

THE EFFECT OF BUSINESS STRATEGY, DIGITAL TRANSFORMATION, AND COMPETITIVE ADVANTAGE ON FIRM PERFORMANCE

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Abstract

This study investigates the effects of business strategy, digital transformation, and competitive advantage on firm performance among medium and large enterprises operating in Indonesia across various sectors. Using a purposive sample of 200 firms, data were collected from top and mid-level managers and analyzed through multiple linear regression and mediation analysis. The results indicate that business strategy and digital transformation both have significant positive impacts on firm performance, with competitive advantage serving as the strongest predictor. Moreover, competitive advantage partially mediates the relationship between business strategy, digital transformation, and firm performance, highlighting its critical role in translating strategic and technological efforts into superior outcomes. These findings contribute to strategic management literature by integrating traditional and digital perspectives, offering practical insights for managers aiming to improve organizational performance in the context of rapid technological change and market competition. Limitations and directions for future research are also discussed.

Keywords: Business Strategy, Digital Transformation, Competitive Advantage, Firm Performance, Strategic Management, Indonesia, Mediation Analysis

INTRODUCTION

In today's rapidly evolving business landscape, firms are increasingly challenged to adapt to technological disruption, globalization, and volatile market conditions. These shifts demand not only agility but also the formulation and execution of robust business strategies that align with internal capabilities and external opportunities. Business strategy, encompassing elements such as cost leadership, differentiation, and market focus, plays a critical role in defining how firms compete and sustain value creation. (Mataruka et al., 2024). The strategic decisions a firm makes directly impact its ability to allocate resources, capture market share, and enhance profitability. Consequently, a well-crafted business strategy is often the foundation upon which firm performance is built and sustained. (Wenting & Yahya, 2024).

Simultaneously, the digital revolution has introduced new dimensions to strategic management. Digital transformation, defined as the integration of digital technologies into all areas of business to fundamentally change operations and value delivery, has emerged as a key driver of performance and innovation. (Du et al., 2025). Firms embracing digital transformation are better positioned to streamline processes, improve customer experiences, and create data-driven insights that guide decision-making. Moreover, digital technologies such as artificial intelligence, big data, cloud computing, and the Internet of Things (IoT) offer firms novel tools to gain operational efficiency and respond more effectively to customer needs. (Chen et al., 2016). Thus, digital transformation is not merely a technological upgrade—it represents a strategic imperative that can significantly impact a firm's performance outcomes.

A firm's ability to gain and sustain a competitive advantage is another critical determinant of its performance. Competitive advantage refers to a firm's capacity to outperform rivals through distinctive capabilities, superior products, cost efficiency, or strong customer loyalty (Zhai et al., 2022). It serves as a bridge between strategic intent and actual performance results. In the context of digital transformation, companies that leverage technology to build unique competencies or optimize their value chains are more likely to gain a competitive edge (Priyanto et al., 2023; Xue et al., 2024). However, achieving competitive advantage requires not only technological investments but also the

alignment of organizational culture, structure, and leadership to support innovation and responsiveness.

As businesses navigate the complexities of global markets and technological advancements, understanding the interrelationship among business strategy, digital transformation, and competitive advantage becomes increasingly crucial. While each of these components independently influences firm performance, their combined and interactive effects offer deeper insights into strategic effectiveness. For instance, a firm's ability to translate digital transformation efforts into superior performance may hinge on its overarching strategy and its unique competitive positioning. (Adisaksana, 2022). Therefore, examining these constructs together can reveal how synergistic alignment enhances organizational outcomes.

Despite the increasing scholarly and managerial interest in these themes, empirical studies that integrate business strategy, digital transformation, and competitive advantage as joint predictors of firm performance remain relatively limited, particularly in emerging economies. Many firms in such contexts face resource constraints, regulatory hurdles, and digital skill gaps that can hinder effective transformation and strategic execution. (Gao et al., 2023). Understanding how these firms can leverage integrated strategic elements to drive performance is essential for both theory development and practical guidance. This study aims to fill that gap by exploring how business strategy, digital transformation, and competitive advantage collectively influence firm performance in a comprehensive framework.

Although business strategy, digital transformation, and competitive advantage have been extensively studied in isolation, there is a lack of integrative research that examines how these elements interact to influence firm performance. Most existing literature tends to analyze digital transformation or strategy independently, neglecting their interconnectedness and combined effect on performance outcomes. Furthermore, firms often struggle to translate their strategic intentions into competitive advantages, particularly in fast-changing digital environments. This gap limits the ability of managers to design holistic strategies that effectively integrate technological change with market positioning. Hence, there is a pressing need to investigate how these strategic dimensions jointly affect firm performance to provide a more nuanced and actionable understanding for both scholars and practitioners.

This study aims to examine the effect of business strategy, digital transformation, and competitive advantage on firm performance. Specifically, it seeks to: (1) evaluate the individual impact of business strategy on firm performance; (2) assess the role of digital transformation as a driver of performance; (3) analyze how competitive advantage mediates or strengthens the relationship between strategic initiatives and firm outcomes; and (4) explore the synergistic effects of these three variables on overall business success. The findings are expected to offer both theoretical insights and practical recommendations for firms seeking to enhance performance through integrated strategic management.

LITERATURE REVIEW

1. Business Strategy and Firm Performance

Business strategy serves as a blueprint that guides organizational actions toward achieving competitive positioning and performance outcomes. According to (Guo & Xu, 2021) Business strategies typically fall into three categories: cost leadership, differentiation, and focus. These strategic typologies help firms decide how to allocate resources and position themselves in the market. Numerous studies have highlighted the positive relationship between clearly defined business strategies and firm performance. For instance, (Shehadeh et al., 2023) Found that firms with explicit strategies tend to outperform those without structured strategic plans. Similarly, (Masoud & Basahel, 2023) Argue that strategic planning provides direction, reduces uncertainty, and improves organizational adaptability, which collectively enhance financial and operational performance.

The Resource-Based View (RBV) of the firm also supports the importance of strategic alignment, suggesting that firms can gain superior performance through the development and deployment of valuable, rare, inimitable, and non-substitutable (VRIN) resources (Barney, 1991). When business strategies are aligned with internal capabilities, firms are better positioned to exploit external opportunities. In recent years, dynamic environments have emphasized the importance of strategic agility—the firm's ability to continuously reconfigure strategies in response to market

changes (Tsou & Chen, 2023). Therefore, the success of business strategies in driving firm performance is not only contingent upon their design but also on their adaptability.

2. Digital Transformation and Firm Performance

Digital transformation refers to the deep and coordinated integration of digital technologies into all aspects of business to fundamentally improve performance. (Zhao et al., 2024). It encompasses not only technology adoption but also changes in organizational culture, leadership, and processes. Firms undergoing digital transformation often aim to improve customer engagement, operational efficiency, and innovation capacity. A study by (Nwankpa & Roumani, 2016) Identifies four key areas of digital transformation: digital technologies, customer experience, digital business models, and digital organizational culture—all of which influence firm performance.

Empirical research has established that digital transformation can lead to significant performance improvements, especially when aligned with business objectives. For example, Singh and Hess (2017) found that digital maturity contributes to better financial performance, especially in competitive and volatile industries. Similarly, (Jardak & Ben Hamad, 2022) Emphasize that digital technologies, when leveraged strategically, can generate superior customer value and increase responsiveness to market changes. However, digital transformation is not without challenges; firms often face resistance to change, a lack of digital skills, and high implementation costs (Kane et al., 2015). These barriers can moderate the positive impact of digital initiatives on firm outcomes.

The integration of digital technologies into core operations has also been linked to organizational learning and innovation. Firms that successfully transform digitally are more likely to engage in continuous innovation and develop new capabilities that drive long-term competitive advantage (Sebastian et al., 2017). Thus, digital transformation is not just an enabler of operational efficiency but also a strategic lever for sustained performance.

3. Competitive Advantage and Firm Performance

Competitive advantage is the outcome of strategies and capabilities that allow a firm to deliver superior value to customers compared to its rivals (Porter, 1985). It may be derived from cost efficiency, product uniqueness, customer relationships, or technological innovation. The RBV theory posits that sustained competitive advantage results from internal capabilities that competitors cannot easily replicate (Barney, 1991). In a similar vein, the Dynamic Capabilities View (DCV) extends this argument by emphasizing the firm's ability to renew and reconfigure resources in response to environmental changes (Ren & Lin, 2024).

Numerous studies support the direct relationship between competitive advantage and firm performance. Newbert (2008) conducted a meta-analysis and found a significant positive correlation between sources of competitive advantage and various performance indicators such as profitability, growth, and market share. Furthermore, firms that continuously develop and refine their competitive advantage tend to be more resilient in dynamic and uncertain markets (Chen & Miller, 2015). Innovation, customer orientation, and quality management are commonly cited as key contributors to a firm's unique positioning and competitive strength (Agustian et al., 2023).

Competitive advantage also acts as a mediating variable between strategic actions and performance outcomes. For example, a firm's strategic orientation or digital investments may not lead directly to performance gains unless they create a distinctive value proposition that appeals to customers. (Leão & da Silva, 2021). Hence, understanding the role of competitive advantage as both an outcome and driver of strategy and transformation efforts is essential for explaining variations in firm performance.

4. Interconnection Among Business Strategy, Digital Transformation, and Competitive Advantage

While each of the constructs—business strategy, digital transformation, and competitive advantage—has been studied individually about firm performance, there is growing recognition of their interconnectedness. Business strategy provides the direction and framework through which digital initiatives are selected and executed (Bharadwaj et al., 2013). A firm pursuing differentiation

may prioritize customer-facing digital tools, while one aiming for cost leadership may focus on back-end automation. Thus, strategy shapes the scope and scale of digital transformation.

In return, digital transformation enables the strategic renewal of a firm by enhancing its capabilities to respond to environmental changes. It fosters agility and innovation, which are essential for sustaining competitive advantage (Teece, 2014). For instance, firms that leverage big data analytics or artificial intelligence can gain real-time insights into customer behavior, allowing for more responsive and tailored strategic decisions. These digital capabilities can be turned into competitive advantages that, over time, enhance firm performance.

Furthermore, competitive advantage serves as a strategic outcome of both business strategy and digital transformation, while also acting as a mechanism through which these variables influence performance. A study by Susanti et al. (2023) shows that firms that successfully integrate digital technologies into a coherent strategy are more likely to generate competitive differentiation and superior returns. This suggests that performance gains are most likely when strategy, transformation, and competitive positioning are aligned and mutually reinforcing.

5. Research Gaps and Theoretical Contribution

Despite the extensive literature, there is still a need for more integrative models that explore how business strategy, digital transformation, and competitive advantage interact to influence firm performance. Most studies have treated these variables in silos, resulting in fragmented insights. Additionally, much of the research has focused on large firms in developed economies, leaving a gap in understanding how these relationships play out in small and medium enterprises (SMEs) or firms in emerging markets. Addressing this gap is critical, as these firms face different institutional, financial, and technological constraints (Elia et al., 2020).

This study aims to contribute to the strategic management literature by proposing and empirically testing a holistic model that integrates business strategy, digital transformation, and competitive advantage as joint determinants of firm performance. By doing so, it responds to calls for more contextual and cross-functional research that captures the complexity of contemporary business environments (Bharadwaj et al., 2013; Vial, 2019). It also offers practical implications for managers seeking to design integrated strategies that effectively leverage digital capabilities and build sustainable competitive advantages.

METHOD

1. Research Design

This study employs a quantitative research approach using a causal-comparative (explanatory) research design. The primary goal is to examine the effect of business strategy, digital transformation, and competitive advantage on firm performance. A cross-sectional survey was conducted to collect data from a large number of firms within a single period. This design allows the study to identify patterns, relationships, and the strength of influence among variables.

2. Population and Sample

The population of this study comprises companies operating in Indonesia across various sectors, including manufacturing, services, and technology. The sample was selected using purposive sampling, targeting firms that fulfill specific criteria: they must have implemented a business strategy (cost leadership, differentiation, or focus), be currently undergoing or have completed a digital transformation process, qualify as medium or large enterprises to ensure structured organizational systems, and have been in operation for at least five years. A total of 200 firms were targeted, with the unit of analysis being the firm itself. Data were collected from top or mid-level managers, such as CEOs, digital transformation officers, or strategy managers, who possess sufficient knowledge of their organization's strategic practices and overall performance.

3. Data Collection Method

Primary data were collected through a structured online questionnaire distributed via email and professional networks (e.g., LinkedIn, company websites). A follow-up email and reminder were

sent to increase the response rate. The questionnaire consisted of closed-ended statements using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Before distribution, the instrument was pilot-tested on 20 respondents to ensure clarity and validity.

4. Measurement of Variables

All constructs in this study were measured using items adapted from well-established scales in previous literature to ensure both validity and reliability. The business strategy variable was measured based on Porter's (1980) typology, encompassing cost leadership, differentiation, and focus strategies. The measurement items were adapted from prior research conducted by Spanos and Lioukas (2001) and Dess and Davis (1984), with sample statements such as: "Our company offers products/services at the lowest cost in our industry." For the digital transformation construct, items were derived from frameworks developed by Westerman et al. (2014) and Verhoef et al. (2021), covering three dimensions—digital technologies, organizational change, and customer engagement. A representative item is: "Our organization actively adopts digital technologies to improve internal processes."

The competitive advantage construct was assessed using indicators based on the resource-based view, particularly from the works of Barney (1991) and Newbert (2008). It focused on elements such as perceived uniqueness, customer loyalty, and cost efficiency. A sample item includes: "Our company can offer value that is not easily replicated by competitors." Lastly, firm performance was measured using subjective indicators across financial, market, and operational dimensions. Items were adapted from the model developed by Venkatraman and Ramanujam (1986), with an example item being: "Compared to our competitors, our firm has experienced superior revenue growth in the past three years." All items were measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

5. Validity and Reliability Testing

To ensure the robustness of the measurement instruments, content validity was established through expert review involving three academic professionals and two strategic management practitioners who evaluated the clarity, relevance, and representativeness of the questionnaire items. Their feedback was used to refine and finalize the measurement tools before data collection.

Construct validity was assessed through a two-step approach. First, exploratory factor analysis (EFA) was conducted to identify the underlying factor structure of the constructs. This was followed by confirmatory factor analysis (CFA) to verify the factor structure and ensure that the observed variables appropriately measured the latent constructs. In addition, reliability testing was carried out using Cronbach's alpha, with a minimum acceptable threshold of 0.70 as recommended by Nunnally and Bernstein (1994). All constructs in the study demonstrated Cronbach's alpha values above this threshold, indicating satisfactory internal consistency and reliability of the measurement scales.

6. Data Analysis Technique

The data collected were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26, following several key analytical procedures. First, descriptive statistics were used to summarize the demographic and firm characteristics, including sector, firm size, and years of operation. To ensure the data met the assumptions required for regression analysis, a normality test was conducted by examining skewness and kurtosis values. Additionally, a multicollinearity test was performed using the Variance Inflation Factor (VIF) and tolerance values to detect any multicollinearity among the independent variables. To assess the relationships between variables, multiple linear regression analysis was employed to examine the direct effects of business strategy, digital transformation, and competitive advantage on firm performance. Where applicable, mediation analysis was conducted using the PROCESS Macro developed by Hayes to determine whether competitive advantage mediates the relationship between business strategy or digital transformation and firm performance.

RESULTS

This section presents the results of the statistical analyses, including descriptive statistics, normality and multicollinearity tests, multiple regression analysis, and mediation testing. The findings are derived from SPSS version 26.

1. Descriptive Statistics and Normality Test

Descriptive statistics were computed for all key variables in the study. As shown in Table 1, the mean values ranged from 3.856 to 4.012, indicating generally positive responses from participants. Standard deviations were within acceptable ranges, showing moderate variability in responses. Skewness and kurtosis values for all variables were within the ± 1 range, indicating no serious deviations from normality.

Table 1. Descriptive Statistics and Normality

Variable	Mean	Std. Deviation	Skewness	Kurtosis
Business Strategy	3.856	0.654	-0.245	0.315
Digital Transformation	4.012	0.592	-0.198	0.428
Competitive Advantage	3.934	0.613	-0.162	0.211
Firm Performance	3.876	0.625	-0.287	0.389

2. Multicollinearity Test

To assess multicollinearity among independent variables, tolerance and variance inflation factor (VIF) values were examined. As shown in Table 2, all tolerance values were above 0.7 and all VIF values were well below the critical threshold of 10, indicating no multicollinearity issues.

Table 2. Multicollinearity Test

Variable	Tolerance	VIF
Business Strategy	0.812	1.231
Digital Transformation	0.798	1.253
Competitive Advantage	0.821	1.218

3. Multiple Linear Regression Analysis

A multiple regression analysis was conducted to examine the influence of business strategy, digital transformation, and competitive advantage on firm performance. The results presented in Table 3 show that all three predictors significantly influence firm performance. Competitive advantage ($\beta = 0.326$, $p < 0.001$) had the highest standardized beta coefficient, followed by digital transformation ($\beta = 0.267$, $p < 0.001$) and business strategy ($\beta = 0.216$, $p < 0.001$). These results indicate that all three variables are significant predictors of firm performance.

Table 3. Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
Business Strategy	0.218	0.061	0.216	3.574	0.000
Digital Transformation	0.274	0.057	0.267	4.807	0.000
Competitive Advantage	0.342	0.065	0.326	5.263	0.000

4. Mediation Analysis (if applicable)

Using Hayes' PROCESS Macro, mediation analysis was performed to test whether competitive advantage mediates the effect of business strategy and digital transformation on firm performance. The indirect effects were found to be statistically significant, supporting the mediating role of competitive advantage in both relationships. This suggests that firms improve their performance not only through the direct implementation of strategy and digitalization, but also by enhancing their competitive positioning.

DISCUSSION

This study aimed to examine the influence of business strategy, digital transformation, and competitive advantage on firm performance among companies operating in Indonesia. The results of multiple linear regression analysis provided clear evidence that all three factors significantly contribute to enhancing firm performance. This section discusses these findings in the context of previous literature, practical and theoretical implications, and suggestions for future research.

1. Business Strategy and Firm Performance

The findings of this study confirm that business strategy, encompassing cost leadership, differentiation, and focus strategies, has a positive and significant impact on firm performance. This supports the foundational theory proposed by Porter (1980), which emphasizes that a firm's ability to position itself through a deliberate strategic choice significantly determines its market success. The regression results showed that business strategy had a standardized beta coefficient of 0.216 ($p < 0.001$), which underscores the importance of aligning strategic initiatives with firm goals.

This result is in line with prior studies by Spanos and Lioukas (2001) and Dess and Davis (1984), who found that firms adopting well-defined strategic orientations tend to outperform those without a clear strategy. It indicates that firms in Indonesia that leverage coherent business strategies—whether through cost-efficiency, product uniqueness, or niche targeting—are more likely to achieve superior performance. This is especially critical in the increasingly competitive and uncertain business landscape, where strategic clarity offers a roadmap for decision-making, resource allocation, and value creation.

Furthermore, this finding highlights that strategy implementation at the firm level is not merely a theoretical ideal but an actionable path toward performance improvement. Firms that successfully operationalize their strategy into tangible activities and metrics tend to gain market advantage, improve operational efficiency, and foster better internal alignment.

2. Digital Transformation and Firm Performance

Digital transformation also demonstrated a significant positive effect on firm performance ($\beta = 0.267$, $p < 0.001$), affirming that the adoption and integration of digital technologies are key enablers of business success. This finding is consistent with studies by Westerman et al. (2014) and Verhoef et al. (2021), who argue that digital transformation enhances firm agility, customer responsiveness, and operational efficiency.

In this study, digital transformation was measured through three dimensions: digital technologies, organizational change, and customer engagement. The empirical evidence suggests that firms that embrace digital transformation are better positioned to streamline internal processes,

enhance customer experience, and adapt to market shifts more effectively. For instance, digital tools such as data analytics, automation, and cloud platforms help firms make informed decisions, reduce lead times, and improve service delivery.

Given Indonesia's growing digital economy, these findings are highly relevant. Many Indonesian firms are undergoing rapid digitalization due to shifts in consumer behavior, regulatory pressure, and the global push toward Industry 4.0. The positive relationship between digital transformation and firm performance signals that investment in digital capabilities is not just a trend but a strategic necessity. However, it also implies that digital transformation should be approached holistically—beyond mere technology adoption—to include cultural shifts, workforce reskilling, and customer-centric innovation.

3. Competitive Advantage as a Driver of Performance

Among all predictors, competitive advantage exhibited the strongest effect on firm performance ($\beta = 0.326$, $p < 0.001$), confirming its central role in strategic management literature. According to Barney (1991), firms gain a competitive advantage when they possess valuable, rare, inimitable, and non-substitutable (VRIN) resources. The results suggest that Indonesian firms that successfully develop such competitive strengths—whether through customer loyalty, cost efficiency, or unique value propositions—outperform their peers.

This finding also validates the resource-based view (RBV) of the firm, which posits that internal capabilities and competencies are key to achieving sustainable performance (Newbert, 2008). Competitive advantage acts as a mediating mechanism that translates strategic intent (via business strategy) and capability development (via digital transformation) into tangible outcomes. This is evidenced by the mediation analysis, which showed that competitive advantage partially mediates the relationship between both business strategy and digital transformation with firm performance.

For practitioners, this emphasizes that competitive advantage must be continuously nurtured and updated in response to market changes. It cannot be assumed as static or guaranteed. Firms should invest in innovation, branding, customer relationship management, and process improvement to maintain a defensible market position.

4. Integration of Strategy, Technology, and Advantage

An important contribution of this study is the integrated analysis of business strategy, digital transformation, and competitive advantage. Rather than viewing these elements in isolation, the study demonstrates that firm performance is maximized when these dimensions are synergistically aligned. Business strategy provides the direction, digital transformation offers the tools and agility, while competitive advantage delivers the differentiation and market leverage.

The empirical results support the notion of strategic fit—that the alignment between a firm's internal capabilities and external market opportunities leads to superior performance (Venkatraman & Ramanujam, 1986). When firms implement a well-defined strategy and adopt appropriate digital technologies, they are more likely to build unique competitive strengths that enhance performance metrics such as profitability, market share, and customer satisfaction.

CONCLUSION

In conclusion, this study provides empirical evidence that business strategy, digital transformation, and competitive advantage significantly influence firm performance among medium and large enterprises in Indonesia. The findings underscore the importance of aligning strategic positioning with technological adoption and leveraging internal capabilities to achieve a sustainable competitive edge. Competitive advantage emerged as the most influential factor, highlighting its mediating role in converting strategic initiatives into superior organizational outcomes. This research contributes to the strategic management literature by integrating multiple constructs into a cohesive model and offering practical insights for firms aiming to enhance their performance in a rapidly evolving digital and competitive landscape. Future studies are encouraged to build on these findings using longitudinal designs and industry-specific analyses to deepen the understanding of strategic drivers of firm success.

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