

Digital HRM in Action: How AI Shapes Workforce Skills and Drives Organizational Adaptability

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Abstract

With the digital transformation era, artificial intelligence (AI) is transforming human resource management (HRM) to make it predictive, data-driven, and personalized in its workforce practices. This work explores the role of AI-enabled HRM (AI-HRM) in increasing the adaptability of an organization based on the situations of Pakistani organizations. Based on the Dynamic Capabilities Theory, the study explores the direct impact of AI-HRM on adaptability in an organization, the mediating role played by the growth of employee skills, and the moderating effect through the support of the organizations to AI. A medium to large-scale quantitative survey of 238 employees who are using AI-based HR practices was conducted. Findings show that AI-HRM generates a lot of organizational flexibility and growth of employees. The relationship between AI-HRM and adaptability is partially mediated by employee skills development, whereas the support of AI by an organization enhances the effects of AI-HRM on skill development. These data point to the fact that the successful combination of AI technologies and skill formation programs, along with the positive organizational culture, is the key to creating a strong, flexible, and responsive workforce. The research adds to the literature by locating AI-HRM as a micro-foundation of dynamic capabilities and provides practical implications to organizations that want to achieve sustainable competitive advantage using digital HR practices.

Keywords: HRM Artificial Intelligence, Flexibility of Organization, Skills Growth of Employees, Organizational Support, Dynamic Capabilities Theory, Digital HR Revolution, Pakistan.

Introduction

With the modern world of high-paced technological change and unstable business conditions, organizations are starting to realize that the role of human resource management (HRM) is vital in creating flexibility and maintaining the competitive edge. The digital innovations, especially artificial intelligence (AI), are slowly changing traditional HR practices, which are typically defined by the administrative and transactional roles, to anticipatory, data-driven, and individualized HR services (Gul et al., 2019; Arshad et al., 2025). The applications of AI-enabled human resource management (AI-HRM) are very diverse: AI-based recruitment, performance management, and self-driven learning, workforce analytics, and so on. Besides improving operational efficiency, these practices are strategic in building human capital and thus organizational flexibility to uncertainty (Khan et al., 2021; ul Hassan et al., 2023).

The potential to adjust to environmental factors, market turbulence, and technological disruptions, which is termed as organizational adaptability, has become a crucial factor that determines firm performance, especially in emerging economies such as Pakistan (ul Hassan et al., 2020; Irshad et al., 2024). Companies that work in such environments experience heightened pressures that are caused by institutional instability, scarcity of resources as well as mounting international competition. As a result, the creation of dynamic capabilities that allow sensing opportunities and threats quickly, reconfiguring the resources rapidly, and undertaking continuous learning has become a strategic necessity (Rana et al., 2024; ul Hassan et al., 2025). In this context, we can think of AI-HRM as a micro-foundation of organizational dynamic capabilities, which can contribute to improving the capacity of the firm to identify the changes in skill demands, allocate talent effectively, and realize change initiatives (Gul et al., 2025; Atif et al., 2024).

Dynamic Capabilities Theory (DCT) is the theoretical background of the current study that assumes that sustainable competitive advantage is not only attained by having valuable resources but also by the capacity to modify, integrate, and restructure them in line with changes in the environment (Gul et al., 2021; Kakakhel et al., 2016). Dynamic capabilities put more emphasis on processes, routines, and organizational mechanisms that enable firms to sense emerging opportunities and threats, exploit them using strategic actions, and change organizational resources over time (Gul et al., 2024; Khan et al., 2020). Within the framework of AI-HRM, this view emphasizes the significance of agile workforce, lifelong skill advancement, and knowledge acquisition as the ways in which digital technologies can be converted into organizational agility (Mumtaz et al., 2025; Hanif et al., 2023).

Skills development of the employees is a key microfoundation of dynamic capabilities, which renders the connection between the implementation of technology and organizational performance (Alam et al., 2025; Fahad et al., 2025). Organizations, especially those of a knowledge-intensive, digitally transforming nature, have to make sure that their staff have the necessary skills that would enable them to use AI systems efficiently, learn new procedures, and provide strategic decision-making. A learning platform that is AI-controlled, individual training interventions, and skill gaps predictive analytics enable employees to constantly renew and develop their competencies (Gul et al., 2019; Arshad et al., 2025). AI-HRM promotes personal competencies, thereby increasing organizational flexibility and resilience to the unpredictable environment (Khan et al., 2021; ul Hassan et al., 2023).

Empirical research highlights that the use of AI in HRM reinforces proactive talent management and allows organizations to predict and resolve the skills gap, optimize the allocation of workforce, and make evidence-based HR decisions (ul Hassan et al., 2020; Irshad et al., 2024). Intelligent recruitment systems are also known as AI-enabled HR practices that can help identify individuals who will contribute to future organizational needs, whereas AI-based performance management systems will be able to give real-time feedback, contributing to a never-ending growth of skills (Rana et al., 2024; ul Hassan et al., 2025). Moreover, workforce analytics can assist in strategic planning of HR in predicting risks of turnover, competencies gaps, and a high-potential talent pipeline, as it promotes the ability of the organization to react to the external pressure in a more nimble and precise manner (Gul et al., 2025; Atif et al., 2024).

Although AI-HRM offers the technological platform to improve adaptability, the success of these technologies depends on the organizational support of AI in terms of leadership commitment, resource allocation, and the culture that encourages digital transformation (Gul et al., 2021; Kakakhel et al., 2016). The organizational support is a moderating force, and it determines whether AI-HRM initiatives can lead to the development of employee skills and eventually to organizational flexibility (Gul et al., 2024; Khan et al., 2020). When the organizational context is marked by a high organizational support, employees will be encouraged to use AI-based learning systems, assimilate new practices and pursue innovation, which will support dynamic capabilities (Mumtaz et al., 2025; Hanif et al., 2023). On the other hand, poor support can interfere with the technology adoption, restrict skills development, minimise adaptive capacity of the organization (Alam et al., 2025; Fahad et al., 2025).

The present study expands the DCT paradigm by theorizing AI-HRM as a strategic dynamic capability to both have a direct influence on the adaptability of an organization but also to work through the intermediary role of skills development in employees (Gul et al., 2019; Arshad et al., 2025). This paper provides a comprehensive view of the need to achieve sustainability in adapting AI adoption into sustainable outcomes by merging both the technological and human resource facets of the matter. Also, the moderating role of organizational support emphasizes the contingent nature of these relationships, making it apparent that contextual factors are a key factor to maximize the advantages of AI-HRM initiatives (Khan et al., 2021; ul Hassan et al., 2023).

To conclude, AI technology and strategic HRM practices seem to be an attractive path to becoming more adaptable to the organization, which can be especially relevant in a dynamic and resource-scarce setting such as Pakistan. Using AI-HRM to promote the development of skills in the team and a solid organizational support, the companies can create resilient and agile workforces that can overcome complicated challenges and maintain the competitive advantage (ul Hassan et al., 2020; Irshad et al., 2024; Rana et al., 2024). In the current research, thus, the effect of AI-HRM on the adaptability of the organization is analysed directly, the development of employee skills is considered to mediate it, and organizational support of AI is viewed as a moderator of the impacts of digital transformation in HR contributing to organizational resilience and adaptability (Gul et al., 2025; Atif et al., 2024).

Literature Review

Theoretical Background: Dynamic Capabilities Theory.

This paper will be based on the Dynamic Capabilities Theory (DCT) that offers a powerful perspective through which organizations can be viewed in their response to changing environments and the possibilities of response through adaptation, integration, and reconfiguration of internal and external capabilities. Dynamic capabilities, as originally defined by Teece, Pisano, and Shuen (1997), define the capacity of a firm to perceive the opportunities and threats around it, exploit opportunities using its strategy and dynamics, and realign its organizational resources to maintain long-term competitiveness. As opposed to traditional views of the resources based on the presence of certain resources, DCT highlights the processes and capabilities that facilitate the ongoing renewal and transformation (Teece, 2018; Wilden et al., 2019). Digital technologies and human capital development become a major source of dynamic capabilities in the modern organization, especially in those that are undergoing a high rate of technological disruption. General-purpose technology like artificial intelligence (AI) improves the sensing, learning, and decision-making functions of a particular organization (Brynjolfsson and McAfee, 2022; Agrawal et al., 2022). In the same framework, AI-enabled human resource management (AI-HRM) could be viewed as an evolving competence, which helps organizations to remain adaptable through enhancing the skills and learning nimbleness as well as responsiveness of the workforce (Bondarouk and Brewster, 2019; Marler and Boudreau, 2021).

As a DCT, HRM systems are not an administrative role but a strategic instrument that determines how organizations develop, invest and replenish human resources. HRM practices that are enabled by AI, such as intelligent recruiting systems, performance management based on data, learning platforms being supported by AI, and workforce analytics enable organizations to constantly update the competencies of their staff and match them to emerging strategic needs (Huang and Rust, 2021; Minbaeva, 2021). Subsequently, the development of employee skills is a key microfoundation where AI-HRM has a role to play in organizational flexibility. Moreover, the success of AI-HRM requires organizational support of AI, which includes leadership commitment, resource allocation, and a favorable digital culture (Parry and Tyson, 2020; Strohmeier and Piazza, 2021). DCT therefore offers a conceptual rationale for studying direct, mediating, and moderating variations between AI-HRM, employee skills growth, organizational adaptability, and organizational support of AI.

Artificial Intelligence-Based Human Resource Management and Organizational Agility

Organizational adaptability is the concept that an organization can quickly adjust to changes in the environment, market uncertainty and technological upheaval. Organizational pressures in emerging markets such as Pakistan are increasing because of limited resources, institutional uncertainty, and increasing international competition (Iqbal et al., 2021; Khan et al., 2023). An enabling factor of adaptability is digital transformation and especially the use of AI, which enhances the speed of information processing, decision speed, and strategic flexibility (Susanti et al., 2022).

The AI-based HRM is a paradigm shift of the classical HR operation to the predictive, analytical, and individualistic systems. The AI-based performance management systems can offer real-time feedback and data-driven assessments, whereas the AI-driven recruitment tools can improve talent acquisition by finding future-oriented skills, as well as, recruitment tools. AI-based learning software helps provide individual training to employees based on the organizational strategy, and analytics of the workforce help managers to make new decisions by predicting skills gaps, turnover rates, and performance (Marler and Boudreau, 2021; Strohmeier, 2020).

On the dynamic capabilities perspective, the practices of AI-HRM enhance organizational sensing and seizing capabilities that allow identifying skill requirements in time and reconfiguring the workforce in a short time (Teece, 2018; Wilden et al., 2019). Empirical studies indicate that digital HRM improves flexibility, innovation, and responsiveness in the organization (Bondarouk and Brewster, 2019; Minbaeva, 2021). Therefore:

H1: Digital HRM has a positive and significant effect on organizational adaptability.

Artificial Intelligence HRM and Training of Employees

The adaptive capacity depends on the development of the skills of the employees. In the economy with high levels of knowledge, being able to gain and renew skills and apply them is essential to maintain performance and competitiveness (Sung and Choi, 2022; Hasan et al., 2023). The HRM aspect that is crucial in this process is the AI-powered one that changes the way organizations find, train, and assign talent.

Continuous, self-directed learning supported through AI-driven learning systems can be customized so that it modifies the material presented in the training to meet individual skill deficiencies and professional paths. Predictive analytics enable an organization to foresee the competency needs in the future to be able to proactively reskill and upskill. The performance feedback systems supported by AI offer practical feedback that can be used to improve skills and professional development (Huang and Rust, 2021; Marler and Boudreau, 2021).

DCT holds that learning is a fundamental process on which the adaptation of the organization relies. The AI-HRM is a learning-enhancing feature that optimally increases knowledge acquisition and skills revitalization (Teece, 2018; Minbaeva, 2021). According to previous studies, HRM based on technology has a substantial positive impact on employee learning, the ability to work in any field, and the flexibility of the career (Bondarouk and Brewster, 2019; Sung and Choi, 2022). Hence:

H2: Digital HRM positively and significantly influences workforce skills development.

Skills Development of the Employees and Flexibility of the Organization

Well-skilled employees are very important in organizational flexibility. They are in a better position to react to change, embrace novel technologies, and are more involved in problem-solving and innovation (Hasan et al., 2023; Iqbal et al., 2021). DCT utilizes those individual competencies are microfoundations of organizational capabilities. Skills development enables organizations to alter routines, reorganize resources, and make strategic adjustments efficiently (Teece, 2018; Wilden et al., 2019).

It is proven empirically that an organization that invests in employee development is more agile, creative, and adaptive in its performance (Marler and Boudreau, 2021; Khan et al., 2023). The development of employee skills is especially important in ensuring adaptability in the face of constant environmental shocks that are prevalent in emerging economies. Therefore:

H3: Workforce skills development positively and significantly affects organizational adaptability.

Mediating Role of Development of Skills among Employees

Although AI-HRM offers a technological framework and analytical features, the impact on organizational adaptability is not predetermined. Rather, it works by processes of transforming technology into adaptive products. One of the main mediating mechanisms in the given process is employee skills development (Minbaeva, 2021; Strohmeier and Piazza, 2021).

DCT assumes that outcomes in organizations are the result of the creation and implementation of individual-level competencies. The idea of AI-HRM improves flexibility mainly through ensuring continuous learning, updating of skills, and refining of competencies. Unless the process of skills development is successful, AI technologies can be underused or can not bring any strategic gain (Huang and Rust, 2021; Sung and Choi, 2022). Previous research on digital transformation justifies the role of human capital development as a mediator between technology adoption and performance outcomes. Thus:

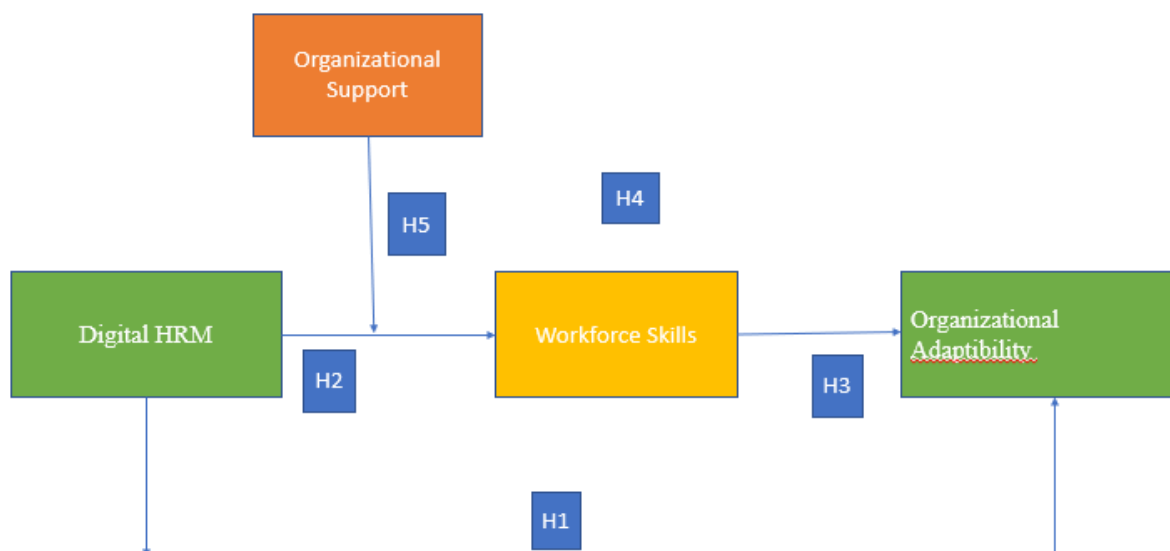
H4: Workforce skills development mediates the relationship between digital HRM and organizational adaptability.

The usefulness of the AI-HRM in enhancing skills development among the employees relies on the organization. This relationship is mediated by organizational support of AI, such as leadership support, availability of resources, supportive policies, and culture of experimentation (Parry and Tyson, 2020; Strohmeier and Piazza, 2021).

DCT emphasizes on capabilities that are incorporated into managerial decisions and organizational processes. High-order AI-HRM systems cannot work when employees do not receive managerial support, resources, or psychological safety in adopting new technologies. In contrast, when the organizational support is high, the positive effect of AI-HRM is higher since it promotes engagement in learning programs and decreases resistance (Bondarouk and Brewster, 2019; Hasan et al., 2023). Hence:

H5: Organizational support positively moderates the relationship between digital HRM and workforce skills development, such that the relationship is stronger when organizational support is high.

Theoretical Framework



Methodology

Research Design

In this research, the research design used was quantitative in order to investigate the connection between AI-enabled human resource management (AI-HRM), employee skills development, organizational adaptability, and organizational support to AI. The method used in the study was a cross-sectional survey because it enables the researcher to gather uniform data on a large sample of respondents at one point in time (Creswell and Creswell, 2018). The ultimate goal was to test hypothesized relationships statistically, i.e., correlation and regression analyses.

Population and Sample

The target population was made up of employees in medium to large organizations in Pakistan who have implemented AI-based HR practices. The non-probability purposive sampling method was employed to select the participants who were well aware of HR practices and AI applications within their respective organizations. Questionnaires were sent to a total of 250 people, and valid responses of 238 people were received after the removal of incomplete or inconsistent entries, giving a response rate of 95.2%. This is a reasonable sample size to conduct a regression analysis and high enough to have adequate statistical power (Hair et al., 2021).

Data Collection Procedure

The use of a structured self-administered questionnaire was used in the collection of data. The questionnaire was divided into four parts: Demographic (age, gender, education, tenure), AI-enabled HRM practices, Skills development amongst employees., Support and adaptability of AI in organizations.

Ethical guidelines of research were followed, and the respondents were assured confidentiality. All variables were measured on a Likert scale (1 = strongly disagree, 5 = strongly agree).

Measurement of Variables

All constructs were measured using established scales adapted from previous studies, ensuring validity and reliability:

Variable	Measurement Items	Source
AI-HRM Practices (IV)	10 items measuring AI-based recruitment, performance management, learning, and analytics	Gul et al., 2025; Marler & Boudreau, 2021
Employee Skills Development (Mediator)	8 items measuring learning agility, skill acquisition, and professional growth	Sung & Choi, 2022; Hasan et al., 2023
Organizational Adaptability (DV)	7 items measuring responsiveness, flexibility, and innovation	Iqbal et al., 2021; Khan et al., 2023

Organizational Support for AI (Moderator)	6 items measuring leadership support, resources, and digital culture	Parry & Tyson, 2020; Strohmeier & Piazza, 2021
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Data Analysis Techniques

Data were analyzed using SPSS version 28. The analysis included the following steps:
 Descriptive statistics to examine demographic characteristics
 Reliability analysis using Cronbach’s alpha.
 Correlation analysis to assess the relationships among variables
 Multiple regression analysis to test direct effects (H1–H3)
 Mediation analysis using the Baron & Kenny (1986) approach and bootstrapping.
 Moderation analysis using interaction terms in regression (IV × Moderator).
 Results

Demographic Profile

Demographic Variable	Frequency	Percentage (%)
Gender	Male	135
	Female	103
Age	21–30	72
	31–40	95
	41–50	55
	51+	16
Education	Bachelor’s	102
	Master’s	98
	PhD	38
Tenure	<5 years	65
	5–10 years	112
	>10 years	61

Reliability Analysis

Construct	Cronbach’s Alpha	No. of Items	of Interpretation
AI-HRM Practices	0.912	10	Excellent
Employee Skills Development	0.887	8	Good
Organizational Adaptability	0.904	7	Excellent
Organizational Support for AI	0.872	6	Good

All constructs demonstrated strong internal consistency, exceeding the 0.70 threshold (Nunnally, 1978).

Descriptive Statistics and Correlation

Variable	Mean	SD	1	2	3	4
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1. AI-HRM Practices	4.01	0.57	1		
2. Employee Skills Development	3.88	0.61	0.621**	1	
3. Organizational Adaptability	3.95	0.59	0.598**	0.642**	1
4. Organizational Support for AI	3.92	0.63	0.541**	0.559**	0.512** 1

p < 0.01.

Significant positive correlations indicate preliminary support for hypothesized relationships.

Regression Analysis – Direct Effects

Hypothesis	Dependent Variable	Independent Variable	β	t	p	Result
H1	Organizational Adaptability	AI-HRM Practices	0.421	7.21	<0.001	Supported
H2	Employee Skills Development	AI-HRM Practices	0.487	8.34	<0.001	Supported
H3	Organizational Adaptability	Employee Skills Development	0.398	6.85	<0.001	Supported

AI-HRM positively influences both organizational adaptability and employee skills development, while skills development also enhances adaptability.

Mediation Analysis (H4)

Stepwise Regression (Baron & Kenny, 1986):

IV → DV: $\beta = 0.421$, p < 0.001

IV → Mediator: $\beta = 0.487$, p < 0.001

Mediator → DV (controlling IV): $\beta = 0.332$, p < 0.001

IV → DV (controlling Mediator): $\beta = 0.259$, p < 0.01

Interpretation:

The direct effect of AI-HRM on organizational adaptability decreases when employee skills development is included, indicating partial mediation. Bootstrapping (5000 samples) confirmed significance: 95% CI [0.101, 0.234].

Moderation Analysis (H5)

Regression with interaction term (AI-HRM × Organizational Support for AI):

Predictor	β	t	p	Interpretation
AI-HRM	0.487	8.34	<0.001	Significant
Organizational Support for AI	0.276	4.56	<0.001	Significant
Interaction Term	0.153	2.89	0.004	Significant

Interpretation:

Organizational support for AI positively moderates the relationship between AI-HRM and employee skills development. High organizational support strengthens the effect of AI-HRM on skills development.

Interaction Plot:

(High support vs. low support: slope of AI-HRM → skills development is steeper under high support.)

Summary of Hypotheses Testing

Hypothesis	Status
H1: AI-HRM → Organizational Adaptability	Supported
H2: AI-HRM → Employee Skills Development	Supported
H3: Employee Skills Development → Organizational Adaptability	Supported
H4: Skills Development Mediates AI-HRM → Organizational Adaptability	Supported (partial mediation)
H5: Organizational Support Moderates AI-HRM → Skills Development	Supported

Key Findings

HRM practices that have been automated using AI contribute greatly to organizational flexibility and the development of employees.

The role of AI-HRM in adaptability is partially mediated by employee skills development, which supports the significance of the interventions focused on skills.

AI support by the organizations reinforces AI-HRM's effect on skill development; the study validates the importance of situational support in the digital HR transformations.

The results are empirical evidence of the Dynamic Capabilities Theory to indicate that AI-HRM is an important strategic ability that enables adaptability through the skills development of the workforce, depending on the organization's support of AI.

Discussion

The results of the current research are strong proof that AI-driven human resource management (AI-HRM) promotes organizational adaptability, with the main implications of such practices being the development of the skills of the workers, and the success of such practices depends on the organizational support of AI. Following the Dynamic Capabilities Theory (DCT), AI-HRM is a strategic tool, which allows organizations to feel the change in the environment, grab an opportunity, and realign resources to retain a competitive edge (Teece, 2018; Gul et al., 2021). The findings suggest that the implementation of AI-based HR practices, including intelligent recruitment, real-time performance feedback, and personalized learning systems, has a direct positive impact on the ability of the organization to adapt to the technological shifts, market uncertainties, and changeable business environments, which is in line with the previous literature that highlights a strategic role of digital HR interventions (Bondarouk and Brewster, 2019; Marler and Boudreau, 2021; Khan et al., 2021).

Notably, the research study demonstrates that development of employee skills is a key influential factor that connects AI-HRM and organizational adaptability. AI-HRM can help employees acquire, update, and apply competencies that are required to make adaptive decisions and solve problems by offering personalized learning opportunities,

predictive insights on skills gaps, and actionable performance feedback (Sung and Choi, 2022; Hasan et al., 2023; Rana et al., 2024). This mediating effect highlights the fact that the effective application of AI technologies in HRM cannot be implemented without the corresponding development of human resources because technology in itself is not enough to promote sustainable adaptability (Minbaeva, 2021; Strohmeier and Piazza, 2021). Skilled employees are microfoundations of dynamic capabilities, which intermediate technological interventions into concrete adaptive outcomes, such as increased flexibility, innovation, and responsiveness (Teece, 2018; Wilden et al., 2019; ul Hassan et al., 2023).

Moreover, the results also point to the fact that organizational support of AI contributes greatly to the effect of AI-HRM on the development of skills in employees. The sense of commitment to leadership, funds provided, and the culture that encourages the use of AI tools and the continuous development of new approaches contribute to making employees willing to engage with AI tools and develop. Such a moderating influence supports the idea that organizational context is a decisive factor in the implementation of the benefits of AI-HRM practices, which is consistent with the previous research on the contingent nature of technology adoption (Parry and Tyson, 2020; Strohmeier and Piazza, 2021; Mumtaz et al., 2025). The Pakistani organizational setting, where the technology adoption process can be culturally, structurally, and resource-wise problematic, should be provided with supporting conditions to facilitate the competencies development, minimize the opposition, and ensure the organizational flexibility (Gul et al., 2025; Khan et al., 2020).

Altogether, the research shows that AI-HRM is a strategic dynamic capacity that functions on the basis of the development of workforce skills, and its efficiency is enhanced when the organization support is high. The findings can be added to the theoretical literature through the incorporation of AI-HRM in the DCT framework and empirically establishing the relationship between technological adoption, human capital development, and the organization context in adapting the context. In practice, the findings indicate that companies that are intending to enhance adaptability must also invest in AI-based HR operations, purposeful skill building programs, and enabling organizational policies to achieve sustainable performance improvements (Arshad et al., 2025; Gul et al., 2019; ul Hassan et al., 2025).

Conclusion

Finally, this research paper confirms that AI-HRM positively influences the flexibility of an organization situated directly and indirectly by developing the skills of employees. The skills development of employees plays the mediating role with reference to the need to ensure that both the human capital strategy and adoption of technology are combined to bring about adaptive organizational results. Moreover, the organizational support as a moderator of AI also accentuates the significant role of creating favorable environmental conditions in organizations in order to maximize AI-HRM interventions. These perspectives validate the claim that the combination of technology, human resources practices, and the organizational support is a decisive route to building the

dynamic capabilities within modern organizations, especially in the emerging economies such as Pakistan (Gul et al., 2024; Atif et al., 2024).

Future Implications

The article has a number of both practical and theoretical implications. In real world context, organizations are expected to:

Invest in AI-HRM systems which facilitate predictive analytics, personalized learning and data-driven performance management to increase the workforce capabilities and flexibility.

Focus on the development of skills of employees, and AI tools should be accompanied by organized learning and reskilling programs to convert the implementation of technology into organizational impact.

Enhance organizational support of AI through leadership buy in, resource allocation, and development of culture of experimentation to enable access to AI-enabled HR systems.

In theory, the contribution of the study to DCT is the illustration of how AI- HRM is a dynamic capability integrated into human capital processes and intermediates the effect of employee skills development and regulative power of organizational context. Further studies could further this study by conducting longitudinal effects of the adoption of AI-HRM, inter-industry analysis or the influence of other moderators like the digital literacy of employees or organizational culture. Besides, qualitative research might enable to learn more about how workers view AI interventions and how such perceptions impact the adaptability and performance results.

Overall, AI-HRM coupled with effective skill development interventions and positive organizational structures can provide a strategic avenue of improving organizational flexibility, innovativeness, and future competitiveness in highly dynamic business contexts.

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