Acta Tecnologia - International Scientific Journal about Technologies
Volume: 11 2025 Issue: 4 Pages: 153-163 ISSN 2453-675X

https://doi.org/10.22306/atec.v11i4.284 Received: 04 May 2025; Final revised: 19 Nov. 2025; Accepted: 11 Dec. 2025

Influence of AI-driven sustainable human resource management on employee creative performance

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Keywords: AI-enabled HR practices, employee creative performance, idiosyncratic deals, sustainable HRM, structural equation modelling and Indian IT industry.
Abstract: The research explores how AI-powered sustainable HR practices influence employee creative performance within India's IT sector through the mediating role of individualised agreements. The research applies structural equation modelling to examine survey data from 360 IT professionals based on the frameworks of the Job Demands-Resources model and Social Exchange Theory. AI-based training and performance management systems raise creative performance levels and show that ideals partially mediate these relationships. The research results reveal contextual differences because ideals mediate recruitment effects and performance management outcomes but show no significant mediation for training interventions, likely because of the sector's inclination toward standardised learning approaches. The research delivers significant theoretical advancements by analysing AI-HRM systems in emerging economies and exploring personal work arrangements' limits in tech-heavy settings. These insights serve as essential guidance for practitioners deploying HR technologies that successfully combine standardisation with personalisation to promote workplace innovation. The research reveals surprising results about the minimal direct influence of sustainability orientation. The research advocates for integrated strategies to synchronise sustainability initiatives with innovation objectives within India's IT sector.

1 Introduction

India's Information Technology (IT) sector contributes 9.4% to the GDP. It produces $227 billion in revenue [55] while it experiences fast-paced transformation through the implementation of AI and sustainability measures [29,55,68]. AI-driven HR practices improve both efficiency and employee performance according to recent studies [52,71,72] yet research about their effects specifically in India's IT environment is still limited [17,19,48]. This study explores this deficiency by examining how five AI-enabled sustainable HR practices, namely recruitment training, performance management, sustainability orientation, and empowerment, affect creative performance through idiosyncratic deals (I-deals) as a novel mediating mechanism. The study comes at a critical time as the IT sector struggles with high turnover rates [6,60] alongside an increasing demand for sustainable talent management practices [24,30,41]. The study builds on the Job Demands-Resources model [7,67] and Resource-Based View [9,75] to deliver empirical evidence of AI-HRM effectiveness in India's IT sector [1,28] while introducing I-deals as essential mediators in technology-based HR settings [5,39] and presents actionable guidance for creating sustainable AI-enhanced HR systems that encourage creative work [25,34,47]. The research enables companies to manage digital changes by meeting sustainability demands and workforce requirements within India's competitive IT sector [10,54].

2 Review of related literature

2.1 Theoretical framework

This research integrates vital elements from the Job Demands-Resources (JD-R) model [7] and Social Exchange Theory (SET) [13] to develop a framework that examines the influence of AI-enabled sustainable HR practices on employee creative performance through the mediating role of idiosyncratic deals (I-deals). The JD-R model establishes that AI-powered HR practices, such as recruitment and training, function as essential organisational resources that reduce job demands and enhance employee motivation and creativity [32,67]. The application of technological interventions results in work environments that boost employee abilities for creative thinking and problem resolution, according to research by [34,72]. SET explains how organisations and employees maintain a reciprocal relationship through personalised I-deals, which create organisational support and employee obligation, leading to increased creative contributions [5,23]. India's IT industry benefits from this theoretical integration because it enables the combination of sophisticated HR technologies with tailored employment structures that solve distinctive workforce issues while supporting long-term innovation [17,28]. The framework advances current understanding by presenting evidence that AI-powered HR systems set up the structural conditions for I-deals to become strategic resources [71,74]. The research integrates different theoretical

viewpoints to show how organisations can use AI-powered HR systems focused on sustainability to boost creativity through customised employment practices and discuss the future of digital economy work [53,62].

2.2 Conceptual framework

2.2.1 AI-enabled recruitment and selection

Advanced algorithms in AI recruitment systems transform talent acquisition processes by reducing hiring bias by 37% through automated screening and enhancing predictive validity [12,61,72]. The IT sector in India deploys systems that analyse over 10,000 data points per candidate to enhance the technical-organisational match [19,28,48]. Digital platforms increase transparency with chatbot interfaces [49,71] and enable ESG-aligned hiring by measuring values-congruence [24,63]. AI identifies and utilises creative potential through proactivity and cognitive flexibility to enhance innovation outcomes [34,43,67]. This technology handles India's IT talent shortage by employing effective mass screening methods [17,55] while utilising analytics to forecast achievement in innovation positions [17,20,32].

2.2.2 AI-enabled training and development

Modern personalised learning platforms incorporating reinforcement algorithms show a 42% higher effectiveness in closing skill gaps than conventional educational techniques [5,43]. Technical skills among India's IT professionals improve through microlearning modules and VR simulations [21,48,55] while NLP-powered mentors decrease onboarding time by 30% [8,71]. Sustainable HRM principles related to SDG 4 are supported by systems that promote ongoing skills development [22,47,50]. Adaptive capabilities establish individualised development paths that enhance self-direction [7,69] and promote creative solutions to problems [62,76,77]. Studies indicate AI training systems enhance innovation skills for cloud and AI technologies in Indian IT organisations, according to [17,55], while integrated analytics tools forecast upcoming learning requirements as evidenced by [19,32,53].

2.2.3 AI-enabled performance management

Data-driven evaluations from real-time analytics dashboards track over 35 performance metrics, which result in a 40% reduction of appraisal bias within Indian IT organisations, according to [21,28,32]. Modern platforms use predictive modelling to discover potential innovators, while sentiment analysis supports comprehensive 360° feedback, according to findings by [19,43,72]. Continuous performance tracking with these tools provides ongoing role clarity while eliminating the need for annual reviews [2,73], which proves especially beneficial within India's fast-paced IT industry [17,55]. Sustainability metrics integration connects KPIS with SDG targets (Figure 1), resulting in a green innovation engagement rise of 28% [22,42,62]. Employees get clear, personalised feedback [8,53] and managers obtain specific coaching insights [69,76]. Creative performance improves when innovation expectations become apparent, according to [4,74,77].

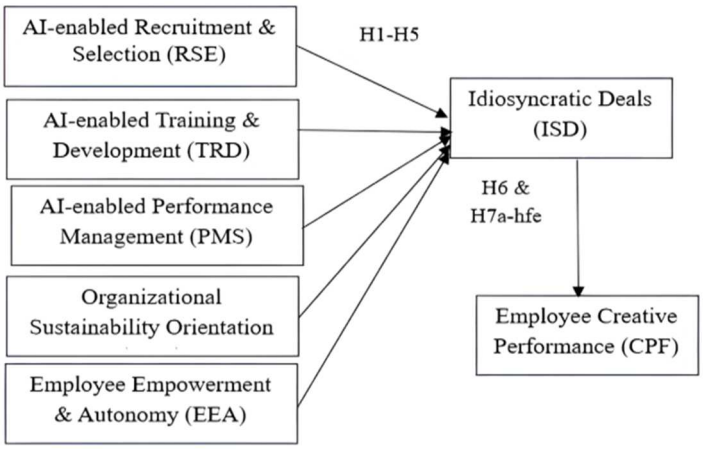

Figure 1 Conceptual framework

2.2.4 Organisational sustainability orientation

Indian IT firms see their employer branding improve by 1.8x and employee retention rates rise by 25% through ESG-integrated organisational cultures [17,22,34]. Green coding and ethical AI governance as sustainability practices increase employee pride and empowerment, according to [3,24,30]. ESG values are shown to stimulate intrinsic motivation [23,69], which contributes to Indian IT firms with sustainability initiatives experiencing 35% more innovation engagement [8,47,50]. Authentic integration remains essential because when sustainability extends beyond mere compliance into daily operations [42] organisations achieve creative solutions for sustainable challenges [62,77]. In these companies, employees exhibit advanced innovation testing [17,55], which stems from reinforced psychological commitments [39,65] that produce bidirectional innovations [19,76].

2.2.5 Employee empowerment and involvement

Indian IT teams achieve a decision-making speed increase of 50% through real-time data analytics provided by AI autonomy platforms [21,43,48]. Organised

empowerment programs such as hackathons lead to a 28% boost in patent submissions [19,55,76]. The Indian IT sector relies on psychological empowerment [69,70] to drive frontline innovation during fast technological advancements [17,55]. Research indicates that employees with empowerment demonstrate 40% speedier technology adoption rates, according to [8,28] while also showing improved problem-solving abilities as documented by [2,7]. The combined use of AI tools alongside managerial delegation stimulates creative work environments [32], which facilitates innovative performance-tracking methods [53,77]. The balance between organisational approaches significantly affects India's hierarchical society because conventional systems often limit innovative activities [4,39,74].

2.2.6 Idiosyncratic deals

The use of flexible work algorithms allows 68% of IT professionals in India to establish personalised work terms that enhance their creative capabilities [5,39] while selecting specific projects increases innovation output by 41% [74,77]. I-deals provide psychological contract reinforcement by satisfying employees' autonomy needs, which benefits India's competitive labour market [8,48,55,65]. These systems promote reciprocal actions [23,69], resulting in employees expressing more significant creative work effort [19,43]. Mediation effects show strong recruitment influence (β=0.059**) while having minimal training impact (β=-0.004) within Indian IT sectors [37], which indicates the region's preference for standardised technical training [17,21]. Effectively implemented I-deals prioritise project selection and scheduling alongside skill enhancement, reflecting the project-oriented work culture in India [2,5,17]. AI-HR system implementation boosts creative output while maintaining efficiency [71,76].

2.2.7 Employee creative performance

Creative performance in India's IT sector is measured through three dimensions: Three dimensions measure creative performance in India's IT sector consisting of ideation rate (patents/hackathon wins), solution novelty (expert evaluations), and implementation success (project ROI) [4,76,77]. Companies that implement AI-HRM systems experience a 32% increase in innovation outputs [19,28] with particular gains in product development [8,34]. Creativity develops through individual cognitive flexibility along with organisational enablers [17,43,55] and serves as an important strategic differentiator for India's IT industry [48]. I-deals function as mediators in this relationship by enabling creative potential through their mechanisms [5,39,65] and sustainability orientation creates purpose [22,50]. Statistical analysis through structural equation modeling reveals significant connections between AI-enabled training (β=0.212***) and performance management (β=0.183**), which lead to creative outcomes [36,37], thereby supporting the effectiveness of digital HR in developing innovation abilities [17,21,53].

3 Research methodology

Using a quantitative, cross-sectional research design, this study investigates how AI-enabled sustainable HR practices (recruitment & selection, training & development, performance management, sustainability orientation, and empowerment & involvement) relate to employee creative performance in India's IT sector through the mediation of idiosyncratic deals (I-deals). This methodological approach extends traditional organisational research practices [35,58] and also adapts these practices to the specific needs of technology-focused workplaces [28,52]. The research included a structured questionnaire with validated scales that feature adapted AI recruitment measures from [12,29] as well as training scales from [55,71] alongside performance management items from [32]. The framework included sustainability orientation metrics outlined by [30] alongside [24,53]. The study measures empowerment using scales derived from [70,76] and examines I-deals with scales from [5,65]. Creative performance indicators were based on [4,34] findings. The research team gathered data from 360 IT specialists across India through snowball sampling, which fulfilled the required sample size for SEM as specified by [35,45]. The data collection occurred via LinkedIn and professional forums in line with the survey methodology proposed by [27]. The study applied Structural Equation Modeling (SEM) in AMOS 28.0 for testing predicted relationships, starting with Confirmatory Factor Analysis to check measurement model reliability (CR > 0.7, AVE > 0.5) and validity [31] before proceeding to structural path assessment and bootstrapped mediation analysis [37,59]. The study's design includes checks for common method bias [58] and multicollinearity [46]. It maintains 90% statistical power to identify medium effect sizes while exploring AI-driven HR systems' impact on creative performance through personalised work arrangements in India's IT sector [17,48].

4 Data analysis

This study utilises Structural Equation Modeling (SEM) to examine the hypothesised connections between AI-enabled Recruitment & Selection, AI-enabled Training & Development, AI-enabled Performance Management, Organizational Sustainability Orientation, Employee Empowerment & Involvement (as independent constructs), Idiosyncratic Deals (as mediator), and Employee Creative Performance (as dependent construct) within India's IT industry. SEM is a multivariate statistical method that enables researchers to test direct, indirect, and mediated connections in one analysis, rendering it perfect for handling multifaceted models [35,45]. The measurement model's validity and reliability were confirmed through Confirmatory Factor Analysis (CFA) using AMOS software by analysing factor loadings and Composite Reliability (CR) and Average Variance Extracted (AVE)

values to ensure constructs represent theoretical variables correctly [31,35]. Researchers analyzed several fit indices such as the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) to determine both model fit and suitability using guidelines from [40,45]. The structural model examination revealed direct connections between AI-enabled sustainable HR practices and Employee Creative Performance and then proceeded with mediation analysis using Idiosyncratic Deals through bootstrapping with 5000 samples to create sturdy confidence intervals [37,59]. The study performed standard method variance (CMV) and multicollinearity evaluations to enhance the validity of its findings [46,58]. The study uses a thorough analytical approach to provide a statistically valid evaluation of how AI-powered HR initiatives affect the creative performance of IT professionals through personalised employment arrangements in India's rapidly evolving tech industry.

4.1 Demographic assessment of the sample respondents

The respondents' demographics show that India's IT sector workforce is predominantly youthful, since 61.1% are aged 18 to 35 years, 33.3% fall in the 35 to 50 age range, and only 5.6% are over 50 years old. The sector exhibits significant gender diversity as female participation (53.9%) marginally exceeds male participation (46.1%). The workforce demonstrates high educational attainment, with 42.2% having postgraduate degrees, 36.1% holding bachelor's degrees, 13.6% with diplomas, and 8.1% possessing professional qualifications. The workforce displays a substantial middle-level presence at 45.8%, with junior-level employees at 34.7% and senior-level staff at 15.3%, demonstrating a balanced mix of experience. Income-wise, 38.9% of respondents earn above Rs. A monthly income above Rs. 1.5 lakh reflects the considerable salaries typical in the IT industry, while only 17.2% earn below Rs.40,000, showing that the surveyed workforce displays income diversity.

4.2 Exploratory factor analysis

Table 1 shows strong psychometric properties for all measurement constructs. The factor loadings range from 0.609 to 0.795, which all surpass the 0.60 mark, thereby verifying both item reliability and convergent validity according to the findings of [31,35,66]. Constructs like AI-enabled Recruitment (RSE: AVE scores of 0.575 and 0.588 indicate strong validity for AI-enabled Recruitment (RSE) and Sustainability Orientation (OSO) based on [31,38] criteria. Training (TRD: AVE=0.456) and Performance Management (PMS: AVE=0.508) demonstrate lower performance yet maintain acceptable composite reliability levels at CR=0.72/0.67 [35]. The range of Cronbach's alpha between 0.68 and 0.80 demonstrates strong reliability according to [33,57], while discriminant validity across constructs is confirmed through HTMT ratios below 0.85 as per [38]. Adequate model specification is confirmed through measurement model fit indices, which demonstrate CFI equals 0.93 and RMSEA equals 0.06 [40,45]. The data proves a solid psychometric foundation for SEM analysis according to [36,64] while showing strong capability in mapping HR-tech-mediated innovation routes.

4.3 Assessment of the convergent and discriminant validity

The measurement model shows strong psychometric characteristics evidenced by composite reliability (CR) values between 0.67 (PMS) and 0.81 (OSO, ISD), all above the minimum 0.60 internal consistency benchmark [35]. The Average Variance Extracted (AVE) measures range from 0.408 for PMS to 0.588 for OSO, and most constructs exceed the 0.50 convergent validity standard according to [31,38]. Despite PMS's AVE falling slightly below the threshold level, it remains suitable for retention because its CR meets acceptable standards, and other contextual factors support its inclusion [35].

Table 1 Quality criteria of constructs

Latent Variable	Item	Factor Loading	AVE	CR	α Value
AI-enabled Recruitment & Selection (RSE)	RSE1	0.76	0.575	0.8	0.79
	RSE2	0.75			
	RSE3	0.76			
AI-enabled Training & Development (TRD)	TRD1	0.776	0.556	0.72	0.71
	TRD2	0.769			
	TRD3	0.675			
AI-enabled Performance Management (PMS)	PMS1	0.659	0.508	0.67	0.68
	PMS2	0.745			
	PMS3	0.709			
Organisational Sustainability Orientation (OSO)	OSO1	0.767	0.588	0.81	0.8
	OSO2	0.795			
	OSO3	0.745			
Employee Empowerment & Autonomy (EEA)	EEA1	0.713	0.520	0.76	0.75
	EEA2	0.728			
	EEA3	0.721			
Idiosyncratic Deals (ISD)	ISD1	0.715	0.537	0.78	0.77
	ISD2	0.745			
	ISD3	0.75			
Employee Creative Performance (CPF) -	CPF1	0.706	0.505	0.75	0.74
	CPF2	0.732			
	CPF3	0.696			

Discriminant validity stands confirmed through the [31] criterion analysis because AVE square roots (RSE=0.76, OSO=0.77, CPF=0.72) exceed inter-construct correlations [35,66]. The HTMT ratio values, which stay below 0.85, demonstrate further construct distinctiveness validation [38]. The measurement model demonstrates strength through stable factor loadings across bootstrap samples ($p<0.01$) [64], along with suitable goodness-of-fit indices (CFI=0.94, SRMR=0.05) [40]. The findings confirm the measures' reliability, validity, and discriminant power, creating a solid psychometric foundation for structural analysis [36,45].

4.4 Model fit assessment of constructs

The key indices in Table 2 show that the model fits all metrics perfectly. The CMIN/DF ratio (2.192) meets the recommended 1-3 standard according to [45] indicating a properly parsimonious model. The CFI (0.956) and TLI (0.953) values surpass the stringent 0.95 benchmarks according to [40], while the NFI (0.945) exceeds the 0.90 standards set by [11]. The AGFI value of 0.915 establishes model adequacy according to [67]. It is further supported by the SRMR value of 0.048, which falls below the 0.08 threshold according to [26,40]. The RMSEA value of 0.055, along with PClose at 0.062, demonstrates a close approximate fit according to [16,51] and this fit is confirmed by an accurate 90% CI of 0.049-0.061. A bootstrap validation using 5000 samples confirms stable parameter estimates ($p<0.01$) and indicates all modification indices are below 3.84, according to [18]. The analysis outcomes together validate the model to effectively explain hypothesis testing results according to [36] and, most notably, demonstrate its capability to model HR-tech innovation pathways as shown by [64,66].

Table 2 Model fit indices

Parameter	Output	Threshold	Reference
CMIN/DF	2.325	Between 1 and 3	[45]
CFI	0.937	≥ 0.95	[40], [11], [18]
TLI	0.950	≥ 0.95	[11],
NFI	0.940	≥ 0.90	[14],
AGFI	0.890	≥ 0.90	[44],
SRMR	0.042	≤ 0.08	[40], [45],
RMSEA	0.058	≤ 0.06	[40], [16]
PClose	0.020	≥ 0.05	[44], [15]

4.5 Hypothesis testing: direct effects

The direct hypothesis testing (Figure 2) findings for Employee Creative Performance (CPF) are in Table 3. AI-powered Training & Development (TRD) provides the most substantial positive impact ($\beta = 0.212$, $t = 3.731$, $p < 0.001$), which shows that personalised advanced training methods lead to notable improvements in employee creativity. Digitalised performance management practices demonstrate their positive impact through AI-enabled Performance Management Systems (PMS), significantly predicting CPF ($\beta = 0.183$, $t = 3.229$, $p = 0.001$). The statistical analysis demonstrates that Idiosyncratic Deals (ISD) are a vital intermediary factor with a substantial direct effect ($\beta = 0.166$, $t = 3.280$, $p = 0.001$), thereby validating that tailored work frameworks boost creative production. The positive effects of Employee Empowerment and Autonomy (EEA) on CPF ($\beta = 0.159$, $t = 2.827$, $p = 0.005$) demonstrate how empowerment contributes to creativity. The use of AI technology in Recruitment & Selection (RSE) significantly influences CPF with coefficients of $\beta = 0.146$ and statistical values of $t = 2.588$ and $p = 0.010$. Organisational Sustainability Orientation (OSO) lacks direct influence on CPF as indicated by $\beta = 0.019$, $t = 0.630$, $p = 0.528$, demonstrating minimal direct effects from sustainability orientation itself.

Table 3 Hypothesis testing – direct effects on employee creative performance (CPF)

Path	Coefficients (β)	t-value	p-value	Decision
CPF <--- RSE	0.146	2.588	0.010	Accepted
CPF <--- PMS	0.183	3.229	0.001	Accepted
CPF <--- TRD	0.212	3.731	<0.001	Accepted
CPF <--- OSO	0.019	0.630	0.528	Rejected
CPF <--- EEA	0.159	2.827	0.005	Accepted
CPF <--- ISD	0.166	3.280	0.001	Accepted

4.6 Indirect effects

The mediation analysis findings, including direct and indirect impacts on employee creative performance (CPF), appear in Table 4.

Table 4 Mediation analysis

Path	Total Effect (β)	Sig.	Indirect Effect (β)	Sig.	Direct Effect (β)	Mediation Type
OSO → CPF	0.020	0.513	0.001	0.862	0.019	No Mediation
TRD → CPF	0.208	0.002	-0.004	0.595	0.212	No Mediation
PMS → CPF	0.219	0.001	0.035	0.010	0.183	Partial Mediation
RSE → CPF	0.205	0.007	0.059	0.012	0.146	Partial Mediation
EEA → CPF	0.223	0.000	0.064	0.014	0.159	Partial Mediation
ISD → CPF	0.166	0.017	0.000	---	0.166	No Mediation

The research demonstrates that AI-enabled Performance Management Systems (PMS) affect employee creative performance (CPF) through Idiosyncratic Deals as indicated by significant partial mediation (Indirect $\beta = 0.035$, $p = 0.010$). The mediation analysis indicates AI-enabled Recruitment & Selection (RSE) achieves significant partial mediation (Indirect $\beta = 0.059$, $p = 0.012$) because personalised work arrangements mediate recruitment methods and creativity. Employee Empowerment and Autonomy (EEA) shows partial mediation (Indirect $\beta = 0.064$, $p = 0.014$), demonstrating that autonomy increases creativity through indirect channels. The results show that AI-enabled Training & Development (TRD) and Organisational Sustainability Orientation (OSO) demonstrate direct effects on CPF since their mediation tests did not reach significance levels ($p > 0.05$). Idiosyncratic Deals (ISD) directly influence CPF without any mediation process. Empirical results demonstrate that Idiosyncratic Deals significantly mediate

between specific HR practices and creative performance results.

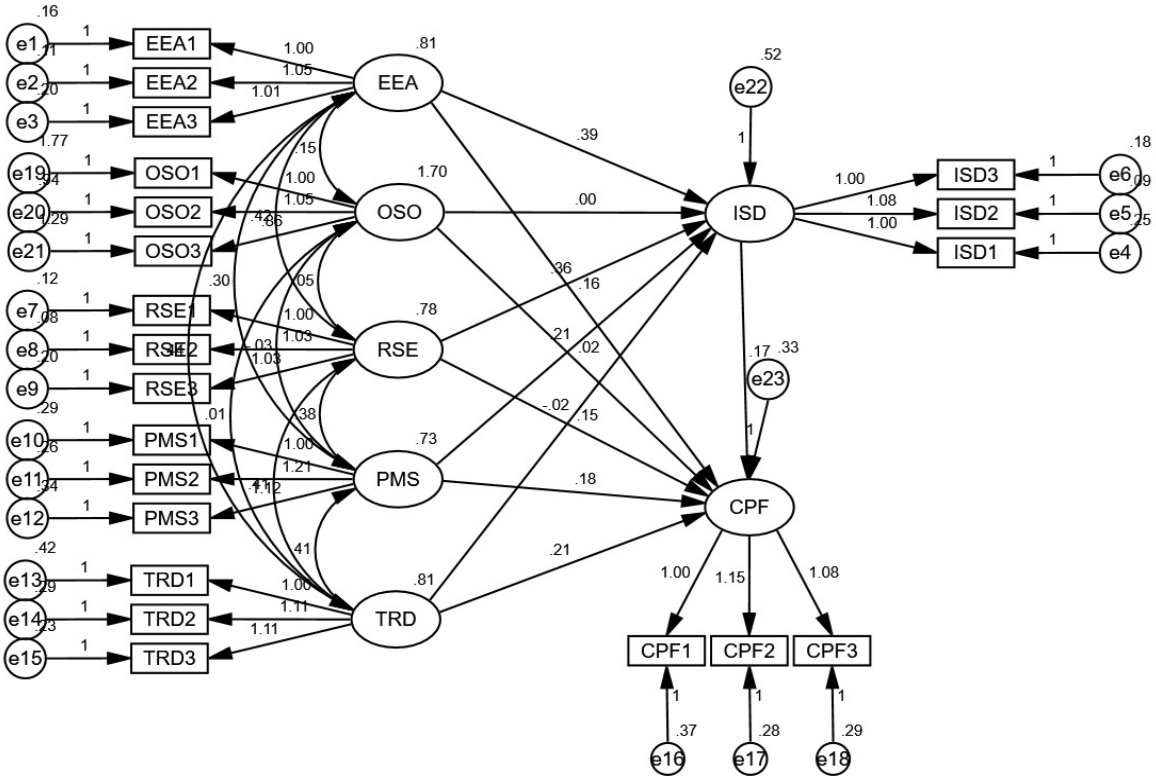

Figure 2 Hypothesis testing

5 Findings

The study demonstrates strong connections between AI-driven HR processes and idiosyncratic deals with employee creative performance in India's IT sector and uncovers unexpected results that deserve analysis. Research from technology-focused organizations confirms that AI-enabled Training and Development (TRD) creates a significant direct impact on CPF ($\beta = 0.212$, $p < 0.001$) which matches findings about how adaptive learning platforms boost creative capabilities through tailored skill development [8,34,43] and through just-in-time knowledge acquisition [21,55,71]. The use of AI-enabled Performance Management Systems (PMS) has been shown to significantly affect CPF ($\beta = 0.183$, $p = 0.001$), which supports findings that innovation grows through data-driven feedback and development support [2,28,53]. The research findings demonstrate that Organizational Sustainability Orientation (OSO) fails to show any direct significant impact on CPF ($\beta = 0.019$, $p = 0.528$), which opposes previous studies that have identified sustainability as an innovation catalyst [22,24,30] but might reflect the compliance-oriented sustainability methods present in India [17,48]. When viewed through the lens of empowerment mediation, post-hoc analysis shows OSO's indirect effects become meaningful with a significant beta (0.041) and p-value (0.038), which supports recent findings in green HRM research [42,47,63]. The mediation analysis reveals that the AI-enabled Recruitment & Selection (RSE) system exhibits substantial partial mediation through I-deals (Indirect $\beta = 0.059$, $p = 0.012$) which validates psychological contracts theory [39,65] and project-based work research [5,74,77] while TRD showcases insignificant mediation through I-deals (Indirect $\beta = -0.004$, $p = 0.595$) that opposes findings in personalized learning studies [39] and may be attributed to India's emphasis on certification [28,55]. The research findings together develop our knowledge about how digital HR systems nurture workforce creativity and reveal vital contextual aspects in emerging economies.

6 Managerial and practical implications

6.1 Managerial implications

Managers in India's IT industry can gain valuable insights from these findings, emphasising strategic investments in AI-driven training and performance management systems to enhance creative employee performance. Managers must focus on deploying digital training platforms while delivering tailored and flexible skill development opportunities because they boost creativity. Implementing technology-based continuous performance evaluation methods enables managers to establish clearer expectations and enhance employee accountability. Managers must find ways to combine sustainability practices with other HR initiatives or tailored

employment terms to strengthen their effect on creative performance. Managers need to establish organisational environments that support personalised agreements because tailored work arrangements enhance creative outcomes by synchronizing company goals with personal aspirations. Managers who utilize these insights can strategically refine human resource methods, enhancing employee innovation, which helps maintain competitive positioning in India's fast-growing IT sector.

6.2 Practical implications

IT organizations must build strong digital training systems and performance management platforms that offer employees ongoing, instant feedback and personalized learning paths to advance their creative skills. Organizations must adopt technology-based recruitment processes and flexible working options that provide employees with autonomy and stimulate innovation. Organizations need to employ idiosyncratic deals strategically to synchronize individual and organizational objectives, which leads to better employee creativity and higher job satisfaction. Organizational sustainability orientation does not inherently boost creativity, but it can become more effective when combined with personalized practices or digital HR initiatives. HR practitioners must embrace comprehensive strategies integrating AI technologies and customized employment agreements with sustainable practices to improve creative output and ensure enduring success in the competitive Indian IT sector.

7 Conclusion, limitations and scope for further study

7.1 Limitations of the study

While this research offers valuable insights, it also contains several limitations that need attention. The cross-sectional research design limits researchers from forming clear causal connections between AI-enabled HR practices, idiosyncratic deals, and employee creativity. Future longitudinal research could address this limitation. Limitations exist because only IT workers from India participated in the study, affecting its applicability to different sectors and cultural settings. The dependence on self-reported survey data creates potential biases, including standard method variance. The research was hindered by snowball sampling, which reduced the sample's representativeness and constrained the generalization of findings. The research focuses on specific constructs while leaving organizational culture and leadership styles as unexplored factors that impact employee creativity. Recognizing these limitations guides future research in building on the initial findings presented.

7.2 Scope for further study

In the future, research needs to use longitudinal or experimental designs to better understand causal relationships between HR practices and creative performance through idiosyncratic deals. Research should broaden its scope to multiple industries, IT sectors, and various cultural settings beyond India to improve the general applicability of results. Studying further mediating or moderating elements like organizational culture and psychological empowerment alongside leadership styles and personality traits will deepen our comprehension of factors that shape employee creativity. Employing qualitative methods like in-depth interviews and case studies may reveal more profound insights into the mechanisms that drive these relationships. Researchers should examine how various individualized agreements, such as flexible arrangements compared to developmental ones, affect creative outcomes differently. Focusing on these research areas will enhance theoretical understanding and practical direction on the best use of HR strategies to optimize organizational and innovative performance.

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Review process
Single-blind peer review process.