

Strategy Implementation and Non-Financial Performance of pharmaceutical firms in Lagos State, Nigeria: The Mediating Role of Technology Adoption

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Abstract

This study investigates the impact of strategy implementation on non-financial performance, taking into account the moderating effect of technology adoption on the impact in the Nigerian pharmaceutical industry. Using the resource-based view, the technology acceptance model and the dynamic capabilities theory, the study formulated and tested a mediation model based on a cross sectional quantitative research methodology. Data were obtained through the use of self-administered questionnaires among 242 respondents who were proportionately selected from a target population of 616 employees from five leading pharmaceutical companies in Nigeria, namely Fidson Healthcare Plc, Emzor Pharmaceutical Industries, May & Baker Nigeria Plc, Neimeth Pharmaceuticals Plc, and Evans Medical Plc using stratified sampling method. The number of respondents used meets the minimum requirement of 50 samples as recommended by Yamane formula in 1967. As such, strategy implementation has been found to be positively associated with non-financial performance ($\beta = 0.363$, $p = 0.002$) and technology adoption ($\beta = 0.577$, $p < 0.001$), and technology adoption has also been found to have a positive influence on non-financial performance ($\beta = 0.448$, $p < 0.001$). Furthermore, the mediation analysis shows that technology adoption partially mediates the association between strategy implementation and non-financial performance, accounting for a Variance Accounted For (VAF) of about 41.5%. This research has provided an important contribution to strategic management and information systems research since it has shown that technology adoption is an important mediator of strategy execution towards superior non-financial performance. Based on these findings, it is recommended that pharmaceutical firms strengthen strategy implementation through clear communication of strategic objectives, adequate resource allocation, continuous monitoring and evaluation systems, and deliberate integration of technology adoption into core strategic processes, while simultaneously investing in employee digital skills development and fostering dynamic capabilities that enhance organizational flexibility, learning, and responsiveness to environmental changes.

Keywords: Strategy implementation; Technology adoption; Non-financial performance; SEM; Emerging markets

1. Introduction

In a world of rapid technological change, fierce competition and increasing regulatory complexity, organisations are under constant pressure to convert strategic intent into measurable and sustainable results. While the strategic management field has paid much attention to strategy formulation, there is a growing body of literature which increasingly points out that the real challenge for organisations is not in designing strategies but in effectively implementing them (Ansoff *et al.*, 2023; Li *et al.*, 2024). The implementation of strategy involves the processes, structures and managerial actions that are necessary to translate strategic plans into operational reality and it is at this stage that many organisations experience ongoing difficulties. However, empirical studies have established that many well-conceived strategies fail in implementation due to poor alignment between strategic goals and operational activities, poor resource allocation, poor communication across organisational levels, resistance to change and poor technological infrastructure to support execution (Okoye & Eze, 2023; Ofori & Atiemo, 2024). This gap in implementation is even more pronounced in the dynamic and resource-constrained environments. In such environments organisations face additional pressures which further complicate the effectiveness of execution and reduce the chance of attaining intended strategic outcomes.

Alongside this, the concepts of organisational performance have shifted considerably over and above the traditional financial measures such as profitability and return on investment. More recent performance measurement frameworks focus more on non-financial aspects of performance like innovative capability, customer satisfaction, employee engagement and operational efficiency. Given that they represent intangible assets, knowledge-based resources, and organisational capabilities that cannot be fully captured by financial metrics alone, these indicators are now widely acknowledged as critical drivers of long-term sustainability, resilience, and competitive advantage (Kaplan & Norton, 2023; Nwachukwu *et al.*, 2024; Yusuf & Bello, 2025). In this way, non-financial performance provides a more holistic and future-oriented assessment of organisational effectiveness, particularly in knowledge-intensive industries where value creation is highly contingent upon innovation, adaptability and customer-centric processes rather than mere financial outcomes.

In this changing performance paradigm, the adoption of technology has become a key enabler for effective implementation of strategies and organisational transformation. The widespread adoption of digital technologies such as

enterprise resource planning (ERP) systems, artificial intelligence, big data analytics, cloud computing, and integrated information systems has changed the way organisations operate, coordinate activities, and make decisions. These technologies allow organisations to achieve higher agility, improve information flow in real time, enhance cross-functional coordination and support evidence-based decision-making, thus resulting in better execution of strategic plans (Vial, 2023; Chen *et al.*, 2024). Recent literature also suggests that technology should not be viewed simply as an operational support tool but as a strategic resource that affects directly how organisations implement strategies, reconfigure processes and create value in increasingly digital business environments (Adebayo *et al.*, 2025; Bharadwaj *et al.*, 2023). Although this has been widely acknowledged, many organisations still face low levels of technology integration in strategic processes, leading to suboptimal implementation results and limited performance improvement.

The pharmaceutical industry is a particularly important context for examining these relationships because it is highly knowledge intensive, innovation driven and strictly regulated. The pharmaceutical companies are operating in the environment where efficiency, compliance, innovation and responsiveness are the key to survival and competitiveness. In emerging economies such as Nigeria, these challenges are further compounded by infrastructural deficiencies, limited access to advanced technologies, high operational costs, and volatile market and regulatory conditions, all of which add additional constraints to effective strategy execution and performance achievement (Akanbi, 2023; Ogunleye *et al.*, 2024). Thus, the success of pharmaceutical firms in implementing strategies and adopting relevant technologies is an important determinant of their non-financial performance outcomes, such as innovation capacity, customer satisfaction and operational efficiency.

Although these constructs are increasingly important, the current empirical literature has largely focused on the direct relationship between strategy implementation and organisational performance, with relatively limited attention given to the underlying mechanisms through which this relationship operates. For instance, studies such as Li *et al.* (2024) and Yusuf and Bello (2025) have established that strategy implementation positively influences organisational performance outcomes, but their analyses primarily treat performance as a direct consequence of execution effectiveness. Similarly, Ofori and Atiemo (2024) and Okoye and Eze (2023) highlight implementation challenges such as poor

alignment, inadequate resources, and weak communication, yet they do not empirically examine the process pathways that explain how these challenges translate into performance outcomes. Even though Vial (2023) and Chen *et al.* (2024) emphasise the relevance of digital technologies in enhancing organisational responsiveness and efficiency, their focus remains largely on technology as a performance enhancer rather than as a mediating mechanism within the strategy implementation–performance relationship. As a result, there remains a clear gap in the literature regarding how intervening variables, particularly technology adoption, explain the linkage between strategy execution and non-financial performance, especially in emerging economy contexts where digital capability constraints are more pronounced.

In view of this, the present study examines the relationship between strategy implementation and non-financial performance focusing on the mediating role of technology adoption in some pharmaceutical firms in Nigeria. Three complementary theories, namely Resource-based View (RBV), Technology Acceptance Model (TAM), and Dynamic Capabilities Theory (DCT), are used to provide a strong theoretical underpinning to ground this study. RBV highlights the importance of firm-specific resources and capabilities in achieving competitive advantage. Integrating these views, the study provides a more holistic explanation of the interplay between strategy implementation and technology adoption in shaping non-financial performance in resource-constrained, technologically changing environments.

Based on the identified theoretical and empirical gaps, the study tests the following hypotheses:

H01: Strategy implementation has no positive effect on non-financial performance;

H02: Strategy implementation has no positive effect on technology adoption;

H03: Technology adoption has no positive effect on non-financial performance;

H04: Technology adoption does not mediate the relationship between strategy implementation and non-financial performance.

Finally, the paper is structured as follows: the next section presents the theoretical foundations underpinning the study, followed by the empirical review of relevant literature. This is then followed by the methodology section, which outlines the research design, sampling, and data collection procedures. Subsequently, the data

analysis and results section presents the empirical findings, followed by a discussion of the results in relation to existing literature and theory. The paper concludes with a summary of key findings, implications for theory and practice, and recommendations for future research.

2. Literature Review

2.1 Theoretical Foundations

Resource-Based View (RBV)

The Resource Based View (RBV) theory has been extensively researched by Barney (1991), drawing from earlier insights provided by Wernerfelt (1984). According to RBV, firms gain sustainable competitive advantages via resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN) (Kruesi & Bazelmans, 2022). Such resources can be physical assets, human capital, business processes, and technological capabilities.

The main premise behind RBV is the fact that it is the firm-specific capabilities that ensure superior business performance rather than external market forces (Gerhart & Feng, 2021). In current strategic management literature, technological capabilities have become a part of strategic resources that help increase execution effectiveness.

It is RBV that forms the basis for explaining the relationship between strategy implementation and non-financial performance. Efficient execution depends on the organizational capability of the company in terms of resource utilization (Tawse & Tabesh, 2022). The use of technology becomes a strategic resource that helps coordinate actions, communicate more effectively, and make decisions more quickly (Escandon-Barbosa & Salas-Paramo, 2025). In other words, companies with highly developed technological capabilities are able to execute their strategies efficiently enough to generate superior non-financial performance such as innovation and customer satisfaction (Salisu & Bakar, 2019).

Technology Acceptance Model (TAM)

Davis (1989) developed the Technology Acceptance Model (TAM), which attempts to elucidate how people come to adopt and use new technologies. The model outlines two major components that influence technology adoption; these include perceived usefulness, which refers to how one perceives a system

improves his or her performance, and perceived ease of use, which refers to how one perceives a system is effort-free to use (Alsyounf et al. 2023).

Since then, TAM has been widely expanded and used in organizations to explain the phenomenon of technology adoption (Lee *et al.* 2025). It shows that for any technological system to be successful, its acceptance and adoption by users are as important as its availability (Ibrahim *et al.* 2025). Adoption of technology acts as a mediator between strategy implementation and non-financial performance according to TAM. As much as organizations might have adopted sound strategies to improve their non-financial performances, the effectiveness of such strategies relies on the extent to which the employees adopt the enabling technologies (Jackson & Allen, 2023). This is because useful and user-friendly technologies increase execution efficiency (Vărzaru & Bocean, 2024).

Dynamic Capabilities Theory

The dynamic capabilities theory is a theoretical contribution of Teece, Pisano, and Shuen (1997), further elaborated by Teece (2007). This theory stresses the significance of a firm's capacity to integrate, develop, and transform its internal and external competencies in relation to constantly evolving environments (Jin et al. 2024). Among other dynamic capabilities, one can name the sensing of opportunities, exploitation of such opportunities through investments, as well as transformation of the organization into a more competitive entity (Dukhaykh & Alangri, 2026). In modern economies undergoing the process of digital disruption, technological adaptability is a vital capability for companies (Jie et al. 2025).

The dynamic capabilities theory underlines the importance of technology as not only resources but also a capability that helps companies to transform the process of their strategy implementation (Gao et al. 2025). Considering the constantly evolving nature of the pharmaceutical industry, in terms of innovations and regulations, adoption of new technologies becomes essential for enhancing organizations' flexibility and improving their non-financial performance.

2.2 Empirical Review

Strategy Implementation and Non-Financial Performance

The concept of strategy implementation implies the conversion of the formulated strategies to practices, routines, and behavior that will govern the operation of the

organization (Wabulasa & Kihara, 2023). It entails the use of resources, structure, leadership behaviors, and controls to ensure effective execution of strategies (Mwanza & Dar, 2025). On the other hand, non-financial performance implies organizational performance aspects not measured by financial measures but critical for competitiveness including innovation capacity, customer satisfaction, service delivery, employee commitment, and operational effectiveness (Liao *et al.* 2015).

Several studies have shown the impact of strategy implementation on achieving superior non-financial performance. Organizations that communicate their strategies effectively and follow them are likely to improve processes, innovate, and meet the customers' requirements (Albright *et al.* 2021). Current research also indicates that organizations that execute their strategies effectively develop better learning capabilities and adaptiveness resulting in good services and customer satisfaction (Ssekiziyivu *et al.*, 2025). According to another study by Yusuf and Bello (2025), organizations executing their strategies effectively perform better in terms of operational efficiency and employee engagement than poorly executing firms (Mousa *et al.* 2024). Based on this empirical and theoretical evidence, the study proposes the following hypothesis:

H₀₁: Strategy implementation does not significantly affect non-financial performance.

Strategy Implementation and Technology Adoption

Adoption of technology can be described as how organizations invest, implement, and deploy digital technologies and technological innovations to improve their performance and achieve strategic objectives (Huang *et al.* 2025). These include investments in technological infrastructure, automation, big data analytics, and communications technology that strengthen organizational competencies (Faiz *et al.* 2024). Strategy implementation is a vital process that determines an organization's ability to adopt technology, as effective strategy implementation ensures that technological choices and deployments are aligned with the organization's strategic objectives and long-term direction (Bharadwaj *et al.*, 2023; Vial, 2023; Rizana *et al.*, 2025).

Research indicates that organizations with efficient strategy implementation capabilities have higher success rates when adopting technology (Rizana *et al.* 2025). Strategic direction and coherent implementation create clarity in strategic

intentions and eliminate resistance to change, leading to technology adoption. According to Chen et al. (2024), execution facilitates the translation of strategic intentions into technology adoption through implementation mechanisms. Organizations that excel in execution are also in a better position to marshal the required resources and skills for technology adoption, according to empirical evidence (Sony et al. 2022). Drawing from these insights, the following hypothesis is formulated:

H02: Strategy implementation does not significantly affect technology adoption.

Technology Adoption and Non-Financial Performance

Technology adoption has increasingly been identified as a vital determinant of non-financial performance in modern organizations (Wassie & Lakatos, 2025). The use of digital technology in an organization enables increased responsiveness, improved quality of services provided, and enhanced innovation process capabilities (Liu et al. 2023). Non-financial performance factors like customer satisfaction, responsiveness, and innovative capabilities are significantly affected by the proper implementation of technological strategies (Somwethee et al. 2023).

Numerous studies indicate that technology adoption plays an important role in enhancing organizational performance aside from its influence on financial results. According to Vial (2023), digital technologies facilitate organizational agility and innovation capabilities through improved communication and decision-making capabilities (Jiao et al. 2024). Technology adoption has also been shown to positively impact customer satisfaction and efficiency of business operations through error reduction and faster cycles of operation (Ali & Maelah, 2025). Based on this evidence, the study advances the following hypothesis:

H03: Technology adoption does not significantly affect non-financial performance.

Mediating Role of Technology Adoption

Strategy implementation impacts non-financial performance directly; however, its effect on non-financial performance may also occur indirectly via the use of technology adoption. Technology adoption may be considered a mediating factor that facilitates the translation of strategies into results (Hu et al. 2026). In such a case, when the strategy implementation process is effective, it creates the

prerequisites for successful technology adoption, leading to increased non-financial performance.

This indirect effect of the implementation process is facilitated by the fact that strategies will not bring any benefit without appropriate technologies (Ali et al. 2025). It follows that organisations ability to implement their strategies will tend to adopt technologies that promote coordination, innovation, and enhanced customer services (Guenduez et al. 2025). According to Vial (2023), digital technologies become the channel of embedding initiatives resulting from the strategies implemented into organisational processes (Alhelal et al. 2025). Thus, technology adoption mediates the relationship between strategy implementation and non-financial performance to a certain extent. Consequently, the study proposes the following mediating hypothesis:

H04: Technology adoption does not significantly mediate the relationship between strategy implementation and non-financial performance.

3. Methodology

The research design employed in this study involves the application of a quantitative cross-sectional survey design. Cross-sectional surveys are appropriate in the study of organizational phenomena since they enable the study of causality and associations among latent variables. The use of cross-sectional surveys facilitates the systematic and standardized collection of data from many subjects at one particular point in time. This makes them ideal for the empirical testing of theoretically formulated hypotheses. As in previous studies on strategic management and information systems, the use of the cross-sectional survey methodology implies that advanced multivariate techniques may be applied to analyze the collected data. Specifically, the proposed partial least square structural equation modeling (PLS-SEM) is an appropriate technique since it permits the estimation of both the measurement and structural model simultaneously in the presence of measurement error.

The population of the study consists of 616 individuals who are employees working in five major companies in the pharmaceutical industry operating in Nigeria. Such companies include Fidson Healthcare Plc, Emzor Pharmaceutical Industries, May & Baker Nigeria Plc, Neimeth Pharmaceuticals Plc, and Evans Medical Plc.

The sample size for the study was determined using the Yamane (1967) sample size determination formula, which is appropriate for finite population surveys. The formula is expressed as:

$$n = \frac{N}{1 + N(e)^2}$$

where n represents the required sample size, N is the population size, and e is the margin of error. Given a population size of 616 employees and a margin of error of 0.05 (5%), the computation is as follows:

$$n = \frac{616}{1 + 616(0.05)^2} = \frac{616}{1 + 616(0.0025)} = \frac{616}{1 + 1.54} = \frac{616}{2.54} = 242.5 \approx 242$$

Thus, the sample size required for the study is 242 respondents. This sample size is considered adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM), as it meets the requirements for statistical power, parameter stability, and generalizability of results (Hair et al., 2021). To ensure representativeness and reduce sampling bias, a stratified sampling technique was employed, with each pharmaceutical company treated as a distinct stratum. This approach ensures that all firms in the population are proportionally represented in the sample, thereby improving the accuracy and external validity of the findings.

Data collection was performed with the help of a structured questionnaire that included items adapted from scales used in previous studies. Strategy implementation questions were adapted from Amoo *et al.* (2019), while technology adoption questions were based on Faiz *et al.* (2024). Non-financial performance items were limited to innovation, customer satisfaction, and efficiency. Slight contextual modifications were introduced to match the Nigerian pharmaceutical context but without changing the meaning of the constructs measured. All items were measured using the Likert-type scale.

Validity was checked via expert evaluation and construct validity using Structural Equation Modeling, while reliability was assessed through Cronbach's alpha and composite reliability scores above the 0.70 criterion (Hair *et al.*, 2022). Strict

Strategy Implementation and Non-Financial Performance of pharmaceutical firms in Lagos State, Nigeria: The Mediating Role of ethical considerations were taken into account by ensuring voluntary participation, consent, confidentiality, and freedom to withdraw as per the established ethical principles (Saunders et al., 2019).

4. Results and Discussions

PLS-SEM ANALYSIS

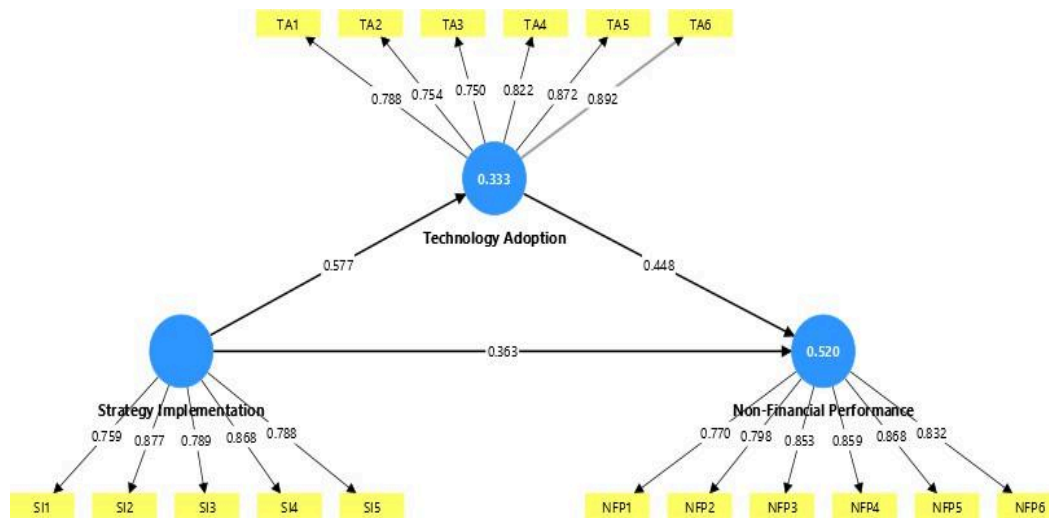


Figure 1: Measurement Model

Source: SMARTPLS Output

Table 1: Construct Validity and Reliability

Variables	Items	Loadings	CR (rho a)	AVE
Strategy Implementation	SI1	0.759	0.881	0.668
	SI2	0.877		
	SI3	0.789		
	SI4	0.868		
	SI5	0.788		
Technology Adoption	TA1	0.788	0.906	0.664
	TA2	0.754		
	TA3	0.750		
	TA4	0.822		
	TA5	0.872		
	TA6	0.892		
Non-Financial Performance	NFP1	0.770	0.918	0.690
	NFP2	0.798		
	NFP3	0.853		
	NFP4	0.859		
	NFP5	0.868		
	NFP6	0.832		

The findings for the measurement of construct validity and reliability of the study constructs are provided in Table 1 below. For each scale of strategy implementation, technology adoption, and non-financial performance, factor loadings of all the individual items exceed the minimum recommended cut-off of 0.70, suggesting the adequacy of representation by these indicators of the constructs. Composite reliability values (ρ_a) of all constructs lie between 0.881 and 0.918, which is well beyond the minimum acceptable level of 0.70. Additionally, the average variance extracted (AVE) values for the measures of strategy implementation (0.668), technology adoption (0.664), and non-financial performance (0.690) all exceed the cut-off point of 0.50, indicating sufficient convergent validity.

Table 2: Discriminant Validity (Heterotrait-monotrait ratio [HTMT]) – Matrix

	1	2	3
Non-Financial Performance			
Strategy Implementation	0.669		
Technology Adoption	0.717	0.637	

The findings regarding discriminant validity are illustrated in Table 2 with the use of heterotrait-monotrait ratio (HTMT). The HTMT ratios for the associations between non-financial performance and strategic implementation (0.669), non-financial performance and technology adoption (0.717), and strategic implementation and technology adoption (0.637) are below the suggested critical value of 0.85. Thus, the constructs can be considered empirically separable from each other, which means they are not highly intercorrelated. Consequently, the data support sufficient discriminant validity, implying that each construct is distinguishable within the model.

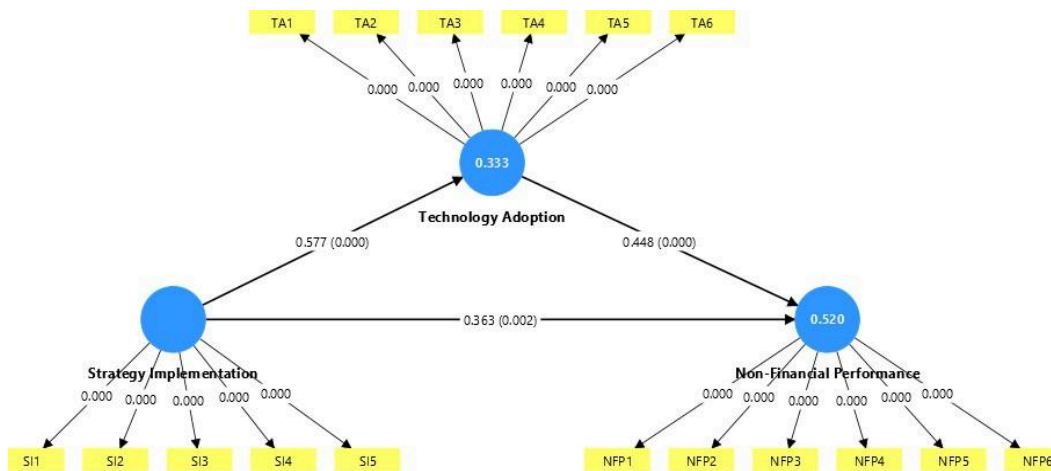


Figure 2: Structural Model

Source: SMARTPLS Output

Table 3: Test of Study Hypotheses

Relationships	Beta	STDEV	T Stat	P Values
H01: SI->NFP	0.363	0.115	3.168	0.002
H02: SI->TA	0.577	0.097	5.961	0.000
H03: TA->NFP	0.448	0.111	4.039	0.000
H04: SI->TA->NFP	0.258	0.077	3.350	0.001

Note: SI represents Strategy Implementation; NFP represents Non-Financial Performance; TA represents Technology Adoption; STDEV represents Standard Deviation; T Stat represents T Statistics; P Values represents Probability Values.

The results of the structural model and hypothesis testing are shown in Table 3 below. It can be seen that the implementation of strategy positively and significantly affects the non-financial performance ($\beta = 0.363$, $t = 3.168$, $p = 0.002$), thereby H_{01} is rejected. The strategy implementation process also strongly and significantly impacts the technology adoption ($\beta = 0.577$, $t = 5.961$, $p < 0.001$), hence invalidating H_{02} . Further, technology adoption positively and significantly impacts the non-financial performance ($\beta = 0.448$, $t = 4.039$, $p < 0.001$), which means H_{03} is empirically rejected. Furthermore, technology adoption significantly mediates the link between strategy implementation and non-financial performance ($\beta = 0.258$, $t = 3.350$, $p = 0.001$), hence, H_{04} is rejected. Applying the variance accounted for (VAF) measure, the indirect effect (0.258) compared to the total effect ($0.258 + 0.363$) leads to a VAF of about 41.5%, which lies within the 20-80% range for partial mediation. Hence, it can be deduced that the technology adoption partially mediates the relationship since neither the direct nor indirect effects can subsume each other completely.

Discussions and Policy Implication

The empirical results of the research presented above confirm the proposed links between strategy implementation, technology adoption and non-financial performance and are consistent with the contemporary theoretical and empirical evidence. The results showed a statistically significant effect of strategy implementation on non-financial performance as reported in previous studies. It means that the more efficient strategic plans were implemented, the better the results in the areas of innovation, operational efficiency, and customer satisfaction. Recent studies show that effective execution drives better coordination, employee alignment and consistency in processes, leading to better non-financial performance outcomes (Tavares & Vaz, 2025; Gede & Huluka, 2023). From a policy perspective, the finding points to the need for organisational and sectoral policies to focus on improving execution capacity through structured strategic planning frameworks, performance monitoring systems and accountability mechanisms that ensure that strategies are not only developed but are also effectively implemented at all levels of the organization.

Furthermore, the findings reveal a significant positive relationship between strategy implementation and technology adoption. This implies that organisations with effective execution capabilities are more likely to align their technological investments with strategic objectives and successfully integrate digital tools into their operations (Rizana *et al.*, 2025). This indicates, from a policy perspective,

the need to encourage digital readiness policies across organisations, particularly in manufacturing and pharma, by stimulating investment in ICT infrastructure, digital skill development, and change management systems to enable smooth technology adoption. Therefore, policy frameworks at the organisational and national levels should be put in place to support digital transformation initiatives that are directly linked to strategic management processes and not treated as isolated technological upgrades.

Furthermore, the adoption of technology was found to have a significant positive effect on non-financial performance. This finding is consistent with the recent literature on the role of digital technologies in enhancing organisational agility, innovation capacity, and service quality (Jabri et al., 2024; Zhang et al., 2023). From a policy perspective, firms should institutionalise technology adoption policies that foster continuous learning, employee upskilling, and user-friendly system design to ensure broad acceptance and effective utilisation of digital tools. Such policies should also foster leadership involvement in digital transformation as a strategic priority.

Furthermore, the mediation analysis reveals that technology adoption partially mediates the relationship between strategy implementation and non-financial performance, suggesting that a part of the effect of strategy implementation is transmitted through digital technologies. This finding is consistent with recent studies highlighting the importance of digital technologies as important enablers of strategic execution and value creation (Plekhanov et al., 2023). The policy implications of this result suggest the necessity of integrated strategic–digital policies that ensure compatibility between strategic planning processes and technology deployment. Therefore, organisations and regulators need to develop frames that explicitly connect strategic objectives to digital transformation agendas, so that technology adoption is systematically integrated into strategic implementation processes and not just considered as an additional function. Thus, the policy implications point to a coordinated approach to improve non-financial performance, which enhances strategy execution capacity, increases digital readiness and institutionalises technology adoption as a core element of strategic management practice.

5. Conclusion and Recommendations

This research has shown that successful strategy implementation is an important determinant of non-financial performance and that this effect can be substantially

reinforced by the use of technology. This research suggests that strategy implementation is an effective factor in enhancing performance in terms of innovation, customer satisfaction, and efficiency, and it does so not only directly but indirectly through the medium of adopting technology as an enabler. The use of the resource-based view, the technology acceptance model, and the dynamic capabilities theory in explaining this process has provided strong theoretical justification for the relationship between strategy implementation and technology adoption on performance outcomes.

Thus, in line with the results obtained from the research, it is suggested that firms allocate more attention to the implementation of strategies through proper communication, sufficient resource allocation, and the continuous evaluation of the process of executing these strategies. The management needs to support technology implementation as part of its strategic agenda, as the results have proved that technology is a partial mediating factor in the association between strategy implementation and non-financial performance. This means that strategies are likely to be more successful when accompanied by the use of the right technology. Furthermore, organizations need to concentrate on developing technological skills among the employees through proper training in order to increase technology acceptance and usage. Lastly, organisations need to develop the required dynamic capabilities in terms of flexibility and responsiveness to change in the environment. Policy makers can aid in improving organizational performance by facilitating the implementation of technology-based strategies.

Contributions to Knowledge

The current study enhances knowledge in this field by increasing knowledge about how the impact of strategic execution influences the achievement of non-financial performance through the process of technology adoption in the pharmaceutical industry in an emerging economy. The study contributes knowledge to this area by providing a multidimensional theoretical framework that explains the connection between the elements of strategic execution, development of technological capability, and performance outcomes. This is because previous research in this area has been characterized by examining each element in isolation. From an empirical point of view, this study contributes knowledge by providing recent evidence about technology adoption mediating the effect of strategic execution on non-financial performance. In addition, structurally, this study increases knowledge by employing the use of structural equation modeling in order to test both direct and indirect relationships. From the

perspective of context, this study contributes by focusing on Nigerian pharmaceutical firms. There has been a lack of sufficient literature in the area concerning emerging economies.

Limitations and Future Research

Nevertheless, several weaknesses can be attributed to the current research and should be noted. First of all, the cross-sectional design does not allow researchers to develop strong causal assumptions because all data were gathered at one point in time; future studies can be conducted using longitudinal research methodologies for more in-depth insights into strategy implementation, adoption of technology, and business performance changes. The second weakness of the current study is that it is based on self-reporting data that could lead to the common method bias; future research can be conducted using more objective measures for the analysis or collecting additional data from various sources. The third limitation of the study under discussion is that it was carried out among pharmaceutical companies located in Nigeria only; future studies may focus on other sectors or locations to evaluate the applicability of the proposed framework. Moreover, future research can examine the impact of other variables as mediators or moderators, such as organisational culture or leadership style.

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