Achievement of SDGs Through the Role of Artificial Intelligence in Human Resources from a Gen-Z Perspective

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Abstrak. *Kemajuan pesat revolusi industri dan transformasi digital telah membentuk kembali sistem organisasi, khususnya dalam Manajemen Sumber Daya Manusia (SDM), dengan memperkenalkan kecerdasan buatan (AI) sebagai alat untuk efisiensi, efektivitas, dan inovasi. Namun, tantangannya terletak pada memastikan bahwa praktik SDM berbasis AI selaras dengan tujuan pembangunan berkelanjutan (SDGs). Studi ini bertujuan untuk mengeksplorasi bagaimana lulusan dan mahasiswa S1 Bisnis Digital, yang mewakili Generasi Z sebagai tenaga kerja masa depan, memandang peran AI dalam SDM dan kontribusinya terhadap pencapaian SDGs tertentu, yaitu: SDG 4 (Pendidikan Berkualitas), SDG 8 (Pekerjaan Layak dan Pertumbuhan Ekonomi), SDG 9 (Industri, Inovasi dan Infrastruktur), dan SDG 11 (Kota dan Komunitas Berkelanjutan). Dengan menggunakan pendekatan kualitatif eksploratif, dua diskusi kelompok terfokus dilakukan dengan 40 peserta yang terdiri dari mahasiswa dan lulusan yang telah menyelesaikan magang atau bekerja di industri yang menerapkan AI dalam SDM. Temuan ini menyoroti bahwa peserta memandang AI sebagai peningkatan rekrutmen, pelatihan, evaluasi kinerja, dan pengambilan keputusan berbasis data. Namun, tantangan seperti keamanan data, kesenjangan literasi digital, dan resistensi budaya organisasi masih signifikan. Kontribusi studi ini terletak pada penekanan perspektif Gen Z, yang tidak hanya mengalami tetapi juga mendorong transformasi digital dalam manajemen sumber daya manusia. Wawasan mereka mengungkapkan potensi AI untuk mempercepat pencapaian SDG sekaligus menggarisbawahi perlunya pengembangan kompetensi dalam literasi teknologi dan analisis data. Implikasi praktis ditujukan kepada institusi pendidikan tinggi untuk penyesuaian kurikulum dan kepada organisasi untuk mendorong praktik sumber daya manusia yang adaptif, inovatif, dan berkelanjutan di era digital.*

Kata kunci: *Kecerdasan Buatan; Manajemen Sumber Daya Manusia; Transformasi Digital; Generasi Z; SDGs.*

Abstract. *The rapid advancement of the industrial revolution and digital transformation has reshaped organizational systems, particularly in Human Resource Management (HRM), by introducing artificial intelligence (AI) as a tool for efficiency, effectiveness, and innovation. However, the challenge lies in ensuring that AI-based HRM practices align with sustainable development goals (SDGs). This study aims to explore how Digital Business graduates and undergraduate students, representing Generation Z as the future workforce, perceive the role of AI in HRM and its contribution to achieving specific SDGs, namely: SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), and SDG 11 (Sustainable Cities and Communities). Using an exploratory qualitative approach, two focus group discussions were conducted with 40 participants consisting of students and graduates who have completed internships or worked in industries applying AI in HRM. The findings highlight that participants perceive AI as enhancing recruitment, training, performance evaluation, and data-driven decision-making. However, challenges such as data security, digital literacy gaps, and organizational culture resistance remain significant. The contribution of this study lies in emphasizing the perspective of Gen Z, who not only experience but also drive digital transformation in HRM. Their insights reveal the potential of AI to accelerate SDG achievements while underscoring the need for competency development in technology literacy and data analysis. Practical implications are directed to higher education institutions for curriculum adjustments and to organizations for fostering adaptive, innovative, and sustainable HR practices in the digital era.*

Keywords: *Artificial Intelligence; Human Resource Management; Digital Transformation; Generation Z; SDGs.*

Introduction

Digital transformation has significantly altered organizational structures and operations, particularly in the realm of Human Resource Management (HRM). The adoption of digital technologies most notably artificial intelligence (AI) has reshaped recruitment, training, performance assessment, and decision-making processes. These advancements increase operational efficiency while compelling organizations to navigate the growing intricacies of modern work environments (Bondarouk & Brewster, 2016; Strohmeier & Parry, 2021). Despite its advantages, the implementation of AI within HRM remains complex. Empirical research reveals disparities in both institutional and individual readiness, including limited digital proficiency, concerns over data protection, and organizational inertia toward technological adaptation (Marler & Parry, 2021). Understanding these challenges requires examining how emerging generations, particularly those entering the workforce, perceive the evolving role of AI in managing people. Generation Z born between the mid-1990s and early 2010s represents a distinctive demographic in this transformation. Raised in a digitally mediated environment, they are familiar with automation, value flexibility in professional settings, and assess employers based on innovation and sustainability (Schroth, 2019; Ozkan & Solmaz, 2022).

Their perceptions are not merely reflective; they influence how organizations evolve, as Gen Z employees actively participate in shaping digital work cultures. The intersection between AI-driven HRM and sustainable development can be analyzed through the framework of the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 11 (Sustainable Cities and Communities). Prior research underscores that integrating digital systems into HRM can support SDG progress through improved skill development, inclusive employment opportunities, and technological innovation (Caligiuri *et al.*, 2020; Thite, 2022). In light of these dynamics, this study examines how Generation Z perceives the role of AI in HRM and how these perceptions relate to sustainable organizational development. By centering analysis on this cohort, the research offers empirical insights into the evolving relationship between technological advancement, workforce adaptation, and sustainable growth.

Literature Review

Sustainability and Theoretical Foundations

The incorporation of sustainability into Human Resource Management (HRM) has increasingly drawn on the *Triple Bottom Line* (TBL) framework, which posits that organizational success should be assessed not solely through financial performance but also through its social and environmental impact (Elkington, 1997). Within the HRM context, this perspective underscores the need for policies that integrate profitability with employee welfare and ecological responsibility. Complementing TBL, *Stakeholder Theory* asserts that organizations must address the expectations of diverse stakeholder groups including employees, local communities, consumers, and regulatory bodies to maintain legitimacy and achieve long-term resilience (Freeman, 1984). Recent research demonstrates that embedding both frameworks into HRM strengthens alignment with the Sustainable Development Goals (SDGs). This integration encourages organizations to pursue growth that is both responsible and inclusive, ensuring that sustainability principles are reflected in workforce management, ethical governance, and organizational strategy (Westerman *et al.*, 2020; Carter *et al.*, 2018).

Digital Transformation and Artificial Intelligence in HRM

Over the past decade, HRM has undergone a profound transformation through the integration of artificial intelligence (AI) and data analytics. AI technologies have redefined how organizations recruit, train, assess, and retain employees. Studies indicate that AI supports greater efficiency and accuracy in HR processes while also enabling personalization and predictive modeling for workforce decisions (Marler & Parry, 2021). Nonetheless, digital transformation in HRM introduces several

challenges. Barriers such as limited digital skills, reluctance toward technological change, ethical ambiguities, and concerns about data privacy remain prevalent (Strohmeier & Parry, 2021). These issues highlight the importance of balancing technological advancement with human adaptability and institutional readiness. Sustainable HRM, therefore, depends not only on adopting AI but also on cultivating digital competence and ethical awareness among employees and leaders alike.

Generation Z in the Workforce

Generation Z (born between the mid-1990s and early 2010s) has become a defining segment of the global workforce. As digital natives, they are proficient with technology, prioritize sustainability, and value meaningful professional engagement that emphasizes flexibility, autonomy, and innovation (Schroth, 2019; Ozkan & Solmaz, 2022). Empirical studies reaffirm their distinct expectations and behaviors. For example, research in China revealed that transparent compensation systems, training access, and supportive environments significantly influence retention among Gen Z employees (Zhu *et al.*, 2024). Similarly, studies in the service sector demonstrate that leadership and open communication strengthen Gen Z's adaptability during organizational transitions (Karatepe *et al.*, 2024). These findings suggest that HRM strategies must evolve to meet the aspirations of this generation. Students and recent graduates serve as valuable indicators of Gen Z attitudes, as their early professional experiences often mirror broader generational patterns (Prund, 2021). Although such samples may lack extensive professional exposure, they provide essential insights into the expectations of the emerging workforce and the competencies required for future HR ecosystems.

The Interconnection of HRM, AI, and the SDGs

The intersection of HRM, AI, and sustainability represents an emerging area of inquiry. While sustainable HRM has gained scholarly attention, limited research explicitly addresses how AI-based practices contribute to advancing the SDGs through inclusion, innovation, and environmental awareness (Caligiuri *et al.*, 2020). The integration of TBL and Stakeholder Theory provides a robust analytical foundation for understanding these dynamics, enabling a holistic evaluation of how human and technological elements collectively support sustainable development (Thite, 2022). Examining Generation Z perspectives offers timely relevance. Their emphasis on equity, digital proficiency, and environmental responsibility aligns closely with SDG principles. Consequently, this study seeks to interpret how Gen Z students and graduates perceive AI's role in HRM and how these perceptions correspond with sustainable organizational outcomes. This linkage not only advances theoretical discourse but also offers practical insight into how the future workforce may influence the ethical and sustainable use of technology in human resource practices.

Research Methodology

This study employs a qualitative research design aimed at generating a nuanced understanding of Generation Z's perceptions regarding the role of artificial intelligence (AI) in Human Resource Management (HRM). The approach emphasizes interpretive inquiry rather than measurement, allowing the researchers to capture attitudes, experiences, and reflections grounded in participants' personal and academic engagement with digital transformation. Data were collected through two primary techniques: documentary analysis and structured interviews. The documentary analysis involved a review of secondary sources, including academic publications, organizational reports, and prior empirical studies relevant to AI-driven HR practices. This stage established a theoretical foundation and provided contextual insight into current debates surrounding technology integration and sustainability in HRM. Complementing this, structured interviews were conducted using standardized question sets to ensure consistency across participants. Respondents consisted of undergraduate and graduate students majoring in Digital Business who had completed courses in Organizational Human Resource Management and Artificial Intelligence, as well as internships within

organizations utilizing AI-based HR systems. This purposive sampling strategy ensured that participants possessed both theoretical knowledge and practical exposure to digital HR processes. All interviews were audio-recorded with participant consent and subsequently transcribed for thematic analysis. The data were coded inductively to identify recurring patterns and interpretive categories related to perceived benefits, challenges, and ethical considerations of AI in HRM. Triangulation between documentary evidence and interview findings was employed to strengthen the validity and credibility of interpretations.

Results and Discussion

Results
The results presented in this section derive from a qualitative content analysis of transcripts obtained from two focus group discussions involving students of Human Resource Management. Supplementary data were drawn from field notes taken by the primary researcher as well as written reflections submitted by participants. These additional materials provided contextual depth and enhanced the interpretive reliability of the transcriptions. Following the initial coding process, recurring themes and categories were identified through iterative analysis. The coding scheme was subsequently refined to capture patterns that reflected participants' perceptions of digital transformation in HRM, particularly regarding the application of artificial intelligence in organizational settings. The final set of codes and their respective frequencies are summarized in Table 1.

Table 1. Theme, Code and Frequency of Content Analysis Results

He	Code	Frequency
Digitization	Social media	24
	Cloud Technology	24
	Mobile Technology	30
	HR application	36
Profit	Effectiveness	38
	Efficiency	38
	productivity	36
	Time	35
	Cheaper	13
	Knowledge Management	26
	Agility	19
	Employee Monitoring	33
Challenge	Match	15
	Cost	29
	Lack of Strategy	15
	Shift in culture organization	24
	Data security	33
	Need training	30
HR Manager Role	Automation	31
	Recruitment and Selection	34
	Ability management	32
	HR analysis	32
	Data analysis	28
HR Management Competence	Technology literacy	37
	robotics	8

Discussion

The findings of this study reaffirm that digitalization has profoundly transformed Human Resource Management (HRM) by enhancing organizational efficiency, decision-making accuracy, and employee engagement. Participants consistently emphasized that the integration of digital technologies particularly artificial intelligence (AI) simplifies administrative procedures and allows human resource professionals to focus on strategic responsibilities. These insights correspond with Bondarouk and Brewster (2016), who argued that digital transformation restructures HR processes by reducing manual workloads and improving workflow transparency. Similarly, Strohmeier and Parry (2021) observed that AI-based systems improve recruitment and performance management by promoting data-driven evaluations and real-time feedback mechanisms. A recurrent theme identified among participants concerns the role of AI in recruitment and selection.

Respondents perceived AI-powered platforms as capable of accelerating candidate screening, matching applicants with specific job requirements, and minimizing bias during decision-making. This aligns with findings by Marler and Parry (2021), who noted that AI-driven analytics enhance objectivity and efficiency in recruitment processes. Participants further recognized that the use of digital tools such as cloud technology, HR applications, and mobile platforms enables seamless coordination between HR departments and job candidates. Beyond efficiency, these technologies were seen as vehicles for improving creativity and personal development among employees through flexible online learning opportunities and tailored training programs. The results also demonstrate that while digitalization contributes significantly to organizational performance, its implementation presents multiple challenges. The most frequently mentioned issues data security, cost implications, and resistance to organizational change mirror patterns discussed in prior studies (Thite, 2022; Hamilton & Sodeman, 2020). Participants expressed concern about data privacy and the ethical management of employee information within automated systems, reflecting an awareness of the trade-offs between technological convenience and security risks. Organizational culture emerged as another crucial barrier, as many respondents noted that successful digital transformation depends on fostering openness and collaboration across departments. Similar arguments were made by Westerman *et al.* (2020), who emphasized that digital HRM requires both technological readiness and cultural adaptability to achieve sustainable outcomes. In terms of managerial adaptation, participants recognized that digitalization redefines the traditional role of HR managers. Rather than acting solely as administrative coordinators, modern HR leaders are expected to utilize analytics and automation to guide strategic decision-making. The emphasis on *HR analytics*, *automation*, and *data analysis* found in this study supports the argument of Marler and Parry (2021), who described the HR function as evolving toward a hybrid role where technological expertise complements human judgment.

Participants also highlighted that HR managers must cultivate digital fluency, creativity, and collaboration skills to manage technologically augmented teams effectively. These competencies are essential to maintaining human-centered decision-making amid increasing reliance on AI systems. The findings further underscore the growing need for technological literacy and analytical competence as core HR skills. Participants identified *technology literacy* (37 mentions) as the most critical competency in the digital era, echoing Thite (2022), who asserted that sustainable HR practices rely on employees' ability to engage with digital tools critically and ethically. Creativity, innovation, and adaptability were also described as indispensable attributes for HR professionals navigating continuous technological evolution. Schroth (2019) and Ozkan and Solmaz (2022) similarly noted that Generation Z employees, who constitute the emerging workforce, prioritize digital readiness and value-driven work environments that emphasize sustainability, flexibility, and innovation. However, participants also observed that organizational readiness often lags behind technological advancement.

Many organizations still lack coherent digital strategies or adequate investment in workforce training, leading to gaps between AI adoption and effective implementation. This aligns with Marler and Parry's (2021) argument that technological success in HRM depends not merely on infrastructure but on managerial vision and employee preparedness. The study also reveals that insufficient digital competence among staff members can slow transformation efforts, underscoring the necessity of targeted upskilling programs. Overall, the participants' perspectives suggest that digitalization in HRM is both a driver of operational progress and a test of organizational adaptability. The dual impact technological empowerment alongside ethical and cultural tension indicates that HR digitalization cannot be viewed solely as a technical upgrade but as a systemic transformation in how people, processes, and data interact. As Thite (2022) and Westerman *et al.* (2020) emphasized, sustainable HRM requires aligning technological innovation with human-centered values and long-term development goals. The practical implications of these findings extend to both academia and industry. Higher education institutions must integrate AI literacy, data analytics, and innovation management into HRM curricula to prepare graduates for digitally mediated work environments.

For organizations, continuous investment in digital infrastructure, employee training, and change management is crucial to achieving efficiency and maintaining competitiveness. The study also highlights that Generation Z represented here by Digital Business students perceives digital transformation not only as an operational tool but as a determinant of organizational attractiveness. As emerging professionals, they evaluate potential employers based on the sophistication of technological adoption and the inclusiveness of their workplace culture. In summary, the discussion reinforces that digital transformation in HRM offers significant potential for advancing Sustainable Development Goals (SDGs), particularly SDG 8 on decent work and SDG 9 on innovation and infrastructure. However, realizing these benefits requires addressing organizational inertia, ensuring ethical AI

governance, and developing a workforce capable of integrating technology with human values. By aligning HRM strategies with both digital capability and sustainability principles, organizations can create resilient systems that reflect the aspirations and competencies of the Gen Z workforce (Caligiuri *et al.*, 2020; Thite, 2022).

Conclusion

This study concludes that the integration of artificial intelligence (AI) into Human Resource Management (HRM) represents a significant shift in how organizations manage people, make decisions, and pursue sustainability. The findings illustrate that Generation Z, as future members of the workforce, perceive AI as both an enabler of efficiency and a catalyst for innovation within HR functions. However, they also recognize that digital transformation introduces new challenges related to data security, cultural adaptation, and competency development. These dual perceptions reflect a maturing understanding of the digital workplace one that balances technological advancement with ethical and human considerations. The research further underscores that successful HR digitalization depends not only on technology adoption but also on organizational readiness and continuous investment in human capital.

Both educational institutions and employers must prioritize digital literacy, data analytics, and adaptive leadership to ensure that AI-driven HR practices contribute meaningfully to sustainable development. By doing so, HRM can advance several Sustainable Development Goals (SDGs), particularly those concerning quality education, decent work, and innovation. Despite its valuable insights, this study has certain limitations inherent in its qualitative design. Focus group discussions, while effective for capturing diverse opinions, may be influenced by group conformity or dominant participants, potentially shaping collective responses. Moreover, the sample size and participant background primarily students and recent graduates limit the generalizability of the findings. To address these constraints, future research could employ a mixed-method

approach, combining individual surveys with follow-up discussions to capture both quantitative breadth and qualitative depth. Expanding participant diversity to include HR professionals and managers would also provide a more comprehensive perspective on the organizational realities of AI integration. In sum, this research contributes to the growing body of knowledge on digital transformation in HRM by revealing how Generation Z envisions the future of technology-mediated human resource practices. Their perspectives highlight the urgency of aligning digital innovation with sustainable human development, ensuring that the evolving role of AI enhances not replaces the human dimension at the core of organizational success.

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