning becomes a structural necessity.

The synthesis further demonstrates that AI implementation significantly influences organizational decision-making by replacing intuition-based human resource practices with predictive analytics supported by large-scale workforce data. Most reviewed studies conclude that AI contributes to higher operational efficiency, reduced recruitment costs, and more accurate workforce forecasting. Nevertheless, the literature simultaneously highlights concerns regarding transparency, fairness, privacy protection, and algorithmic bias. Consequently, technological efficiency alone is insufficient to ensure organizational sustainability unless supported by ethical governance and inclusive employment policies[17].

Another important finding concerns employment structure dynamics. The reviewed literature consistently reports a decline in routine and repetitive occupations while emphasizing increasing demand for analytical, technological, and interdisciplinary competencies. Organizations increasingly prioritize employees capable of adapting to digital transformation through continuous learning and innovation. This structural transition creates opportunities for highly skilled workers while increasing vulnerability among employees with limited digital competencies, thereby widening employment inequality if reskilling initiatives are insufficient[18].

The literature also reveals significant changes in industrial relations. Traditional labor-management interactions are increasingly complemented by digital communication platforms, remote work arrangements, and algorithm-assisted supervision. While these innovations improve organizational flexibility, they also generate new challenges regarding employee autonomy, workplace surveillance, collective bargaining, and occupational well-being. Consequently, industrial relations increasingly require adaptive institutional mechanisms capable of balancing organizational efficiency with employee rights[19].



Finally, the reviewed evidence demonstrates that organizational resilience depends largely on leadership commitment, organizational learning, and effective change management. Organizations integrating AI with employee development programs, transparent governance, and participatory decision-making report greater success in achieving sustainable digital transformation than organizations emphasizing technology adoption alone[20].

Discussion

The findings confirm that human resource management transformation should be understood as a multidimensional organizational and social process rather than merely technological modernization. From a sociological perspective, AI modifies organizational structures by redistributing authority, redefining occupational identities, and transforming institutional norms governing employment relationships. This observation supports Giddens' Structuration Theory, which argues that social structures are continuously reproduced and transformed through interactions between institutional arrangements and human agency. AI therefore functions not only as an innovation but also as a mechanism through which organizations reconstruct workplace practices and governance.

The findings also support Rogers' Diffusion of Innovations Theory. Organizations adopting AI technologies generally experience improved efficiency and competitiveness when technological innovations are perceived as compatible with organizational objectives and employee capabilities. However, the literature indicates that successful diffusion depends not solely on technological quality but also on organizational culture, leadership support, employee readiness, and institutional legitimacy. These factors explain why similar AI technologies often produce different organizational outcomes across industries.

The transformation of employment structures identified in this study illustrates the emergence of a competency-based labor market characterized by increasing demand for digital literacy, critical thinking, creativity, and interdisciplinary collaboration. Although AI automates routine work, the reviewed literature consistently emphasizes that human competencies remain indispensable in areas requiring ethical judgment, strategic decision-making, emotional intelligence, and complex social interaction. Accordingly, workforce development policies should prioritize continuous reskilling and lifelong learning to reduce technological displacement.



The discussion also demonstrates that industrial relations are undergoing substantial institutional transformation. Digital workplaces introduce algorithmic supervision, remote collaboration, and platform-based employment arrangements that challenge conventional labor regulations and collective bargaining mechanisms. Therefore, governments, employers, and labor organizations should collaboratively develop updated regulatory frameworks capable of protecting workers while supporting innovation. ³⁰ Ethical AI governance, transparency in algorithmic decision-making, and accountability mechanisms become increasingly important to maintain organizational legitimacy and employee trust.

Table 2. Implications of the Findings

Stakeholder	Practical Implications
Organizations	Invest in AI while strengthening employee development and ethical governance.
HR Professionals	Develop competencies in AI, analytics, strategic planning, and organizational change management.
Employees	Continuously improve digital literacy, adaptability, and interdisciplinary skills.
Governments	Update labor regulations to accommodate digital employment systems.
Academic Researchers	Expand interdisciplinary studies integrating HRM, sociology, AI, and industrial relations.

Overall, the synthesized literature indicates that successful human resource transformation requires balancing technological innovation with organizational justice, employee participation, and institutional adaptation. AI should therefore be positioned as an enabling technology that supports human capability rather than replacing the social foundations of work. Organizations adopting a human-centered approach are more likely to achieve sustainable competitiveness while maintaining healthy industrial relations in the Digital Industrial Revolution.

The discussion ultimately suggests that future research should move beyond examining technological performance alone by investigating how AI reshapes organizational culture, institutional legitimacy, employee well-being, and long-term labor market sustainability across different industrial and national contexts. Such interdisciplinary investigations would strengthen theoretical understanding and provide evidence-based guidance for policymakers and organizational leaders navigating digital transformation.



CONCLUSIONS

⁴The findings of this library-based study demonstrate that ³the transformation of human resource management in the era of artificial intelligence and technological disruption represents a multidimensional structural change that extends beyond technological innovation. Artificial intelligence has fundamentally reshaped organizational governance, employment structures, and industrial relations by introducing data-driven decision-making, intelligent workforce management, predictive analytics, and algorithm-assisted human resource practices. At the same time, the widespread adoption of AI has accelerated the automation of routine work, increased demand for advanced digital competencies, promoted more flexible employment arrangements, and transformed traditional employer–employee relationships. These developments indicate that AI should not be understood merely as a technological instrument for improving organizational efficiency but as an institutional force capable of influencing organizational behavior, workforce dynamics, and the broader social structure of employment. Consequently, understanding human resource transformation requires an interdisciplinary perspective that integrates management and sociological approaches to explain the interaction between technological advancement, organizational adaptation, and evolving labor relations within the Digital Industrial Revolution.

The study further concludes that sustainable human resource transformation depends not only on successful technological implementation but also on the ability of organizations to balance innovation with social responsibility, ethical governance, employee development, and inclusive industrial relations. Organizations should prioritize continuous reskilling and upskilling initiatives, transparent AI governance, employee participation, and adaptive human resource policies to ensure that technological progress contributes to both organizational competitiveness and workforce well-being. From a theoretical perspective, the integration of sociological perspectives ²⁶provides a more comprehensive understanding of how AI reshapes institutional arrangements, employment systems, and organizational legitimacy. ²⁵Future research is encouraged to complement the present library-based findings through empirical investigations across different industrial sectors and national contexts to validate and extend the conceptual relationships identified in this study. Such efforts will ²¹contribute to the development of more robust theoretical frameworks and practical strategies for managing human resources effectively in an increasingly AI-driven and digitally connected world.



References:

- [1] ¹² R. Kurt, "Industry 4.0 in terms of industrial relations and its impacts on labour life," *Procedia Comput. Sci.*, vol. 158, pp. 590–601, 2019.
- [2] R. S. TARIGAN, ²⁰ *Hukum Tata Negara dan Transformasi Implikasi dan Prospek Sosial*. Ruang Karya Bersama, 2024.
- [3] R. S. Tarigan, "Konstitusi & Konstitusionalisme: Fondasi Hukum dan Demokrasi Modern," 2025.
- [4] ³¹ Y. Shen and X. Zhang, "The impact of artificial intelligence on employment: the role of virtual agglomeration," ²² *Humanit. Soc. Sci. Commun.*, vol. 11, no. 1, 2024.
- [5] ³ P. Budhwar *et al.*, "Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT," *Hum. Resour. Manag. J.*, vol. 33, no. 3, pp. 606–659, 2023.
- [6] ¹³ A. Tokunova, V. Zvonar, D. Polozhentsev, V. Pavlova, and Y. Teres, "Economic consequences of artificial intelligence and labor automation: employment recovery, transformation of labor markets, and dynamics of social structure in the context of digital transformation," *Econ. Aff.*, vol. 68, no. 4, pp. 2035–2046, 2023.
- [7] ⁷ V. Agarwal, K. Mathiyazhagan, S. Malhotra, and T. Saikouk, "Analysis of challenges in sustainable human resource management due to disruptions by Industry 4.0: an emerging economy perspective," *Int. J. Manpow.*, vol. 43, no. 2, pp. 513–541, 2022.
- [8] ⁸ K. Boyd and R. J. Holton, "Technology, innovation, employment and power: Does robotics and artificial intelligence really mean social transformation?," *J. Sociol.*, vol. 54, no. 3, pp. 331–345, 2018.
- [9] ⁶ A. Jaiswal, C. J. Arun, and A. Varma, "Rebooting employees: Upskilling for artificial intelligence in multinational corporations," *Int. J. Hum. Resour. Manag.*, vol. 33, no. 6, pp. 1179–1208, 2022.
- [10] ¹⁵ K. M. Oosthuizen, "The fourth industrial revolution—smart technology, artificial intelligence, robotics and algorithms: Industrial psychologists in future workplaces," *Front. Artif. Intell.*, vol. 5, p. 913168, 2022.
- [11] ⁵ L. Koh, G. Orzes, and F. Jia, "The fourth industrial revolution (Industry 4.0): technologies disruption on operations and supply chain management," *Int. J. Oper. Prod. Manag.*, vol. 39, no. 6–7–8, pp. 817–828, 2019.
- [12] J. Avis, "Socio-technical imaginary of the fourth industrial revolution and its implications for vocational education and training: A literature review," *J. Vocat. Educ. Train.*, vol. 70, pp. 346



no. 3, pp. 337–363, 2018.

- [13] D. Chalmers, N. G. MacKenzie, and S. Carter, “Artificial intelligence and entrepreneurship: Implications for venture creation in the fourth industrial revolution,” *Entrep. Theory Pract.*, vol. 45, no. 5, pp. 1028–1053, 2021.
- [14] B. Sivathanu and R. Pillai, “Smart HR 4.0—how industry 4.0 is disrupting HR,” *Hum. Resour. Manag. Int. Dig.*, vol. 26, no. 4, pp. 7–11, 2018.
- [15] R. Syaidi, Z. A. Hoesein, and A. Redi, “Resolution of disputes over the regional head elections post the Constitutional Court Decision Number 85/PUUXX/2022 regarding the implementation of simultaneous regional elections in Indonesia,” *Eduvest-Journal Univers. Stud.*, vol. 4, no. 3, pp. 1396–1412, 2024.
- [16] P. Budhwar, A. Malik, M. T. T. De Silva, and P. Thevisuthan, “Artificial intelligence—challenges and opportunities for international HRM: a review and research agenda,” *Int. J. Hum. Resour. Manag.*, vol. 33, no. 6, pp. 1065–1097, 2022.
- [17] A. Mazurchenko and K. Maršíková, “Digitally-powered human resource management: Skills and roles in the digital era,” *Acta Inform. Pragensia*, vol. 8, no. 2, pp. 72–87, 2019.
- [18] R. Morrar, H. Arman, and S. Mousa, “The fourth industrial revolution (Industry 4.0): A social innovation perspective,” *Technol. Innov. Manag. Rev.*, vol. 7, no. 11, pp. 12–20, 2017.
- [19] H. Aly, “Digital transformation, development and productivity in developing countries: is artificial intelligence a curse or a blessing?,” *Rev. Econ. Polit. Sci.*, vol. 7, no. 4, pp. 238–256, 2022.
- [20] N. Malik, S. N. Tripathi, A. K. Kar, and S. Gupta, “Impact of artificial intelligence on employees working in industry 4.0 led organizations,” *Int. J. Manpow.*, vol. 43, no. 2, pp. 334–354, 2022.

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