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ROLE OF INFORMATION TECHNOLOGY CAPABILITY IN ENHANCING BUSINESS PERFORMANCE AND COMPETITIVE ADVANTAGE

Dr. Retno Cahyaningati

Lecturer, Accounting, Area of Specialization: Accounting, Entrepreneurship, MSME Financial Management, Digital Marketing, and Halal Assurance, Institute of Technology and Business Widya Gama Lumajang, Indonesia, Email id: retnocahyaningati@dosen.itbwigalumajang.ac.id, Orcid id : 0000-0001-9180-7480

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Abstract
Rapid advances in digital technologies have transformed how firms organize resources, execute business processes, and compete in increasingly dynamic markets. The research design used was a quantitative and explanatory research design to examine the relationship between technological capability, organizational performance and market-based competitive outcomes. Digital transformation capability and technological dimensions of digital transformation were used to measure information technology capability, and profitability, growth and cash-flow indicators were used to measure business performance. Tobin's Q was used as a proxy evaluate of competitive advantage. The proposed relationships were tested using descriptive statistics, Pearson correlation, multiple regression, robustness analysis, and mediation analysis. The results show that there is a significant positive relationship between information technology capability and the performance of the business, especially on return on assets and firm growth. But the direct impact of information technology capability on competitive advantage was not statistically important. The effect of business performance on competitive advantage was also nonsignificant, and the hypothesized mediation effect of business performance was not confirmed. These results imply that technological capability has a direct influence on internal outcomes of the organization and its finances that is more direct than its impact on the immediate market-based valuation of the firm. The study concludes that in order to be a source of sustainable competitive advantage, the capability of information technology could be related to complementary factors, including operational integration, innovation capability, quality of governance and strategic alignment.

Keywords: *information technology capability, business performance, competitive advantage, digital transformation, Tobin's Q*

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1. Introduction

Organizations are surrounded by a rapidly changing technology landscape, fierce competition and growing reliance on digital infrastructures, making information technology capability a more valuable resource. Organizations are no longer judged on whether they have technological resources available but, on their capability to integrate, organise and reconfigure these resources to complete strategic and operational goals. As a result of the changes that have occurred in the way businesses operate, make decisions, interact with customers and how they work, there are new needs for technology-based capabilities and managerial coordination (Baiyere et al., 2020). Digitalization has also become more strategic, which has led firms to integrate technology investments into organizational goals and objectives instead of considering digitalization as a standalone technical function (Correani et al., 2020).

The capability of information technology broadly may be defined as an organization's capacity to mobilize technological infrastructure, technical expertise, digital resources and managerial processes to enhance business activities. This is not just about hardware or software; it's about leveraging technological assets alongside organizational insights and strategic goals. The concept of digital transformation is frequently discussed as a change process of the organization that leverages digital technologies to shape business models, organizational structures and mechanisms of value creation (Gong & Ribiere, 2021). Likewise, the difference in a conventional IT-enabled organizational conversion and the more comprehensive digital transformation shows that technology can impact organizational identities, structures, and strategic relationships as well as processes.Similarly, through the difference between conventional IT-enabled organizational transformation and broader digital transformation, it can be seen that technology can shape not only processes but also identities, structures, and strategic relationships. As a result, companies with a strong IT capability might have an edge when it comes to adjusting to technological disruption and shifting market dynamics.

There has been lots of academic interest in the link between technological capability and business performance. While digitalization can have a positive impact on organizational efficiency, productivity, information processing, responsiveness and innovation, these advantages can be hindered in firms by the ability to effectively deal with technological and organizational challenges (Eller et al., 2020). However, in a resource-based perspective, information and communication technology can support better organizational performance if the technological resource is valuable, strategically deployed and matched with appropriate organizational capabilities, argues Karim et al. (2022). Digital technology-enabled dynamic capabilities also have been proven to improve the sensing ability of changes in the market, exploit new opportunities to firms, and reconfigure resources, thus improving organizational performance in uncertain environments (Li et al., 2022). The following arguments indicate that the IT capability must be approached as an strategic organizational capability and not just a technical asset.

From a broader strategic perspective, digital transformation has important implications for competitive advantage. Organizations can leverage technologic capabilities to enhance customer experiences, foster innovation, address operational inefficiencies, respond to the market quickly, and create value propositions that are differentiated. Despite the importance of technology, the benefits of its use are not automatic as firms are very different in their capabilities to translate technological investments into strategic outcomes of value (Leão & da Silva, 2021). Dynamic capabilities are even more crucial because they allow organizations to reconfigure resources and business processes due to external change (Matarazzo et al., 2021). The capacity to build and restructure internal capabilities is also key to successful digital transformation as indicated by evidence from small and medium-sized enterprises (Civelek et al., 2023).

As this literature grows, the complexity of digital transformation is also pointed out. It pervades organizational strategy and structure, customer relationships, innovation, and business models, and is a central topic in the research and theories of information systems and management (Verhoef et al., 2021). As per the field reviews, research on digital transformation has escalated in recent years, although it is still disparate with varying theoretical approaches and organizational settings (Hanelt et al., 2021). The importance of more integration between digital transformation theory and strategic management and organizational capability research is corroborated by similar observations (Nadkarni & Prügl, 2021). The importance of digital transformation is also recognized in business and management literature, which is increasingly acknowledging that the value of digital transformation is linked to embedding the technological initiatives in the organizational resources and its strategic processes (Kraus et al., 2022).

Many questions are still unanswered in spite of all this literature. Digitalization, IT investment and individual IT practices are noted in numerous studies, while a limited number of studies examine the relationship between the general IT capability and the business performance and/or competitive advantage at the same time. Furthermore, better operational or financial results do not always lead directly to better market based

Vol. 12 Issue 10 (October, 2026)
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competitive results. This means there is a need to differentiate between the internal performance advantage of IT capability and the overall strategic implications. The understanding of these relationships is especially important since technology can increase profitability and growth but not necessarily create an immediate competitive premium. Thus, this study aims to analyze the direct and indirect associations in a single empirical setting between information technology capability, business performance and competitive advantage.

Objectives:

- To study the correlation between Information Technology Capability and Business Performance.
- To analyze the effect of information technology capability on competitive advantage.
- To check if competitive advantage is mediated by business performance and information technology capability of the business.

Hypotheses:

H1: IT capability has a positive effect on business performance. This is stated as supported by the regression results.

H2: Capability around information technology has a positive and significant link to competitive advantage.

H3: The impact of business performance on competitive advantage is significant and positive.

H4: There is a significant mediating relationship between information technology capability and competitive advantage.

2. Methodology

2.1 Research Design

The study used a quantitative and explanatory research design to investigate the role of information technology capability in improving business performance and competitive benefit. The study employed a secondary-data approach since the study aimed at assessing measurable relationships between technological capability, organizational performance, and market-based competitive outcomes. The analytical framework was based on the Resource Based View (RBV) that views information technology resources and related organizational capabilities as strategic assets that may help enhance firm performance and competitive position.

2.2 Data Source and Sample

The study employed the Corporate Digital Transformation Dataset, comprising firm-level data on digital transformation, technological infrastructure, research and development, financial performance, governance and organizational characteristics. There are 25 variables and 2000 observations. It is a suitable study for the following reason: it offers relevant indicators of the information technology capability, business performance, competitive position and the control variables of a firm. The data screening also showed that there were no missing observations for the variables to be analyzed in the initial data screening (Colabsss, 2025).

2.3 Measurement of Variables

Information technology capability was the key independent variable and was largely measured using the digitaltransindex which reflects the overall level of digital transformation capability. Technological infrastructure, technical resource intensity and research and development capability were represented by the additional indicators infra_score, tech_ratio and rd_intensity. The business performance was quantified by roa, growth and cashflow_ratio, which indicate the profitability, firm growth and cash-flow performance, respectively. To create a composite measure of business performance, these variables were standardized and the combined. Competitive position was captured as competitive advantage, which was proxied by the tobin_q measure, a market-based measure. A higher Tobin's Q was interpreted to be a sign of better market valuation, growth potential and better strategic value generation for the firm with respect to its assets. With the available secondary data, there was no direct variable that expresses competitive advantage and it was therefore decided to use a proxy approach.

2.4 Control Variables

To address potential differences that may have affected performance and competitive results among firms, a number of firm-specific control variables were added. These comprised the firm size (size_ln), the financial leverage of the firm (lev), the organisational age (firm_age), and the state ownership (soe). These variables were added to the regression models to control for the effect on the principal dependent variables other than the information technology capability of the firm.

2.5 Data Analysis

The data was analysed using both descriptive and inferential statistical methods. Descriptive statistics including mean, standard deviation, minimum, and maximum values were computed to summarise the features of the variables. Lastly, Pearson correlation analysis was used to evaluate the direction and strength of the correlations between the variables of information technology capability, business performance, and competitive advantage

Vol. 12 Issue 10 (October, 2026)
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DOIhttps://doi.org/10.69980/31f6vc24

with the chosen control variables. The direct effect of information technology capability on the business performance and business competitive advantage was tested by using multiple linear regression analysis. The values of Variance Inflation Factor were checked for multicollinearity, the values of R^2, Adjusted R^2, regression coefficients, F statistics, confidence interval and p value were examined to assess the model performance and statistical significance.

2.6 Mediation Analysis

To explore the ability of business performance to mediate the relationship between information technology capability and competitive advantage, a mediation analysis was conducted. Here, information technology capability was hypothesized as the independent variable, business performance as the intervening variable, and Tobin's Q as the dependent variable. The indirect effect was estimated with a bootstrapping procedure, 5000 bootstraps and 95% confidence intervals. Mediation was deemed to be statistically significant when the CI for the indirect effect did not contain zero.

2.7 Robustness and Diagnostic Assessment

To test the robustness of the results the model was repeated with each measure of business performance, such as ROA, growth and cash-flow ratio. Other measures of information technology capability were also considered such as infrastructure score, technical resource ratio and R&D intensity. The following regression diagnostics tools were used to detect possible multicollinearity, influential cases, and model assumptions violation: Cook's distance, studentized residual, Leverage values, and DFBeta values.

2.8 Ethical Considerations

The study was purely an existing secondary data source and no personal information or human interaction was performed. As such, there was no specific participant recruitment, intervention, or informed-consent process involved in the present analysis. The data set was used solely for academic research purposes, and suitable reference and credit to the original data source was maintained for transparency, responsible data use and research reproducibility.

3. Results

3.1 Descriptive Statistics

A total of 2,000 firm-level observations were analysed in the Corporate Digital Transformation Dataset. Digital transformation index was the main component of information technology capability, while cash-flow ratio, standardized values of return on assets, and firm growth were the three components of business performance. The market proxy for competitive advantage was used as Tobin's Q. The average digital transformation index of the sampled firms was 0.5260, and the standard deviation of the digital transformation index was 0.1495, suggesting moderate variation in information technology capability among the sampled firms as shown in Table 1. The average score of the infrastructure was 0.5948, while the mean technical-resource ratio and R&D intensity were 0.3230 and 0.1291, respectively. The mean return on assets was 0.1042, the average growth ratio was 0.1593 and the average cash flow ratio was 0.0986. The standardized composite business-performance measure was around zero as expected from the standardization procedure. Tobin's Q has a relatively large standard deviation of 1.2932, confirming that there was a great deal of variation around the mean.

Table 1. Descriptive statistics of the principal study variables

Variable	Mean	SD	Minimum	Maximum
Digital transformation index	0.5260	0.1495	0.0000	1.0000
Infrastructure score	0.5948	0.2302	0.2001	0.9998
Technical-resource ratio	0.3230	0.1584	0.0500	0.5996
R&D intensity	0.1291	0.0693	0.0100	0.2499
Return on assets	0.1042	0.0852	-0.0499	0.2497
Firm growth	0.1593	0.2618	-0.3000	0.5999
Cash-flow ratio	0.0986	0.1153	-0.0999	0.2997
Business-performance composite	0.0000	0.5700	-1.6542	1.5675
Tobin's Q	2.8049	1.2932	0.5023	4.9946
Firm size	11.9895	2.3257	8.0052	15.9991
Firm age	20.0515	11.1122	1.0000	39.0000
Leverage	0.5073	0.2315	0.1005	0.8999

Vol. 12 Issue 10 (October, 2026)
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Figure 1 shows the distribution of business performance by the three digital-transformation categories. The mean standardized score of business performance for firms in the lowest digital-transformation group was -0.1841, while the standardized score of business performance for firms in the intermediate group was -0.0117, and for firms in the highest digital-transformation group, it was 0.1393. This gradual progression offers some preliminary evidence of the connection between information technology capability and superior business working.

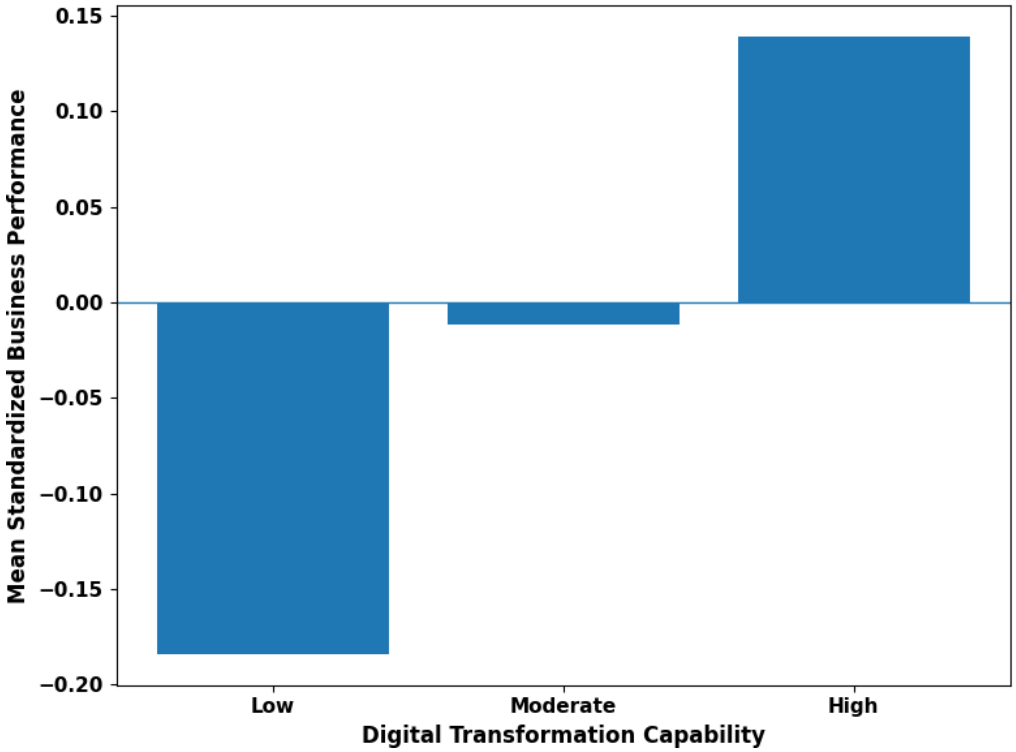

Figure 1. Distribution of standardized business performance across digital-transformation capability categories

3.2 Correlation Analysis

The bivariate relationships between information technology capability, business performance, competitive advantage and the major technological dimensions were examined by using Pearson correlation analysis. The results have been summarized in Table 2. The correlation between digital transformation index and business performance was found to be significant and positive at $r = 0.1836$ and $p<0.001$. It was also strongly related to infrastructure capability at $r = 0.5688$, $p < 0.001$, technical-resource ratio at $r = 0.2681$, $p < 0.001$, and R&D intensity at $r = 0.2307$, $p < 0.001$. These links help to explain the digital transformation index as a general indicator of an organization's information technology capabilities. However, the relationship between DTi and Tobin's Q was relatively low at $r = 0.0142$, $p = 0.525$. The relationship between Tobin's Q and business performance was also weak with $r = 0.0245$ and $p = 0.273$.

Table 2. Pearson correlation matrix of the major study variables

Variable	1	2	3	4	5	6
1. IT capability	1.000					
2. Business performance	0.184***	1.000				
3. Tobin's Q	0.014	0.025	1.000			
4. Infrastructure score	0.569***	-0.004	0.028	1.000		
5. Technical-resource ratio	0.268***	-0.008	-0.003	-0.047*	1.000	
6. R&D intensity	0.231***	0.009	-0.031	0.011	0.015	1.000

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Vol. 12 Issue 10 (October, 2026)
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The correlation between the information technology capability and the business performance is further illustrated in Figure 2. The fitted regression line shows a positive overall association, with firms that were more capable of digital transformation being more likely to have a higher business-performance score than firms that were less capable of digital transformation.

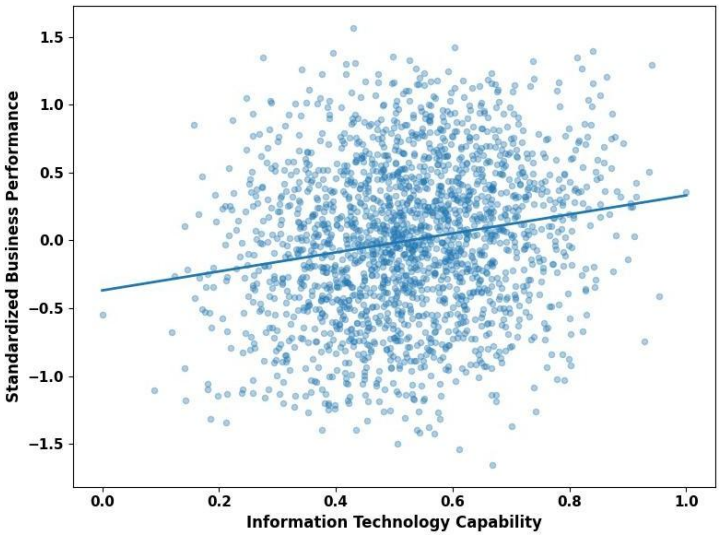

Figure 2. Relationship between information technology capability and standardized business performance

The entire relationship between the various technological and performance indicators is graphically presented in Figure 3. The heatmap clearly shows that also the relationship between the digital transformation index and infrastructure score is comparatively strong, whereas the relationship with Tobin's Q are comparatively low.



Figure 3. Correlation heatmap of information technology capability, technological resources, business performance, and competitive advantage indicators

3.3 Effect of Information Technology Capability on Business Performance

Multiple linear regression was used to test the significance of the information technology capability after controlling for firm size, firm age, leverage, and state ownership on the business performance. Table 3 presents the results of the overall model with an R^2 of 0.0355 and adjusted R^2 of 0.0331, which were statistically significant. The model test was statistically significant with $F = 15.04$ and p value < 0.001. The capability of information technology had a positive impact on business performance. The unstandardized regression coefficient was $B = 0.6948$, with a robust standard error of 0.0840 and $p < 0.001$. The standardized coefficient

Vol. 12 Issue 10 (October, 2026)
ISSN: 2208-2190 Pages- 109-119
DOIhttps://doi.org/10.69980/31f6vc24

was β = 0.1823, which meant that, after controlling for all other factors included in the model, a 1 standard deviation increase in information technology capability was associated with a 0.18 standard deviation increase in the business performance. The effects of firm size, firm age, leverage, and state ownership were not significant at the 0.05 level in this model. The results confirm H1 stating that the IT capability has a positive effect on business performance.

Table 3. Multiple regression results predicting business performance

Predictor	B	Robust SE	Standardized β	t	p
Constant	-0.2328	0.0860	—	-2.707	0.007
IT capability	0.6948	0.0840	0.1823	8.268	<0.001
Firm size	-0.0085	0.0053	-0.0347	-1.595	0.111
Firm age	-0.0012	0.0011	-0.0230	-1.055	0.291
Leverage	-0.0148	0.0545	-0.0060	-0.272	0.786
State ownership	0.0005	0.0251	0.0005	0.021	0.983

Model statistics: $R^2 = 0.0355$; Adjusted $R^2 = 0.0331$; $F = 15.04$; $p < 0.001$; $N = 2,000$.

3.4 Effect of Information Technology Capability on Competitive Advantage

A second regression model tested whether information technology capability was a direct determinant of the competitive advantage that is measured as Tobin's Q. The model accounted for a small amount of variance in Tobin's Q ($R^2 = 0.0016$ and adjusted $R^2 = -0.0009$), as seen in Table 4. This model was not statistically significant ($F = 0.632$, $p = 0.676$). Information technology capability exhibited a positive direct effect on Tobin's Q which was not statistically significant ($B = 0.1439$, $p = 0.465$). So, the evidence available did not support direct market-valuation effect of information technology capability.

Table 4. Regression results predicting competitive advantage from information technology capability

Predictor	B	Robust SE	t	p	95% CI
Constant	2.6690	0.2052	13.005	<0.001	2.2668 to 3.0713
IT capability	0.1439	0.1967	0.731	0.465	-0.2417 to 0.5294
Firm size	-0.0056	0.0125	-0.443	0.658	-0.0302 to 0.0190
Firm age	0.0036	0.0026	1.382	0.167	-0.0015 to 0.0086
Leverage	0.0817	0.1277	0.640	0.522	-0.1685 to 0.3319
State ownership	0.0283	0.0580	0.488	0.626	-0.0854 to 0.1419

Model statistics: $R^2 = 0.0016$; Adjusted $R^2 = -0.0009$; $F = 0.632$; $p = 0.676$; $N = 2,000$.

3.5 Business Performance and Competitive Advantage

Business performance was then included as a separate term in the competitive-advantage regression model to evaluate the effect of business performance on the model alone to provide a foundation for mediation testing. The results in Table 5 showed that business performance had a small positive coefficient of $B = 0.0526$ and it was not statistically significant at $p = 0.319$. The direct coefficient of information technology capability dropped from 0.1439 to 0.1073 after business performance was added to the model, but the change wasn't statistically significant ($p = 0.592$). The model accounted for about 0.21% of the variance in Tobin's Q.

Table 5. Regression model including business performance as a predictor of competitive advantage

Predictor	B	Robust SE	Standardized β	t	p
Constant	2.6813	0.2057	—	13.038	<0.001
IT capability	0.1073	0.2004	0.0124	0.535	0.592
Business performance	0.0526	0.0527	0.0232	0.997	0.319
Firm size	-0.0051	0.0126	-0.0092	-0.407	0.684
Firm age	0.0036	0.0026	0.0312	1.405	0.160
Leverage	0.0825	0.1276	0.0148	0.646	0.518
State ownership	0.0283	0.0580	0.0109	0.487	0.626

Model statistics: $R^2 = 0.0021$; Adjusted $R^2 = -0.0009$; $N = 2,000$.

Vol. 12 Issue 10 (October, 2026)
ISSN: 2208-2190 Pages- 109-119
DOIhttps://doi.org/10.69980/31f6vc24

The results of these findings showed that H3 was not supported since there was no statistically significant direct effect of business performance on the market-based competitive-advantage proxy. The standardized coefficients of the main structural relationships are shown graphically in Figure 4. The IT capability-to-business performance path was substantially larger than the direct IT capability-to-competitive advantage and business performance-to-competitive advantage paths.

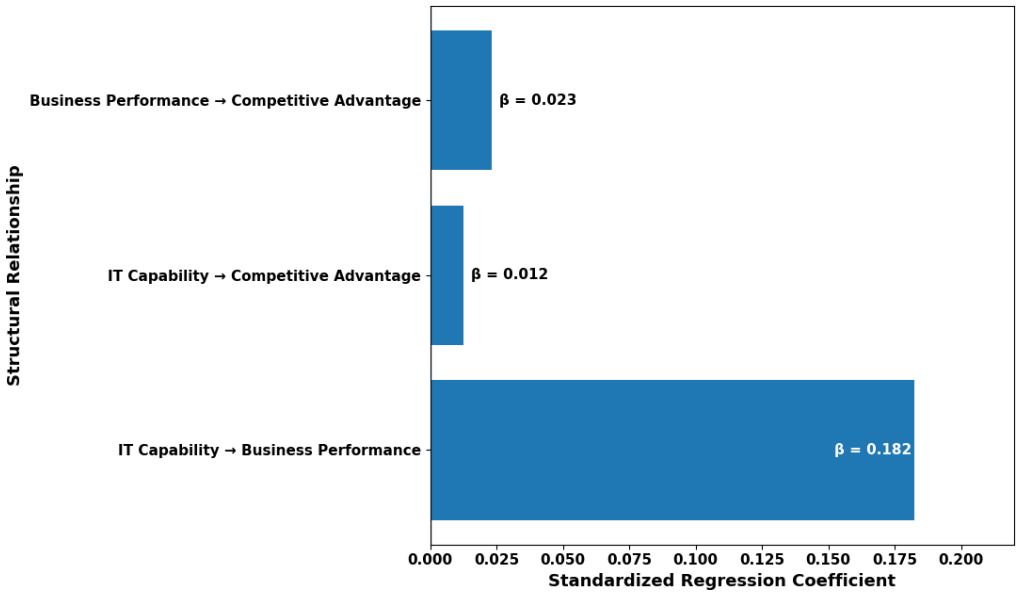

Figure 4. Standardized regression coefficients for the principal relationships among information technology capability, business performance, and competitive advantage

3.6 Mediation Analysis

The mediation effect of business performance was explored with 5000 bootstrap resamples. Information technology capability and business performance were statistically significant and positive with a = 0.6948, as shown in Table 6. The next step in the model from business performance to competitive advantage was also positive is insignificant given the information technology capability (b = 0.0526). The indirect effect estimated was 0.0365. The 95% bootstrap confidence interval was, however, between -0.0353 and 0.1119, including the value zero. Thus, the indirect effect was not significant. The mediator's direct effect was 0.1073 and the total effect was 0.1439.

Table 6. Mediation analysis and hypothesis-testing summary

Hypothesis	Relationship	Effect	95% CI / p-value	Decision
H1	IT capability → Business performance	B = 0.6948	p < 0.001	Supported
H2	IT capability → Competitive advantage	B = 0.1439	p = 0.465	Not supported
H3	Business performance → Competitive advantage	B = 0.0526	p = 0.319	Not supported
H4	IT capability → Business performance → Competitive advantage	Indirect = 0.0365	CI = -0.0353 to 0.1119	Not supported

The mediation results therefore did not provide any evidence that business performance mediated the impact of information technology capability to Tobin's Q. The indirect effect was in the positive direction, but could not be confirmed due to statistical uncertainty.

Vol. 12 Issue 10 (October, 2026)
ISSN: 2208-2190 Pages- 109-119
DOIhttps://doi.org/10.69980/31f6vc24

3.7 Robustness Analysis

To test if the significant IT capability effect on the overall business-performance measure could be attributed to specific measures, regression analysis was conducted on the three specific measures return on assets, firm growth, and cash-flow ratio.

The capability of information technology was found to be a significant predictor of ROA, $B = 0.0655$, $p < 0.001$ and firm growth, $B = 0.3554$, $p < 0.001$. Its impact on cash-flow ratio, on the other hand, was negligible with $B = -0.0049$, $p = 0.776$. The findings show that the positive relationship between information technology capability and business performance was mainly manifested in the profitability and growth rather than in the short-term cash-flow performance.

No multicollinearity was deemed to be a problem. The VIFs of the variables ranged from 1.001 to 1.060, far less than the typical cutoff values. Hence, the estimated regression coefficients were not likely to be biased due to high linear correlation of the explanatory variables.

Overall, the results indicate that a higher information technology capability is related to better internal business performance, mainly profitability and firm growth. These improvements, however, did not lead to a statistically significant direct or indirect effect on the Tobin's Q (proxy for competitive advantage in the market) in the current data set.

4. Discussion

The study of the present time focussed on the influence of information technology capability on the business performance and business competitive advantage, with special attention to the mediation of business performance. Empirical results showed a distinct but distinct pattern. The direct effect of information technology capability on competitive advantage (measured in Tobin's Q) was statistically insignificant but statistically significant for business performance. The relationship between business performance and competitive advantage was also not found to be strong enough to predict competitive advantage, and the proposed indirect effect of business performance on competitive advantage mediated by information technology capability was not supported. The results highlight that the internal financial and operational results are more direct indicators of the organizational value of IT capability than are the market-based valuation results.

Overall, the strong positive associations for the relationships between information technology capability and business performance lend credence to the argument that firms can gain measurable performance benefits from strategically leveraging digital technologies, technological infrastructure and capabilities within their business operations. This finding aligns with past research indicating that digital skills enhance organizational and manufacturing performance through increased efficiency, responsiveness, and resource utilization (Wang et al., 2022). Likewise, IT capability has been shown to positively impact the agility and performance of organizations in various empirical settings, so technology gains economic value when used within organizational processes and routines (Werder & Richter, 2022).

The robustness analysis also revealed that IT capability had a significant positive effect on return on assets and firm growth, but had little influence on cash-flow performance. This implies that technology may have a higher impact on profitability and growth than on near term liquidity results. Similar evidence has revealed the positive impact on firm performance of digital transformation, but with different intensities depending on the orientation of the organization, strategic positioning, and the capacity of the firms to develop IT (Barba-Sánchez et al., 2024). In addition to providing immediate returns, digital initiatives can also be used to improve performance in other ways, such as improving process efficiency and providing greater operational flexibility and capability development (Yang & Yee, 2022). The small cash-flow impact may thus be a result of the time lag between investments in technology and short-term cash-flow benefits.

The fact that the direct effect of information technology capability on competitive advantage is insignificant is also theoretically relevant. Digital transformation promises better organizational results, but it's not a foregone conclusion. While digitalization can boost firm value, it can create a paradox in that investments in technology do not always lead to an increase in firm value due to managerial myopia, implementation complexity, and misalignment of resources and expectations (Guo et al., 2023). Similarly, IT capability would need to be complemented by other operational capabilities to yield better market-level results (Wang et al., 2023).

The results are also consistent with a body of literature that focuses on the value creation of digital transformation in terms of configurations of complementary resources, rather than in terms of single technological investments. Digital transformation, for instance, has a positive influence on innovation performance, which relies on the interplay between digital transformation and organizational capabilities for knowledge integration, experimentation, and innovation (Li et al., 2023). Configurational research also shows

Vol. 12 Issue 10 (October, 2026)
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that a single dimension of a digital capability is not enough to ensure better innovation results, but several technological and organizational factors need to go together (Xing et al., 2023). This implies that competitive advantage could only be realized when IT capability is backed up by strategic flexibility, innovativeness, managerial competency and operational integration.

The relatively low correlation between Tobin's Q and business performance also suggests that increases in profitability and growth may not have an immediate impact on the market value of the firm. Market-based indicators represent investor expectations, conditions in the industry, risk perceived for the future, and intangible strategic considerations that go beyond current operating performance. This is confirmed by the non-significant mediation effect. Although there was a significant direct impact of IT capability on business performance, the subsequent impact of competitive advantage was not statistically significant. Previous studies indicate that IT capability's contribution to firm performance can vary significantly according to the governance mechanisms in place and the organizational structure and managerial skills (Menshawy et al., 2022; Wessel et al., 2021). Similarly, the impact of IT capability on the benefits of operational capabilities will be either positive or negative based on their ability to integrate the technological and operational resources (Zhang et al., 2023). The results also align with empirical research which demonstrates that digital transformation offers a range of benefits to firms, but can have different impacts on different firms and in different contexts (Zhai et al., 2022). The general findings of the study add to the literature because it shows that the relationship of information technology capability to enterprise performance is stronger and more direct than the relationship of information technology capability to market competitive advantage.

5. Conclusion

This study aimed at investigating the influence of information technology capability on business performance and business competitive advantage. This research reveals that increased information technology competency improves positively and significantly the business performance, especially profitability and growth of the firm. This aligns with the notion of technological capability as a strategic organizational resource that can enhance the internal efficiency, adaptability, and value creation of the organization. The direct impact of information technology capability on competitive advantage (Tobin's Q), however, did not prove to be statistically significant. Similarly, there was no significant predictive power of business performance on the competitive advantage, and the mediation was not confirmed for business performance. The results here suggest that market-based competitive position can be improved without a corresponding improvement in the technological capability of the business and that, indeed, better technology can provide an important internal business benefit. Other factors like innovation capability, operational integration, governance quality, managerial competence and strategic alignment may be required for the conversion of IT capability to sustained competitive advantage. Organizations should therefore, from a practical point of view, abandon the concept of technology investment and apply it to the combination of digital resources and organization's resources. The findings of this study show that the capability of information technology is an important factor in improving the performance of business, however, the relationship between information technology capability and competitive advantage is more complicated and depends on the skills of the company in combining IT resources with strategic and organizational mechanisms.

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