



The Mediating Role of Organizational Culture in the Relationship Between Digital Transformation and Firm Agility: Evidence from Jordanian Companies

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Abstract: Objective: This study investigates the mediating role of organizational culture in the relationship between digital transformation and firm agility among companies operating in Jordan. **Method:** Using a quantitative approach, data were collected from 260 employees and administrators across sectors such as information technology, communications, banking/finance, insurance, and industry. A structured questionnaire measured the constructs of digital transformation, organizational culture, and firm agility. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) through SmartPLS 4. **Results:** Results confirm that digital transformation positively influences both firm agility and organizational culture. Furthermore, organizational culture partially mediates the relationship between digital transformation and firm agility. **Conclusion:** These findings offer valuable implications for digital transformation strategies in emerging markets, emphasizing the cultural foundation necessary for achieving agility in turbulent environments.

Keywords: Digital Transformation, Organizational Culture, Firm Agility, PLS-SEM, Jordan, Organizational Change

الدور الوسيط للثقافة التنظيمية في العلاقة بين التحول الرقمي ومرونة الشركة: أدلة من الشركات الأردنية

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المخلص: الهدف: تبحث هذه الدراسة في الدور الوسيط للثقافة التنظيمية في العلاقة بين التحول الرقمي ومرونة الشركة بين الشركات العاملة في الأردن. **المنهجية:** باستخدام منهج كمي، جمعت البيانات من 260 موظفًا وإداريًا من قطاعات مثل تكنولوجيا المعلومات، والاتصالات، والخدمات المصرفية/المالية، والتأمين، والصناعة واستخدم استبيان مهيكل لقياس عناصر التحول الرقمي، والثقافة التنظيمية، ومرونة الشركة. وخلصت البيانات باستخدام نمذجة المعادلات الهيكلية الجزئية للمربعات الصغرى (PLS-SEM) من خلال برنامج SmartPLS 4. **النتائج:** تؤكد النتائج أن التحول الرقمي يؤثر إيجابًا على مرونة الشركة وثقافتها التنظيمية علاوة على ذلك، تلعب الثقافة التنظيمية دورًا وسيطًا جزئيًا في العلاقة بين التحول الرقمي ومرونة الشركة. **الخلاصة:** تقدم هذه النتائج تأثيرات قيمة على استراتيجيات التحول الرقمي في الأسواق الناشئة، مع التركيز على الأساس الثقافي اللازم لتحقيق المرونة في البيئات المضطربة.

الكلمات المفتاحية: التحول الرقمي، الثقافة التنظيمية، مرونة الشركة، PLS-SEM، الأردن، التغيير التنظيمي

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Background

The rapid advancement of digital technologies has reshaped how organizations compete, operate, and deliver value (Cascio & Montealegre, 2016; Javaid et al, 2024). Emerging technologies such as artificial intelligence, cloud computing, big data analytics, and the Internet of Things have transformed business models and created new paradigms of value creation (Wirtz, 2022; Piccoli, Grover, & Rodriguez, 2024). In today's digital economy, digital transformation (DT) is no longer a competitive advantage, it is a strategic necessity (Vărzaru & Bocean, 2024; Kraus et al, 2022). DT extends beyond adopting technology; it represents a holistic reconfiguration of strategy, processes, and people to enhance innovation, responsiveness, and long-term performance (Cao, Duan, & Edwards, 2025; Plekhanov, Franke, & Netland, 2023; Hamouda, 2022; Rahahleh, 2018; Alhadeethi et al, 2025).

Despite widespread technological adoption, many organizations fail to translate digital investments into tangible performance gains, often due to organizational unpreparedness, especially cultural resistance and misalignment (Deep, 2023). Successful digital transformation depends not only on infrastructure and systems but also on leadership, employee readiness, and a culture that encourages flexibility, learning, and innovation (Malik et al, 2025). Organizational culture (OC) provides the shared values and norms that influence how employees respond to technological change and uncertainty (Praveena & Fonceca, 2023; Hasan et al, 2025). Cultures characterized by openness, experimentation, and trust enable digital initiatives to thrive, while rigid or hierarchical ones tend to suppress them (Siswanti & Nurhariati, 2022).

In parallel, organizational agility (OA), the firm's ability to sense and respond swiftly to

market changes, has become a crucial strategic capability in volatile, uncertain, complex, and ambiguous (VUCA) environments (AlNuaimi et al, 2022; Amajuoyi, Benjamin, & Adeusi, 2024). Recent studies have shown that digital transformation capabilities, such as data analytics, digital leadership, and IT-business alignment, are critical enablers of agility (Chen et al, 2023; Hamieddine & Akioud, 2025). However, technological tools alone do not create agility; the transformation must be embedded within a culture that promotes continuous learning and cross-functional collaboration (Leso, Cortimiglia, & Ghezzi, 2023; Cao et al, 2025).

In emerging economies like Jordan, businesses are accelerating digital initiatives but still face substantial cultural and structural challenges (Hasan et al, 2025). Therefore, this study investigates how organizational culture mediates the relationship between digital transformation and firm agility. It aims to clarify whether the benefits of digital transformation on agility depend on the presence of an adaptive and innovation-oriented culture. By doing so, the research provides evidence-based insights for business leaders and policymakers seeking to foster digital resilience and agility in evolving markets.

Conceptual Framework

The conceptual framework of this study is shown in Figure 1. It illustrates the hypothesized relationships between digital transformation, organizational culture, and firm agility. Digital transformation is proposed to have both a direct influence on firm agility and an indirect influence through organizational culture, which functions as a mediating variable. This model reflects the theoretical assumptions and guides the empirical testing using the PLS-SEM approach.

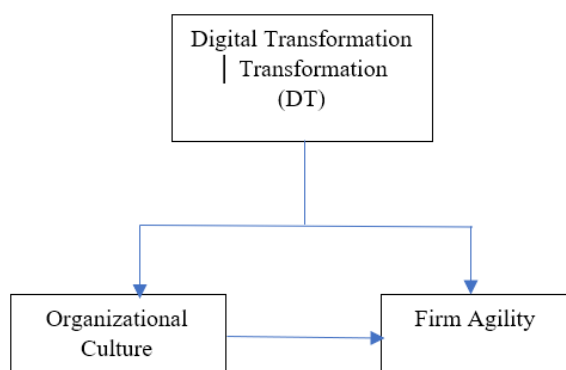


Figure (1): Conceptual Model of the Study

Note: Organizational Culture mediates the relationship between Digital Transformation and Firm Agility. Arrows indicate hypothesized directional relationships.

Methodology

Research Design and Analytical Approach

The study employed a quantitative, cross-sectional design to determine the mediating effect of organizational culture in the digital transformation-firm agility relationship. Research was conducted among Jordanian firms from different industries and employed Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 4 software. This facilitated testing of the measurement model and structure models simultaneously, hence providing a robust test of the theorized relationships.

Sampling and Data Gathering

A simple random sampling technique was employed to ensure that all potential respondents within the selected organizations had an equal chance of participation. This approach was chosen to minimize sampling bias and to enhance the representativeness of the collected data across industries and job categories. A sampling frame was obtained from human resource departments or professional directories of participating organizations, from which participants were randomly invited to complete the questionnaire. This method provided a balanced representation of administrative and technical

personnel, thereby allowing for diverse organizational insights.

A total of 260 respondents participated in the study, representing five major industries in Jordan, information technology, telecommunications, financial services, insurance, and manufacturing. These sectors were deliberately chosen because they are among the most active in Jordan's digital transformation agenda and represent a spectrum of digital maturity levels. The inclusion of firms from multiple industries ensures a holistic understanding of how digital transformation and organizational culture interact to influence agility under varying competitive conditions.

Some organizations contributed multiple respondents from different managerial levels and departments. This approach allowed triangulation of perspectives on digital transformation and organizational culture within firms. To assess whether responses were independent, intra-class correlation coefficients (ICC) were calculated. The low ICC values (< 0.05) indicated negligible clustering effects, confirming that data aggregation at the individual level was statistically justified.

The decision to focus on Jordanian companies was guided by both theoretical and practical considerations. Jordan has positioned itself as a regional leader in digital transformation through national initiatives such as the Jordan Digital Transformation Strategy (2023–2027), which emphasizes the modernization of both private and public sectors. However, despite these initiatives, many organizations still face cultural and structural barriers to digital adoption (Hasan et al., 2025). Studying this context provides a valuable opportunity to explore how digital transformation unfolds in an emerging economy characterized by rapid technological change, evolving market demands, and

traditional organizational hierarchies. The findings therefore have significant implications for policymakers and practitioners seeking to strengthen digital and cultural readiness in similar developing environments. The participants' personal data (N = 260) are summarized in Table 1.

Table (1): Distribution of Personal Data (N = 260)

Variable	Category	Frequency	%
Gender	Male	156	60.0%
	Female	104	40.0%
Years of Experience	Less than 5 years	52	20.0%
	5 to less than 10 years	78	30.0%
	10 to less than 15 years	65	25.0%
	15 years or more	65	25.0%
Educational Level	Diploma	26	10.0%
	Bachelor's	130	50.0%
	Master's	78	30.0%
	PhD	26	10.0%
Company Sector	Information Technology	65	25.0%
	Communications	52	20.0%
	Financial / Banking Services	52	20.0%
	Insurance	39	15.0%
	Industry	52	20.0%

Measurement Instrument

Information was collected through a three-part structured questionnaire where each part is dedicated to one of the major constructs in the study:

Digital Transformation (DT): Contains six items to measure adoption of digital technologies, readiness of infrastructure, direction for strategy going digital, potential for automation, and employee training for digital applications items were adapted from Ismail, Khater, and Zaki (2017) and Verhoef et al (2021), who conceptualized DT as the strategic integration of digital technologies into organizational processes

Organizational Culture (OC): Contains six items adapted from Denison and Mishra (1995) and further refined in Leso, Cortimiglia, and Ghezzi (2023) to measure innovation leadership, interdepartmental trust, open mindedness toward change, concentration on

ongoing learning, and promotion of knowledge sharing

Firm Agility (FA): Included six items, adapted from Tallon and Pinsonneault (2011) and AlNuaimi et al (2022), assessing organizational responsiveness to change, operational flexibility and speed, speed and quality of decision making, and teamwork flexibility in collaborations

All the items were assessed on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree)

Given the self-reported nature of the data, potential common method bias (CMB) was addressed through both procedural and statistical remedies. Respondents were assured of anonymity and confidentiality, and item order was randomized to minimize response pattern bias. Statistically, Harman's single-factor test showed that no single factor accounted for more than 40% of the total variance, suggesting limited CMB. In addition, Variance Inflation Factor (VIF) values were examined using the full collinearity test, and all values were below 33, further confirming that common method variance did not threaten the results (Kock, 2015).

Measurement Model Evaluation

Reliability and Convergent Validity

The constructs' internal consistency and convergent validity were assessed using Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). All the constructs exceeded the suggested thresholds, confirming that the measurement model was reliable and valid.

To ensure methodological rigor, key concepts were operationalized in the following ways:

- Indirect mediation occurs when an independent variable (digital transformation) influences a dependent

variable (firm agility) through an intermediary (organizational culture)

- Multicollinearity is measured by the Variance Inflation Factor (VIF); values below 5 indicate that there is no appreciable overlap between predictors (Hair, 2009)

Discriminant Validity

Discriminant validity was established using two renowned techniques: the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT) Results from both techniques testified to conceptual distinctiveness of the constructs and lack of construct redundancy

Multicollinearity Assessment

To establish the absence of multicollinearity among predictor variables, Variance Inflation Factor (VIF) values were checked All were below the cut-off, and there was no significant collinearity issue in the model

Structural Model Analysis

Coefficient of Determination (R^2)

The R^2 values also provided some indication of the explanatory power of the model (Chin, 1998; Falk & Miller, 1992) In particular, digital transformation accounted for a large proportion of the variance in organizational culture and firm agility, and organizational culture accounted for a further significant proportion of the variance in predicting agility

Effect Size (f^2)

The values of f^2 also revealed relative strength across the predictors (Chin, 1998) Digital transformation affected organizational culture and firm agility substantially Organizational culture's influence on firm agility was statistically significant with a lesser effect size The effect sizes were categorized in accordance with recommendations of Chin (1998):

- Digital Transformation \rightarrow Firm Agility ($f^2 = 0444$) has a large effect ($f^2 \geq 035$)

- Digital Transformation \rightarrow Organizational Culture ($f^2 = 0331$) has a medium effect ($015 \leq f^2 < 035$)
- Organizational Culture \rightarrow Firm Agility ($f^2 = 0027$) has a small effect ($002 \leq f^2 < 015$)

The variance explained in the endogenous latent variables is presented in Table 2.

Table (2): Variance Explained in the Endogenous Latent Variables.

Construct	R-square	Effect Size
Firm Agility	0.435	moderate
Organizational Culture	0.249	weak

The effect sizes of the independent constructs are shown in Table 3

Table (3): Effect Size of the Independent Constructs.

Construct	f-square	Result
Digital Transformation \rightarrow Firm Agility	0.444	large
Digital Transformation \rightarrow Organizational Culture	0.331	medium
Organizational Culture \rightarrow Firm Agility	0.027	small

Predictive Relevance (Q^2)

The predictive relevance of the model was assessed using the Stone-Geisser test (Q^2) and the blindfolding technique According to Hair (2009), Q^2 values greater than zero indicate adequate predictive power This method evaluates the model's predictive capacity for missing data points Chin (1998) states that weak, moderate, and strong predictive relevance are indicated by Q^2 values greater than 002, 015, and 035, respectively The model's predictive validity was further tested through the Stone-Geisser Q^2 test through the blindfolding procedure (Hair, 2009; Henseler, Ringle, & Sinkovics, 2009) It was established that all the values of Q^2 were positive and thus confirmed the model as being predictive to its endogenous constructs

Hypothesis Testing and Mediation Analysis

For testing the formulated hypotheses, the research utilized the bootstrapping method with 5,000 resamples All the direct associations between the constructs were statistically significant Also, analysis confirmed that organizational culture partially mediates the

association between digital transformation and firm agility (Hair et al, 2012; Preacher & Hayes, 2008)

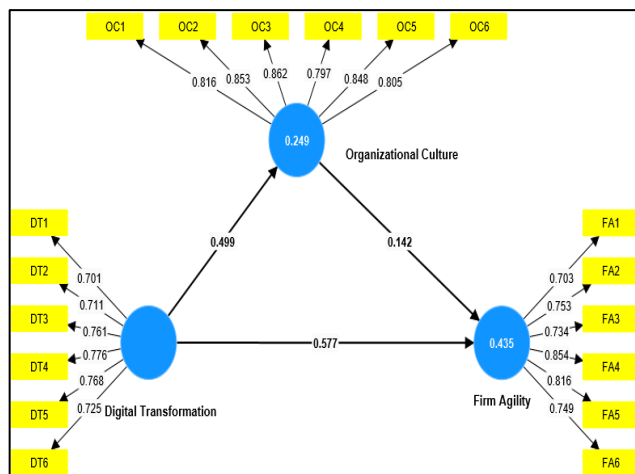


Figure (2): Path (correlation) Coefficient of PLS Algorithm.

Figure 2 demonstrates the visual representation of structural model, path coefficients, and significance values for determining direction and magnitude of hypothesized relations. The research employed a research design that was best suited in offering statistical validity, conceptual accuracy, and empirical reliability. The combination of PLS-SEM with strict reliability and validity testing was best suited in offering a good foundation to test the mediating role of organizational culture in the digital transformation-firm agility relationship in the context of Jordanian organizations.

Results

The current research examined the mediating effect of organizational culture on the relationship between digital transformation and firm agility in the case of the Jordanian

company using a sample of 260 employees and managers of five big industries. Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis was carried out with the assistance of SmartPLS 4, which allowed measurement and structural models testing at one go. Statistical analysis results and interpretation of their significance are provided in this section.

Measurement Model Testing

Reliability, discriminant validity, and convergent validity of the measurement model were fully examined. Tests of internal consistency were done through the use of Cronbach's Alpha and Composite Reliability (CR), and they were far in excess beyond the minimum value of 0.70 (Leedy & Ormrod, 2015). CR values of constructs were exactly 0.879 for Digital Transformation (DT), 0.93 for Organizational Culture (OC), and 0.897 for Firm Agility (FA), displaying high reliability (Leedy & Ormrod, 2015). Convergent validity was assessed with the Average Variance Extracted (AVE), and all the constructs had surpassed the threshold of 0.50 (Hair, Ringle, & Sarstedt, 2013). AVEs ranged from 0.549 for DT, 0.689 for OC, to 0.593 for FA, indicating that a significant percentage of each construct's indicators' variance was accounted for by the construct itself (Hair, Ringle, & Sarstedt, 2013). Second, individual item loadings ranged from 0.701 to 0.862, and this further attested to good construct validity (Hair Jr et al, 2017). Table 4 presents the descriptive statistics along with the reliability and validity test results.

Table (4): Descriptive Statistics, Reliability and Validity Test.

Variable	Mean	Std. Deviation	Excess Kurtosis	Skewness	Factor Loading	Cronbach's Alpha	CR	AVE
Organizational Culture								
OC1	3.646	1.084	0.024	-0.772	0.816	0.91	0.93	0.689
OC2	3.242	1.136	-0.736	-0.266	0.853			
OC3	3.338	1.167	-0.736	-0.437	0.862			
OC4	3.208	1.22	-0.962	-0.237	0.797			
OC5	3.277	1.11	-0.609	-0.344	0.848			
OC6	3.392	1.06	-0.365	-0.544	0.805			
Firm Agility								
FA1	2.438	1.019	-0.739	0.157	0.703	0.863	0.897	0.593
FA2	2.281	0.9	-0.225	0.435	0.753			

Variable	Mean	Std. Deviation	Excess Kurtosis	Skewness	Factor Loading	Cronbach's Alpha	CR	AVE
FA3	3.358	1.126	-0.255	-0.755	0.734			
FA4	2.677	1.1	-0.897	0.075	0.854			
FA5	2.738	1.13	-0.953	0.079	0.816			
FA6	2.731	1.122	-0.951	0.069	0.749			
Digital Transformation								
DT1	3.35	1.156	-0.527	-0.623	0.701	0.836	0.879	0.549
DT2	3.346	1.366	-1.434	-0.061	0.711			
DT3	3.423	1.329	-1.405	-0.15	0.761			
DT4	3.438	1.395	-1.453	-0.219	0.776			
DT5	3.696	1.334	-1.229	-0.455	0.768			
DT6	3.2	1.425	-1.472	-0.052	0.725			

Discriminant validity was also assured through Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT) (Henseler, Ringle, & Sarstedt, 2015; Kline, 2023) The Fornell-Larcker matrix provided evidence that the square root of the AVE for each construct exceeded its correlation with all other constructs, demonstrating construct distinctiveness (Henseler, Ringle, & Sinkovics, 2009). Table 5 presents the Fornell-Larcker criterion.

Table (5): Fornell-Larcker Criterion

Construct	Digital Transformation	Firm Agility	Organizational Culture
Digital Transformation	0.741		
Firm Agility	0.648	0.770	
Organizational Culture	0.499	0.430	0.830

The maximum HTMT of 0.731 between DT and FA was far below the conservative threshold value of 0.85, again indicating discriminant validity (Kline, 2023). Table 6 shows the Heterotrait-Monotrait (HTMT) ratio, indicating that all values are below 0.90 and discriminant validity is adequate.

Table (6): Heterotrait-Monotrait Ratio (HTMT)

Construct	Digital Transformation	Firm Agility	Organizational Culture
Digital Transformation			
Firm Agility	0.731		
Organizational Culture	0.561	0.470	

Multicollinearity was assessed utilizing the Variance Inflation Factor (VIF) Values for VIF were between Digital Transformation → Organizational Culture at 1000 and Digital Transformation → Firm Agility and Organizational Culture → Firm Agility both

1331 (Winship & Western, 2016) The all VIF values were under 5 and indicate that there isn't an issue of multicollinearity and that all the constructs are each making an exclusive contribution to the model (Winship & Western, 2016), as shown in Table 7.

Table (7): Collinearity Statistics – Inner VIF values in the structural model

Construct	VIF
Digital Transformation → Firm Agility	1.331
Digital Transformation → Organizational Culture	1.000
Organizational Culture → Firm Agility	1.331

Structural Model Results

Explanatory power of the structural model was examined using the R-squared (R^2) values The model explained 435% variance in Firm Agility and 249% variance in Organizational Culture, with moderate and weak but significant levels of explanation, respectively (Chin, 1998) The values show that digital transformation explains the two constructs significantly but more agility than culture

Effect sizes (f^2) further indicated the strengths of these relations (Chin, 1998) Digital Transformation impacted Firm Agility significantly ($f^2 = 0.444$) and Organizational Culture significantly ($f^2 = 0.331$) However, the influence of Organizational Culture over Firm Agility was minimal ($f^2 = 0.027$) directly, indicating that culture only facilitates agility but its direct influence is lower in the organization under study

Predictive validity of the model was also tested using the Stone-Geigger Q^2 test (Chin,

1998) Values of Q^2 of 0411 and 0239 for Firm Agility and Organizational Culture, respectively, were both positive (Henseler, Ringle, & Sarstedt, 2015) These results affirm that the model is valid in its predictive capability for its endogenous constructs (Hair, Ringle, & Sarstedt, 2013), as illustrated in Table 8.

Table (8): Predictive Relevance (Q^2) of the Endogenous Constructs.

	Q^2 Predict
Firm Agility	0.411
Organizational Culture	0.239

Bootstrapped confidence intervals (CIs) were generated using 5,000 resamples None of the intervals included zero, confirming the statistical significance of all hypothesized paths (Preacher & Hayes, 2008) Reporting CIs alongside t- and p-values increases transparency and statistical rigor in assessing both direct and indirect effects

Table (9): Results of the Hypothesis Testing.

Hypothesis	Constructs	Relationships	Beta	Standard Deviation	T Statistics	P Values	Result
H1	Digital Transformation -> Firm Agility	0.577	0.582	0.046	12..480	0.000	Supported
H2	Digital Transformation -> Organizational Culture	0.499	0.503	0.046	10..892	0.000	Supported
H3	Organizational Culture -> Firm Agility	0.142	0.142	0.059	2.398	0.017	Supported
H4	Digital Transformation -> Organizational Culture -> Firm Agility	0.071	0.071	0.031	2.317	0.021	Partial Mediation

Table 10 shows the bootstrapped confidence intervals for direct and indirect effects.

Table (10): Bootstrapped Confidence Intervals for Direct and Indirect Effects.

Hypothesis	Path Relationship	β (Beta)	t-value	p-value	95% Confidence Interval (Lower–Upper)	Result
H1	Digital Transformation → Firm Agility	0.577	12..480	<0..001	[0.462, 0.681]	Supported
H2	Digital Transformation → Organizational Culture	0.499	10..892	<0..001	[0.393, 0.594]	Supported
H3	Organizational Culture → Firm Agility	0.142	2.398	0.017	[0.028, 0.263]	Supported
H4	Digital Transformation → Organizational Culture → Firm Agility (Indirect Effect)	0.071	2.317	0.021	[0.016, 0.139]	Partially Supported

Source: Author's calculation using SmartPLS 4 (bootstrapping, 5,000 resamples)

These findings verify that digital transformation has direct and positive influences on the agility of firms and, concurrently, facilitates organizational culture

Hypothesis Testing and Mediation Analysis

All four of the hypothesized effects were empirically tested through bootstrapping with 5,000 resamples:

- **H1:** Digital Transformation → Firm Agility ($\beta = 0577$, $t = 12480$, $p < 0001$)
- **H2:** Digital Transformation → Organizational Culture ($\beta = 0499$, $t = 10892$, $p < 0001$)
- **H3:** Organizational Culture → Firm Agility ($\beta = 0142$, $t = 2398$, $p = 0017$)
- **H4:** Digital Transformation → Organizational Culture → Firm Agility ($\beta = 0071$, $t=2317$, $p = 0021$)

Table 9 shows the results of the hypothesis testing, summarizing the relationships between constructs and their significance levels

Additionally, the findings affirm the partial mediating role of culture between digital transformation and agility

Discussion

The results are a testament to the core function of digital transformation in organizing organizational competences and behavioral foundations. The direct effect of digital transformation on the firm agility is a testament to its primary role of equipping firms with structures and tools essential to cope in volatile environments. Operational dimensions of digital transformation, ie, implementation of digital infrastructure, process automation, strategic digital direction, and labor market readiness, appear to translate directly into improved responsiveness, decision-making timeliness, and operational flexibility.

The profound positive impact of digital transformation to organizational culture affirms the magnitude of digital transformation beyond technology. Digitally changing organizations will build cultures that welcome innovation, functional trust, resilience, and continuously learning, dispositions that are captured in this study's scale of organizational culture. These types of cultural change are the precursors to openness to change instead of active adopting of it. Even though the direct organizational culture impact on agility was statistically significant, the low effect size cautions that cultural enablers alone are not sufficient to achieve agility in the absence of strategic and technology alignment.

The modest direct influence of organizational culture on agility may be attributed to contextual and structural characteristics of Jordanian firms. Many organizations in Jordan still operate under hierarchical, authority-centered systems, where decision-making tends to be centralized and procedural rigidity remains prevalent (Hasan et al, 2025). As a result, cultural openness or collaboration, while present, may not yet be strong enough to translate directly into agile operational behaviors without parallel

structural flexibility. Furthermore, digital maturity levels differ across sectors, which could limit the extent to which an innovation-oriented culture manifests as immediate agility. For example, technology and telecom firms may display high cultural adaptability, while traditional sectors such as manufacturing or insurance may lag behind. Thus, the smaller effect reflects not a weakness of culture per se, but rather its dependence on structural and technological enablers for expression in practice.

Yet, the partial mediation verified that organizational culture is a great vehicle through which digital transformation conveys agility. That is, digital transformation acts directly on firm agility through altered structure and strategy, and indirectly through altered collective values, behaviour, and orientation to learning. This intermediary appeal is echoed with one of the key findings: the success of digital transformation programmes is optimised when set in an enabling culture. In the Jordanian context, where businesses may be confronted with change-resistant hierarchies, this construction of an open, innovative, and collaborative culture is at the center of unlocking the potential of digital programs.

Drawing on a representative sample of anchor industries, information technology, telecommunications, financial services, insurance, and manufacturing, these findings provide robust empirical evidence that organizational culture is not a passive setting for digital transformation, but an active, formative influence on how that transformation is expressed as strategic agility.

Conclusion

In conclusion, the study confirms that digital transformation boosts firm agility, but also that it can realize its maximum worth only if complemented by an enabling culture. To companies that want to thrive in increasingly

turbulent and digital environments, the intersection of cultural and technical transformation is not merely something to be hoped for, it is required. Linking strategic digital aspirations with a culture of flexibility, openness, and imagination ranks high as a success driver in achieving and sustaining agility.

Strategic Insights and Practical Implications

This study examined organizational culture's mediating function among digital transformation and firm agility among Jordanian firms. Grounded on empirical evidence from 260 employees and managers in five most prominent industries, the findings established that digital transformation has a vital role in organizational culture and firm agility. Organizational culture also partially mediated digital transformation-agility.

The study acknowledges that digital transformation is not technology change but a transformation in strategy that reconsiders organizational form, processes, and behaviors. Digital infrastructure, automation, and data-driven business are technological advancements that can provide tangible performance gains only as part of an adaptive culture that supports innovation, collaboration, and continuity.

Organizational culture is also found by the study to be a driving factor in enabling digital transformation outcomes. An adaptive culture, interdepartmental trust, and ongoing learning enable employees to make the most of digital tools as well as quickly respond to environmental shifts. Digital tools provide the ability for agility alone; culture decides whether and how the tools are being utilized.

Practical Implications

The results highlight several actionable recommendations for business leaders, policymakers, and practitioners seeking to

translate digital initiatives into real organizational agility:

1. **Foster a Culture of Innovation:** Organizations should intentionally promote a culture that encourages experimentation, creative problem-solving, and openness to failure. Leaders can achieve this by recognizing innovative efforts, supporting idea-sharing platforms, and allocating dedicated time for employees to explore new technologies and processes.
2. **Empower Employees and Decentralize Decision-Making:** Agility thrives in environments where employees are trusted to make timely decisions. Managers should flatten hierarchies, empower cross-functional teams, and create autonomy for staff to act quickly when facing market changes. Empowered employees are more responsive and adaptable in digital environments.
3. **Invest in Continuous Digital Training and Reskilling:** Firms should prioritize digital upskilling through structured training programs on data analytics, automation, cybersecurity, and AI-driven tools. Tailored learning paths help employees adapt to new technologies and strengthen digital readiness across all organizational levels.
4. **Integrate Change Management into Digital Strategies:** Resistance to change remains a major barrier to transformation. Companies should integrate structured change management frameworks that include communication, employee engagement, and feedback loops. Transparent leadership communication ensures smoother digital adoption and greater buy-in.

Theoretical Contributions

This research contributes to the knowledge on digital transformation by empirically verifying the mediating role of organizational culture between technology and agility, with

reference to emerging economies It contributes to the theoretical body of knowledge through the demonstration that the cultural context can determine the effectiveness of digital strategies

The findings also extend existing theories on the technology–culture–agility nexus by showing that while organizational culture remains a mediating mechanism, its direct influence on agility may be weaker than classical models propose (eg, Denison & Mishra, 1995; Tallon & Pinsonneault, 2011) This challenges the traditional assumption that culture alone drives adaptability and highlights that culture’s value is contingent upon digital infrastructure and structural flexibility In emerging economies like Jordan, cultural readiness without parallel technological enablement produces limited agility gains Thus, this study refines existing theoretical frameworks by positioning culture as a conditional enabler, effective only when integrated with digital and strategic resources This insight contributes to the refinement of socio-technical systems theory and the dynamic capabilities view, which emphasize that resources gain value only through interaction and alignment

Future Research Directions

Future studies can explore other moderators or mediators, such as leadership behavior, organizational design, or employee digital literacy, which would shed further light on the relationship between digital transformation and agility Longitudinal studies would also illustrate how organizational culture evolves over time alongside digital initiatives as well as how continuous transformation could be enabled

Disclosure Statement

The author declares that there are no relevant or material financial interests that relate to the research described in this paper

– Ethical Approval and Consent to Participate

– The study was conducted in compliance with ethical research guidelines Participation was voluntary, and informed consent was obtained from all respondents prior to data collection Confidentiality and anonymity of the participants were strictly maintained

– **Availability of Data and Materials:** The datasets generated and analyzed during the current study are available from the author upon reasonable request

– **Author Contribution:** The author solely conceived the study, designed the methodology, collected and analyzed the data, and prepared the manuscript

– **Conflict of Interest:** The author declares no conflict of interest

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Supplementary Material

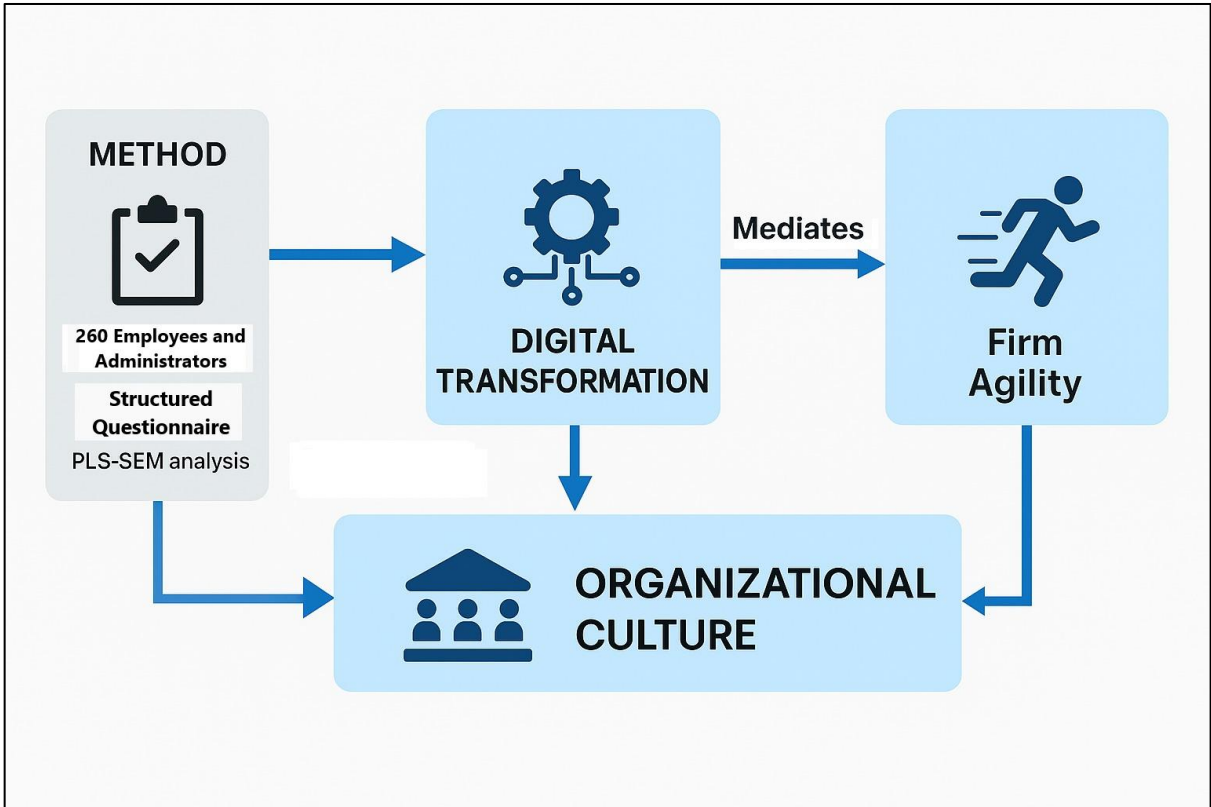


Figure (S1): Graphical Abstract

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