E-ISSN 3048-1546 Vol. 3, Issue 3 (2026)
Doi: https://doi.org10.37899/mjdm.v3i3.401

Maroon Journal De Management

Human-Centered Management in Industry 5.0: Balancing Artificial Intelligence and Employee Well-Being

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Article Info

Article History:
Received: 26 July 2026
Revised: 16 September 2026
Accepted: 29 September 2026

Keywords:
Artificial Intelligence Adoption, Employee Well-Being, Human-Centered Management, Industry 5.0, Organizational Sustainability

JEL Classification: O33, M12, M15, J28, I31

Abstract

This study examines the relationships among artificial intelligence adoption, human-centered management, and employee well-being in the context of Industry 5.0. The study specifically investigates whether human-centered management mediates the association between artificial intelligence adoption and employee well-being. A quantitative cross-sectional survey was conducted with 280 employees from organizations using artificial intelligence technologies across several industries. Data were analyzed using partial least squares structural equation modeling. The findings show that artificial intelligence adoption positively relates to human-centered management and employee well-being. Human-centered management also exhibits a positive relationship with employee well-being. The mediation analysis confirms a significant indirect association, while the direct relationship remains significant, indicating partial mediation. These findings suggest that technological adoption is more associated with employee welfare when supported by participatory leadership, employee empowerment, and continuous learning. The study contributes an integrated Industry 5.0 perspective and encourages organizations to align artificial intelligence implementation with human-centered management and employee well-being.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) has transformed organizational structures, managerial processes, and the nature of work across contemporary industries. AI-enabled technologies are increasingly integrated into recruitment, performance evaluation, operational decision-making, customer services, and employee development. These developments have positioned AI as a strategic instrument for improving organizational efficiency, decision accuracy, and workplace productivity. Nevertheless, the expansion of AI in organizational settings has generated a fundamental debate concerning the extent to which technological innovation can coexist with employee well-being (Zheng et al., 2025; Moghayedi et al., 2025; Dutta & Mishra, 2024; Soomro et al., 2026). While AI may reduce repetitive tasks and support employees in handling complex responsibilities, its implementation may also introduce job insecurity, algorithmic surveillance, reduced

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autonomy, and psychological strain. Consequently, the organizational value of AI cannot be assessed exclusively through technological performance or operational efficiency, but must also consider its implications for employees and the sustainability of work systems (Raisch & Krakowski, 2021; Bankins et al., 2024; Alzeaideen et al., 2026; Arroyo et al., 2026).

The emergence of Industry 5.0 has further strengthened the argument that technological transformation should be aligned with human welfare, resilience, and sustainability. Unlike technology-centered approaches that primarily emphasize automation and productivity, Industry 5.0 places human needs and human–machine collaboration at the center of industrial development (Oyekunle et al., 2024; Darvishi & Hosseini, 2024). Recent systematic reviews indicate that human-centered AI requires greater attention to trust, worker autonomy, motivation, psychological safety, and the psychosocial consequences of technological integration (Passalacqua et al., 2025). Similarly, research on workplace well-being in Industry 5.0 emphasizes that employee welfare should be considered an integral component of technological design and organizational development rather than a secondary consequence of digital transformation (Antonaci et al., 2024; Cimino et al., 2025; Trstenjak et al., 2025). These perspectives suggest that the successful adoption of AI depends not only on technological readiness but also on organizational capacity to preserve meaningful human involvement in technology-mediated work.

The link between AI implementation and employee wellness is complicated, yet, the advantages are undeniable. AI-powered systems can enhance task coordination, access to information, and streamline repetitive tasks, allowing employees to focus on analytical, creative, and interpersonal tasks. Algorithmic management may also impact on work intensity, decision-making autonomy, perceived fairness, and employee perception of control, however (Lu, 2026; Gong, 2025). Empirical studies of algorithmic management have indicated that technology-based management can have positive and negative impacts on workers' health and wellbeing, especially when decisions made by the algorithms impact workers without any transparency or participation (Kinowska & Sienkiewicz, 2023). Other more recent research also points to possible psychological impacts of algorithmic control, such as feelings of threat, burnout, and loss of autonomy for employees (Röttgen et al., 2024; Zayid et al., 2024). The conflicting viewpoints suggest that the impacts of AI use on employees is not uniformly positive (Soulami et al., 2024).

Human-centred management is therefore one of the organizational perspectives that can be used to comprehend how technological innovation can be aligned with the needs of the employees (Barabanova et al., 2025; Atay et al., 2025; Pan & Froese, 2023; Malik et al., 2023; Pereira et al., 2023). The key principles of this form of management are supportive leadership, empowering employees, participatory decision making, ongoing learning, ethical technology use, and organizational support (Ogu, 2024; Almassadeh et al., 2026). In AI-driven work environments, these behaviors can foster a heightened sense of awareness about technological shifts, acquire the necessary skills, and ensure a sense of control and value. In addition, research in AI and organizational behavior highlights the role of individual, group, and organizational factors in shaping employees' reactions to AI, underscoring the need for managers to make arrangements to influence outcomes of AI adoption (Bankins et al., 2024; Horani et al., 2025). Furthermore, the study on AI and workplace well-being explores the potential for AI to support employees, provide personalized growth strategies, and detect psychosocial risks at the workplace, while also highlighting the need for responsible use of AI (García-Madurga et al., 2024; Evangeline, 2026; Lokeshwari, 2026; Olalere & Adewojo, 2026; Mdhluli, 2026).

Prior research focuses on different aspects of AI utilisation and algorithmic management, human-AI collaboration, and employee well-being, but the intersection

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between these aspects is still not fully explored. Despite a significant amount of literature regarding technological abilities, productivity results or the dangers of algorithmic control, much fewer studies have focused on the mechanism of human-centred management linking the use of AI with employee well-being. Gaps in theory-driven empirical research and the need to conduct more in-depth investigation of psychosocial factors and human-technology interaction (HTI) are also highlighted through recent reviews of human-centered AI in Industry 5.0 (Passalacqua et al., 2025). This is especially important since the use of AI doesn't automatically mean 'employee-friendly' practices. But, managerial reactions can make technological innovation a tool for employee growth or source for new demands at work.

To fill this void, the present study proposes an integrated framework of Artificial Intelligence Adoption, Human-Centered Management and Employee Well-Being in the context of Industry 5.0. This study is novel because it not only investigates the role of human-centered management as a desirable organizational philosophy but also as a mediating factor between AI adoption and employee well-being. This view brings the discussion to a new level by combining the adoption of technology and management of employees in one empirical model. The study therefore makes a valuable contribution to the literature of Industry 5.0, as it deepens understanding of the organizational function of human-centered management in balancing technology with employee welfare. Therefore, this study is designed to explore the effects of AI adoption on human-centered management, assess the connection between human-centered management and employee wellness, assess the direct link between AI adoption and employee wellness, and analyze the mediating effect of human-centered management between the two.

METHODS

Research Design

This study employed a quantitative explanatory research design with a cross-sectional survey approach to examine the relationships among Artificial Intelligence (AI) Adoption, Human-Centered Management (HCM), and Employee Well-Being (EWB) within the context of Industry 5.0. The explanatory design was selected to investigate the proposed relationships between the research constructs and to assess the mediating role of human-centered management in the relationship between AI adoption and employee well-being. A cross-sectional approach was applied because the data were collected from respondents at a single point in time. The research framework positioned AI adoption as the independent variable, human-centered management as the mediating variable, and employee well-being as the dependent variable. This framework enabled the study to examine both the direct association between AI adoption and employee well-being and the indirect relationship operating through human-centered management (Shin, 2025).

Population and Sampling Technique

The target population consisted of employees working in medium- and large-sized organizations that had implemented artificial intelligence technologies in their operational or managerial activities. The study covered employees from manufacturing, service, financial, healthcare, and technology organizations. A purposive sampling technique was employed to ensure that respondents had relevant experience with AI-supported work environments. Respondents were eligible to participate if they had at least one year of work experience and had direct exposure to AI-enabled technologies in their daily work activities. These criteria were established to ensure that participants could provide informed assessments of AI adoption, organizational management practices, and their own workplace well-being.

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A total of 280 valid questionnaires were included in the analysis. The sample size was considered in relation to the requirements of Partial Least Squares Structural Equation Modeling (PLS-SEM), which was used to evaluate the measurement and structural models. The selection of respondents was guided by the relevance of their workplace experience to the research objectives rather than by random selection. Consequently, the findings are interpreted within the characteristics of the participating organizations and respondents.

Research Instrument and Measurement

Primary data were collected using a structured questionnaire adapted from measurement scales reported in previous studies. The questionnaire consisted of two main sections. The first section gathered demographic information, including gender, age, educational level, work experience, and industry sector. The second section measured the three principal constructs of the study, namely AI Adoption, Human-Centered Management, and Employee Well-Being.

All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). AI Adoption represented the extent to which AI-supported technologies were integrated into employees' work activities and organizational processes. Human-Centered Management reflected managerial practices emphasizing leadership support, employee empowerment, participation, and continuous organizational learning. Employee Well-Being captured employees' perceptions of their psychological and workplace conditions in AI-enabled organizational environments. Prior to the main survey, the questionnaire underwent expert review involving perspectives from human resource management and digital transformation. A preliminary pilot test was also conducted to assess item clarity, readability, and suitability for the research context. The measurement model was subsequently evaluated through statistical procedures to establish indicator reliability, internal consistency, convergent validity, and discriminant validity.

Data Collection Procedure

Data were collected through a structured employee survey administered to individuals who met the predetermined eligibility criteria. The survey focused on employees with direct experience of AI-supported technologies in their workplace. Before completing the questionnaire, participants were informed about the research purpose and the voluntary nature of their participation. Respondents were also informed that their answers would be treated confidentially and used exclusively for research purposes. After the data collection process, the returned questionnaires were reviewed for completeness and suitability for analysis. A total of 280 valid responses were retained for subsequent statistical examination. The collected data were then organized and prepared for analysis using SmartPLS 4. The research procedure was designed to maintain consistency between the research objectives, respondent eligibility criteria, measurement instruments, and statistical analysis.

Data Analysis Technique

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The analysis consisted of two stages. First, the measurement model was evaluated through indicator loadings, Cronbach's Alpha, Composite Reliability, Average Variance Extracted (AVE), and the Fornell–Larcker criterion and Heterotrait–Monotrait Ratio (HTMT) to establish reliability and validity. Second, the structural model was assessed using the Variance Inflation Factor (VIF), coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2). Hypothesis testing was conducted using bootstrapping with 5,000 resamples at a 5% significance level. The mediating role of Human-Centered Management was

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examined by evaluating the significance of the indirect effect of AI Adoption on Employee Well-Being.

Validity, Reliability, and Research Ethics

Several procedures were implemented to ensure the methodological quality of the study. Content validity was supported through expert evaluation of the questionnaire, while construct validity was assessed through the measurement model. Internal consistency reliability was examined using Cronbach's Alpha and Composite Reliability. Convergent and discriminant validity were evaluated using AVE, the Fornell–Larcker criterion, and HTMT.

Because the study relied on self-reported questionnaire data, Harman's single-factor test was included as an initial assessment of potential common method bias. The interpretation of this test was considered alongside the other measurement model evaluations rather than as the sole evidence of the absence of common method bias. Research ethics were addressed through voluntary participation, confidentiality of responses, and the use of collected information exclusively for academic research. Respondents were informed of the purpose of the study before participating. Personal information was not intended to be disclosed in the reporting of the findings.

RESULTS AND DISCUSSION

This study examined the relationships among Artificial Intelligence (AI) Adoption, Human-Centered Management (HCM), and Employee Well-Being (EWB) using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The empirical analysis was conducted in three stages. First, descriptive statistics were employed to describe respondents' demographic characteristics and summarize the distribution of the research variables. Second, the measurement model was assessed to evaluate the reliability and validity of the constructs. Finally, the structural model was examined to test the proposed hypotheses regarding the influence of AI adoption on employee well-being and the mediating role of human-centered management. Overall, the findings indicate that organizations have increasingly adopted AI technologies while simultaneously recognizing the importance of human-centered management practices in maintaining employee well-being.

Respondent Characteristics

A total of 280 valid questionnaires were collected from employees working in manufacturing, service, financial, healthcare, and technology organizations that had implemented AI-supported technologies. The respondents represented various organizational levels, ensuring diverse perspectives regarding AI adoption and employee experiences.

Table 1. Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	156	55.7
	Female	124	44.3
Age	Below 30 years	68	24.3
	30–39 years	117	41.8
	40–49 years	64	22.9
	Above 50 years	31	11.0
Education	Diploma	26	9.3
	Bachelor's Degree	171	61.1
	Master's Degree	76	27.1
	Doctoral Degree	7	2.5
Work Experience	<5 years	74	26.4
	5–10 years	119	42.5

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	>10 years	87	31.1

Source: Authors' Survey Data, 2026

Table 1 shows that male respondents accounted for 55.7% of the sample, while female respondents represented 44.3%. The largest proportion of respondents (41.8%) were between 30 and 39 years old, indicating that most participants were in their productive working years. More than sixty percent held a bachelor's degree, and approximately one-third possessed more than ten years of work experience. These characteristics suggest that respondents were sufficiently experienced to evaluate the implementation of AI technologies and human-centered management practices within their organizations.

Descriptive Statistics

Descriptive statistics were calculated to examine respondents' perceptions of the three research constructs.

Table 2. Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation	Interpretation
Artificial Intelligence Adoption	4.24	0.56	High
Human-Centered Management	4.12	0.60	High
Employee Well-Being	4.06	0.63	High

Source: Authors' Survey Data, 2026

Table 2 indicates that Artificial Intelligence Adoption achieved the highest mean score (4.24), suggesting that respondents generally perceived AI technologies to be well integrated into organizational operations. The relatively low standard deviation (0.56) indicates a high level of agreement among respondents regarding AI implementation.

The Human-Centered Management construct recorded a mean value of 4.12, reflecting positive perceptions of leadership support, employee participation, organizational learning, and employee empowerment. This finding suggests that many organizations recognize the importance of balancing technological advancement with employee needs and organizational well-being. Similarly, Employee Well-Being obtained a mean score of 4.06, indicating that respondents generally experienced positive psychological and workplace conditions despite the increasing adoption of AI technologies. The relatively small standard deviation demonstrates consistency in respondents' evaluations.

Measurement Model Assessment

Indicator Reliability

Indicator reliability was assessed using the outer loading values of each measurement item. An outer loading value of 0.70 or higher indicates that an indicator adequately represents its corresponding latent construct. As shown in Table 3, all indicators exceeded the recommended threshold, with loading values ranging from 0.751 to 0.913.

Table 3. Indicator Reliability

Construct	Indicator	Loading
Artificial Intelligence Adoption	AI1	0.842
	AI2	0.879
	AI3	0.901
	AI4	0.856
	AI5	0.819
Human-Centered Management	HCM1	0.913

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	HCM2	0.887
	HCM3	0.851
	HCM4	0.825
	HCM5	0.782
Employee Well-Being	EWB1	0.884
	EWB2	0.861
	EWB3	0.838
	EWB4	0.806
	EWB5	0.751

Source: Authors' Survey Data, 2026

The findings indicate that every measurement item demonstrated satisfactory loading values, confirming that the observed indicators reliably measured their respective latent constructs. Therefore, no indicators were excluded from the analysis.

Internal Consistency Reliability and Convergent Validity

Internal consistency reliability was evaluated using Cronbach's Alpha (CA) and Composite Reliability (CR), whereas convergent validity was assessed using the Average Variance Extracted (AVE). The accepted thresholds are values greater than 0.70 for CA and CR, and greater than 0.50 for AVE.

Table 4. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Artificial Intelligence Adoption	0.913	0.935	0.742
Human-Centered Management	0.905	0.929	0.724
Employee Well-Being	0.891	0.920	0.697

Source: Authors' Survey Data, 2026

As presented in Table 4, all constructs achieved excellent reliability, with Cronbach's Alpha values ranging from 0.891 to 0.913 and Composite Reliability values exceeding 0.90. In addition, all AVE values were well above the recommended threshold of 0.50, indicating that each construct explained more than half of the variance of its indicators. These findings confirm satisfactory convergent validity for all research variables.

Discriminant Validity

Table 5. HTMT Ratio

Constructs	HTMT
AI Adoption ↔ Human-Centered Management	0.684
AI Adoption ↔ Employee Well-Being	0.653
Human-Centered Management ↔ Employee Well-Being	0.742

Source: Authors' Survey Data, 2026

The HTMT values presented in Table 5 range from 0.653 to 0.742, all of which are below the recommended threshold of 0.90. These results confirm adequate discriminant validity, indicating that Artificial Intelligence Adoption, Human-Centered Management, and Employee Well-Being represent distinct conceptual constructs. The assessment of the measurement model demonstrates that all indicators satisfy the recommended criteria for reliability and validity. The constructs exhibit strong internal consistency, adequate convergent validity, and satisfactory

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discriminant validity. Consequently, the measurement model provides a reliable foundation for evaluating the structural relationships among the research variables in the next stage of the analysis.

Structural Model Assessment

Collinearity Assessment

Table 6. Collinearity Assessment

Structural Relationship	VIF
AI Adoption → Human-Centered Management	1.756
AI Adoption → Employee Well-Being	2.014
Human-Centered Management → Employee Well-Being	2.014

Source: Authors' Survey Data, 2026

The VIF values ranging from 1.756 to 2.014 confirm that the predictor constructs are statistically independent and suitable for structural model evaluation.

Coefficient of Determination and Predictive Relevance

Table 7. Model Evaluation

Endogenous Construct	R^2	Q^2
Human-Centered Management	0.548	0.362
Employee Well-Being	0.671	0.487

Source: Authors' Survey Data, 2026

The results indicate that AI Adoption explains 54.8% of the variance in Human-Centered Management. Furthermore, AI Adoption and Human-Centered Management jointly explain 67.1% of the variance in Employee Well-Being. The Q^2 values of 0.362 and 0.487 exceed zero, confirming that the proposed model demonstrates satisfactory predictive relevance.

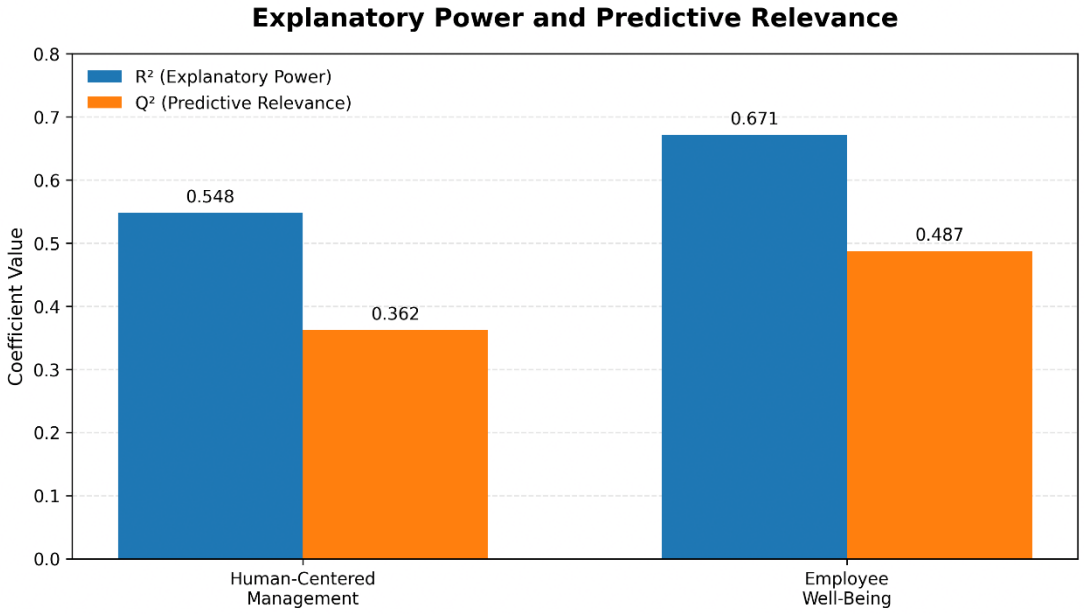


Figure 1. Explanatory Power and Predictive Relevance of the Structural Model

Source: Authors' Survey Data, 2026

Figure 1 the explanatory power and predictive relevance of the structural model. Human-Centered Management achieved an R^2 value of 0.548, indicating that Artificial Intelligence Adoption explains 54.8% of its variance. Employee Well-Being

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recorded a higher R^2 value of 0.671, demonstrating that Artificial Intelligence Adoption and Human-Centered Management jointly explain 67.1% of its variance. Both constructs also exhibited positive Q^2 values of 0.362 and 0.487, respectively, indicating predictive relevance of the proposed model.

Effect Size

Table 8. Effect Size

Relationship	f^2	Interpretation
AI Adoption → Human-Centered Management	0.611	Large
AI Adoption → Employee Well-Being	0.182	Medium
Human-Centered Management → Employee Well-Being	0.347	Large

Source: Authors' Survey Data, 2026

The findings indicate that AI Adoption has a large effect on Human-Centered Management, while Human-Centered Management also exerts a substantial influence on Employee Well-Being. The direct effect of AI Adoption on Employee Well-Being is moderate, suggesting that managerial practices play an important role in strengthening employees' positive responses to AI implementation.

Hypothesis Testing

Table 9. Direct Effects

Hypothesis	Structural Path	β	t-value	p-value	Decision
H1	AI Adoption → Human-Centered Management	0.740	17.824	<0.001	Supported
H2	Human-Centered Management → Employee Well-Being	0.512	9.763	<0.001	Supported
H3	AI Adoption → Employee Well-Being	0.298	4.582	<0.001	Supported

Source: Authors' Survey Data, 2026

The results presented in Table 9 indicate that all direct hypotheses are statistically supported. AI Adoption significantly influences Human-Centered Management (β = 0.740), suggesting that organizations with higher levels of AI implementation tend to adopt more employee-oriented managerial practices. Human-Centered Management also demonstrates a significant positive effect on Employee Well-Being (β = 0.512), indicating that supportive leadership, employee participation, and organizational learning contribute substantially to employees' psychological and professional well-being. Furthermore, AI Adoption directly influences Employee Well-Being (β = 0.298), although the magnitude of this relationship is weaker than the effect mediated through Human-Centered Management.

Mediation Analysis

Table 10. Indirect Effect

Hypothesis	Indirect Path	β	t-value	p-value	Decision
H4	AI Adoption → Human-Centered Management → Employee Well-Being	0.379	8.915	<0.001	Supported

Source: Authors' Survey Data, 2026

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The indirect effect is statistically significant (β = 0.379, p < 0.001), confirming that Human-Centered Management mediates the relationship between AI Adoption and Employee Well-Being. This finding indicates that AI implementation contributes more effectively to employee well-being when organizations simultaneously promote supportive management practices, employee empowerment, and inclusive organizational policies. Therefore, the positive influence of AI extends beyond technological capability and depends largely on how organizations manage the interaction between employees and intelligent technologies.

Human-Centered Management as a Mechanism Linking AI Adoption and Employee Well-Being

The findings suggest that the relationship between artificial intelligence (AI) adoption and employee well-being is shaped not only by technological implementation but also by how organizations manage the human consequences of digital transformation. The positive association between AI adoption and human-centered management indicates that AI integration may encourage organizations to reconsider leadership, employee participation, and learning practices. This interpretation is consistent with research emphasizing that AI creates organizational value through the interaction between technological capabilities and human resources rather than through automation alone (Raisch & Krakowski, 2021; Bankins et al., 2024). However, the finding should not be interpreted as evidence that AI automatically produces employee-oriented management. Instead, it suggests that technological adoption and managerial adaptation may develop together.

The positive relationship between human-centered management and employee well-being is consistent with studies identifying autonomy, organizational support, fairness, and employee involvement as important conditions in technology-mediated work (Kinowska & Sienkiewicz, 2023; Parent-Rocheleau & Parker, 2022). Nevertheless, previous research also documents that algorithmic monitoring and automated decision-making may reduce autonomy and intensify work demands (Vignola et al., 2023; Zhang et al., 2022). This apparent difference highlights the importance of organizational context. AI may support well-being when employees retain meaningful participation and access to managerial support, whereas technology-centered control may generate adverse experiences.

The mediation result provides the central contribution of this study. Human-centered management partially mediates the relationship between AI adoption and employee well-being, indicating that the association operates through both managerial practices and a remaining direct pathway. This finding complements AI–HRM research that identifies employee-oriented implementation as a condition for translating technological capabilities into workplace outcomes (Krakowski et al., 2023; Budhwar et al., 2023). It also extends human-centered AI scholarship by empirically connecting AI adoption, management practices, and employee well-being within one Industry 5.0 framework (Wilkens et al., 2023; García-Madurga et al., 2024).

The theoretical novelty lies in positioning human-centered management as an explanatory organizational mechanism rather than merely a normative principle of Industry 5.0. This integrated perspective contributes to the literature by linking digital transformation with employee-centered organizational outcomes. Practically, managers should combine AI investment with transparent communication, continuous reskilling, employee consultation, and human oversight. These measures are particularly relevant because AI can simultaneously create opportunities for task support and risks associated with surveillance, insecurity, and work intensification (Braganza et al., 2021; Parker & Grote, 2022; Vrontis et al., 2023; Bankins et al., 2024).

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The implications extend to organizational policy: AI governance should evaluate employee experience alongside productivity and operational efficiency. However, the cross-sectional design limits causal interpretation, while purposive sampling across several sectors restricts generalizability. Future research should use longitudinal and multi-source data, compare industries and national contexts, and examine trust, job autonomy, digital leadership, and psychological empowerment as additional mediators or moderators. Such extensions would clarify when human-centered management enables AI adoption to contribute to sustainable employee well-being.

CONCLUSION

This study examined the relationships among artificial intelligence adoption, human-centered management, and employee well-being within the context of Industry 5.0. The findings demonstrate that artificial intelligence adoption positively influences employee well-being both directly and indirectly through human-centered management. These results indicate that organizations can maximize the benefits of artificial intelligence when technological innovation is supported by employee-centered managerial practices, including participative leadership, continuous learning, organizational support, and employee empowerment. Human-centered management emerged as a key mechanism that strengthens the positive impact of artificial intelligence on employees' workplace experiences and overall well-being.

This study contributes to the growing literature on Industry 5.0 by integrating technological and human resource perspectives into a unified framework. The findings provide theoretical evidence that sustainable organizational performance depends on balancing technological advancement with employee welfare. From a practical perspective, the study offers guidance for managers and policymakers in designing human-centered artificial intelligence strategies that improve organizational resilience and workforce well-being. Despite these contributions, the study is limited by its cross-sectional design and its focus on a single mediating variable. Future research should employ longitudinal approaches, examine additional mediating and moderating variables, such as organizational culture, digital leadership, and employee trust, and conduct comparative studies across industries and countries to enhance the generalizability of the findings.

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