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DIGITAL TRANSFORMATION AND BUSINESS PERFORMANCE IN NIGERIA: A CONCEPTUAL REVIEW

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ABSTRACT

Digital transformation has turned into one of the most important forces for organizational competitiveness and overall performance. In Nigeria, the pace of internet access, the rise of mobile connectivity, and digital entrepreneurship are basically opening new doors for companies to improve efficiency, stimulate innovation, and strengthen how they relate with customers, all through digital tools. Still, the link between digital transformation and business performance does not look "the same everywhere" it is more like it depends on context, and it feels under explored in the country setting. In this study, we use an integrative conceptual review, sort of pulling together both theoretical and empirical work, focusing on digital transformation and business performance in Nigeria. From the Resource-Based View, Dynamic Capabilities Theory, Institutional Theory, and Socio-Technical Systems Theory, the review points to several core dimensions, things like technology adoption, process re-engineering, digital culture and strategic alignment. These dimensions, in turn, are described as key drivers of both financial and non-financial performance. The review also points out that organizational capabilities and innovation can sit in the middle, acting as mediators, while leadership, digital infrastructure, the regulatory environment and technological readiness can change the strength of these effects, like moderating forces. A context-sensitive conceptual framework is then proposed to show how these relationships may work, and it also suggests possible directions for future empirical research. Overall, the contribution is an integrated theoretical lens plus practical takeaways for managers and policymakers, who are trying to use digital transformation in a way that can support sustainable business performance in Nigeria, not just quick wins but longer - term gains.

Keywords: Business Dynamics; Business Performance; Digital Transformation; Organizational Capabilities; and SMEs

INTRODUCTION

The fast evolution of digital technologies has changed the modern business world and redefined the way businesses work, compete, and create value. Digital transformation all over the world

is now a strategic need and not a discretionary innovation, and companies are focusing on digital technologies to improve their effectiveness, agility, and performance. Based on the current figures, digital technologies have already reached more than 15 percent of the total economic output in the world, and digital transformation is expected to make up over 50 percent of the growth in the global GDP by the end of the decade (World Bank, 2020; OECD, 2021; Varzaru, 2025; Siddiqui, 2026).

Digital transformation has been on the rise in Nigeria because of increased internet penetration, mobile connectivity and digital entrepreneurship. There are more than 150 million subscribers to the internet in the country, its mobile penetration is over 80 percent, and the digital economy comprises 1518 percent to GDP, which is likely to rise to over 20 percent by 2030 (NCC, 2023; Boston Consulting Group, 2021; World Bank, 2022). In spite of this increase the results of digital transformation performance are still unequal. Although financial services, telecommunications, and e-commerce sectors have seen an increase in productivity and profitability, several companies, especially SMEs, which comprise the majority of businesses, are struggling with infrastructural inadequacies, labour shortages, internet security threats, and lack of access to finance (Afolayan et al., 2022; SMEDAN, 2022; Oyelaran-Oyeyinka & Adebowale, 2021).

Digital transformation in conceptual terms goes beyond the technology adoption to encompass cultural, leadership, business process, and value creation logic changes (Vial, 2019; Verhoff et al., 2021). On the same note, business performance includes all non-financial aspects like resilience in operations, innovation ability, customer satisfaction and strategic adaptability (Richard et al., 2009). Theoretical approaches, such as the Resource-Based View and Dynamic Capabilities Theory, point at the fact that digital technologies are not the only determinants of better performance, and the influence of digital transformation on performance is mediated by organizational capabilities, managerial capabilities, and environmental factors, including regulatory uncertainty, infrastructural constraints, and market volatility (Teece, 2018; Warner and Wenger, 2019; Autio et al., 2021; North, 1990).

Statement of the Problem

Despite the fact that, digital transformation is a strategic necessity in enhancing the competitiveness and business performance across the globe, the advantages of the changes are neither automatic nor homogenous (Vial, 2019; Verhoef et al., 2021). In Nigeria, although the country is fast developing in terms of digital expansion, most firms, particularly SMEs, are unable to convert the digital adoption to concrete performance gains and thus they have low productivity, innovation, and positioning (Afolayan et al., 2022; Oyelaran-Oyeyinka & Adebowale, 2021). One of the biggest problems is the conceptual and theoretical vagueness of the digital transformation in the Nigerian context. Current literature is too limited on the topic of technology adoption or e-business adoption which ignores the capabilities of organizations, leadership orientation, and strategic alignment. Equally, business performance is often evaluated in terms of financial measures only, ignoring the non-financial performance, which is important in the long-term competitiveness (Richard et al., 2009). In addition, the imbalance

in the effects of digital transformation is aggravated by infrastructural gaps, regulatory ambiguity, labour shortages, and cybersecurity threats (North, 1990; Autio et al., 2021).

So, there really is a need for a context sensitive plus integrative conceptual set-up, that kind of explains how digital transformation, affects business performance in Nigeria, while also considering organizational, technological, and environmental contingencies. In other words, since the picture still feels incomplete, the present study tries to synthesize what other scholars have already argued both theoretically and empirically, to give a more solid understanding of the channels and the conditions under which digital transformation can actually improve firm performance within the Nigerian business setting.

Objectives of the Study

The overall objective of this study is to explore how digital transformation influences business performance in Nigerian firms. Specific objectives are then to:

i. clarify the conceptual meaning and key dimensions of digital transformation as they apply to firms operating within the Nigerian business environment;

ii. examine the multidimensional nature of business performance and identify performance indicators relevant to digitally transforming businesses in Nigeria;

iii. analyze the theoretical linkages between digital transformation and business performance based on existing management and organizational theories; and

iv. explore the organizational and environmental factors that mediate or moderate the relationship between digital transformation and business performance in Nigeria.

REVIEW OF IMPORTANT CONSTRUCTS IN A CONCEPTUAL FORM

Digital Transformation and Business Performance

Digital Transformation

Digital transformation (DT) is an act of strategic combination of the use of digital technologies in every aspect of the business operation that changes the very basis of the way the organizations create the values, provide the services, and interact with the stakeholders. It does not only include the adoption of technology but also includes alterations in organizational strategy, organizational culture, organizational processes, and business models, which makes it possible to increase operational efficiency, innovation, and competitive advantage (Bharadwaj et al., 2013; Vial, 2019; Verhoef et al., 2021). The use of technologies like cloud computing, AI, big data analytics and digital platform enables productivity, effective decision-making and tailored customer experience making DT to be a key contributor of organizational competitiveness in both developed and emerging economies.

Digital Transformation Dimensions.

DT is multidimensional. Technology adoption is the implementation of technological solutions (ERP, cloud, & mobile) to support the automation of process and information flows (Bharadwaj

et al., 2013). Process re-engineering is a method that matches workflows and operations with the digital capabilities to enhance efficiency and minimize the costs (Hammer & Champy, 2003). The digital culture puts a focus on innovation, experimentation, and lifelong learning to guarantee that employees are open to change and acquire appropriate skills (Westerman, Bonnet, & McAfee, 2014). Digital initiatives and organizational goals are combined in strategic alignment, which means that DT has a direct effect on long-term value creation and competitive advantage (Matt, Hess, & Benlian, 2015).

International Scenes and Nigerian Environment.

The adoption of DT is very high globally, and the infrastructure, regulations, and technological preparedness support it (OECD, 2020). Digital entrepreneurship, the rapid penetration of the internet, and mobile connectivity in Nigeria has opened up DT opportunities, especially in financial services, telecommunications, retail, and e-commerce (Adeleye & Eboagu, 2019; NCC, 2023). However, the adoption rates differ by sectors and the size of the firm, with the latter being limited by inadequate infrastructure, skills gap, cybersecurity threats, and financial limitations (SMEDAN, 2022; World Bank, 2021).

Opportunities and threats in Nigeria.

Among the essential issues, there are infrastructural shortages, a lack of digital skills, regulatory ambiguity, and change reluctance. Nevertheless, DT is quite promising as it allows expanding the market, streamlines operations, innovates, and gains competitiveness in local and foreign markets (Adeleye & Eboagu, 2019).

Business Performance

Business performance is a measure of the efficiency of an organization to meet its goals and provide value to the organization based on both financial and non-financial measures. Financial metrics are the profitability, revenue increases, and ROI whereas non-financial metrics are innovation, operating efficiency, customer satisfaction, and strategic agility (Kaplan & Norton, 1996; Richard et al., 2009; Teece, 2016, 2018).

Empirical Insights

Empirical research has been pretty consistently connecting digital transformation (DT) to better organizational performance, especially when it comes to productivity, innovation, and also customer engagement. Like for example, the work done by Vial (2019) and Verhoef et al. (2021) implies that when firms strategically fold digital technologies into their core activities, they can better tune processes, improve value creation, and even reinforce customer relationships. And if we look past developed economies, there is also evidence from emerging markets, that DT helps firms open up broader market access, increase operational efficiency, and support entrepreneurial momentum… which then feeds into economic development (UNCTAD, 2021). Still, how much these advantages really show up, can vary a lot, because it depends on the setting like technology infrastructure, internal readiness, and the level of regulatory backing.

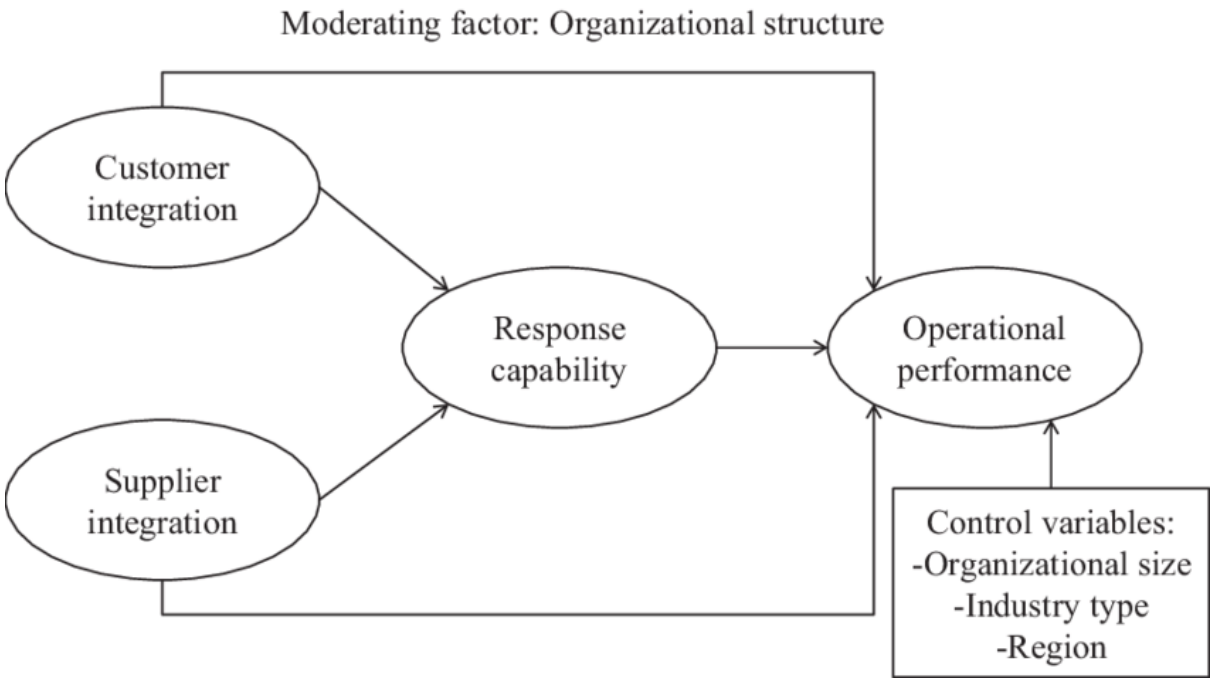
Within the Nigerian context, empirical evidence also seems to suggest a positive role for digital adoption, in boosting business competitiveness and making day-to-day operations more effective. A number of studies have noted that firms, especially small and medium-sized enterprises, as well as organizations in fintech, e-commerce, and telecommunications, have used digital technologies to improve service delivery, widen market reach, and reach higher efficiency (Adeleye & Eboagu, 2019). However, most of the existing literature still leans heavily toward the advantages of digitalization, while not paying much attention to the organizational and environmental situations that actually determine how well it works. So, it looks like, there is a need for a more careful view, of what happens when digital transformation connects with business performance, taking into account the actual Nigerian business setting and its realities.

Gaps in Literature

Even though the literature keeps growing and somehow links digital transformation to better organizational results, a few limitations still stay. Most of the earlier works tend to spell out a direct tie between digital transformation and business performance, but they do not really dig into the internal organizational, or even environmental, situations where those effects actually come through. Also, a lot of the empirical evidence is drawn from developed economies, so it feels a bit risky to assume the same logic will automatically fit places like Nigeria. There, infrastructural issues, institutional arrangements, and technological ground realities can look quite different. On top of that, the research area still looks a little splintered, with limited joining of related theories, so it becomes harder to get a full explanation of the way digital transformation affects business performance. All of this suggests the need for a context-aware conceptual structure that pulls together what is already known and clarifies the mechanisms through which digital transformation influences business performance, within the Nigerian business setting.

Moderating and Mediating Factors in Digital Transformation

Fig. 1.



Source: Authors' Formulation, 2026

Mediator: Response Capability

Theoretical Rationale

Response capability works like a sort of go between mechanism through which customer integration, and supplier integration end up helping operational performance. If we pull from Dynamic Capabilities Theory, the competitive edge doesn't come only from having information or raw resources, instead it comes from how well a firm senses, processes, and then reacts to shifting market conditions. In this view, customer integration gives firms not just any data but timely, very relevant insights about what customers want and which market signals are growing, while supplier integration supports a smoother flow of operational plus supply-chain information. Together these outside connections kind of push up response capability, so decisions get made faster, flexibility increases, and the firm can adjust quicker when the environment changes. So, once response capability improves, operational performance tends to rise too, through higher efficiency, better quality, shorter delivery lead times, and stronger responsiveness overall.

That is why response capability mediates the relationship: customer integration and supplier integration do not automatically translate into better performance by themselves. It's more like they first upgrade the firm's capacity to respond to market and day to day operational needs, and then, after that, the performance results show up.

Moderator: Organizational Structure

Theoretical Rationale

Organizational structure really does moderate the link between integration capabilities and operational performance, mostly because it sets up, or basically shapes, how well information

and resources get used inside the firm. So, the reasoning, if you anchor it properly, sits with Contingency Theory, which suggests that organizational success and effectiveness hinge on the fit between internal arrangements and the actual environmental or strategic needs that are coming up. When structures are more flexible, and a bit decentralized, they tend to support smoother communication, stronger cooperation, and quicker decisions, which in turn boosts the positive impact that customer integration and supplier integration have on operational performance. But if the organization is heavily centralized and bureaucratic, then the information tends to move slower, responses get delayed, and that can reduce, sometimes even neutralize, the gains that come from integration initiatives.

So overall, the relationship between integration practices and operational performance is not a constant thing, it varies with what the organizational structure looks like. Firms that are more adaptive and elastic are more likely to turn their integration efforts into better performance results, compared with firms that remain rigid and hard-to-adjust.

Organizational Factors

The leadership is a key defining factor. Transformational and digitally oriented leaders offer a strategic vision, manage the resources, and facilitate innovation as a mediating factor of the effect of DT on organizational performance (Westerman, Bonnet, & McAfee, 2014). Culture is another factor to consider; organizations with a higher level of organizational culture that enables to experiment, collaborate, and learn incorporate technology adoption and innovation, and organizations with more rigorous and risk-averse cultures block the efficiency of DT (Vial, 2019). Human resources and organizational competencies also play a role, since the companies with skilled labour and technologies also may use DT more effectively and facilitate innovation and efficiency in the work (Teece, 2018).

Environmental Factors

External conditions determine the adoption and effectiveness of DT. Effective execution also involves proper digital infrastructure, that is, it is necessary to have a stable electricity supply, a connection with broadband, and access to digital platforms (World Bank, 2021). The institutional support and regulation mechanisms may also accelerate or decelerate the process of DT initiatives, but the competitive market forces push the companies to introduce digital solutions to their business to become capable and responsive (Verhoff et al., 2021). The growing digital landscape in Nigeria (fintech and innovation hubs) is also a potential opportunity of collaboration and technological edge.

Technological Factors

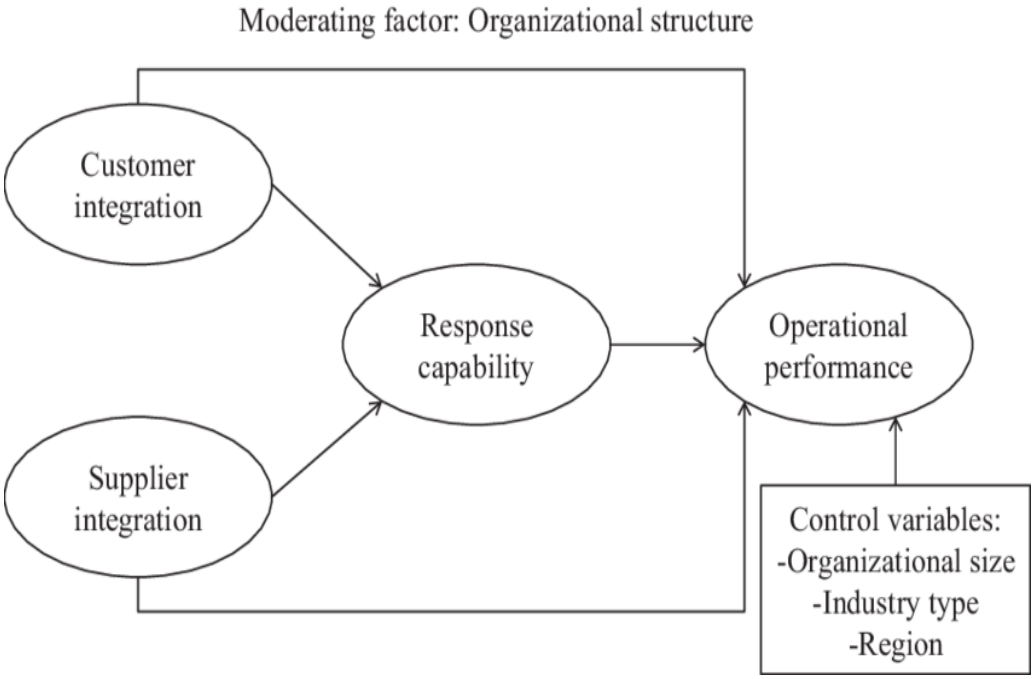
It is critical in terms of technological preparedness, combination, and scale. Advanced IT infrastructure and competencies increase the likelihood of firms to implement DT successfully, and effective integration is associated with digital tools to create meaningful performance responses. Scalable technologies enable organisations to increase operations, penetrate new markets as well as adapt to changing business environments without high costs (Bharadwaj et al., 2013).

Nigerian Firm Implications

These moderating and mediating factors are essential in Nigeria in terms of infrastructural inefficiency, lack of skills and regulatory risks. The question of whether the digital initiatives will lead to tangible performance gains depends on leadership dedication, positive culture, and organizational strengths. Similarly, environmental enablers, including the enhanced digital infrastructure, favourable policy environments, and competitive forces can bolster the results of DT, and technological preparedness can guarantee the long-term gains in sectors.

Conceptual Framework Development

Fig. 2.



Source: Authors' Formulation, 2026

Conceptual Framework, Propositions, and Literature Gaps

This paper postulates a theoretical framework of the relationship between digital transformation (DT) and the performance of the business in the Nigerian companies. Based on the knowledge of strategic management, information systems, and organizational theory, the framework makes DT the independent variable, which includes technology adoption, process redesign, development of digital capabilities, and strategic alignment, which ultimately increases operational efficiency levels, innovation, and strategic responsiveness (Bharadwaj et al., 2013; Vial, 2019; Verhoef et al., 2021).

The dependent variable is the business performance, which is quantified in terms of financial (profitability, the increase of revenues, ROI) and non-financial (operational efficiency, customer satisfaction, ability to innovate, strategic agility) measures that provide the holistic measurement of organizational success (Richard et al., 2009; Teece et al., 2016). The mediating variables include organizational capabilities, digital culture, and innovation capacity that explain how DT will be converted into better outcomes and moderating variables include the

quality of leadership, technological preparedness, regulatory environment, and digital infrastructure (Westerman, Bonnet, & McAfee, 2014).

Theoretical hypotheses that have been proposed based on the framework are as follows: (i) DT has a positive effect on business performance; (ii) the meditating effect that the capabilities of the organization could have was identified; (iii) the moderating effect that the leadership and culture could have has been identified; (iv) environmental factors enhance the effect of DT; (v) technological readiness enhances the effect of DT. These hypotheses can be used to conduct empirical studies in the future in the Nigerian context.

In spite of global and emerging market data suggesting that DT can help to increase efficiency, innovation, and competitiveness, voids exist. There are conceptual gaps in the incorporation of multiplicity of theoretical viewpoints to understand the impact of DT in the emerging economies. The contextual gaps represent the lack of research on the firms in Nigeria, especially infrastructures, regulations, and digital ecosystems. The lack of longitudinal and mixed-method designs leads to methodological gaps due to a majority of cross-sectional and descriptive designs (Autio et al., 2021; North, 1990).

To fill these gaps, the study will create an extensive framework to explain how DT relates to business performance and consider mediating and moderating variables applicable to Nigerian companies to provide both contextualized and theoretical explanations.

METHODOLOGY

The proposed research design is the conceptual and theoretical one as it will concentrate on synthesising and reviewing the existing literature instead of primary empirical data analysis (Snyder, 2019; Jaakkola, 2020). To explain the theoretical relationships, to overcome various literature streams, and to find gaps to be filled by subsequent empirical research, the conceptual review would be suitable, especially in the rapidly developing sphere of digital transformation and its influence on the performance of the business in Nigeria. It is a synthesis of knowledge on strategic management, information systems, and innovation studies and a qualitative, theory-based research that offers a consistent knowledge of the role of digital transformation in organizational performance. The choice of this approach is informed by the fragmented nature of existing scholarship on digital transformation, which spans multiple disciplines, including strategic management, information systems, innovation studies, and organizational theory. The review therefore seeks not only to summarize existing knowledge but also to critically examine, compare, and integrate different theoretical perspectives relevant to digital transformation and business performance.

Following Snyder's (2019) integrative review process, the study involves four stages: (i) problem formulation and identification of the review purpose; (ii) literature search and selection of relevant scholarly sources; (iii) critical analysis and synthesis of the literature; and (iv) development of a conceptual framework based on the synthesized evidence. Through this process, recurring themes, theoretical relationships, contextual factors, and knowledge gaps are identified and integrated into a coherent explanatory framework. The study specifically adopts a theory synthesis approach (Jaakkola, 2020), which involves combining complementary

theoretical perspectives to explain how digital transformation influences business performance within the Nigerian business environment. This approach facilitates the integration of insights from the Resource-Based View, Dynamic Capabilities Theory, Technology–Organization–Environment Framework, and related perspectives to provide a more comprehensive explanation of the mechanisms and contextual conditions through which digital transformation contributes to organizational performance.

Consequently, the review moves beyond a descriptive summary of prior studies and develops a theoretically grounded conceptual framework capable of guiding future empirical research and managerial practice in the Nigerian context.

Literature Search Strategy

Several scholarly databases, like Scopus, Web of Science, Google Scholar, JSTOR, and African Journals Online (AJOL), were searched thoroughly with the keywords of digital transformation, business performance, Nigeria, SMEs, emerging economies, digital adoption, and organizational capabilities. Relevance in the search was narrowed using the Boolean operators. Peer-reviewed articles, conceptual papers, and institutional reports published in the past 10-15 years were given the inclusion criteria with a preference given to emerging economies and articles providing a theoretical or conceptual perspective on the same.

Selection and Screening of Literature

Two stage screening was used. The initial phase of short listing of sources was done using titles and abstracts that dealt with digital transformation, organizational performance, and innovation. The second step was full-text reviews conducted to determine conceptual value, contextual and overall quality. Empirical studies which lacked theoretical contribution to the studies or those which were purely technical but lacked organizational consequences were also eliminated. Synthesis was done on around 5070 high quality sources.

Information Mining and Generalization

Among the main aspects that were brought out of each source were the definition of digital transformation, theoretical considerations, performance measures, and situational aspects. The literature was arranged in thematic analysis and the categories were conceptual definitions, theoretical frameworks, empirical insights and contextual influences. This helped in incorporating different views to form a consistent story on the impact of digital transformation on business performance.

Development of Conceptual Framework

The literature helped identify the most significant constructs, including dimensions of digital transformation, business performance indicators, and mediating and moderating factors. The connections between these constructs were balanced into a conceptual map, which depicts how digital transformation generates value to the Nigerian firms. The propositions were put forward as a theoretical framework to be applied in future empirical studies establishing the relationship that can be expected between digital transformation, mediators, moderators, and business performance outcomes.

SYNTHESIS OF LITERATURE AND CONCEPTUAL INSIGHTS

The literature review indicated that the digital transformation is being taken as a strategic determinant of organizational performance in every corner of the world, and including other developing economies such as Nigeria. The synthesis of 50-70 quality sources was carried out that consisted of peer-reviewed journals, concept papers, policy reports, and institutional publications. Most of the research findings in developed economies, as per the literature, are dedicated to applying new high-tech solutions and their impact on the efficiency of operations, innovation, and customer interaction (Vial, 2019; Verhoef et al., 2021). However, new economies, particularly in Africa, place the emphasis of their literature on the significance of institutional, infrastructural, and human capital limitations in the achievement of the effectiveness of digital transformation initiatives (Adeleye & Eboagu, 2019; UNCTAD, 2021).

Theoretically, the literature demonstrates that the association between digital transformation and business performance is multilateral and its impacts rely on the technological adoption, business processes, strategic alignment and culture. In addition, the mediating and moderating variables are leadership, workforce capabilities, digital infrastructure, and regulatory support, which are incredibly significant to the outcomes (Teece, 2018; Westerman et al., 2014). These observations form the basis of making generalizations of a situationalised understanding of digital transformation of the Nigerian firms.

Digital Transformation Organization Practices

The literature on digital transformation keeps pointing to a few interdependent practices that kind of move together to shape organizational results, instead of showing up as standalone initiatives. Core technologies like cloud computing, big data analytics, artificial intelligence, mobile platforms, and enterprise resource planning systems (Bharadwaj et al., 2013; Vial, 2019) basically give the infrastructural groundwork for what we can call digital capability. But the benefits aren't just "there" because they were adopted. It's more about how these tools allow other things to happen, and how they interact with complementary organizational practices, in a more intertwined way

Take business process re-engineering (Hammer & Champy, 2003) for example. It isn't simply a restructuring activity or a neat mechanical reset. It works like a mechanism where digital technologies get translated into real operational efficiency. Yet that translation depends on how far firms actually use digital tools to rework the workflows, rather than just patching things by automating inefficient, legacy systems. So, in this view, process re-engineering acts as a mediator between technology adoption and performance outcomes.

Similarly, the emergence of a digital culture (Westerman et al., 2014) does not just pop up as a standalone result, but rather acts as a reinforcing situation that essentially shapes whether technological adoption and process redesign can actually work. In other words, without a learning-oriented and innovation driven culture, firms tend to meet resistance to change, and that resistance then curtails the benefits even when the digital systems are advanced. This points to cultural readiness as an enabling environment, the kind that keeps technological and structural shifts moving rather than stalling.

Strategic alignment (Matt et al., 2015) then stitches the whole thing together, because it makes sure digital initiatives are not scattered, but instead oriented toward broader organizational ambitions like market expansion, operational efficiency, and improvement in customer experience. So, in effect, alignment behaves like a coordinating mechanism that binds technological capability, process re - engineering, and cultural transformation into one consistent strategic path.

Overall, these aspects should not be treated as separate boxes, they are more like mutually reinforcing parts inside a systemic transformation process. Digital technologies open the door to process innovation; process re-engineering turns technological potential into execution; digital culture sustains adaptability, and strategic alignment keeps the direction coherent and goal centred. That's why the literature frames digital transformation as an integrated capability system, where performance outcomes come from how these elements interact, not from simply having each practice present.

Digital Effect and Business Performance Results

Digital transformation (DT) has been broadly tied to better outcomes for organizations, both in the financial side and also in those more "soft" non-financial areas. Yet, the evidence kind of shows that these benefits are not really automatic, and they do not show up the same way for every firm. Like, from the financial point of view, multiple studies connect DT with higher profitability, faster revenue growth, and stronger return on investment (Kaplan & Norton, 1996). For instance, companies that fold digital technologies into customer-facing processes often mention improved sales efficiency and also an expansion of digital- based income sources (Verhoef et al., 2021). But the thing is, these improvements tend to depend on a few extra, supporting abilities such as digital literacy, data stewardship and disciplined change management, otherwise the whole stack of tech investments might not produce the financial return that was expected, or at least not in the way people planned.

Moving beyond money, DT is also commonly related to non-financial outcomes like innovation capability, operational effectiveness, customer experience quality, and strategic responsiveness (Teece et al., 2016; Richard et al., 2009). In practical terms, digital tools along with analytics can support near real-time decisions and make organizations respond quicker to shifts in markets. Still, there are setbacks too, for example data overload, higher system complexity, and an over reliance on automated decisions that can, at times, weaken the decision-making skill of managers instead of strengthening it.

Empirical evidence from developing economies, including Nigeria, shows both the promising side and the uneven way DT benefits actually get realized. For example, fintech and e-commerce firms have used mobile technologies, plus data analytics, to broaden customer reach, make service delivery smoother, and basically tighten up operations (Adeleye & Eboagu, 2019). But that kind of success isn't everywhere, and it's not the same for all players. Results differ a lot across sectors, and also by firm size, where small and medium-sized enterprises

(SMEs) often get held back by digital skills that are thin, infrastructure that is not quite ready, and gaps in financial resources.

More to the point, the literature also flags possible harmful, or at least unintended outcomes from digital transformation. You can see things like job displacement when automation ramps up, a widening digital divide between big and small firms, increased cybersecurity exposure, and the danger of becoming strategically reliant on external technology providers. In a few situations, the implementation costs are high, and the integration just fails, so efficiency drops and daily operations get disrupted, especially when older, legacy systems are already deeply embedded. So overall, the evidence tends to suggest that DT results are context-dependent and a bit ambivalent, rather than uniformly positive. In other words, performance effects depend on organizational readiness, institutional backing, and the conditions of each sector. That's why a more contingent, and more critical, reading of digital transformation impacts still matters.

Mediating and Moderating Factor Role

The relationship that exists between the digital transformation and the business performance is not direct but mediated and moderated by any factor.

The organizational factors that mediate transformation of digital transformation initiatives into performance improvements include leadership and culture. Transformational leadership and digitally oriented decision-making facilitate digital processes, innovation and employee engagement (Westernman et al., 2014). Similarly, a positive organizational culture facilitates experimentation and learning that would assist firms to maximize digital investments (Vial, 2019).

Digital transformation effectiveness is determined by the characteristics in the environment such as the digital infrastructure, regulatory environment and market turbulence. Infrastructures and uncertain regulations create gaps making digital initiatives have bigger impacts when there is enough internet infrastructure, reliable power supply, and when certain benefits are mostly overlooked (World Bank, 2021; Verhoef et al., 2021).

Technological factors also define the outcomes and encompass readiness, integration, and scalability. Well-integrated digital systems, strong IT architecture, and scalable systems enhance the possibilities of companies to realize the long-term change in the business performance (Bharadwaj et al., 2013). Such moderating and mediating variables can be used specifically in Nigeria as the business environment in the country is varied and the infrastructure is dynamic where the access to digital skills is different.

Business Implications in Nigeria

The analysis throws light into the Nigerian business environment realities. Digital transformation has the potential to offer an opportunity to become more efficient, expand the market, and innovate. Nevertheless, firms have to address the problem of infrastructure, the lack of digital literacy, and complex regulations (Adeleye & Eboagu, 2019). Small and medium-sized enterprises (SMEs) that are so important to the Nigerian economy have even greater obstacles in their way to adopting and using digital technologies.

The new opportunities of fintech innovations, mobile commerce, and digital platforms are despite these challenges. Those organisations that base all their digital activities on business objectives, make investments on employee capacity building, and establish relationships in the digital ecosystem stand a greater chance of experiencing massive performance changes. The results suggest that Nigeria needs to have a wide perspective of digital transformation. It involves integration of technology adoption and organization skills, style of leadership and facilitating conditions in the environment. This holistic solution addresses the best practices in the world with the local constraints in mind.

Correlation to the Proposed Conceptual Framework

Building on the reviewed literature, the study synthesizes the key dimensions of digital transformation into a conceptual model that, in a way explains how it connects to business performance. Here digital transformation sits as the independent variable, whereas business performance is the dependent side, covering financial and also non-financial outcomes, like profitability, innovation, operational efficiency, and strategic agility. Still, in line with what the literature suggests, this link is not exactly straightforward or uniform. Instead, it's shaped by a handful of mediating and moderating factors, that kind of steer how things play out. The mediating processes involve organizational routines and the reconfiguration of capabilities, meaning digital technologies get translated into better performance results. Then there are the moderating variables, such as leadership commitment, digital culture, technological infrastructure, and organizational readiness. These determine how far a firm can actually adopt and leverage digital technologies, and how smoothly that adoption happens.

This integrated framework captures the idea that digital transformation by itself, doesn't automatically turn into better performance; instead, what happens really depends on internal organizational capabilities and the broader context. In Nigeria, this model feels especially useful, since we still see gaps in infrastructure, digital skills and institutional backing, and that could help make sense of those mixed results researchers often see across different firms and sectors. When these linkages are set into one coherent storyline, the framework gives a way to interpret why some firms manage real improvements in efficiency, novelty, and strategic flexibility from digital transformation, while others end up with benefits that are small or uneven. It also works as a stepping stone for future empirical work in emerging economies, where contextual limits and the enabling conditions, together, tend to determine what kind of digital transformation outcomes firms actually get.

Propositions and Conceptual Framework

The paper introduces a conceptual framework explaining the impact of digital transformation (DT) on business performance (BP) among the Nigerian companies. It relies on the strategic management, information systems, and organizational theory (Vial, 2019; Verhoff et al., 2021). The independent variable, DT, comprises technology adoption, process redesign, digital culture, and strategic alignment (Bharadwaj et al., 2013; Matt et al., 2015) which are intended to increase efficiency, innovation, and competitiveness. The dependent variable, BP includes

financial measures (profitability, revenue growth, ROI) and non-financial measures (operational efficiency, innovation, customer satisfaction, strategic agility) (Kaplan and Norton, 1996; Teece et al., 2016).

The way in which DT generates better performance is mediated by organizational abilities, innovation capacity, and digital culture (Teece, 2018; Westerman et al., 2014). The efficiency of DT initiatives depends on moderating variables, such as the quality of leadership, organizational culture, digital infrastructure, regulatory support, and technological readiness (Vial, 2019; Adeleye and Eboagu, 2019; World Bank, 2021). These aspects are particularly applicable to Nigeria because of the difference in infrastructure and regulatory barriers.

Theoretical Propositions

i. DT has a positive effect on BP in terms of efficiency, innovation and competitiveness.

ii. The relationship between DT and BP is mediated by organizational capabilities, innovation capacity, and digital culture.

iii. The quality of leadership and culture of an organization influence the influence of DT on BP.

iv. The environmental factors such as infrastructure, and regulating support have a positive influence on DT outcomes.

v. Technological preparedness, integration, and scalability are effective in improving the performance of DT, both financially and non-financially.

Implications

Theoretical: The research incorporated Resource-Based View, Dynamic Capabilities, Institutional, and Socio-Technical Systems theories. It addresses the gaps in the previous studies, which only studied the technology adoption without looking at the mediators, moderators, and context (Barney, 1991; Teece et al., 1997; Vial, 2019; Verhoeff et al., 2021).

Managerial:

i. Match digital efforts to the overall organizational strategy.

ii. It is a good idea to invest in people and the culture of digital in order to make organizations stronger.

iii. Promote digital and transformational leadership in order to enhance DT performances.

iv. Make use of digital ecosystems to assist the SMEs to access markets.

Policy:

i. Enhance internet penetration and infrastructures.

ii. Less unpredictability in rules and stimulate creativity.

iii. Train employees on digital skills both in academics and training programs.

iv. Make SMEs more accessible to finance, technology and advisory services.

Future Research Directions

i. Test the framework proposed on a quantitative, qualitative, or mixed basis.

ii. Carry out longitudinal studies that would capture the performance implications of DT.

iii. Investigate the variations in the use of DT by sector and size.

iv. Explore contextual moderators such as cultural, infrastructure and institutional moderators.

v. Research on interaction between DT and sustainability and innovation to generate larger economic and social value.

REFERENCES

Adeleye, N., & Eboagu, C. (2019). Evaluation of ICT development and economic growth in Africa. *Netnomics: Economic Research and Electronic Networking, 20*(1–2), 31–53. https://doi.org/10.1007/s11066-019-09131-6

Afolayan, A. O., Adeyeye, A. D., & Ola-David, O. (2022). Digital technology adoption and firm performance in developing economies: Evidence from Nigerian enterprises. *Journal of African Business, 23*(3), 415–433. https://doi.org/10.1080/15228916.2021.1930702

Autio, E., Nambisan, S., Thomas, L. D. W., & Wright, M. (2021). Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. *Strategic Entrepreneurship Journal, 15*(1), 1–26. https://doi.org/10.1002/sej.1346

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly, 37*(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3

Boston Consulting Group. (2021). *The rise of Nigeria's digital economy: Opportunities and growth prospects*. BCG Publications.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10–11), 1105–1121.

Hammer, M., & Champy, J. (2003). *Reengineering the corporation: A manifesto for business revolution* (2nd ed.). HarperCollins.

Hammer, M., & Champy, J. (2003). *Reengineering the corporation: A manifesto for business revolution* (Rev. ed.). Harper Business.

Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization, 28*(1), 52–61. https://doi.org/10.1016/j.infoandorg.2018.02.004

Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business School Press.

Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering*. Keele University and Durham University.

Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2021). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management, 63*, 102466. https://doi.org/10.1016/j.ijinfomgt.2021.102466

Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business & Information Systems Engineering, 57*(5), 339–343. https://doi.org/10.1007/s12599-015-0401-5

Nadkarni, S., & Prügl, R. (2021). Digital transformation: A review, synthesis, and opportunities for future research. *Management Review Quarterly, 71*(2), 233–341. https://doi.org/10.1007/s11301-020-00185-7

Nigerian Communications Commission (NCC). (2023). *Subscriber statistics report Q4 2023*. NCC.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

OECD. (2021). *Going digital: Shaping policies, improving lives*. Organisation for Economic Co-operation and Development.

Okoli, C. (2015). A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems, 37*(1), 879–910.

Organisation for Economic Co-operation and Development (OECD). (2020). *The digital transformation of SMEs*. OECD Publishing. https://doi.org/10.1787/bdb9256a-en

Oyelaran-Oyeyinka, B., & Adebowale, A. (2021). Digital transformation in Nigerian SMEs: Empirical evidence and policy implications. *Journal of African Business, 22*(1), 1–23. https://doi.org/10.1080/15228916.2021.1894760

Oyelaran-Oyeyinka, B., & Adebowale, B. A. (2021). Digitalization, innovation and firm performance in Africa. *African Journal of Science, Technology, Innovation and Development, 13*(3), 311–323. https://doi.org/10.1080/20421338.2020.1804132

Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management, 52*(2), 183–199.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management, 35*(3), 718–804. https://doi.org/10.1177/0149206308330560

SMEDAN. (2022). *SME sector performance report 2022: Nigeria*. Small and Medium Enterprises Development Agency of Nigeria.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

UNCTAD. (2021). *Digital economy report 2021: Cross-border data flows and development*. United Nations Conference on Trade and Development.

United Nations Conference on Trade and Development (UNCTAD). (2021). *Digital economy report 2021: Cross-border data flows and development*. United Nations.

Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research, 122*, 889–901. https://doi.org/10.1016/j.jbusres.2019.09.022

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems, 28*(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: A framework for large-scale organizations. *Long Range Planning, 52*(3), 326–349. https://doi.org/10.1016/j.lrp.2018.12.001

Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly, 26*(2), xiii–xxiii.

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.

World Bank. (2020). *World development report 2020: Trading for development in the digital age*. World Bank Group.

World Bank. (2021). *Digital economy for Africa initiative: Supporting Africa's digital transformation*. World Bank Group.