

The Impact of Digital Transformation in Accounting on Business Performance: The Mediating Role of Cost Reduction in an Emerging Southeast Asian Economy

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Abstract: This study investigates how accounting digital transformation influences enterprise performance in manufacturing firms in emerging economies, highlighting the mediating role of operational cost reduction. Grounded in the resource-based view, dynamic capabilities theory, and the technology-organisation-environment framework, the study evaluates four dimensions: technology, databases, human resources, and process digitisation. Using a quantitative survey design (N = 395), empirical data from financial managers and chief accountants were analysed via partial least squares structural equation modelling in SmartPLS 4.0. Results show that all four digital dimensions significantly drive cost reductions, thereby enhancing firm performance. Process digitisation and human resource competencies demonstrate the strongest indirect effects on performance through operational cost savings. The structural model confirms both direct and indirect performance gains through streamlined workflows, reduced errors, and optimised resource allocation. These findings offer actionable strategic insights for corporate leaders pursuing efficiency-driven accounting strategies in emerging markets.

Keywords: accounting; technology; business cost; human resources

1. Introduction

In the contemporary era of the Fourth Industrial Revolution, digital transformation has evolved beyond mere technological adoption into a comprehensive paradigm shift in organisational operations and value creation. By integrating advanced digital technologies with behavioural and process-based improvements, organisations can achieve strategic objectives with enhanced speed and cost-efficiency (Abbas, 2024). This transition is particularly critical for sustainable development, as it strengthens competitive advantage by reducing operational costs, improving information quality, and facilitating data-driven managerial decision-making.

Within the accounting domain, the integration of artificial intelligence (AI), big data, cloud computing, and blockchain has fundamentally redefined financial management. These technologies enable real-time processing, bolster data security, and enhance the accuracy of financial reporting (Calderon-Monge & Ribeiro-Soriano, 2023).



Globally, the digital shift in accounting is no longer optional; it is an essential trend for optimizing transparency and analytical capabilities while minimizing human error (Mikhliif & Smaoui, 2024)

In Vietnam, digital transformation is being aggressively pursued to meet the demands of international integration and the burgeoning digital economy. However, the manufacturing sector, a cornerstone of the national economy, faces unique challenges. Manufacturing accounting is inherently complex, requiring the meticulous management of raw materials, labor, and overhead costs. While digital tools can automate these processes and optimize resource allocation, many Vietnamese enterprises remain hindered by infrastructure limitations, human resource gaps, and inconsistent digital awareness (Khuc & Hieu, 2025).

As a key economic hub in central Vietnam, Da Nang serves as a microcosm of these broader challenges. Despite the city's significant progress in digital infrastructure, manufacturing firms in the region often struggle with high initial investment costs and a shortage of specialized personnel. While the potential for digital transformation to enhance financial compliance and transparency is clear, empirical evidence regarding its direct impact on company performance within this specific geographic and sectoral context remains sparse. Despite the proliferation of digital transformation studies globally, the specific nexus between accounting digitalization and the performance of manufacturing enterprises in Da Nang has not been fully explored.

2. Literature review

2.1 Theoretical framework

The resource-based view (RBV), proposed by Penrose (2009) suggests that a company's internal resources are a fundamental factor in creating a competitive advantage. Bastein et al. (2014) extend this by arguing that unique resources create resource-position barriers that enhance organizational performance. In the modern economy, digital transformation, including artificial intelligence and automated accounting systems, serves as a strategic resource, enabling firms, particularly small and medium enterprises (SMEs), to optimize resource allocation and achieve superior financial efficiency. Within the RBV framework, these digital capabilities provide a sustainable competitive advantage only when they satisfy the valuable, rare, inimitable, and non-substitutable (VRIO) criteria: being valuable, rare, inimitable, and non-substitutable (Barney, 1995).

Under the RBV framework, digital accounting transformation yields a true competitive edge only when technology is deeply embedded into organizational routines and combined with human digital capabilities. Advanced database integration and specialized accounting human resources represent firm-specific, complex capabilities that cannot be easily imitated. By integrating hardware, software, and human expertise into a cohesive accounting information infrastructure, manufacturing enterprises create internal efficiencies that directly drive operational cost reductions and sustainable business outcomes.

While the RBV focuses on static resource bundles, the dynamic capabilities theory (Teece, 2007; Teece et al., 1997) addresses how organizations integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Dynamic capabilities are structured into three primary clusters: sensing digital opportunities, seizing technological investments, and transforming/reconfiguring operational routines.

In management accounting, process digitization functions as a dynamic operational capability. Modern manufacturing environments demand agility, real-time data access, and rapid cost control. Digital transformation enables accounting functions to continuously reengineer financial workflows, shifting from manual, paper-heavy tasks to automated, real-time reporting systems (e.g., automated inventory tracking, electronic invoicing, and predictive cost variance analysis). Through this ongoing transformation and reconfiguration, firms eliminate redundant administrative tasks, mitigate human calculation errors, and systematically compress unit operational costs, thereby elevating overall enterprise performance.

Developed by Tornatzky and Fleischer (1990), the TOE framework offers a comprehensive structural lens for investigating how contextual factors drive organizational technology adoption and post-implementation impact. The

framework classifies drivers into three contexts. Firstly, technological context encompasses both internal infrastructure (e.g., automated accounting software, enterprise databases) and emerging external platforms (e.g., cloud computing, AI analytics). Secondly, organizational context encompasses internal structures, human capital competencies, digital culture, and administrative support. Finally, environmental context pertains to market competitiveness, regulatory dynamics, and regional industrial characteristics. This study adapts the internal dimensions of the TOE framework to operationalize digital transformation in accounting into four core constructs: technology (DTAT) and databases (DTAD) representing the technological dimension; human resources (DTAH) representing the organizational context; and process digitization (DTAP) reflecting the functional synthesis of technology and business operations.

2.2 Definition of key concepts, literature review, and research model

Digital transformation represents a strategic paradigm shift wherein technology is integrated across all organizational facets to redefine business models, enhance performance, and facilitate real-time, data-driven decision-making (Kabir et al., 2025; Schilirò, 2024). In the accounting sector, this involves modernizing and automating financial processes to improve reporting accuracy and organizational agility. While the fourth industrial revolution is expected to disrupt traditional accounting and auditing roles (Abdullah & Almaqtari, 2024), leading to the automation of routine tasks (Riadi, 2022), it fundamentally elevates the strategic function of accounting. Consequently, professionals must undergo technological upskilling to maintain relevance, while organizations must realign their accounting systems to ensure long-term growth and a sustained competitive edge in an increasingly digital environment (Hoffmann, 2025). Emerging technologies, such as artificial intelligence (AI), big data, cloud computing, and blockchain, redefine managerial decision-making by providing high-quality, transparent financial information in real time (Abed & Begum, 2023; Kinana, 2025; Yarmoliuk et al., 2024).

Business performance Emerging technologies, such as artificial intelligence (AI), big data, cloud computing, and blockchain, redefine managerial decision-making by providing high-quality, transparent financial information in real time (Phornlaphatrachakorn & Na-Kalasindhu, 2020). Lebas and Euske (2007) conceptualize performance as a holistic set of financial and non-financial metrics that reflect the extent to which organizational goals are realized. Similarly, Suzana and Milica (2021) define business performance as an enterprise's continuous capacity to foster innovation, employment, and sustainable growth throughout its organizational lifecycle. In accounting digitalization contexts, firm performance encompasses both enhanced internal efficiency (e.g., error reduction, elevated productivity) and superior market responsiveness (Shwede et al., 2023).

Cost reduction is a proactive strategic mechanism to eliminate operational waste, optimize resource utilization, and improve unit-cost efficiency (Androniceanu, 2017; Hameed, 2025). In modern manufacturing, minimizing non-value-adding administrative and accounting overhead directly strengthens enterprise profitability and operational flexibility (Bello, 2020). Digital transformation in accounting acts as a primary catalyst for cost optimization by streamlining workflow redundancies, eliminating paper-based transaction costs, and minimizing human processing errors (Ali, 2024).

Drawing upon the multidimensional framework proposed by Ali (2024), this study conceptualizes accounting digital transformation through four key dimensions. Technology (DTAT) encompasses advanced hardware, software, and cloud infrastructure that bolster financial processing capabilities and reporting timeliness (Otia & Bracci, 2022). Databases (DTAD) serves as the structural backbone for centralizing, classifying, and securing financial data, enabling automated analytics and informed decision-making (Bresciani et al., 2021). Human Resources (DTAH) reflects the digital skills, analytical competencies, and technological readiness of accounting personnel required to operate digital systems effectively (Minh-Nhat et al., 2022). Process Digitization (DTAP) represents the re-engineering and automation of end-to-end accounting procedures, which optimizes organizational efficiency and fosters process innovation (Abbas, 2024).

The integration of digital accounting technology and centralized databases automates routine data entry, reduces transaction processing times, and eliminates manual calculation errors, thereby lowering administrative overhead

(Bresciani et al., 2021; Otia & Bracci, 2022). Furthermore, digitally competent accounting personnel can leverage automated platforms to streamline resource allocation, while digitized processes eliminate redundant paper-based procedures and material waste in manufacturing environments (Abbas, 2024; Bello, 2020; Minh-Nhat et al., 2022). Thus, we hypothesize:

H1: Technological factors in accounting digital transformation positively impact cost reduction in Da Nang's manufacturing enterprises.

H2: Database integration in accounting digital transformation positively impacts cost reduction in Da Nang's manufacturing enterprises.

H3: Human resource digital competencies positively impact cost reduction in Da Nang's manufacturing enterprises.

H4: Accounting process digitization positively impacts cost reduction in Da Nang's manufacturing enterprises.

Systematic cost reduction improves financial margins and enables firms to reallocate capital toward core value-creating activities, directly elevating firm performance (Androniceanu, 2017; Hameed, 2025). Concurrently, direct adoption of advanced technology and digitized accounting processes provides executives with real-time strategic insights, speeding up operational response times and bolstering overall business agility (Ali, 2024; Shwede et al., 2023). Therefore, we propose:

H5: Reducing business costs contributes positively to the performance of manufacturing businesses in Da Nang.

H6: Technological factors in accounting digital transformation positively affect the performance of manufacturing businesses in Da Nang.

H7: Process digitization in accounting digital transformation positively affects the performance of manufacturing businesses in Da Nang.

While digital technologies, database assets, human capital, and digitized processes provide the structural capacity for transformation, their ultimate contribution to enterprise performance is realized through operational efficiency mechanisms (Ali, 2024). Specifically, accounting digitalization optimizes resource deployment and eliminates operational waste, which translates into quantifiable cost savings, subsequently driving overall business performance gains (Yarmoliuk et al., 2024). Accordingly, cost reduction is posited as a vital operational mediator:

H8a: Cost reduction (RECO) positively mediates the relationship between Technology (DTAT) and Business performance (COPE).

H8b: Cost reduction (RECO) positively mediates the relationship between Databases (DTAD) and Business performance (COPE).

H8c: Cost reduction (RECO) positively mediates the relationship between Human resources (DTAH) and Business performance (COPE).

H8d: Cost reduction (RECO) positively mediates the relationship between Process digitization (DTAP) and Business performance (COPE).

To summarize, this study aims to bridge this research gap by identifying and assessing the extent to which digital transformation in accounting influences organizational performance. The findings will provide a critical empirical foundation for both business leaders and local policymakers to develop strategies that maximize the benefits of the digital era.

The proposed research model comprises four independent factors within the context of digital transformation that influence cost reduction, and the impact of cost reduction on the performance of manufacturing enterprises in Da Nang City. The model includes seven research hypotheses that need to be tested. Figure 1 presents the research model. Arrows indicate relationships according to the proposed hypotheses, all of which show positive effects.

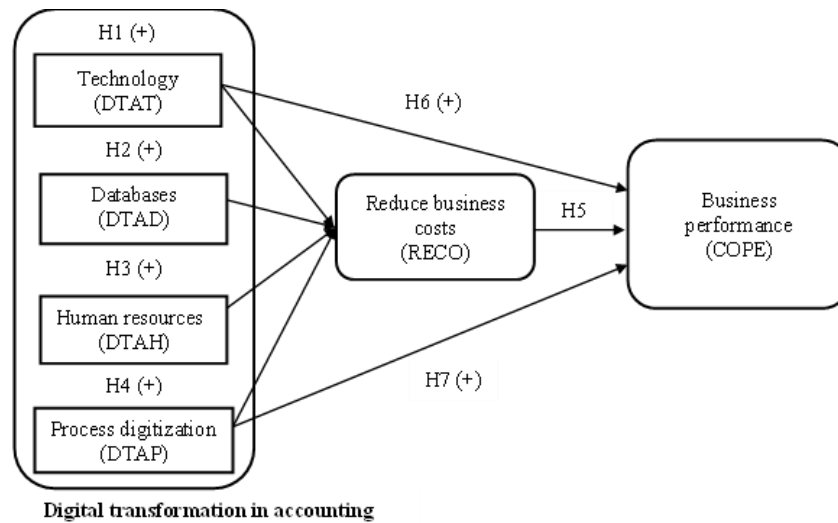


Figure 1. Proposed research model

3. Methodology

The research instruments were adapted from validated literature to ensure construct validity. Digital transformation (DT) was operationalized as a multidimensional construct comprising technology, databases, human resources, and process digitalization (Ali, 2024). Reduction in operating costs (RECO) and corporate performance (COPE) were assessed using scales adapted from Abdulkhaliq and Abd (2018) and Chinomona and Mofokeng (2015), respectively. All survey items were operationalized on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Following pre-testing and item refinement, 20 observed variables were retained across six latent constructs: 14 items measuring the four digital transformation dimensions, three items for cost reduction, and three items for corporate performance.

The target population comprised key organizational informants, including chief accountants, finance directors, and digital transformation executives in manufacturing enterprises operating in Da Nang, Vietnam. A purposive sampling approach combined with structured administration was utilized to target professionals with direct knowledge of enterprise accounting systems and financial performance. Questionnaires were distributed through dual channels using physical hard copies and secure online forms (Google Forms). Out of 414 total responses gathered, 19 were removed due to incomplete data or unengaged response patterns. The final effective sample consisted of 395 valid observations, yielding an acceptable response rate and exceeding the minimum sample size requirements for structural equation modeling as per power analysis standards.

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4.0, following the two-stage evaluation methodology outlined by (Hair et al., 2021). In the first stage, the reflective measurement model (outer model) was evaluated for construct reliability and validity. Indicator reliability was assessed via outer loadings, internal consistency through Cronbach's Alpha and Composite Reliability (CR), and convergent validity via the Average Variance Extracted (AVE). Discriminant validity was rigorously verified using both the traditional Fornell-Larcker criterion and the Heterotrait-Monotrait ratio of correlations (HTMT) with a conservative threshold of less than 0.85 (Hair et al., 2021).

In the second stage, the structural model (inner model) was evaluated to test the research hypotheses. To address potential bias issues, multicollinearity was first assessed using the variance inflation factor (VIF). Subsequently, the significance and relevance of the structural path coefficients (β) were determined using a non-parametric bootstrapping procedure with 5,000 subsamples. The model's explanatory power and predictive relevance were further validated through the coefficient of determination (R^2) and the Q^2 effect size obtained via the PLS predict procedure. The

model's results for measuring the concepts ensure that the scales of the concepts are satisfied, meeting the following conditions:

Table 1. Acceptance criteria for metric

Metric	Threshold	Reference
Outer Loadings	≥ 0.7	Joseph F. Hair (2009)
Cronbach's Alpha (CA)	≥ 0.7	Joseph F. Hair (2009)
Composite Reliability (CR)	0.7–0.9	Netemeyer et al. (2003)
Average variance extracted (AVE)	≥ 0.5	Höck and Ringle (2010)
HTMT Ratio	< 0.85	Henseler et al. (2015)
Fornell-Larcker Criterion	< 0.9	SmartPLS 4.0
Variance inflation factor (VIF)	Avoid values > 5 or < 0.2	Lowry and Gaskin (2014)

4. Results

Table 2 presents the demographic profile and organizational context of the 395 respondents. The sample exhibited near-parity by gender (50.13% female) and was predominantly composed of individuals aged 28–35 (50.89%). Most respondents hold higher education qualifications: 59.75% ($n = 236$) have a university degree, and 26.33% ($n = 104$) have a master's degree.

In terms of job positions, key decision-makers and senior accounting personnel represented the majority of the sample: chief accountants comprised 48.10% ($n = 190$), managers accounted for 28.35% ($n = 112$), and senior staff accountants made up 23.04% ($n = 91$). Furthermore, participant tenure was substantial, with over half reporting 5 to 10 years of professional experience (51.90%, $n = 205$) and nearly one-third reporting 10 to 20 years 30.13% ($n = 119$), underscoring the sample's high degree of domain expertise.

All participating manufacturing firms ($n = 395$, 100%) had actively implemented digital transformation initiatives in their accounting operations. While technology adoption and process digitalization were universally reported across all enterprises (100%), implementation rates varied for other digital transformation domains. Specifically, human resource digital training initiatives were adopted by 50.89% of firms ($n = 201$), whereas centralized database integration was established in 46.84% of surveyed enterprises ($n = 185$).

Table 2. Data analysis characteristics

Characteristic	n	%
Gender	395	100%
Female	198	50.13%
Male	197	49.87%
Age	395	100%
22-27 years old	101	25.57%
28-35 years old	201	50.89%
36-45 years old	78	19.75%
Over 45 years old	15	3.80%
Degree	395	100%
College	55	13.92%

University	236	59.75%
Master's degree	104	26.33%
Job position	395	100%
Accountant	91	23.04%
Chief Accountant	190	48.10%
Manager	112	28.35%
Other	2	0.51%
Tenure	395	100%
Under 5 years	54	13.67%
From 5-10 years	205	51.90%
From 10-20 years	119	30.13%
Over 20 years	17	4.30%
Implementing digital transformation in accounting	395	100%
Yes	395	100%
No	0	0%
Digital transformation content in accounting	395	100%
Application of technology	395	100%
Database integration	185	47%
Training and developing human resources	201	51%
Applying digitalization to processes.	395	100%

The measurement model was assessed for reliability, convergent validity, and discriminant validity. As summarized in Table 3, all constructs demonstrate high internal consistency, with Cronbach's Alpha and Composite Reliability (CR) values ranging from 0.723 to 0.910, well above the 0.7 threshold. Convergent validity is confirmed as all outer loadings exceed 0.7 and the Average Variance Extracted (AVE) for each construct surpasses 0.5, ranging from 0.643 to 0.771.

Table 3. Summary of load factors in the PLS-SEM model.

Structure	Index	Loading factor (>0.7)	Cronbach's Alpha (CA) (>0.7)	Composite reliability (CR) (>0.7)	AVE (>0.5)
Technology	DTAT1	0.849	0.819	0.88	0.648
	DTAT2	0.825			
	DTAT3	0.746			
	DTAT4	0.796			

Database	DTAD1	0.848	0.796	0.879	0.707
	DTAD2	0.854			
	DTAD3	0.82			
Human resources	DTAH1	0.849	0.782	0.872	0.694
	DTAH2	0.797			
	DTAH3	0.852			
Process digitization	DTAP1	0.813	0.838	0.892	0.673
	DTAP2	0.816			
	DTAP3	0.84			
	DTAP4	0.811			
Reduce costs	RECO1	0.734	0.723	0.843	0.643
	RECO2	0.816			
	RECO3	0.852			
Company performance	COPE1	0.865	0.851	0.91	0.771
	COPE2	0.895			
	COPE3	0.874			

Discriminant validity was verified using both the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. All HTMT values are below 0.85, indicating distinctiveness between constructs. Furthermore, the square root of the AVE for each construct (diagonal values in Table 4) is greater than its correlation with other latent variables, satisfying the Fornell-Larcker requirement.

The results show that all observed variables have VIFs < 5; thus, there is no multicollinearity among them (Table 5).

Table 4 Discriminant Validity and Collinearity

	COPE	DTAD	DTAH	DTAP	DTAT	RECO
<i>Heterotrait-monotrait ratio (HTMT) (<0.85)</i>						
COPE						
DTAD	0.542					
DTAH	0.556	0.363				
DTAP	0.523	0.277	0.324			
DTAT	0.501	0.312	0.271	0.212		
RECO	0.574	0.335	0.402	0.376	0.283	
<i>Fornell-Larcker criterion</i>						
COPE	0.878					

DTAD	0.451	0.841				
DTAH	0.452	0.289	0.833			
DTAP	0.442	0.228	0.265	0.820		
DTAT	0.423	0.249	0.219	0.182	0.805	
RECO	0.452	0.261	0.309	0.299	0.224	0.802

Note: The square root of the AVE diagonal is greater than the (off-diagonal) correlations for mirror structures to satisfy the Fornell–Larker criterion; the lower or upper confidence interval should not include a value of 1 to pass HTMT.

Table 5. Statistics of the coefficient of variance inflation

	VIF
DTAD -> RECO	1.16
DTAH -> RECO	1.164
DTAP -> COPE	1.116
DTAP -> RECO	1.117
DTAT -> COPE	1.069
DTAT -> RECO	1.105
RECO -> COPE	1.136

The structural model was assessed using a bootstrapping procedure with 5,000 resamples to evaluate the significance of the hypothesized paths. As shown in Table 6, all seven hypotheses (H1–H7) are supported at a significance level of $p < 0.05$. Specifically, the four dimensions of accounting digital transformation, technology (H1), database (H2), human resources (H3), and process digitization (H4, positively influence cost reduction (RECO). Furthermore, RECO significantly enhances company performance (H5). Notably, technology (H6) and process digitization (H7) also exert strong direct positive effects on Company Performance (COPE).

Table 6. Results of hypothesis testing in the research model.

Hypothesis	Path coefficient β (Original sample)	Standard deviation (SE)	Value t	P-digital (< 0.05)	Result	Order of action
DTAT → RECO	0.113	0.048	2,351	0.019	Accepted	4
DTAD → RECO	0.132	0.043	3,024	0.003	Accepted	3
DTAH → RECO	0.194	0.049	3,957	0.000	Accepted	2
DTAP → RECO	0.197	0.048	4,086	0.000	Accepted	1
RECO → COPE	0.295	0.043	6.82	0.000	Accepted	
DTAT → COPE	0.302	0.042	7,269	0.000	Accepted	

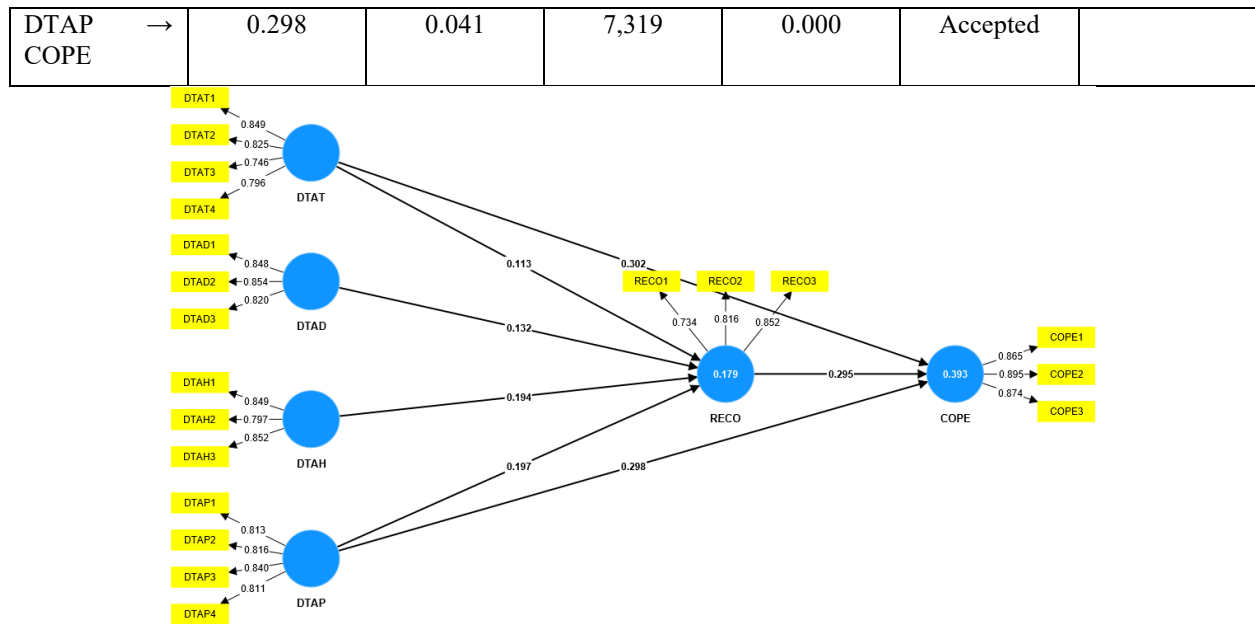


Figure 2. Results of the structural model

Mediation analysis reveals that cost reduction (RECO) plays a statistically significant mediating role in all tested pathways. The strongest indirect impacts on COPE originate from process digitization ($\beta=0.058$) and human resources ($\beta=0.057$) (Table 7)

The model's explanatory power is substantial, with an R^2 of 0.393 for Company Performance, indicating the model explains 39.3% of its variance. Additionally, the Q^2 values for COPE (0.353) and RECO (0.157) exceed Cohen's (1988) threshold, confirming the model's medium-to-high predictive relevance (Table 8)

Table 7. Results of the indirect impact of research variables and activity effectiveness

Relationship	Pathway coefficient β	Standard deviation	Value t	P-digital (<0.05)	Result
DTAT -> RECO -> COPE	0.033	0.015	2.2	0.028	Accepted
DTAD -> RECO -> COPE	0.039	0.016	2,412	0.016	Accepted
DTAP -> RECO -> COPE	0.058	0.016	3,742	0.000	Accepted
DTAH -> RECO -> COPE	0.057	0.019	3,021	0.003	Accepted

Table 8. Accuracy (R^2) and predictive correlation (Q^2) of the model

	R-square	R-square adjusted	Q^2 predict	RMSE	MAE
COPE	0.393	0.388	0.353	0.809	0.639
RECO	0.179	0.17	0.157	0.923	0.742

5. Discussion

This study empirically investigates the structural mechanisms through which accounting digital transformation impacts firm performance within manufacturing enterprises in an emerging country context. Utilizing a PLS-SEM framework, the findings reveal that all four dimensions of accounting digital transformation, technology (DTAT), databases (DTAD), human resources (DTAH), and process digitization (DTAP), exert significant positive effects on operational cost reduction (RECO), which in turn substantially drives overall firm performance (COPE).

The statistical analysis confirms that technological adoption, database integration, human capital development, and process digitization each significantly contribute to compressing operational expenses. This aligns with prior empirical literature demonstrating that digital tools (e.g., electronic invoicing, automated data reconciliation, and digital signatures) streamline administrative workflows, eliminate paper-based material usage, and mitigate costly operational errors (Faraj Gheni & Baydaa Fadhil, 2026; Otia & Bracci, 2022). Deploying core digital infrastructure, such as cloud platforms and advanced analytics, enables manufacturing firms to comply with rigorous financial reporting standards while enhancing data accuracy and transparency. However, as Vogelsang et al. (2018) emphasize, digital transformation extends beyond mere software acquisition. Effective implementation necessitates alignment between enterprise digital infrastructure (such as ERP systems) and employee technical competencies. Automating routine accounting tasks minimizes manual entry errors and frees accounting professionals to engage in strategic managerial analysis, thereby fostering long-term organizational profitability (Daud, 2024; Nhan et al., 2025). A pivotal empirical finding of this research is the mediating role of cost reduction (RECO). While all digital transformation dimensions relate to enterprise outcomes, process digitization (DTAP) and human resources (DTAH) demonstrate the most substantial indirect impacts on business performance via cost optimization. This indicates that within the manufacturing sector, digital investments yield maximum performance dividends when combined with standardized operational routines and digitally skilled personnel. These insights resonate with (Ali, 2024), who observed that cost efficiency serves as the principal operational bridge connecting digital technology adoption to financial performance.

For corporate leaders, chief financial officers, and decision-makers in emerging manufacturing hubs, this study offers concrete strategic insights. First, investing strictly in digital hardware or software without parallel investments in human capital yields sub-optimal returns, so management must prioritize continuous digital upskilling for accounting staff. Second, because process digitization exerts the strongest indirect effect on performance, organizations should re-engineer traditional accounting processes prior to full-scale automation to avoid digitalizing inefficient workflows. Finally, cost reduction should not be viewed merely as short-term expense cutting, but rather as a strategic tool to free up resource capacity for innovation and market expansion.

Despite its contributions, this study acknowledges several limitations that point to promising avenues for future research. The empirical sample was restricted to manufacturing enterprises in a single regional hub (Da Nang, Vietnam), which may constrain external generalizability. Future inquiries should expand the geographic and cross-sectoral scope to cross-validate these findings across different regions and service industries. Additionally, data collection relied primarily on key informants such as owners, managers, and chief accountants. Future research should incorporate multi-level surveys involving general accounting employees to explore user-centric behavioral intentions, psychological barriers, and digital culture dynamics. Lastly, firm performance was evaluated using subjective, perceptual scales. To ensure higher quantifiable rigor, subsequent studies should integrate objective financial metrics (such as ROA, ROE, and ROS) alongside secondary accounting data, while explicitly factoring in digital implementation costs, specialized IT infrastructure investments, and maintenance expenses (Jasim & Abboud, 2026; Otia & Bracci, 2022).

6. Conclusion

Grounded in the resource-based view, the dynamic capabilities theory, and the technology-organization-environment framework, this study develops a comprehensive model linking four dimensions of accounting digital transformation, technology, databases, human resources, and process digitization, to cost reduction and overall firm performance. The empirical findings demonstrate that accounting digital transformation positively influences company performance both directly and indirectly through the key mediating mechanism of operational cost reduction.

Specifically, process digitization and digitally competent human capital exert the strongest indirect effects on organizational performance. These results indicate that capital investments in accounting technologies yield maximum efficiency dividends when supported by standardized operational workflows and adequately trained accounting personnel. Ultimately, this research provides strategic insights for manufacturing enterprises in emerging economies seeking to optimize internal resource allocation, streamline financial operations, and secure sustainable competitive advantages in the digital era.

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