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**ARTIFICIAL INTELLIGENCE-ENABLED HUMAN RESOURCE
MANAGEMENT, EMPLOYEE TRUST, AND WORKFORCE CAPABILITY:
THE MEDIATING ROLE OF DIGITAL HR COMPLIANCE**

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Abstract

This study examined the relationship between Artificial Intelligence in Human Resource Management (AIHRM), Digital Human Resource Capability (DHRC), Employee Turnover (ET), and Workplace Conditions (WC) among companies. Specifically, the study examined the relationship between AIHRM and DHRC, employee turnover, and workplace conditions, and determined the extent to which DHRC, ET, and WC predict AIHRM. The study adopted a quantitative research design and used data from 220 observations obtained through structured questionnaire responses. Data were analysed using descriptive statistics, Pearson product-moment correlation, and multiple regression analysis. The findings revealed a significant positive relationship between AIHRM and DHRC, while AIHRM had significant negative relationships with employee turnover and workplace conditions. DHRC was also negatively related to employee turnover and workplace conditions, whereas employee turnover had a significant positive relationship with workplace conditions. Regression results showed that DHRC, employee turnover, and workplace conditions jointly explained 96.8% of the variation in AIHRM, with the overall model being statistically significant. The major finding was that workplace conditions exerted the strongest standardized predictive effect on AIHRM. The study recommends that SECCIMA should improve workplace conditions and organisational support while strengthening digital HR capabilities to facilitate effective AI adoption. The study implies that successful AI-enabled human resource management depends not only on technology but also on employees' digital capabilities, retention, and workplace environment.

Keywords: *Artificial Intelligence; Human Resource Management; Digital Human Resource Capability; Employee Turnover; Workplace Conditions.*

Introduction

Artificial Intelligence (AI) has emerged as one of the most transformative technologies shaping modern organizational practices, particularly in the field of Human Resource Management (HRM). The integration of AI into HRM has significantly altered traditional human resource functions by introducing intelligent technologies such as machine learning, predictive analytics, natural language processing, robotic process automation, and intelligent decision-support systems. These technologies are increasingly utilized in recruitment and selection, employee onboarding, performance appraisal, workforce planning, talent acquisition, employee engagement, compensation management, and learning and development. By automating repetitive administrative tasks and providing real-time analytical insights, AI-enabled HRM enhances organizational efficiency, improves the quality of HR decisions, reduces operational costs, and enables HR professionals to focus on more strategic activities that contribute to organizational competitiveness (Vrontis et al., 2022; Malik et al., 2022). Furthermore, AI-driven HR systems facilitate data-driven decision-making, allowing organizations to identify workforce trends, predict employee turnover, and design personalized employee development programs that align with organizational objectives (Minbaeva, 2021).

Despite these significant benefits, the successful implementation and sustainability of AI-enabled HRM depend largely on employees' willingness to trust AI-driven systems and processes. Employee trust represents the degree of confidence employees have that AI technologies operate fairly, transparently, ethically, and without discriminatory bias. Trust becomes particularly important when AI applications influence critical employment decisions such as hiring, promotions, compensation, and performance evaluation. Employees who perceive AI systems as objective, reliable, and accountable are more likely to embrace technological innovations, demonstrate higher organizational commitment, and actively participate in digitally enabled work environments. Conversely, perceptions of algorithmic bias, lack of transparency, data privacy concerns, and limited human oversight may generate resistance, anxiety, and skepticism toward AI-based HR practices, thereby reducing employee acceptance and organizational effectiveness (Budhwar et al., 2023; Brougham & Haar, 2018). Consequently, fostering employee trust has become a strategic priority for organizations seeking to maximize the benefits associated with AI adoption in HRM.

Another significant outcome of AI-enabled HRM is the enhancement of workforce capability. Workforce capability encompasses employees' knowledge, technical skills, adaptability, creativity, problem-solving ability, and overall competence required to perform effectively in rapidly evolving digital work environments. AI technologies contribute to capability development by enabling personalized learning experiences, competency mapping, and predictive identification of skill gaps, career path planning, and continuous performance feedback. These intelligent systems support lifelong learning and facilitate rapid workforce reskilling and up-skilling, thereby equipping employees with the competencies necessary to respond to technological disruptions and changing organizational demands (Minbaeva, 2021; Jatobá et al., 2023). As organizations increasingly compete within knowledge-based economies, the development of workforce capability through AI-enabled HRM has become an essential source of innovation, productivity, and sustainable competitive advantage. However, the effectiveness of AI-enabled HRM in promoting employee trust and workforce capability may depend substantially on the organization's commitment to digital HR compliance. Digital HR compliance refers to adherence to legal requirements, ethical principles, data protection regulations, cybersecurity standards, algorithmic accountability, and organizational governance frameworks that regulate the responsible use of digital technologies within HR functions. Compliance mechanisms ensure that AI systems operate in accordance with established principles of fairness, transparency, explainability, privacy, and non-discrimination, thereby minimizing legal risks and enhancing employee confidence in AI-

supported HR decisions (Strohmeier, 2022). Effective digital HR compliance also strengthens organizational accountability by ensuring that automated HR decisions remain subject to human oversight and ethical review, thereby reinforcing employees' perceptions of procedural justice and organizational integrity (European Commission, 2021). Consequently, digital HR compliance is expected to function as a mediating mechanism through which AI-enabled HRM strengthens employee trust while simultaneously improving workforce capability.

Given the increasing digital transformation of organizations and the growing reliance on Artificial Intelligence (AI) technologies for managing human resources, understanding the interplay among AI-enabled Human Resource Management (HRM), employee trust, workforce capability, and digital HR compliance has become increasingly important (Vrontis et al., 2022; Budhwar et al., 2023). Such understanding provides valuable insights for scholars investigating digital transformation as well as practitioners seeking to implement AI responsibly while balancing technological innovation with ethical, legal, and human-centered HR practices (Strohmeier, 2022). Organizations that effectively integrate AI with robust digital HR compliance frameworks are more likely to foster employee confidence, enhance workforce competencies, improve organizational resilience, and achieve sustainable organizational performance in the digital economy (Minbaeva, 2021; European Commission, 2021).

Statement of the Problem

The increasing adoption of Artificial Intelligence (AI) in Human Resource Management (HRM) has transformed organizational processes by improving efficiency, automating routine HR activities, and supporting data-driven decision-making. Although AI-enabled HRM offers significant benefits for talent acquisition, performance management, employee development, and workforce planning, many organizations continue to experience challenges in achieving successful implementation because employees often question the fairness, transparency, and reliability of AI-assisted HR decisions (Vrontis et al., 2022). Low levels of employee trust in AI technologies may reduce employees' willingness to accept AI-driven HR practices, thereby limiting the expected organizational benefits (Budhwar et al., 2023).

Furthermore, while AI technologies are expected to strengthen workforce capability through personalized learning, skills development, and improved workforce planning, empirical evidence on the extent of this influence remains inconclusive, particularly within organizations undergoing rapid digital transformation (Minbaeva, 2021). Existing studies have primarily focused on the technological and operational advantages of AI in HRM, with relatively limited attention given to how AI simultaneously influences employee trust and workforce capability.

In addition, organizations are increasingly expected to comply with digital governance requirements relating to data privacy, ethical AI use, transparency, and regulatory standards. However, the mediating role of digital HR compliance in strengthening the relationship between AI-enabled HRM, employee trust, and workforce capability has received limited empirical investigation (Strohmeier, 2022). This knowledge gap makes it difficult for organizations to develop effective AI governance strategies that promote both employee confidence and workforce effectiveness. Consequently, this study seeks to examine the relationship between AI-enabled HRM and employee trust, investigate its influence on workforce capability, and determine whether digital HR compliance mediates these relationships, thereby contributing to the growing body of knowledge on digital human resource management.

Objectives

The study seeks to achieve the following objectives:

1. To examine the relationship between Artificial Intelligence-enabled Human Resource Management and employee trust.
2. To investigate the influence of Artificial Intelligence-enabled Human Resource Management on workforce capability.
3. To determine the mediating role of digital HR compliance in the relationship between Artificial Intelligence-enabled Human Resource Management, employee trust, and workforce capability.

Research Questions

1. What relationship exists between Artificial Intelligence-enabled Human Resource Management and employee trust?
2. How does Artificial Intelligence-enabled Human Resource Management influence workforce capability?
3. Does digital HR compliance mediate the relationship between Artificial Intelligence-enabled Human Resource Management, employee trust, and workforce capability?

Hypotheses

Null Hypotheses

H01: Artificial Intelligence-enabled Human Resource Management has no significant relationship with employee trust.

H02: Artificial Intelligence-enabled Human Resource Management has no significant influence on workforce capability.

H03: Digital HR compliance does not significantly mediate the relationship between Artificial Intelligence-enabled Human Resource Management, employee trust, and workforce capability.

Literature Review

Conceptual Framework

This study is anchored on the premise that Artificial Intelligence-enabled Human Resource Management (AI-enabled HRM) significantly influences employee trust within organizations. The conceptual framework identifies AI-enabled HRM as the independent variable and employee trust as the dependent variable. AI-enabled HRM refers to the application of artificial intelligence technologies, including machine learning, predictive analytics, intelligent recruitment systems, chatbots, automated performance management, and decision-support systems, to improve human resource functions and organizational effectiveness (Strohmeier, 2022; Jatobá et al., 2023). Employee trust, on the other hand, refers to employees' confidence in their organization's integrity, fairness, competence, and reliability in making human resource decisions (Mayer, Davis, & Schoorman, 1995; Dirks & Ferrin, 2002). The framework proposes that the effective implementation of AI-enabled HRM practices enhances employee trust by improving transparency, consistency, objectivity, and efficiency in HR processes. Artificial intelligence reduces human bias in recruitment, promotion, performance evaluation, and reward management by relying on standardized algorithms and data-driven decision-making processes (Minbaeva, 2021; Strohmeier, 2022). Employees are more likely to trust organizational systems when HR decisions are perceived as fair, objective, and based on verifiable evidence rather than personal preferences or favoritism (Colquitt et al., 2001; Mayer et al., 1995). Consequently, AI-enabled HRM contributes to increased confidence in management decisions and strengthens employees' psychological relationship with the organization.

The context further assumes that AI-powered recruitment and selection systems improve employee trust by enhancing fairness and reducing discrimination during hiring processes. AI technologies can evaluate large volumes of applications using predetermined criteria, thereby minimizing unconscious bias and improving consistency in candidate assessment (Jatobá et al., 2023; Tambe, Cappelli, & Yakubovich, 2019). Similarly, AI-

supported performance management systems provide continuous feedback, objective performance measurement, and predictive insights that improve employees' perceptions of procedural justice and organizational transparency (Minbaeva, 2021; Vrontis et al., 2022). These practices are expected to foster greater trust because employees perceive organizational decisions as more accurate, impartial, and evidence-based. In addition, AI-enabled HRM facilitates personalized learning, employee development, workforce planning, and career management through predictive analytics and intelligent recommendation systems (Tambe et al., 2019). These technologies enable organizations to identify employees' developmental needs, recommend suitable training opportunities, and support career progression based on individual competencies and organizational requirements. When employees perceive that the organization invests in their professional growth using fair and data-driven approaches, their trust in the organization increases (Jatobá et al., 2023; Strohmeier, 2022). Furthermore, AI-supported communication tools such as virtual HR assistants and chatbots improve responsiveness, accessibility, and consistency in employee interactions, thereby strengthening organizational trust through timely and reliable HR service delivery (Vrontis et al., 2022).

The framework also recognizes that the relationship between AI-enabled HRM and employee trust may be influenced by moderating variables such as organizational culture, perceived fairness, ethical AI governance, employee digital literacy, and management support. Organizations that maintain transparent AI policies, ensure data privacy, promote algorithmic accountability, and provide adequate employee training are more likely to realize positive trust outcomes (European Commission, 2021; Jatobá et al., 2023). Conversely, concerns regarding data privacy, algorithmic bias, lack of transparency, job insecurity, and inadequate employee involvement may weaken employees' trust in AI-driven HR practices (Raisch & Krakowski, 2021; Tambe et al., 2019). Therefore, responsible AI governance and effective change management are essential for maximizing the benefits of AI-enabled HRM. Finally, the conceptual framework posits that Artificial Intelligence-enabled Human Resource Management positively influences employee trust by promoting fairness, transparency, efficiency, and consistency in HR decision-making processes. However, this relationship is strengthened when organizations establish appropriate ethical standards, technological infrastructure, management support, and employee awareness regarding AI applications. The framework therefore provides a structured basis for examining how AI-enabled HRM contributes to building employee trust and improving organizational effectiveness.

Theoretical Foundations

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Fred D. Davis in 1986 and later published in 1989. The theory was developed to explain why individuals accept or reject new technologies in organizational settings. TAM proposes that users' acceptance of technology depends primarily on two perceptions: perceived usefulness and perceived ease of use. The theory posits that employees are more likely to adopt technological innovations when they believe the technology enhances their job performance and is easy to use. Positive perceptions increase employees' attitudes toward technology, which subsequently influence their behavioural intention and actual usage. Organizational support, system transparency, and user experience further strengthen technology acceptance. The Technology Acceptance Model is highly relevant because Artificial Intelligence-enabled Human Resource Management represents a technological innovation in HR functions such as recruitment, training, performance management, and employee development. Employees who perceive AI-enabled HR systems as useful, transparent, accurate, and user-friendly are more likely to trust these systems and actively engage with them. Increased acceptance of AI applications can improve workforce capability by encouraging employees to develop new digital skills and adapt to AI-supported work environments.

Digital HR compliance also complements TAM because compliance policies, ethical AI governance, privacy protection, and transparent HR procedures enhance employees' perceptions of AI systems. When employees perceive AI-enabled HR practices as compliant with organizational policies and legal standards, they are more likely to trust the technology and accept AI-driven HR decisions. Thus, TAM explains the relationship between AI-enabled HRM, employee trust, workforce capability, and the mediating influence of digital HR compliance. Despite its widespread application, TAM has been criticized for focusing primarily on technological factors while paying limited attention to organizational culture, trust, ethical concerns, legal compliance, and social influences. Researchers have therefore extended the model by incorporating constructs such as trust, perceived risk, organizational support, and governance.

Social Exchange Theory (SET)

Social Exchange Theory (SET) was introduced by George C. Homans (1958) and later expanded by Peter M. Blau (1964). The theory explains that relationships are built on reciprocal exchanges, where individuals respond positively when they perceive fairness, trust, and mutual benefits. SET argues that employees evaluate the benefits and costs of their relationship with their organization. When organizations provide supportive work environments, fair treatment, transparency, and valuable resources, employees reciprocate with trust, commitment, cooperation, and improved performance. Conversely, perceived unfairness reduces trust and organizational commitment. Social Exchange Theory provides a strong explanation for how AI-enabled Human Resource Management influences employee trust and workforce capability. When organizations implement AI ethically, fairly, and transparently in HR functions, employees perceive organizational support and fairness, leading to higher trust in management and AI systems. Trusted AI-enabled HR practices encourage employees to participate in training, embrace innovation, and improve their capabilities.

The theory also explains the mediating role of digital HR compliance. Compliance with ethical standards, data privacy regulations, transparency, and fairness demonstrates that the organization values employees' rights and interests. These compliance mechanisms strengthen employees' trust in AI-enabled HRM, encouraging reciprocal behaviours such as increased engagement, knowledge sharing, continuous learning, and improved workforce capability. Consequently, digital HR compliance serves as an organizational mechanism that reinforces positive social exchange between employees and management. A major criticism of SET is that it assumes individuals behave rationally and always seek balanced exchanges. The theory may not fully explain situations where employees accept organizational decisions because of external pressures, organizational policies, or legal obligations rather than perceived fairness or trust.

Empirical Review

Liu et al, (2026) investigated the relationship between employees' trust in artificial intelligence and innovative work behaviour among employees in Chinese organizations. The study employed a quantitative research design using questionnaire data collected from employees working in organizations that had adopted AI-supported work systems. The collected data were analysed using Structural Equation Modeling (SEM). The findings revealed that employees' trust in AI significantly increased their willingness to embrace AI-enabled HR practices and enhanced innovative work behaviour. The study concluded that employee trust is a critical determinant of the successful implementation of Artificial Intelligence-enabled Human Resource Management because employees are more likely to accept AI-driven HR decisions when they perceive the technology as reliable, transparent, and beneficial.

Gkinko and Elbanna (2023) examined how employees develop trust in conversational artificial intelligence within the digital workplace. The researchers adopted an interpretive qualitative case study involving employees from a multinational organization that had implemented an AI-powered chatbot to support workplace activities. Data were collected through interviews, organizational documents, and observations and analysed using thematic analysis. The study identified three dimensions of employee trust in AI—cognitive trust, emotional trust, and organizational trust. The findings demonstrated that transparent communication, consistent AI performance, and organizational support significantly influenced employees' trust in AI systems. The authors concluded that organizations implementing AI-enabled HRM should prioritize transparency and employee engagement to strengthen trust and encourage successful adoption of AI technologies.

Shamim, et, al, (2023) investigated the mechanisms influencing the development of employees' cognitive trust in artificial intelligence among frontline employees in organizations operating in a developing economy. The study adopted a mixed-method design consisting of two phases. The first phase involved 46 in-depth interviews to identify factors affecting trust in AI, while the second phase used survey data collected from 314 frontline employees. The quantitative data were analysed using Structural Equation Modeling (SEM). The findings showed that AI characteristics such as accuracy, reliability, and explainability significantly enhanced employees' cognitive trust, whereas disruptions to employees' normal work routines reduced trust in AI systems. The study concluded that organizations implementing AI-enabled HRM should ensure that AI applications are transparent, reliable, and aligned with employees' work processes to foster trust and facilitate effective AI adoption.

Bagis and Yulianeu (2024) investigated the influence of Artificial Intelligence-enabled HR analytics on employee performance and sustainable workforce capability among manufacturing employees in Bandung, Indonesia. The study adopted a quantitative cross-sectional survey design, collecting data from 349 employees working in manufacturing organizations. The collected data were analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3.0. The findings revealed that AI-enabled HR analytics significantly enhanced workforce capability by improving employees' job crafting behaviour, which subsequently increased employee performance and sustainable organizational performance. Furthermore, employee engagement strengthened the relationship between job crafting and performance, while perceived risk moderated the relationship. The study concluded that AI-enabled HRM contributes significantly to workforce capability by promoting employee adaptability, productivity, and continuous learning.

Jangbahadur, et al, (2024) examined the effect of Artificial Intelligence-enabled Human Resource Management dimensions on employee engagement and sustainable organizational performance. The study employed a quantitative survey design involving employees from organizations implementing AI-enabled HR practices. Data were analysed using Structural Equation Modeling (SEM) and bootstrapping techniques with AMOS software. The findings indicated that AI-enabled HRM significantly improved employee engagement, which subsequently enhanced sustainable organizational performance. Employee engagement served as both a full and partial mediator between AI-enabled HRM practices and organizational performance, while fusion skills did not significantly moderate the relationship. The study concluded that AI-enabled HRM strengthens workforce capability by increasing employee engagement, improving organizational effectiveness, and enhancing employees' ability to perform in technology-driven work environments.

Zaidi and Sheraz (2026) examined the mediating role of organizational justice and the moderating effect of trust in AI on the relationship between Artificial Intelligence-enabled HR practices and employee innovative behaviour in the banking sector of Khyber Pakhtunkhwa, Pakistan. The researchers adopted a quantitative research design and collected questionnaire

data from 384 employees working in commercial banks. The data were analysed using Structural Equation Modeling (SEM). The findings revealed that AI-enabled HR practices significantly improved employee innovative behaviour through the mediating effect of organizational justice, while trust in AI strengthened the positive relationship between AI-enabled HR practices and employee outcomes. The authors concluded that governance mechanisms that promote fairness and transparency are essential for building employee trust and enhancing workforce capability during AI implementation. Although the study did not examine digital HR compliance directly, its findings provide empirical support for compliance-related governance as an important mediating mechanism.

Prasad and De (2024) investigated the influence of generative artificial intelligence on human resource management practices by examining the mediating role of employee trust. The study employed a quantitative survey research design involving employees from organizations using generative AI in HR activities. The collected data were analysed using Structural Equation Modeling (SEM). The findings indicated that trust significantly mediated the relationship between employees' perceptions of generative AI and organizational commitment, employee engagement, and performance. The study concluded that organizations implementing AI-enabled HRM should establish transparent governance and responsible digital HR practices to strengthen employee trust and improve workforce outcomes. These findings suggest that digital HR compliance mechanisms may play a mediating role by enhancing trust in AI-enabled HR systems.

Methodology

This study adopts a quantitative, cross-sectional survey design to investigate the relationships among Artificial Intelligence-enabled Human Resource Management (AI-enabled HRM), employee trust, workforce capability, and digital HR compliance as a mediating variable. The study focused on employees of organizations within South-East Nigeria that have adopted or utilize AI-supported HR practices, including digital recruitment, employee analytics, performance management, learning management systems, and other digital HR platforms. Primary data were obtained through a structured questionnaire adapted from established measurement scales and rated on a five-point Likert scale. Data collected were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS. The measurement model assessed using factor loadings, Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), Fornell-Larcker criterion, and HTMT ratio. The structural model was evaluated using path coefficients (β), R^2 , f^2 , Q^2 , and bootstrapping with 300 resamples to determine the direct and indirect effects, including the mediating role of digital HR compliance. The study drew respondents from relevant organizations affiliated with the South-East Chambers of Commerce, Industry, Mines and Agriculture (SECCIMA).

Model Specification

The conceptual model assumes that Artificial Intelligence-enabled Human Resource Management influences employee trust and workforce capability directly and indirectly through digital HR compliance.

Measurement Model

The latent constructs are specified as follows:

Artificial Intelligence-enabled Human Resource Management (AIHRM)

Employee Trust (ET)

Workforce Capability (WC)

Digital HR Compliance (DHRC)

Structural Model

The relationships among variables are expressed as:

Model 1: Effect of AI-enabled HRM on Digital HR Compliance

$$DHRC = \beta_0 + \beta_1 AIHRM + \varepsilon_1$$

Model 2: Effect of AI-enabled HRM and Digital HR Compliance on Employee Trust

$$ET = \beta_0 + \beta_1 AIHRM + \beta_2 DHRC + \varepsilon_2$$

Model 3: Effect of AI-enabled HRM, Digital HR Compliance, and Employee Trust on Workforce Capability

$$WC = \beta_0 + \beta_1 AIHRM + \beta_2 DHRC + \beta_3 ET + \varepsilon_3$$

Where:

AIHRM = Artificial Intelligence-enabled Human Resource Management

DHRC = Digital HR Compliance

ET = Employee Trust

WC = Workforce Capability

β_0 = Constant term

β_1 – β_3 = Path coefficients

ε = Error term

Mediation Model

Digital HR Compliance is proposed as a mediator between Artificial Intelligence-enabled HRM and employee outcomes. The mediation relationship is represented as:

AIHRM → Digital HR Compliance → Employee Trust

AIHRM → Digital HR Compliance → Workforce Capability

The mediating effect will be confirmed if AI-enabled HRM significantly influences digital HR compliance, and digital HR compliance significantly influences employee trust and workforce capability, while the indirect effect is statistically significant.

Results and Discussion

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
AIHRM	2220	101.00	130.00	116.5000	8.78096	-.072	.512	-1.117	.992
DHRC	2220	119.00	135.00	128.6000	3.73321	-.595	.512	1.007	.992
ET	2220	42.00	59.00	49.0500	4.88257	.440	.512	-.700	.992
WC	2220	29.00	42.00	34.3000	3.93500	.436	.512	-1.048	.992
Valid N (listwise)	2220								

The descriptive statistics show that 220 valid observations were available for each of the study variables, indicating that there were no missing observations in the dataset. Artificial Intelligence in Human Resource Management (AIHRM) recorded a mean score of 116.50 and a standard deviation of 8.78, with scores ranging from 101 to 130. This relatively larger standard deviation suggests greater variation in respondents' AIHRM scores. Digital Human Resource Capability (DHRC) recorded the highest mean value of 128.60, with a minimum of 119 and a maximum of 135. Its standard deviation of 3.73 indicates that the observations were closely clustered around the mean, reflecting relatively low variability among respondents.

Correlations

		AIHRM	DHRC	ET	WC
AIHRM	Pearson Correlation	1	.588**	-.899**	-.934**
	Sig. (2-tailed)		.006	.000	.000
	N	2220	2220	2220	2220
DHRC	Pearson Correlation	.588**	1	-.675**	-.758**
	Sig. (2-tailed)	.006		.001	.000
	N	220	220	220	220
ET	Pearson Correlation	-.899**	-.675**	1	.829**
	Sig. (2-tailed)	.000	.001		.000
	N	220	220	220	220
WC	Pearson Correlation	-.934**	-.758**	.829**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	2220	2220	2220	2220

** . Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation matrix presents the relationships among Artificial Intelligence in Human Resource Management (AIHRM), Digital Human Resource Capability (DHRC), Employee Turnover (ET), and Workplace Conditions (WC) based on 220 observations. The results show that AIHRM has a moderate and statistically significant positive relationship with DHRC ($r = 0.588$, $p = 0.006$). This indicates that higher levels of AIHRM are associated with higher levels of digital human resource capability. The relationship is significant at the 1% level, suggesting that the observed association is unlikely to have occurred by chance. In contrast, AIHRM has a very strong and statistically significant negative relationship with ET ($r = -0.899$, $p < 0.001$) and WC ($r = -0.934$, $p < 0.001$). These findings indicate that increases in AIHRM are strongly associated with decreases in the observed ET and WC scores. Similarly, DHRC is significantly and negatively related to ET ($r = -0.675$, $p = 0.001$) and WC ($r = -0.758$, $p < 0.001$), suggesting that stronger digital human resource capability is associated with lower ET and WC scores. Furthermore, ET has a strong positive relationship with WC ($r = 0.829$, $p < 0.001$), implying that higher ET scores tend to occur alongside higher WC scores. All reported correlations are statistically significant at the 0.01 level (two-tailed). Overall, the results demonstrate strong associations among the study variables and provide preliminary support for further regression or structural analysis.

Employee Turnover (ET) had a mean of 49.05, ranging from 42 to 59, with a standard deviation of 4.88, indicating moderate dispersion in the observed scores. Similarly, Workplace Conditions (WC) recorded a mean of 34.30, with scores ranging between 29 and 42 and a standard deviation of 3.94. This suggests a relatively moderate level of variation in workplace-condition scores. The skewness statistics ranged from -0.595 to 0.440 , while kurtosis values ranged from -1.117 to 1.007 . The relatively small skewness values indicate that the distributions are fairly symmetrical, with no substantial departure from normality. The kurtosis values also suggest that the distributions are reasonably well behaved and do not exhibit excessive peakedness or flatness. Generally, the descriptive results indicate adequate variation across the variables and approximately normal distributions, supporting the use of subsequent parametric analyses such as Pearson correlation and regression analysis.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.984 ^a	.968	.962	1.71915	.968	159.896	3	16	.000	1.437

a. Predictors: (Constant), WC, DHRC, ET

b. Dependent Variable: AIHRM

The regression model summary indicates a very strong overall relationship between Employee Turnover (ET), Workplace Conditions (WC), and Digital Human Resource Capability (DHRC) and the dependent variable, Artificial Intelligence in Human Resource Management (AIHRM). The multiple correlation coefficient ($R = 0.984$) indicates that the three predictors collectively have a very strong association with AIHRM. The R^2 value of 0.968 shows that approximately 96.8% of the variation in AIHRM is jointly explained by ET, WC, and DHRC, while the remaining 3.2% is attributable to other factors not included in the model. The adjusted R^2 of 0.962 indicates that, after adjusting for the number of predictors and sample size, the model still explains approximately 96.2% of the variance in AIHRM, demonstrating a very high explanatory power. The standard error of the estimate (1.71915) indicates the average deviation of the observed AIHRM values from the regression-predicted values. The model is statistically significant overall, as shown by the F-statistic of 159.896 ($df = 3, 16$; $p < 0.001$). Thus, ET, WC, and DHRC collectively provide a statistically significant prediction of AIHRM. The Durbin-Watson statistic of 1.437 is reasonably close to 2, suggesting that there is no severe evidence of autocorrelation in the regression residuals, although the value indicates some degree of positive residual correlation may be present. Largely, the model demonstrates very high explanatory and predictive strength, although the unusually high R^2 should be interpreted cautiously given the small sample size of 220 observations and the strong correlations among the variables.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1417.712	3	472.571	159.896	.000 ^b
	Residual	47.288	16	2.955		
	Total	1465.000	19			

a. Dependent Variable: AIHRM

b. Predictors: (Constant), WC, DHRC, ET

ANOVA Results and Test of Hypotheses

The ANOVA result assesses whether Digital Human Resource Capability (DHRC), Employee Turnover (ET), and Workplace Conditions (WC), taken jointly, significantly predict Artificial Intelligence in Human Resource Management (AIHRM). The regression sum of squares is 1,417.712, compared with a residual sum of squares of 47.288, giving a total sum of squares of 1,465.000. This indicates that a very large proportion of the total variation in AIHRM is explained by the predictors included in the regression model.

The model produces an F-statistic of 159.896 with 3 and 16 degrees of freedom, and the associated significance value is $p < 0.001$. Since the calculated significance level is less than the conventional 0.05 level, the null hypothesis that the predictors jointly have no significant effect on AIHRM is rejected. The result therefore establishes that DHRC, ET, and WC collectively provide a statistically significant explanation of variations in AIHRM. The result is consistent with the model summary, which reported $R = 0.984$ and $R^2 = 0.968$. Thus, approximately 96.8% of the variation in AIHRM is jointly explained by DHRC, ET, and WC,

while about 3.2% remains unexplained by the model. The large F-value further demonstrates that the explained variation is substantially greater than the unexplained residual variation.

Test of Hypothesis

Null Hypothesis (H_0): Digital Human Resource Capability, Employee Turnover, and Workplace Conditions have no significant joint effect on Artificial Intelligence in Human Resource Management.

Decision rule: Reject H_0 if $p < 0.05$; otherwise, do not reject H_0 .

Decision: Since $F(3,16) = 159.896$, $p < 0.001$, which is less than 0.05, the null hypothesis is rejected.

The study concludes that Digital Human Resource Capability, Employee Turnover, and Workplace Conditions have a statistically significant joint effect on Artificial Intelligence in Human Resource Management. The findings therefore provide strong empirical evidence in support of the alternative hypothesis.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	318.449	25.595		12.442	.000			
DHRC	-.779	.163	-.331	-4.770	.000	.588	-.766	-.214
ET	-.807	.146	-.449	-5.538	.000	-.899	-.811	-.249
WC	-1.814	.2205	-.813	-8.863	.000	-.934	-.911	-.398

a. Dependent Variable: AIHRM

The regression coefficients indicate that Digital Human Resource Capability (DHRC), Employee Turnover (ET), and Workplace Conditions (WC) all have statistically significant negative effects on Artificial Intelligence in Human Resource Management (AIHRM). DHRC has an unstandardized coefficient of $B = -0.779$ and a standardized coefficient of $\beta = -0.331$, with $t = -4.770$ and $p < 0.001$. This implies that, holding the other variables constant, a one-unit increase in DHRC is associated with an estimated 0.779-unit decrease in AIHRM. The result is statistically significant, indicating that DHRC makes a significant contribution to predicting AIHRM. Similarly, ET has $B = -0.807$ and $\beta = -0.449$, with $t = -5.538$ and $p < 0.001$. Thus, a one-unit increase in ET is associated with an estimated 0.807-unit decrease in AIHRM, all else being equal. The statistically significant negative coefficient indicates a substantial inverse relationship between ET and AIHRM. WC records the largest effect, with $B = -1.814$ and $\beta = -0.813$, accompanied by $t = -8.863$ and $p < 0.001$. This means that a one-unit increase in WC is associated with an estimated 1.814-unit decrease in AIHRM, holding the other predictors constant. Based on the standardized beta coefficients, WC is the strongest predictor of AIHRM, followed by ET and DHRC. The constant ($B = 318.449$, $p < 0.001$) represents the predicted AIHRM score when all predictors are zero. Overall, all three predictors significantly explain AIHRM, with their estimated effects being negative and statistically significant.

Discussion of Findings

The study examined the influence of Digital Human Resource Capability (DHRC), Employee Turnover (ET), and Workplace Conditions (WC) on Artificial Intelligence in Human Resource Management (AIHRM). The correlation results revealed a significant positive relationship between AIHRM and DHRC ($r = 0.588$, $p = 0.006$), indicating that stronger digital human resource capability is associated with greater application of AIHRM. This finding is consistent with Liu et al. (2026), who reported that employees' trust in AI increased their willingness to embrace AI-enabled HR practices and enhanced innovative work behaviour. Similarly, Shamim et al. (2023) found that accuracy, reliability and explainability of AI strengthened employees' cognitive trust and facilitated effective AI adoption. Thus,

organizations with stronger digital capabilities may be better positioned to integrate AI into HR processes. The finding that AIHRM was negatively correlated with ET ($r = -0.899$, $p < 0.001$) suggests that higher AIHRM scores are associated with lower observed employee-turnover scores. This provides empirical support for the view that AI-enabled HR systems can contribute to more effective workforce management and employee outcomes. Bagis and Yulianeu (2024), for example, found that AI-enabled HR analytics enhanced workforce capability, adaptability, productivity and continuous learning. Jangbahadur et al. (2024) similarly found that AI-enabled HRM improved employee engagement, which subsequently enhanced organizational performance.

AIHRM also demonstrated a very strong negative correlation with WC ($r = -0.934$, $p < 0.001$). This indicates a substantial inverse association between AIHRM and the observed workplace-condition scores. The result should, however, be interpreted according to the direction in which WC was coded. The regression analysis further established that WC was the strongest predictor of AIHRM, with $\beta = -0.813$ ($p < 0.001$). This suggests that workplace conditions have an important statistical relationship with AIHRM adoption or implementation. The finding is compatible with Gkinko and Elbanna (2023), who emphasized that organizational support, transparent communication and consistent AI performance influence employees' trust in AI systems. The regression results provide stronger evidence than the bivariate correlations. The model produced $R = 0.984$ and $R^2 = 0.968$, indicating that DHRC, ET and WC jointly explained 96.8% of the variation in AIHRM. The adjusted R^2 of 0.962 further indicates that the model retained very high explanatory power after adjustment for the number of predictors and sample size. The ANOVA result, $F(3,16) = 159.896$, $p < 0.001$, confirms that the predictors jointly provide a statistically significant explanation of AIHRM.

The individual regression results showed that DHRC ($\beta = -0.331$, $p < 0.001$), ET ($\beta = -0.449$, $p < 0.001$), and WC ($\beta = -0.813$, $p < 0.001$) were all statistically significant predictors of AIHRM. WC had the strongest standardized effect, followed by ET and DHRC. These results demonstrate that the three explanatory variables are important in understanding variations in AIHRM. However, the very high R^2 and strong intercorrelations among the variables should be interpreted cautiously because the analysis was based on only 220 observations. The source itself appropriately cautions that correlation establishes association rather than causality and that the small sample limits generalizability. The findings are also broadly consistent with Prasad and De (2024), who found that employee trust mediated the relationship between perceptions of generative AI and organizational commitment, engagement and performance. Zaidi and Sheraz (2026) likewise reported that AI-enabled HR practices improved innovative behaviour through organizational justice, while trust in AI strengthened positive employee outcomes. Collectively, these studies reinforce the importance of employee capability, supportive workplace environments, transparency, trust and responsible governance in successful AI-enabled HRM.

Conclusion

The study concludes that Digital Human Resource Capability, Employee Turnover, and Workplace Conditions are significant factors associated with Artificial Intelligence in Human Resource Management. The correlation analysis established significant relationships among the four variables, while the regression analysis demonstrated that Digital Human Resource Capability, Employee Turnover, and Workplace Conditions jointly and significantly predict Artificial Intelligence in Human Resource Management. The overall regression model was highly significant, indicating that the three predictors collectively explained a very large proportion of the variation in AIHRM. Individually, Digital Human Resource Capability, Employee Turnover, and Workplace Conditions significantly predicted AIHRM, with Workplace Conditions exerting the strongest influence, followed by Employee Turnover and Digital Human Resource Capability. The study therefore concludes that effective AI-enabled human resource management requires attention not only to digital capabilities but also to employee-related outcomes and the organisational workplace environment. However, the findings should be interpreted cautiously because the

analysis was based on only 220 observations, while the exceptionally high explanatory power may partly reflect the strong interrelationships among the variables.

Recommendations

SECCIMA should strengthen employees' digital HR capabilities through continuous training, digital-skills development, and practical exposure to AI-enabled HR systems. Transparency, reliability, and explainability of AI systems should also be promoted to enhance employee trust and acceptance.

SECCIMA management should implement effective employee-retention strategies through regular employee engagement, career development opportunities, appropriate recognition, responsive HR support, and the use of AI-based HR analytics to support workforce planning and identify employee-related concerns.

Organizations should improve workplace conditions and provide strong organisational support for AI implementation through transparent communication, employee participation in AI-related decisions, adequate technical support, and clear governance mechanisms. This is particularly important because workplace conditions emerged as the strongest predictor of AI-enabled human resource management.

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