



The Impact of Organizational Culture Factors on Innovation Capability: An Empirical Study of Vietnamese Enterprises

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Abstract

This study explores the impact of organizational culture factors on innovation capability within Vietnamese enterprises. Based on organizational culture theory and dynamic capabilities theory, the research proposes an integrated model comprising five cultural factors: innovation-supportive culture, continuous learning culture, cross-functional collaboration culture, adaptability culture, and empowerment culture. Using a quantitative research approach with cross-sectional design, data were collected from 225 Vietnamese enterprises through online surveys. Multiple regression analysis results demonstrate that all five cultural factors have positive and statistically significant impacts on innovation capability, with innovation-supportive culture showing the strongest influence ($\beta = 0.287$), followed by adaptability culture ($\beta = 0.269$). The research model explains 65% of the variance in innovation capability. This study makes significant theoretical contributions to organizational culture literature and provides practical guidance for Vietnamese enterprises in developing organizational culture to enhance innovation capability. The findings suggest that organizations should adopt a holistic approach to cultural transformation, prioritizing innovation-supportive environments while simultaneously fostering adaptability, continuous learning, cross-functional collaboration, and employee empowerment to maximize their innovation potential in an increasingly competitive global market.

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Keywords: Organizational Culture, Innovation Capability, Vietnamese Enterprises, Innovation, Cultural Transformation

1. Introduction

In today's rapidly evolving business landscape, innovation capability has emerged as a critical determinant of organizational survival and competitive advantage. As markets become increasingly dynamic and customer expectations continue to rise, enterprises must continuously develop new products, services, and processes to maintain their market position (Tidd & Bessant, 2020) ^[8]. The ability to innovate effectively distinguishes high-performing organizations from their competitors, enabling them to adapt to technological disruptions, respond to changing consumer demands, and capitalize on emerging opportunities (Crossan & Apaydin, 2010) ^[10]. This imperative for innovation is particularly pronounced in developing economies, where enterprises face the dual challenge of competing globally while building local capabilities. Organizational culture has been increasingly recognized as a fundamental driver of innovation performance, yet the specific mechanisms through which cultural factors influence innovation capability remain inadequately understood. While extensive research has established that culture significantly impacts organizational outcomes, the literature reveals inconsistent findings regarding which specific cultural dimensions most effectively foster innovation (Ahmed, 1998; Martins & Terblanche, 2003) ^[2, 18]. Previous studies have predominantly focused on broad cultural typologies or examined individual cultural factors in isolation, providing limited insight into how multiple cultural dimensions interact to enhance innovation capability. This fragmented approach has resulted in theoretical gaps and practical challenges for managers seeking to cultivate innovation-supportive environments.

Furthermore, most existing research on organizational culture and innovation has been conducted in developed Western contexts, with limited attention to emerging economies where cultural dynamics and institutional frameworks may differ significantly. The generalizability of findings from Western contexts to developing economies remains questionable, given fundamental differences in power distance, collectivism, and institutional support systems (Hofstede, 2001) ^[16]. Vietnamese enterprises, operating within a unique cultural and economic context characterized by rapid economic transformation and distinct cultural values, represent an important yet understudied setting for examining culture-innovation relationships.

Addressing these knowledge gaps is crucial for both theoretical advancement and practical application. A more nuanced understanding of how specific cultural factors influence innovation capability would contribute to organizational theory by providing clearer causal mechanisms and actionable insights for practitioners. For Vietnamese enterprises seeking to enhance their innovation performance in an increasingly competitive global market, such knowledge would offer evidence-based guidance for cultural transformation initiatives and strategic decision-making.

This study aims to examine the impact of organizational culture factors on innovation capability within Vietnamese enterprises, specifically investigating how innovation-supportive culture, continuous learning culture, cross-functional collaboration culture, adaptability culture, and empowerment culture influence organizational innovation capability. The research addresses three key questions: (1) How do different organizational culture factors individually impact innovation capability? (2) What is the relative importance of each cultural factor in determining innovation capability? (3) How do these cultural factors collectively explain variance in innovation capability among Vietnamese enterprises?

This research makes several significant contributions to the literature and practice. First, it advances organizational culture theory by developing and empirically testing a comprehensive multidimensional framework that examines five distinct cultural factors simultaneously, providing a more holistic understanding of culture-innovation relationships. Second, it extends the geographical scope of innovation research by providing the first systematic examination of organizational culture and innovation capability relationships in the Vietnamese context, contributing to cross-cultural organizational theory. Third, it offers practical insights for Vietnamese managers and policymakers by identifying specific cultural factors that most effectively enhance innovation capability, enabling more targeted organizational development interventions. Fourth, it contributes methodologically by demonstrating the application of advanced statistical techniques to examine complex culture-innovation relationships in an emerging economy context.

2. Literature Review

2.1. Theoretical Foundations

The theoretical foundation of this study draws primarily from organizational culture theory and innovation capability theory. Schein's (2010) ^[22] seminal work on organizational culture provides the conceptual framework for understanding how deeply embedded assumptions, values, and beliefs shape organizational behavior and performance outcomes.

According to Schein's model, organizational culture operates at three levels: artifacts (visible structures and processes), espoused beliefs and values (strategies, goals, and philosophies), and underlying assumptions (unconscious beliefs and perceptions). This multilevel perspective suggests that cultural transformation requires addressing not only surface-level practices but also deeper cognitive and emotional elements that guide organizational members' behavior.

Dynamic capabilities theory, as developed by Teece *et al.* (1997) ^[26] and further refined by Eisenhardt and Martin (2000) ^[13], provides the theoretical lens for understanding innovation capability. This theory posits that organizations must develop the ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Innovation capability, viewed through this lens, represents a higher-order dynamic capability that enables organizations to systematically generate novel solutions and adapt to environmental changes. The theory emphasizes that such capabilities are not static assets but rather complex, path-dependent processes that must be continuously developed and refined.

The resource-based view of the firm (Barney, 1991) ^[6] further supports the theoretical foundation by explaining how organizational culture can serve as a valuable, rare, inimitable, and non-substitutable resource that provides sustainable competitive advantage. When organizational culture aligns with innovation objectives, it creates a unique organizational context that competitors find difficult to replicate, thereby enhancing the organization's innovation capability. However, the theory also highlights that cultural resources must be effectively leveraged and continuously developed to maintain their strategic value.

2.2. Empirical Research on Organizational Culture and Innovation

Extensive empirical research has established a positive relationship between organizational culture and innovation performance, though findings vary considerably regarding which specific cultural dimensions most effectively foster innovation. Ahmed (1998) ^[2] conducted one of the earliest comprehensive studies, identifying key cultural factors including risk tolerance, openness to new ideas, and supportive leadership as primary drivers of innovation. Subsequent research by Martins and Terblanche (2003) ^[18] extended this work by developing a comprehensive framework that includes strategy, structure, support mechanisms, behavior, and communication as critical cultural dimensions.

Recent meta-analytic studies have provided more robust evidence for culture-innovation relationships. Naranjo-Valencia *et al.* (2016) ^[19] analyzed 35 empirical studies and found that adhocracy culture (characterized by flexibility, external focus, and innovation orientation) showed the strongest positive correlation with innovation performance, while hierarchy culture demonstrated negative associations. Similarly, Büschgens *et al.* (2013) ^[8] conducted a meta-analysis of 42 studies and confirmed significant positive relationships between cultural factors such as openness to change, risk tolerance, and external orientation with innovation outcomes.

However, empirical findings also reveal important contradictions and contextual variations. While some studies (Tellis *et al.*, 2009) ^[27] emphasize the importance of risk

taking and entrepreneurial orientation, others (Jaskyte & Dressler, 2005)^[17] highlight the significance of collaborative and supportive cultural elements. These inconsistencies suggest that cultural effects on innovation may be more complex and context-dependent than initially assumed, requiring more nuanced theoretical and empirical approaches.

Cross cultural research has further complicated the picture by demonstrating that cultural effects vary significantly across national and institutional contexts. Studies in Asian contexts (Wan *et al.*, 2005; Xu *et al.*, 2021)^[30] have shown that collectivistic cultural values can either enhance or inhibit innovation depending on how they interact with organizational practices and external environmental factors. This highlights the need for context-specific research to understand how universal cultural principles manifest in particular cultural and economic settings.

2.3. Research Gaps and Knowledge Limitations

Despite the substantial body of research on organizational culture and innovation, several critical gaps remain. First, most existing studies have examined cultural factors in isolation rather than investigating how multiple cultural dimensions interact to influence innovation capability. This fragmented approach limits understanding of the complex, systemic nature of culture and its multifaceted impact on innovation processes. The few studies that have attempted comprehensive approaches (Dobni, 2008)^[12] have typically relied on broad cultural typologies that may obscure important nuances in culture-innovation relationships.

Second, the literature suffers from methodological limitations that constrain the reliability and generalizability of findings. Many studies have relied on single-source data collection, raising concerns about common method bias, while others have used convenience samples that may not represent broader populations. Additionally, the predominant use of cross sectional designs limits the ability to make causal inferences about culture-innovation relationships, despite the theoretical assumption that culture influences innovation rather than vice versa.

Third, there is a significant geographical bias in the existing literature, with most studies conducted in developed Western economies. This limitation is particularly problematic given evidence that cultural effects may vary significantly across different institutional and economic contexts. The scarcity of research in emerging economies represents a critical gap, especially as these markets increasingly contribute to global innovation and economic growth.

2.4. Hypothesis Development

Based on the literature review, this study proposes five specific hypotheses regarding the relationship between organizational culture factors and innovation capability. Each hypothesis is grounded in theoretical reasoning and supported by empirical evidence from previous research.

Innovation-Supportive Culture and Innovation Capability: Innovation-supportive culture encompasses organizational practices and values that actively encourage creativity, accept reasonable risks, provide necessary resources, and recognize innovative efforts (Amabile *et al.*, 1996)^[3]. Such cultural elements create psychological safety for experimentation and reduce barriers to novel idea generation and implementation. Studies by Zhou and George (2001)^[33] and Tierney *et al.* (1999)^[29] have demonstrated that when employees perceive

organizational support for innovation, they are more likely to engage in creative behaviors and persist through implementation challenges. Therefore:

H1: Innovation supportive culture has a positive impact on the innovation capability of enterprises.

Continuous Learning Culture and Innovation Capability: Continuous learning culture reflects an organization's commitment to ongoing knowledge acquisition, skill development, and intellectual growth (Senge, 2006)^[23]. This cultural orientation facilitates innovation by ensuring that organizational members have access to current knowledge, diverse perspectives, and problem-solving capabilities necessary for innovative solutions. Research by Calantone *et al.* (2002)^[9] and Baker and Sinkula (1999)^[5] has shown that learning-oriented organizations demonstrate superior innovation performance because they more effectively absorb external knowledge, challenge existing assumptions, and adapt to changing requirements. Thus:

H2: Continuous learning culture has a positive impact on the innovation capability of enterprises.

Cross Functional Collaboration Culture and Innovation Capability: Cross-functional collaboration culture promotes interaction, communication, and cooperation across organizational boundaries and functional silos (Brown & Eisenhardt, 1995)^[7]. Innovation typically requires integration of diverse knowledge domains, skills, and perspectives that are distributed across different organizational units. Studies by Ancona and Caldwell (1992)^[4] and Hoegl and Gemuenden (2001)^[15] have demonstrated that effective cross-functional collaboration enhances innovation outcomes by facilitating knowledge sharing, reducing development time, and improving solution quality. Accordingly:

H3: Cross functional collaboration culture has a positive impact on the innovation capability of enterprises.

Adaptability Culture and Innovation Capability: Adaptability culture reflects an organization's orientation toward flexibility, responsiveness, and openness to change (Denison & Mishra, 1995)^[11]. Such cultural characteristics are essential for innovation because they enable organizations to recognize emerging opportunities, adjust to new technologies, and reconfigure resources in response to market changes. Research by Gibson and Birkinshaw (2004)^[14] and O'Reilly and Tushman (2008)^[21] has shown that adaptive organizations demonstrate superior innovation performance because they can balance exploitation of existing capabilities with exploration of new possibilities. Therefore:

H4: Adaptability culture has a positive impact on the innovation capability of enterprises.

Empowerment Culture and Innovation Capability: Empowerment culture involves delegating decision-making authority, providing autonomy, and enabling organizational members to take initiative and assume responsibility (Spreitzer, 1995)^[25]. This cultural orientation supports innovation by reducing bureaucratic constraints, accelerating decision-making processes, and encouraging entrepreneurial behavior throughout the organization. Studies by Amabile *et al.* (1996)^[3] and Zhang and Bartol (2010)^[32] have demonstrated that psychological empowerment enhances creative performance and innovation outcomes by increasing

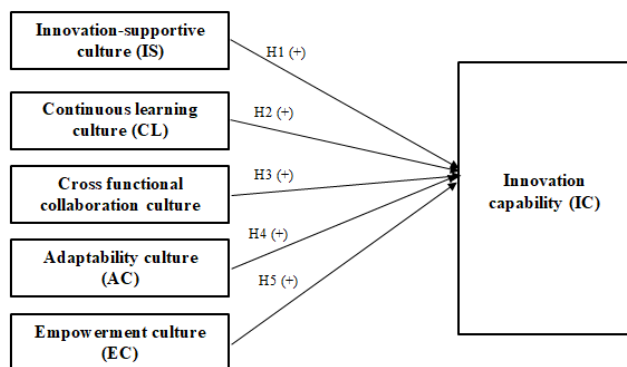
intrinsic motivation and reducing reliance on hierarchical approval processes. Thus:

H5: Empowerment culture has a positive impact on the innovation capability of enterprises.

2.5. Proposed Research Model

Based on the theoretical foundations presented above, this study proposes an integrated model to examine the simultaneous effects of five organizational culture factors on innovation capability. The model is built upon organizational culture theory (Schein, 2010)^[22], dynamic capabilities theory (Teece *et al.*, 1997)^[26], and the resource-based view (Barney, 1991)^[6].

According to this theoretical framework, organizational culture is viewed as a strategic resource that is valuable, rare, and difficult to imitate, creating sustainable competitive advantage when effectively leveraged to promote innovation. The model focuses on five critical cultural factors: (1) Innovation-supportive culture; (2) Continuous learning culture; (3) Cross-functional collaboration culture; (4) Adaptability culture; and (5) Empowerment culture.



*Source: Author's proposal, 2025

Fig 1: Research model

The model assumes that cultural factors have positive and independent effects on innovation capability, while also potentially interacting to create synergistic effects. Mathematically, the model is represented as:

$$IC = \beta_0 + \beta_1 * IS + \beta_2 * CL + \beta_3 * CC + \beta_4 * AC + \beta_5 * EC + \varepsilon$$

Where:

IC = Innovation capability

IS = Innovation-supportive culture

CL = Continuous learning culture

CC = Cross-functional collaboration culture

AC = Adaptability culture

EC = Empowerment culture

β_1 - β_5 = Regression coefficients

ε = Error term.

Based on prior research, the model is expected to explain 40-60% of the variance in innovation capability (Büschgens *et al.*, 2013; Naranjo-Valencia *et al.*, 2016)^[19, 8]. This model not only contributes to theory but also provides practical guidance for Vietnamese managers in identifying the relative importance of each cultural factor to enhance organizational innovation capability.

2.6. Variable Measurement

Innovation Capability (IC) is conceptualized as a multidimensional construct reflecting an organization's systematic ability to generate, develop, and implement novel

solutions. Following the comprehensive framework established in recent innovation capability research, innovation capability is measured through four key dimensions: (1) new product/service development capability (IC1), capturing the organization's ability to create novel offerings; (2) process innovation capability (IC2), reflecting capacity for operational and procedural improvements; (3) business model innovation capability (IC3), measuring ability to reconfigure value creation and delivery mechanisms; and (4) innovation effectiveness (IC4), assessing the overall success rate and impact of innovation efforts. This multidimensional approach aligns with the Oslo Manual classification and has been validated across multiple organizational contexts. Each dimension is measured using multiple indicators on seven-point Likert scales, with higher scores indicating stronger innovation capability.

Innovation-Supportive Culture (IS) encompasses organizational practices and values that actively foster innovation. Based on established innovation culture frameworks, this construct is measured through four dimensions: creativity encouragement (IS1), measuring the extent to which organizations actively promote creative thinking and novel ideas; risk acceptance (IS2), reflecting tolerance for reasonable failures and experimentation; resource support (IS3), capturing provision of necessary time, funding, and tools for innovation; and recognition and rewards (IS4), measuring acknowledgment and incentivization of innovative efforts. This measurement approach has demonstrated high reliability and validity in previous studies examining organizational innovation culture.

Continuous Learning Culture (CL) reflects organizational commitment to ongoing knowledge acquisition and skill development. Drawing from established learning organization literature, this construct includes four dimensions: learning opportunities (CL1), measuring provision of formal and informal learning experiences; knowledge sharing (CL2), reflecting practices that facilitate information exchange; feedback and improvement (CL3), capturing systematic approaches to learning from experience; and external knowledge update (CL4), measuring efforts to acquire external knowledge and best practices. These dimensions have been empirically validated in studies examining learning culture's impact on innovation outcomes. Cross-Functional Collaboration Culture (CC) represents organizational orientation toward cooperation and integration across functional boundaries. Based on research examining team innovation capabilities and cross-functional effectiveness, this construct encompasses: cross-departmental teamwork (CC1), measuring frequency and quality of interfunctional collaboration; internal communication (CC2), reflecting effectiveness of information flow across units; trust and respect (CC3), capturing interpersonal relationships that facilitate cooperation; and leadership support (CC4), measuring management commitment to collaborative practices. This measurement framework has been validated in studies of innovation teams and cross-functional collaboration.

Adaptability Culture (AC) reflects organizational flexibility and responsiveness to change. Following frameworks that examine organizational adaptability in innovation contexts, this construct includes: change awareness (AC1), measuring recognition of environmental shifts; quick response (AC2), reflecting speed of adaptation to new circumstances; process flexibility (AC3), capturing ability to modify operational procedures; and openness to external ideas (AC4), measuring receptivity to external input and perspectives. These

dimensions align with dynamic capabilities theory and have been validated in studies examining organizational adaptation and innovation.

Empowerment Culture (EC) encompasses organizational practices that delegate authority and encourage initiative. Based on established empowerment frameworks and their application to innovation contexts, this construct includes: autonomy in work (EC1), measuring individual discretion in task performance; decentralized decision-making (EC2), reflecting distribution of decision authority; opportunities to demonstrate competence (EC3), capturing chances for skill utilization and development; and responsibility and accountability (EC4), measuring individual ownership of outcomes. This measurement approach draws from validated empowerment scales and innovation culture research.

All constructs are measured using established scales adapted for the Vietnamese context, with items translated and back-translated to ensure conceptual equivalence. The measurement instruments follow best practices in scale development, utilizing seven-point Likert scales to optimize response variance and statistical power. Reliability is assessed using Cronbach's alpha coefficients, with values above 0.70 considered acceptable, while validity is evaluated through exploratory and confirmatory factor analyses to ensure that measures adequately represent their intended constructs. The measurement approach is consistent with recent developments in innovation capability and organizational culture research, incorporating multidimensional constructs that capture the complexity of these phenomena.

3. Methods

3.1. Research Design

This study employed a quantitative cross-sectional survey design to examine the relationships between organizational culture factors and innovation capability in Vietnamese enterprises. The cross-sectional approach was selected as it allows for data collection from a large number of organizations at a single point in time, providing a comprehensive snapshot of current organizational culture and innovation capability (Setia, 2016). This methodology aligns with established practices in organizational culture and innovation research (Büschgens *et al.*, 2013) [8].

3.2. Data and Data Collection Procedures

The target population comprised Vietnamese enterprises across multiple industries. A stratified random sampling approach was employed based on industry type and geographical location. Data collection was conducted between January to April 2025 through a structured online survey administered to senior managers and executives. The survey was distributed to 850 Vietnamese enterprises, yielding 225 valid responses (response rate: 26.5%). Respondents included CEOs (35%), general managers (28%), R&D directors (22%), and other senior executives (15%) with average organizational tenure of 8.3 years.

Missing data analysis revealed less than 3% missing values across all variables, handled using listwise deletion. Outlier detection using Mahalanobis distance resulted in removal of 8 extreme cases.

3.3. Data Analysis Methods

Data analysis was conducted using IBM SPSS Statistics version 28.0 following a systematic four-stage approach:

Stage 1: Reliability Assessment: Cronbach's alpha coefficient was calculated to assess internal consistency of each construct, with values above 0.70 considered acceptable (Nunnally & Bernstein, 1994) [20].

Stage 2: Exploratory Factor Analysis (EFA): Principal component analysis with varimax rotation was performed to identify underlying factor structure. Data suitability was assessed using Kaiser-Meyer-Olkin (KMO) measure (>0.60) and Bartlett's test of sphericity ($p < 0.05$). Factor loadings above 0.50 were considered acceptable.

Stage 3: Correlation Analysis: Pearson correlations were calculated to examine bivariate relationships between all study variables, providing preliminary evidence for hypothesized relationships.

Stage 4: Multiple Linear Regression: Multiple regression analysis was employed with innovation capability as dependent variable and five organizational culture factors as independent variables. Regression assumptions were tested including linearity, independence (Durbin-Watson test), homoscedasticity, and normality of residuals.

3.4. Addressing Methodological Issues

Common method bias was assessed using Harman's single-factor test, revealing no single factor accounted for more than 35% of total variance. Multicollinearity was evaluated using variance inflation factors ($VIF < 5.0$) and tolerance values (> 0.40). Non-response bias was examined by comparing early and late respondents, showing no significant differences. The study's limitations include the cross-sectional design limiting causal inferences and reliance on self-reported measures.

4. Results and Discussion

4.1. Descriptive Statistics and Reliability Analysis

The descriptive analysis of the sample revealed diverse organizational characteristics among the 225 participating Vietnamese enterprises. The majority of organizations were medium-sized enterprises (45.3%) followed by large enterprises (32.4%) and small enterprises (22.3%). Industry distribution showed manufacturing (38.7%), services (34.2%), and technology (27.1%) sectors were well represented. Geographically, 42.7% of enterprises were located in northern Vietnam, 28.9% in southern Vietnam, and 28.4% in central Vietnam, ensuring adequate regional representation.

Table 1: Descriptive Statistics and Reliability Analysis

Construct	Mean	SD	Cronbach's α	No. of Items
Innovation-Supportive Culture (IS)	3.68	0.82	0.889	4
Continuous Learning Culture (CL)	3.85	0.78	0.834	4
Cross-functional Collaboration (CC)	3.72	0.75	0.805	4
Adaptability Culture (AC)	3.79	0.81	0.848	4
Empowerment Culture (EC)	3.64	0.83	0.846	4
Innovation Capability (IC)	3.54	0.65	0.891	4

*Source: Data processing results, 2025

The reliability analysis demonstrated excellent internal consistency for all constructs, with Cronbach's alpha values ranging from 0.805 to 0.891, well above the recommended threshold of 0.70. Innovation Capability showed the highest reliability ($\alpha = 0.891$), followed by Innovation-Supportive Culture ($\alpha = 0.889$). All constructs exhibited acceptable distributional properties, supporting the appropriateness of parametric statistical analyses.

4.2. Exploratory Factor Analysis Results

The exploratory factor analysis confirmed the distinctiveness of the six constructs in the study. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.835, exceeding the recommended value of 0.60, and Bartlett's test of sphericity was significant ($\chi^2 = 2220.867$, $df = 190$, $p < 0.001$), indicating that the data were suitable for factor analysis.

Table 2: Exploratory Factor Analysis - Rotated Component Matrix

Items	Factor 1 (IS)	Factor 2 (EC)	Factor 3 (AC)	Factor 4 (CL)	Factor 5 (CC)
IS4	0.868				
IS2	0.829				
IS3	0.807				
IS1	0.792				
EC4		0.880			
EC2		0.819			
EC3		0.803			
EC1		0.759			
AC4			0.860		
AC1			0.801		
AC2			0.750		
AC3			0.748		
CL4				0.828	
CL1				0.811	
CL2				0.783	
CL3				0.712	
CC4					0.813
CC2					0.782
CC1					0.733
CC3					0.717

*Source: Data processing results, 2025

Note: Rotation Method: Varimax with Kaiser Normalization. Total Variance Explained: 69.417%

The five-factor solution explained 69.417% of the total variance, with eigenvalues ranging from 1.487 to 6.062. All items loaded strongly on their intended factors (loadings >0.70) with minimal cross-loadings (<0.20), demonstrating clear factor structure and supporting the discriminant validity of the constructs.

4.3. Correlation Analysis

The correlation analysis revealed significant positive relationships between all organizational culture factors and innovation capability, providing preliminary support for the research hypotheses.

Table 3: Correlation Matrix and Descriptive Statistics

Variables	1	2	3	4	5	6
Innovation Supportive Culture	1					
Continuous Learning Culture	0.345	1				
Cross functional Collaboration	0.415	0.273	1			
Adaptability Culture	0.326	0.436	0.328	1		
Empowerment Culture	0.229	0.180	0.193	0.213	1	
Innovation Capability	0.595	0.564	0.554	0.582	0.327	1

*Source: Data processing results, 2025

Innovation-Supportive Culture showed the strongest correlation with Innovation Capability ($r = 0.595$, $p < 0.01$), followed by Adaptability Culture ($r = 0.582$, $p < 0.01$), Continuous Learning Culture ($r = 0.564$, $p < 0.01$), and Cross-functional Collaboration Culture ($r = 0.554$, $p < 0.01$). Empowerment Culture demonstrated the weakest, but still significant, correlation with Innovation Capability ($r = 0.327$, $p < 0.01$). All correlations between independent variables were below 0.80, indicating absence of multicollinearity

concerns.

4.4. Multiple Regression Analysis

Multiple linear regression analysis was conducted to test the research hypotheses and examine the collective impact of organizational culture factors on innovation capability. The regression model was statistically significant ($F(5,219) = 81.491$, $p < 0.001$) and explained 65.0% of the variance in innovation capability ($R^2 = 0.650$, Adjusted $R^2 = 0.642$).

Table 4: Multiple Regression Analysis Results

Independent Variables	B	Std. Error	β	t	Sig.	VIF
(Constant)	0.010	0.189	-	0.054	0.957	-
Innovation-Supportive Culture	0.233	0.038	0.287	6.199	0.000	1.343
Continuous Learning Culture	0.208	0.037	0.259	5.636	0.000	1.321
Cross-functional Collaboration	0.239	0.042	0.255	5.634	0.000	1.286
Adaptability Culture	0.244	0.042	0.269	5.795	0.000	1.350
Empowerment Culture	0.090	0.034	0.109	2.606	0.010	1.090

*Source: Data processing results, 2025

Note: $R^2 = 0.650$, Adjusted $R^2 = 0.642$, $F = 81.491$, $p < 0.001$. ** $p < 0.001$, $p < 0.05$

All five organizational culture factors significantly predicted innovation capability, supporting hypotheses H1 through H5. Innovation-Supportive Culture had the strongest individual impact ($\beta = 0.287$, $p < 0.001$), followed by Adaptability Culture ($\beta = 0.269$, $p < 0.001$), Continuous Learning Culture ($\beta = 0.259$, $p < 0.001$), and Cross-functional Collaboration Culture ($\beta = 0.255$, $p < 0.001$). Empowerment Culture showed the smallest but still significant effect ($\beta = 0.109$, $p < 0.05$). All VIF values were below 1.4, confirming absence of multicollinearity issues.

Regression Equation

Based on the regression coefficients, the final predictive model can be expressed as:

$$IC = 0.010 + 0.233*IS + 0.208*CL + 0.239*CC + 0.244*AC + 0.090*EC$$

The regression equation demonstrates that all cultural factors contribute positively to innovation capability, with Adaptability Culture (coefficient = 0.244) showing the strongest individual effect, followed closely by Cross-functional Collaboration Culture (coefficient = 0.239) and Innovation-Supportive Culture (coefficient = 0.233). The near zero intercept (0.010) indicates excellent model fit, suggesting that innovation capability is predominantly explained by the organizational culture factors included in the model.

This equation enables organizations to quantitatively assess the potential impact of cultural improvements on their innovation capability. For instance, a one-unit increase in Adaptability Culture is associated with a 0.244-unit increase in Innovation Capability, holding other factors constant. The practical significance of these findings is substantial, as the model explains 65% of the variance in innovation capability, providing managers with a robust framework for prioritizing cultural development initiatives.

4.5. Discussion of Results

The findings provide strong empirical support for the proposed research model, demonstrating that organizational culture factors significantly influence innovation capability in Vietnamese enterprises. The results align with theoretical expectations and previous research in the field, while also revealing interesting insights specific to the Vietnamese organizational context.

- **Hypothesis Testing Results:** All five research hypotheses were supported by the empirical evidence. The strongest relationship was found between Innovation-Supportive Culture and Innovation Capability (H1), which is consistent with innovation literature emphasizing the importance of organizational environments that actively encourage creativity, accept

reasonable risks, and provide necessary resources for innovation (Amabile *et al.*, 1996) [3]. The significant impact of Adaptability Culture (H4) reflects the importance of organizational flexibility and responsiveness in the rapidly changing Vietnamese business environment.

- The substantial effects of Continuous Learning Culture (H2) and Cross-functional Collaboration Culture (H3) highlight the knowledge-intensive nature of innovation processes and the necessity of integrating diverse perspectives and expertise. Interestingly, while Empowerment Culture (H5) showed the weakest relationship with Innovation Capability, it remained statistically significant, suggesting that employee autonomy and decentralized decision-making contribute to innovation, albeit to a lesser extent than other cultural factors.
- **Theoretical Implications:** These findings contribute to organizational culture theory by demonstrating the multidimensional nature of culture-innovation relationships. The strong explanatory power of the model ($R^2 = 0.650$) suggests that the five cultural dimensions collectively capture important aspects of innovation-conducive organizational environments. The results support the resource-based view of the firm by showing how organizational culture serves as a valuable, rare, and difficult-to-imitate resource that enhances innovation capability.
- **Practical Implications:** For Vietnamese enterprises seeking to enhance their innovation capability, the results suggest that developing Innovation-Supportive Culture should be the top priority, given its strongest individual impact. This involves creating environments that encourage creativity, accept reasonable failures, provide adequate resources, and recognize innovative efforts. Similarly, fostering Adaptability Culture through change awareness, quick response capabilities, and openness to external ideas appears crucial for innovation success.

The moderate but significant impact of all cultural factors suggests that a holistic approach to cultural transformation may be more effective than focusing on individual dimensions. Organizations should simultaneously work on building supportive environments, promoting continuous learning, facilitating cross-functional collaboration, enhancing adaptability, and empowering employees to maximize their innovation potential.

These findings have particular relevance for Vietnamese enterprises operating in an increasingly competitive global market, where innovation capability can provide sustainable competitive advantage. The results suggest that cultural transformation initiatives should be viewed as strategic

investments in organizational innovation capacity rather than merely administrative changes.

5. Conclusion

5.1. Summary of Key Findings

This study examined the impact of organizational culture factors on innovation capability in Vietnamese enterprises. The results demonstrate strong empirical support for all five proposed hypotheses. Innovation-supportive culture emerged as the most influential factor ($\beta = 0.287$), followed by adaptability culture ($\beta = 0.269$), continuous learning culture ($\beta = 0.259$), cross-functional collaboration culture ($\beta = 0.255$), and empowerment culture ($\beta = 0.109$). Collectively, these factors explained 65.0% of the variance in innovation capability, with excellent reliability scores for all constructs (Cronbach's α : 0.805-0.891).

5.2. Theoretical Contributions

This research contributes to organizational culture and innovation literature by developing and validating a comprehensive multidimensional framework examining five cultural factors simultaneously. The study extends innovation research to the Vietnamese context, providing the first systematic examination of culture-innovation relationships in this emerging economy. The findings support resource-based view theory by demonstrating how organizational culture functions as a strategic resource that enhances innovation capability.

5.3. Practical Implications

For Vietnamese enterprises, the findings suggest prioritizing innovation-supportive culture development through encouraging creativity, accepting reasonable risks, providing adequate resources, and recognizing innovative efforts. Organizations should also focus on building adaptability, continuous learning, cross-functional collaboration, and employee empowerment to maximize innovation potential. Policymakers should consider initiatives that help organizations develop innovation-conducive cultures through training programs and best practice sharing.

5.4. Limitations and Future Research

The cross-sectional design limits causal inferences, and reliance on self-reported measures may introduce response biases. The Vietnamese context may limit generalizability to other settings. Future research should employ longitudinal designs, multi-source data collection, and examine mediating mechanisms and moderating effects of environmental factors.

5.5. Final Remarks

This study provides robust evidence that organizational culture significantly influences innovation capability in Vietnamese enterprises. Organizations seeking enhanced innovation performance must adopt a holistic approach to cultural development. As Vietnamese enterprises compete globally, these insights offer evidence-based guidance for cultural transformation aimed at building innovation capability and maintaining competitive advantage.

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