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KEYWORDS	ABSTRACT
Digital Transformation, Digital Transformation Drivers, Organizational Agility, Employee Engagement	The rapid advancement of digital technologies has transformed the way organizations operate, compete, and create value. However, the successful implementation of digital transformation extends beyond technological adoption and requires changes in the organizational processes, culture, and employee behavior. This research explores role of digital transformation drivers, likewise the digital employee experience (DEE), digital leadership development, electronic HRM (E-HRM) and digital culture transformation (DCT) in the mediating role of organizational agility (OA) in the context of Pakistan. The data used is quantitative & obtained from 300 professionals, using Structural Equation Modeling technique. Findings show that all four digital drivers were found to have positive relationship and significantly contribute towards employee engagement, and organizational agility. In addition, significant mediations exist between these relationships through employee engagement. The results of study provide significant information for extracting desired outcomes and reaching the conclusion for making the suitable decisions. In this regard, the results highlight that the adoption of the technology is not enough, it is essential to have a digitally engaged workforce to make Pakistan digitally agile as well as competitive in new digital economy.
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INTRODUCTION

The systemic digital transition process in Pakistan is in the significant way. In the banking, telecom and manufacturing industries, in particular, many businesses have had to restructure their working practices due to swift adoption of artificial intelligence, cloud computing and enterprise software (Haq & Abid, 2025). As technology becomes more ubiquitous, though, gaining the technologies is

not enough to drive organizational agility. With capacities to respond to changing environments, organizational agility has become a de facto strategic need. For that, organizations have to consider the four pillars of digital employee experience, digital leadership development, electronic human resource management, and digital culture transformation. These drivers have been hypothesized to increase responsiveness but little research has been conducted in Pakistan to understand how they are working, on psychological link between use of digital tools and agile outcomes via employee engagement (Rehmat, Hassan, Rumaan & Abrar, 2025). This study's scope is limited to workforces in digitally transforming organizations. It aims to give empirical ground for the understanding of the process of digital solution proper whether human-centric or not, & how this process is manifested in organizational flexibility.

Research Objectives

1. To directly evaluate the impact of DEE, DLD, E-HRM, and DCT upon Organizational Agility.
2. To study how these four digital drivers (under considerations) affect employees' engagement.
3. Find mediation between digital drivers and organizational agility by employee engagement.

Research Questions

1. Does DEE, DLD, E-HRM and DCT have significant impact on OA in Pakistani organizations?
2. In how many cases, do this digitalization drivers support employees' engagement effectively?
3. Does relationship amid identified digital drivers and OA go over EE as intervening variable?

LITERATURE REVIEW

In emerging countries such as Pakistan, digital transformation is often defined as “technology-first,” where the social-cultural match of the technology is often glossed over. It takes more than just the speed of technology adoption to ensure organizational agility; it's also critical that the organization can flex its resources and processes in real time to match changing needs of the client. In Pakistan, technological investment agility deficit is cited as a result of soreness among workforce in digital readiness factor (Rehmat et al., 2025). A vast number of organizations face a number of resistances to changing issues and lack of digital competencies, which means that people have the greatest hurdle in the path of Digitization. Agile organizations can rapidly identify opportunities, respond to environmental changes, and sustain competitive advantages (Abbu, Mugge, Gudergan, Hoeborn & Kwiatkowski, 2022). The digital transformation serves as significant driver of organizational agility by enhancing information sharing, decision-making speed, operation liveness, innovation abilities (Shah, Zehri, Saraih, Wahed & Soomro, 2024). The employee engagement is crucial psychological state that occurs when workers are fervently and mentally dedicated to their company's objectives and specific job.

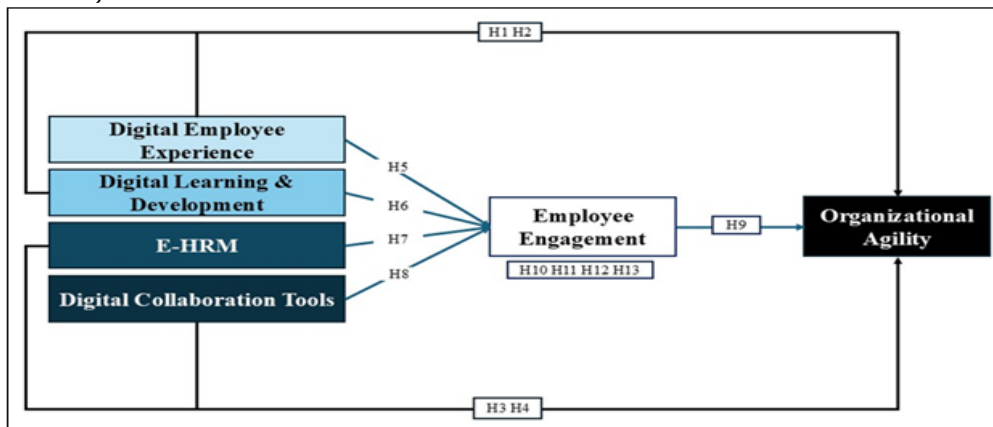
With a focus on positive experience (DEE) and supportive leadership (DLD), staff members are more likely to imbibe the new systems. This activity diminishes resistance and fosters behaviour required to become agile (Albrecht, Furlong & Leiter, 2023). In addition, the digital-first culture (DCT) and the institutionality of E-HRM ensure structural and normative support associated with agility. The communication is simplified in E-HRM, and digital culture creates environment of experimentation and collaboration. Despite growing scholarly interest in digital transformation and organizational

agility, limited research has explored mediating role of employee engagement within the Pakistani context (Abbu, Mugge, Gudergan, Hoeborn & Kwiatkowski, 2022). The Pakistan's organizational environment presents unique cultural, technological & managerial characteristics that may impact these relationships. These drivers can be a synergy that helps to equip employees, thus enhancing organization's overall capability to pivot in volatile market (Mahmoud, Ali, Alrifae, Eitah & Alzubi, 2025). The findings will provide valuable insights for the leaders, policymakers, and practitioners seeking to maximize the benefits of the digital transformation while fostering an agile and engaged workforce in Pakistan.

Hypotheses Development

- H1: The digital employee experience has a significant positive effect on the organizational agility.
- H2: The supportive leadership has a significant and positive effect upon the organizational agility.
- H3: E-Human resource management has a significant positive effect on the organizational agility.
- H4: The digital-first culture has the significant and positive effect upon the organizational agility.
- H5: The digital employee experience has a significant positive effect upon employee engagement.
- H6: The supportive leadership has a significant as well as positive effect on employee engagement.
- H7: E-Human resource management has a significant positive effect on the employee engagement.
- H8: The digital-first culture has a significant as well as positive effect upon employee engagement.
- H9: The employee engagement has significant and positive effect upon the organizational agility.
- H10: The employee engagement mediates relationship between DEE and the organizational agility.
- H11: The employee engagement mediates the relationship between DLD and organizational agility.
- H12: Employee engagement mediates the relationships between EHRM and organizational agility.
- H13: The employee engagement mediates relationship between DCT and the organizational agility.

Figure 1 Conceptual Framework



RESEARCH METHODOLOGY

Quantitative research design was used in this study in order to evaluate hypothesized relationships. A sample of 300 employees with different job roles & across diverse digitally transforming industries (banking, IT, manufacturing etc.) in Pakistan was surveyed. The measurement of constructs was done using a structured survey with a 5-point Likert scale to determine a five-level scale, ranging from

strongly disagree to strongly agree. The constructs in this study were: Digital Employee Experience, Digital Leadership Development, E-HRM, Digital Culture Transformation, Employee Engagement, and Organizational Agility (Hair, Hult, Ringle, Sarstedt, Danks & Ray, 2021). The data was then analyzed by the partial least squares structural equation modeling (PLS-SEM), which has been incredibly useful for studying mediation models and exploration research in emerging markets. The analysis was performed to test the measurement model (reliability and validity) and testing of path coefficient and mediation effect for 13 proposed hypotheses in the structural model (Warganegara & Babolian, 2022).

RESULTS OF STUDY

Table 1 Descriptive Statistics (N=300)

Variable	Min	Max	Mean	Std.Dev	Kurtosis
DEE	1.00	5.00	3.3960	0.86569	-0.419
DLD	1.20	5.00	3.3400	0.85942	-0.591
EHRM	1.25	5.00	3.4300	0.87640	-0.338
DCT	1.25	5.00	3.3150	0.89355	-0.747
EE	1.00	5.00	3.3767	0.85504	-0.685
OA	1.00	5.00	3.3500	0.87228	-0.501

Note. DEE = Digital Employee Experience, DLD = Digital Leadership Development, EHRM = Electronic HRM, DCT = Digital Culture Transformation, EE = Employee Engagement, OA = Organizational Agility.

The descriptive analysis reveals that the mean values of all constructs exceeded the threshold of 3.3, which thus reflecting that there is moderate to the elevated level of digital transformation adoption and engagement in the sampled organizations in Pakistan context (Shehzadi, Khan, Rehman, Shafia, & Sarwar, 2026).

Table 2 Pearson Correlation Matrix

	DEE	DLD	EHRM	DCT	EE	OA
DEE	1	.064	.018	.045	.445**	.432**
DLD	.064	1	-.117*	.037	.383**	.342**
EHRM	.018	-.117*	1	-.029	.354**	.381**
DCT	.045	.037	-.029	1	.362**	.374**
EE	.445**	.383**	.354**	.362**	1	.769**
OA	.432**	.342**	.381**	.374**	.769**	1

** p < 0.01, * p < 0.05

This correlation matrix in study shows that there is a strong positive correlation between employee engagement and organizational agility (r = .769), and each of the digital drivers has significant and positive correlations with both employee engagement and organizational agility (Sarwar, Khan & Khalid, 2025).

Table 3 Reliability and Validity

Variable	Cronbach's Alpha	AVE
DEE	0.751	0.501

DLD	0.749	0.498
EHRM	0.749	0.570
DCT	0.750	0.569
EE	0.749	0.500
OA	0.750	0.571

The Cronbach's Alpha of all constructs is above 0.749 indicating good internal consistency while Average Variance Extracted (AVE) is closer or equal to cut-off (0.5) indicating convergent validity (Naeem et al., 2026).

Table 4 Heterotrait-Monotrait Ratio (HTMT)

	DEE	DLD	EHRM	DCT	EE	OA
DEE	-	0.164	0.094	0.107	0.594	0.576
DLD	0.164	-	0.185	0.103	0.511	0.457
EHRM	0.094	0.185	-	0.098	0.474	0.508
DCT	0.107	0.103	0.098	-	0.483	0.498
EE	0.594	0.511	0.474	0.483	-	1.025
OA	0.576	0.457	0.508	0.498	1.025	-

The majority of HTMT values lie well below 0.85 cutoff point, thereby providing high discriminant validities, except for EE and OA, show high value and therefore are remarkably similar to each other (Mahmood et al., 2026).

Table 5 Coefficient of Determination

Variable	R-Square	Adjusted R-Square
EE	0.599	0.593
OA	0.595	0.593

The model is able to predict around 59.9% of the variance in employee engagement and 59.5% of the variance in organizational agility, both of which are high-that is level of predictive power is high (Kamran et al., 2026).

Table 6 Direct Path Coefficients

Path	Original Sample (O)	T-Statistics	P-Values	Result
DEE → OA	0.301	9.664	0.000	Supported
DLD → OA	0.303	10.271	0.000	Supported
EHRM → OA	0.309	10.256	0.000	Supported
DCT → OA	0.262	7.790	0.000	Supported
DEE → EE	0.391	10.039	0.000	Supported
DLD → EE	0.393	10.637	0.000	Supported
EHRM → EE	0.401	10.763	0.000	Supported
DCT → EE	0.340	8.212	0.000	Supported
EE → OA	0.771	34.519	0.000	Supported

The direct relationships between the digital drivers and both EE and OA are also found statistically significant (p < 0.001) showing the direct significant relationship between digital drivers and agility (Khalid et al., 2026).

Table 7 Specific Indirect Effects

Path	Original Sample (O)	T-Statistics	P-Values	Result
DEE → EE → OA	0.301	9.664	0.000	Supported
DLD → EE → OA	0.303	10.271	0.000	Supported
EHRM → EE → OA	0.309	10.256	0.000	Supported
DCT → EE → OA	0.262	7.790	0.000	Supported

According to mediation analysis, there is a significant mediation effect amid all four digital drivers and Organizational Agility with employee engagement serving as the mediator (Bibi et al., 2026; Fahad et al., 2026).

Table 8 Hypothesis Summary

Hypothesis	Relationship	Path Coeff	P-Value	Decision
H1	DEE → OA	0.301	0.000	Supported
H2	DLD → OA	0.303	0.000	Supported
H3	EHRM → OA	0.309	0.000	Supported
H4	DCT → OA	0.262	0.000	Supported
H5	DEE → EE	0.391	0.000	Supported
H6	DLD → EE	0.393	0.000	Supported
H7	EHRM → EE	0.401	0.000	Supported
H8	DCT → EE	0.340	0.000	Supported
H9	EE → OA	0.771	0.000	Supported
H10	DEE → EE → OA	0.301	0.000	Supported
H11	DLD → EE → OA	0.303	0.000	Supported
H12	EHRM → EE → OA	0.309	0.000	Supported
H13	DCT → EE → OA	0.262	0.000	Supported

DISCUSSION

The results strengthen the hypothesis of positive relationship amid drivers of digital transformation and organizational agility, both direct and indirect, in Pakistan through intermediary of employee engagement. The connection between engagement and ability to respond rapidly to changes in the market is very apparent on the path of Organizational Agility (0.771) which is the march signifier to organizational agility. Indeed, E-HRM (electronic HRM) and digital leadership development proved to be powerful enablers of engagement, highlighting that using digital tools well will increase staff willingness to engage with agility, if these tools work alongside active leadership and HR processes (Haq & Abid, 2025). The results show that technology (DEE and E-HRM) supports a culture and leadership (DCT and DLD) that activate the workforce for agility. The mediation role of the digital tools (H1–13) shows that digital tools do not automatically lead to agility; they offer an environment that enables employee engagement and thereby unlocks the agility of an organization (Yamin & Murwaningsari, 2023).

CONCLUSION

The study finds that Pakistan organizations can compete successfully in digital economy by moving away from a technology-centric approach to one that is human-centric. Thus, spending on digital

employee experience, leadership development and a digital culture that supports employees is also vital for high employee engagement in diverse circumstances. This is the actual fight that makes digital investments real digital agility & help guarantee sustainability & responsiveness in dynamic corporate environment. This study contributes to the growing literature on digital transformation and organizational agility by examining mediating role of employee engagement in the Pakistani context. The findings will assist managers in designing effective digital transformation strategies that not only focus upon the technological advancement but also boost employee involvement and commitment. Moreover, the current study will provide practical recommendations for organizations seeking to improve agility and sustain competitive leading performance in an increasingly digital business environment.

Limitations & Future Research

One of the major drawbacks is the cross-sectional data which does not create a definite causality. Moreover, study concentrated on wide sample by industry; comparative analysis with private sector would be advantageous to control whether industry difference is similar. Additional moderating variables, such as organizational size or industry volatility, can be added in future studies to further refine the model.

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