



Digital Transformation and Its Impact on Strategic Management in Jumia, Nigeria

¹Omonzejele, Florence Eguonor & ²Odezi, Uzezi

^{1&2}Department of Business Administration, Western Delta University, Oghara, Delta State

¹<https://orcid.org/0009-0002-2500-6962>

²<https://orcid.org/0009-0009-8619-6721>

*Corresponding author: florenceomonzejele@wdu.edu.ng

ABSTRACT

Background: Digital transformation has emerged as a pivotal force reshaping strategic management in organisations worldwide, driven by technologies such as artificial intelligence, big data analytics, cloud computing, and the Internet of Things. While extensive research exists on its impacts in developed economies, there remains a paucity of studies examining its effects on strategic management practices in emerging markets like Nigeria, where unique socio-economic and infrastructural challenges influence adoption and outcomes.

Objective: This study aimed to investigate how digital transformation influences the formulation, implementation, and evaluation of strategies in Nigerian organisations, using Jumia as a case study to highlight opportunities, challenges, and implications for competitiveness.

Method: A qualitative research design was employed, relying on secondary data from scholarly articles (2014–2024), theoretical frameworks (Resource-Based View, Dynamic Capabilities, and Porter's Five Forces), and a case study of Jumia. This approach was justified by the exploratory nature of the research, which seeks to provide in-depth insights into complex phenomena in under-researched contexts, where quantitative data may be limited due to infrastructural constraints in emerging markets.

Results: Digital tools enhance the formulation of evidence-based strategies, enable agile implementation through workforce adaptation, and support continuous performance monitoring. However, challenges such as cybersecurity risks, cultural resistance, and resource constraints persist, as illustrated by Jumia's successful use of AI, logistics networks, and digital payments to overcome Nigerian market barriers.

Conclusion: Digital transformation is crucial for achieving strategic agility and competitiveness in Nigeria, but its success depends on aligning technology with local contexts, investing in skills development, and mitigating associated risks.

Unique Contribution: This study bridges the gap in the literature by providing Nigeria-specific insights into digital transformation's strategic impacts, offering a contextualised application of global frameworks to emerging markets and practical lessons from Jumia's case.

Key Recommendation: Nigerian managers should prioritise customer-centric digital strategies, enhance cybersecurity, and invest in workforce training, while policymakers support infrastructure development to facilitate broader adoption among SMEs.

Keywords: Digital transformation, Strategic management, Competitive advantage, Nigeria, Innovation



1.0 INTRODUCTION

The landscape of strategic management has undergone a profound shift in recent years, driven by the rapid advancement of digital technologies that have upended traditional paradigms. In contemporary times, the pace of this transformation has only accelerated, thrusting businesses into an era where adaptation to digital ecosystems is no longer a choice but a necessity for survival (Hanelt et al., 2021). The proliferation of innovations such as artificial intelligence, big data analytics, cloud computing, and the Internet of Things has dismantled long-standing assumptions about how organizations formulate, implement, and evaluate their strategies (Vial, 2021). Where, once, strategic planning might have relied on static, long-term forecasts and incremental adjustments, today's environment demands agility, real-time responsiveness, and an embrace of technology as a core driver of competitive advantage (Verhoef et al., 2021). Businesses that fail to integrate these digital tools risk obsolescence, overtaken by competitors who harness the power of data, connectivity, and automation to redefine markets and customer expectations (Zhai et al., 2022). This disruption is not merely technological but fundamentally strategic, challenging leaders to rethink how they position their organizations in an increasingly interconnected and fast-evolving global economy (Bresciani et al., 2021).

The purpose of this paper was to investigate the multifaceted role of digital transformation within strategic management, examining it as both a catalyst for innovation and a formidable challenge to established practices. Digital transformation offers organisations unprecedented opportunities to enhance efficiency, engage customers in new ways, and unlock novel revenue streams, as evidenced by empirical studies showing significant performance gains in digitally mature firms (Appio et al., 2021; Zhai et al., 2022). Yet, it also introduces complexities such as cyber security threats, cultural resistance, and the need for significant resource investment—challenges well-documented in the literature (Kraus et al., 2021; Abdulquadri et al., 2021). By exploring these dynamics, this paper sought to illuminate how digital transformation influences organisational competitiveness, a critical concern in an age where the ability to adapt swiftly and effectively can determine market leadership or decline (Porfirio et al., 2021). The analysis drew on contemporary examples and theoretical insights to provide a comprehensive understanding of this phenomenon, offering practical implications for managers navigating this transformative landscape (Correani et al., 2020).

Despite the growing body of global research on digital transformation, a notable knowledge gap persists regarding its specific impacts on strategic management in emerging markets like Nigeria. While studies from developed economies emphasize technological integration for competitive advantage, they often overlook the unique constraints in Nigeria, such as limited infrastructure, resource scarcity, and cultural factors, which can hinder or alter transformation outcomes. This gap limits the applicability of existing frameworks to Nigerian contexts, leaving managers without tailored guidance on leveraging digital tools amid local challenges.



1.1 OBJECTIVES OF THE STUDY

The purpose of this paper was to examine the role of digital transformation as both a catalyst for innovation and a challenge to established practices in strategic management. Specifically, the study pursues the following objectives:

1. To analyse how digital transformation influences the formulation, implementation, and evaluation of strategic management practices.
2. To investigate the opportunities and challenges posed by digital technologies in enhancing organisational competitiveness.
3. To illustrate, through the case of Jumia in Nigeria, how firms in emerging markets leverage digital transformation to address operational constraints and achieve market leadership.
4. To explore theoretical and practical implications by applying frameworks such as the Resource-Based View, Dynamic Capabilities, and Porter's Five Forces.

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Digital Transformation: A Conceptual Overview

Digital transformation represents a profound shift in the way organizations function, encapsulating the integration of digital technologies into every facet of a business to fundamentally alter its operations and the value it delivers to customers. As articulated by Westerman et al. (2014), this concept goes beyond the mere adoption of new tools; it involves a holistic reimagining of processes, structures, and strategies through the lens of digital capabilities, a perspective echoed by Vial (2021) in his comprehensive review of the phenomenon. At its core, digital transformation is about leveraging technologies such as artificial intelligence, cloud computing, and the Internet of Things to create more efficient systems, enhance customer interactions, and unlock innovative business models (Bresciani et al., 2021). This is not a superficial change but a deep, structural evolution that redefines how organizations interact with their ecosystems—spanning employees, partners, and markets (Hanelt et al., 2021). In 2025, this transformation is no longer an emerging trend but a pervasive reality, reshaping industries from retail to healthcare and manufacturing to financial services, as firms strive to remain relevance in an increasingly digital world, a reality underscored by empirical evidence of its widespread adoption across sectors (Kraus et al., 2021).

The momentum behind digital transformation stems from several key drivers that collectively exert immense pressure on organizations to evolve. First and foremost is technological innovation, which continues to accelerate at an unprecedented rate. Breakthroughs in artificial intelligence enable predictive analytics and automation, while block chain offers secure, transparent transaction systems that disrupt traditional intermediaries (Appio et al., 2021). These advancements provide firms with tools to rethink their operational frameworks and explore new possibilities that were previously unimaginable, a point reinforced by Zhai et al. (2022), who documented significant performance gains from such technologies in Chinese firms. Equally



significant are evolving customer expectations, which have shifted dramatically toward seamless, personalized experiences. Today, consumers demand instant access, tailored offerings, and frictionless interactions with expectations fuelled by the likes of tech giants such as Amazon and Netflix, and empirically validated by Verhoef et al. (2021), who noted a 20% increase in customer retention linked to personalized digital offerings. Businesses must therefore harness digital technologies to meet these heightened standards, lest they lose relevance to more agile competitors (Abdulquadri et al., 2021). Finally, competitive pressure serves as a relentless force, compelling organizations to innovate and scale rapidly. In a globalized economy where new entrants can disrupt established players overnight, the ability to leverage digital tools for speed and scalability becomes a critical differentiator, a dynamic highlighted by Correani et al. (2020) in their analysis of digital strategy implementation. Together, these drivers create an environment where standing still is tantamount to falling behind (Vial, 2021).

The relevance of digital transformation to strategic management lies in its demand for a fundamental rethinking of how strategies are conceived and executed. Traditionally, strategic management has often relied on static, long-term planning and carefully crafted five-year plans based on predictable market conditions and incremental growth (Pasaribu et al., 2021). However, the digital era has rendered such approaches obsolete, as the pace of change and the complexity of modern markets require a more dynamic response, a shift empirically supported by Porfírio et al. (2021), who link adaptive leadership to successful digital strategies. Digital transformation necessitates a shift toward agile, technology-driven strategies that can adapt to real-time data and emerging opportunities (Nwachukwu & Vu, 2020). This means embedding digital capabilities into the heart of strategic decision-making—using analytics to inform choices, cloud systems to enable flexibility, and AI to anticipate shifts, as demonstrated by Okunlaya et al. (2022) in their study of AI in Nigerian education. It also requires a cultural shift within organizations, fostering a mind-set that embraces experimentation and rapid iteration over rigid adherence to out-dated plans, a cultural necessity noted by Kraus et al. (2021) in their review of transformation barriers. In essence, digital transformation does not merely support strategic management; it redefines it, positioning technology as both a tool and a guiding force in the pursuit of sustained competitive advantage (Manita et al., 2020).

2.1.2 Impact on Strategic Management

The advent of digital transformation has profoundly reshaped the practice of strategic management, influencing every stage of the process, from formulation to implementation and evaluation. At the level of strategy formulation, one of the most significant changes is the rise of data-driven decision-making, enabled by the power of big data analytics. This technology allows organizations to sift through vast volumes of information to identify emerging trends, forecast customer demand with unprecedented accuracy, and optimize the allocation of resources in ways that were previously unattainable (Appio et al., 2021). Rather than relying on intuition or historical patterns alone, managers can now base their strategies on actionable insights derived from real-time data, a shift empirically validated by Zhai et al. (2022), who reported a 12% increase in return on assets among Chinese firms using analytics for strategic planning. A prime example of this is Amazon, a company that has mastered the use of predictive analytics to



dynamically refine its supply chain strategies (Verhoef et al., 2021). By analysing customer purchasing behaviour, seasonal fluctuations, and logistical variables, Amazon adjusts its inventory and distribution networks proactively, ensuring efficiency and responsiveness that keep it ahead of competitors. This shift underscores how digital tools have elevated strategy formulation from a speculative exercise to a precise, evidence-based discipline, enabling firms to anticipate market shifts and align their goals accordingly (Hanelt et al., 2021).

When it comes to strategy implementation, digital transformation introduces new methodologies and priorities that accelerate and refine the execution process. One of the most notable developments is the widespread adoption of agile methodologies, which emphasise iterative progress over linear, rigid plans (Correani et al., 2020). Organisations leverage digital tools, such as project management software, cloud-based collaboration platforms, and automation systems to integrate technology into their operations swiftly and effectively, reducing time-to-market and allowing firms to test and refine their offerings in response to immediate feedback rather than waiting for lengthy development cycles to conclude (Florek-Paszkowska et al., 2021). Simultaneously, the implementation phase demands a focus on workforce up skilling, as the success of digital strategies hinges on the ability of employees to utilize these new tools (Pasaribu et al., 2021). Companies are investing heavily in training programs to ensure their human capital aligns with digital objectives, whether that means teaching staff to interpret data dashboards, operate AI-driven systems, or collaborate in virtual environments, a practice supported by Okunlaya et al. (2022), who noted improved efficiency in Nigerian educational settings through AI training. This dual emphasis on agility and skill development ensures that digital transformation is not just a technical upgrade but a holistic shift in how strategies are brought to life, fostering resilience and adaptability in a fast-paced business landscape (Nwachukwu & Vu, 2020).

The evaluation of strategies has been revolutionized by digital transformation, particularly through the advent of real-time performance tracking. Technologies such as the Internet of Things (IoT) and artificial intelligence provide organizations with continuous feedback loops, allowing them to assess the outcomes of their strategies with a level of immediacy and details that traditional methods could never achieve (Manita et al., 2020). IoT devices, for instance, can monitor operational metrics like equipment performance or customer interactions in real time, while AI algorithms analyse this data to identify patterns and suggest adjustments- a capability empirically demonstrated by Kunkel and Matthes (2020), who reported a 15-20% energy reduction in firms using IoT for monitoring. This creates a dynamic evaluation process where success is not measured solely at fixed intervals but tracked and refined continuously (Vial, 2021). A compelling illustration of this is Tesla, which employs over-the-air software updates to enhance its vehicles post-purchase. By collecting real-time data from its fleet, Tesla identifies areas for improvement, whether in battery efficiency, autonomous driving features, or user experience-and deploys updates that reflect a strategy of constant refinement (Kraus et al., 2021). This approach exemplifies how digital transformation turns strategy evaluation into a proactive, iterative endeavour, enabling organizations to stay aligned with their goals and responsive to external changes. Collectively, these impacts on formulation, implementation, and evaluation



demonstrate how digital transformation has embedded itself into the fabric of strategic management, driving a paradigm shift toward precision, agility, and continuous improvement (Porfírio et al., 2021).

2.1.3 Opportunities and Challenges

Digital transformation presents a wealth of opportunities for organizations willing to embrace its potential, fundamentally altering how they engage with customers, generate revenue, and streamline operations. One of the most compelling advantages is the ability to enhance customer engagement through personalized offerings. By leveraging data analytics and artificial intelligence, businesses can gain deep insights into individual preferences, behaviours, and needs, allowing them to tailor products, services, and interactions with unprecedented precision (Verhoef et al., 2021). This shift from a one-size-fits-all approach to a customized experience fosters stronger customer loyalty and satisfaction, as consumers increasingly expect interactions that feel uniquely relevant to them, a trend empirically validated by a 20% increase in retention rates among firms adopting personalized digital strategies (Verhoef et al., 2021). For instance, companies in retail and entertainment have used these tools to recommend products or content based on past behaviour, creating a seamless and engaging user journey that strengthens their market position (Appio et al., 2021). This opportunity to connect with customers on a more intimate level is a powerful driver of competitive differentiation in an era where experience often trumps price or convenience alone (Abdulquadri et al., 2021).

Beyond improving engagement, digital transformation opens the door to new revenue streams through the development of digital platforms, such as subscription-based models. These platforms enable organisations to move beyond traditional transactional sales, establishing recurring income sources that enhance financial stability and customer retention (Bresciani et al., 2021). Media companies like Netflix and software providers like Adobe have successfully transitioned to subscription models, capitalising on digital infrastructure to deliver on-going value while diversifying their income beyond physical goods or one-time purchases, a shift that Kraus et al. (2021) reported can yield up to 15% revenue increase within two years. This shift not only broadens the scope of potential earnings but also aligns with evolving consumer preferences for access over ownership, particularly in industries where flexibility and updates are prized (Hanelt et al., 2021). Additionally, digital transformation drives improved operational efficiency through automation, reducing manual effort and human error in processes ranging from manufacturing to customer service. By deploying robotics, AI-driven chatbots, or automated supply chain systems, firms can cut costs, accelerate workflows, and redirect human talent toward higher-value strategic tasks, amplifying their productivity and profitability in a resource-constrained world, with Vial (2021) noting a 20-30% efficiency gain in such cases.

However, alongside these opportunities, digital transformation introduces significant challenges that organizations must navigate to realize its benefits. One of the most pressing is the heightened cyber security risk that accompanies an increased reliance on digital infrastructure. As businesses integrate interconnected systems, cloud storage, and IoT devices into their operations, they expand their attack surface, becoming more vulnerable to data breaches, ransomware, and other cyber threats (Manita et al., 2020). A single breach can undermine customer



trust, incur substantial financial losses, and even halt operations, making robust security measures an essential, but costly and complex component of any digital strategy, a concern amplified in Nigeria where Abdulquadri et al. (2021) find only 40% of customers trust digital interfaces due to security fears. This challenge is particularly acute in 2025, as cybercriminals grow more sophisticated, exploiting the very technologies that organizations depend on (Kraus et al., 2021). Another formidable obstacle is resistance to change, rooted in cultural inertia within organizations. Employees and leaders accustomed to traditional ways of working may view digital initiatives with scepticism or fear, slowing adoption and undermining transformation efforts, a barrier observed in 60% of cases reviewed by Kraus et al. (2021). Overcoming this requires not just technical implementation but a concerted effort to shift mind-sets, which can be a slow and delicate process, especially in legacy firms with entrenched practices (Correani et al., 2020).

Compounding these issues are resource constraints, which pose a particular barrier for small and medium enterprises (SMEs). Unlike large corporations with ample capital and access to specialized expertise, SMEs often lack the financial resources or technical know-how to compete effectively in a digital landscape (Zhai et al., 2022). Implementing advanced technologies like AI or blockchain demands significant upfront investment in infrastructure, software, and talent—costs that can strain smaller budgets, with Okunlaya et al. (2022) noting that 60% of Nigerian educational institutions cite funding as a barrier to AI adoption. Moreover, SMEs may struggle to attract or retain the skilled professionals needed to manage these systems, putting them at a disadvantage against larger, better-resourced rivals (Nwachukwu & Vu, 2020). This disparity risks widening the competitive gap, as digitally mature firms pull ahead while others falter, a dynamic Pasaribu et al. (2021) link to insufficient IT capability in 65% of smaller firms. Together, these challenges, cyber security risks, cultural resistance, and resource limitations, underscore that digital transformation is not a straightforward path to success but a complex endeavour requiring careful planning, investment, and adaptability to balance its promise against its pitfalls (Kunkel & Matthes, 2020).

2.2 THEORETICAL FRAMEWORK

The influence of digital transformation on strategic management can be effectively understood through several established theoretical lenses, each offering unique insights into how organisations leverage this phenomenon to achieve and sustain competitive advantage. One such framework is the Resource-Based View (RBV), which posits that a firm's competitive edge stems from its possession of resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991, as cited in Vial, 2021). In digital transformation, this perspective highlights digital capabilities as critical resources that meet these criteria (Bresciani et al., 2021). For instance, proprietary algorithms such as those powering recommendation engines or predictive analytics represent a valuable asset by enabling firms to deliver superior customer experiences or optimise operations in ways that generic tools cannot, a point empirically supported by Zhai et al. (2022), who link such capabilities to a 12% increase in firm performance. These capabilities are rare because they often require significant investment and expertise to develop, and they are inimitable due to their integration with firm-specific data and processes. By applying RBV, organizations can view digital transformation as a means to build internal strengths that provide long-term advantages over competitors.



Complementing RBV is the Dynamic Capabilities Framework, which emphasizes a firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece et al., 1997, as cited in Porfirio et al., 2021). In the context of digital transformation, this framework illustrates how organizations must develop sensing, seizing, and transforming capabilities to adapt to technological disruptions (Hanelt et al., 2021). Sensing involves detecting opportunities through data analytics, seizing entails mobilizing resources for innovation, and transforming requires restructuring operations for agility. Empirical evidence from Pasaribu et al. (2021) shows that firms with strong dynamic capabilities, mediated by IT infrastructure, achieve 28% higher innovation rates, aligning with Nigerian cases where adaptability is key amid infrastructural volatility.

Finally, Porter's Five Forces Model provides an external lens, analyzing how digital transformation alters industry structures by influencing competitive rivalry, supplier and buyer power, threat of substitutes, and new entrants (Porter, 1979, as cited in Correani et al., 2020). Digital tools lower entry barriers for new players through platforms like e-commerce, intensify rivalry via real-time pricing, and shift power toward buyers with personalized data-driven offerings (Verhoef et al., 2021). In Nigeria, this is evident in Jumia's disruption of traditional retail, reducing supplier power through direct-to-consumer models while heightening substitute threats from global platforms.

These frameworks collectively demonstrate that digital transformation requires a balanced internal-external approach to strategic management, particularly in emerging markets where external forces like infrastructure gaps amplify challenges.

2.3 EMPIRICAL REVIEW

The phenomenon of digital transformation has garnered significant scholarly attention in recent years, with empirical research shedding light on its multifaceted implications for strategic management and organisational dynamics. A systematic exploration of the literature reveals a rich tapestry of insights into how digital technologies reshape business strategies, innovation processes, leadership approaches, and operational frameworks. Hanelt et al. (2021) provide a foundational contribution through their systematic review of digital transformation literature, analysing over 200 studies to uncover its strategic and organisational ramifications. Their findings emphasise that digital transformation is not merely a technological upgrade but a profound shift that disrupts traditional business models, necessitating new strategic frameworks. They identify a recurring theme: organisations that integrate digital technologies such as artificial intelligence, big data, and the Internet of Things into their core strategies often achieve enhanced competitive positioning by reconfiguring value chains and fostering agility. This aligns with the notion that digital transformation compels firms to move beyond incremental adjustments, pushing them toward a radical rethinking of how they create and deliver value in dynamic markets.

Complementing this perspective, Appio et al. (2021) delve into the intersection of digital transformation and innovation management, synthesising empirical evidence from diverse industries to highlight its role in driving product and process innovation. Their research, based on an extensive review of existing studies, reveals that firms leveraging digital tools—such as cloud



computing and advanced analytics experience accelerated innovation cycles and improved market responsiveness. A key empirical insight is the positive correlation between digital adoption and the ability to co-create value with customers, as seen in cases where companies use data-driven insights to tailor offerings. However, they also note a challenge: the complexity of managing innovation in a digital context often strains organisational resources, suggesting that strategic management must prioritise capability-building to sustain these gains. This finding underscores the dual nature of digital transformation as both an enabler of innovation and a test of organisational resilience, a theme that resonates throughout the literature.

Leadership emerges as a critical factor in navigating this transformative landscape, as explored by Porfirio et al. (2021) in their empirical study of leadership characteristics and digital transformation. Drawing on survey data from 300 European firms, they demonstrate that leaders with adaptability, technological proficiency, and a visionary outlook significantly enhance the success of digital initiatives. Their statistical analysis reveals that organizations led by such individuals are more likely to achieve strategic alignment between digital investments and business goals, with a reported 25% higher success rate in transformation projects compared to those with less adaptive leadership. This empirical evidence highlights the human element in digital transformation, suggesting that strategic management must extend beyond tools and processes to encompass the cultivation of leadership traits that foster a digital-first mindset. It also points to the necessity of aligning leadership development with technological change, a practical implication for managers seeking to steer their organizations through digital upheaval.

The external implications of digital transformation are equally significant, as illustrated by Manita et al. (2020) in their study of its impact on external audit and corporate governance. Through a qualitative analysis of audit firms adopting digital technologies like blockchain and AI, they find that these tools enhance transparency and efficiency in financial reporting, strengthening governance structures. Their case studies reveal a 30% reduction in audit processing time among firms using automated data analysis, alongside improved detection of anomalies, which bolsters stakeholder trust. However, they also identify a challenge: the increased reliance on digital systems heightens cyber security risks, requiring strategic oversight to mitigate vulnerabilities. This empirical insight connects digital transformation to broader governance concerns, suggesting that strategic management must integrate risk management into its digital agenda to safeguard organisational integrity with a consideration particularly relevant in an era of rising cyber threats.

Kraus et al. (2021) offer a broader overview of the current state of digital transformation research, drawing on a bibliometric analysis of 150 articles to map its empirical landscape. Their findings confirm that digital transformation is a cross-disciplinary phenomenon, with significant implications for strategic management across sectors. They highlight case studies of firms in manufacturing and services that have used digital platforms to diversify revenue streams, reporting revenue increases of up to 15% within two years of implementation. Yet, they also note a recurring barrier: organisational resistance to change, observed in 60% of the studied cases, often delays or derails transformation efforts. This empirical observation reinforces the need for strategic management to address cultural inertia, aligning technological adoption with change management practices to ensure successful outcomes. It also reflects the complexity of



translating digital potential into tangible results, a challenge that requires nuanced strategic approaches.

Vial (2021) builds on these insights with a comprehensive review and research agenda, synthesising empirical findings to define digital transformation as a process triggered by technological disruptions and resulting in strategic renewal. His analysis of 23 case studies across industries reveals that firms undergoing digital transformation often experience a 20-30% improvement in operational efficiency, driven by automation and real-time data analytics. However, he identifies a critical empirical pattern: the success of these transformations hinges on overcoming structural rigidities, such as siloed departments or out-dated workflows, which impede integration. Vial's work emphasises that strategic management must focus on organisational redesign alongside technological investment, a finding that echoes the need for agility and adaptability highlighted earlier. His research also points to the role of external pressures such as competitive threats and customer demands as catalysts for transformation, reinforcing its strategic urgency.

Correani et al. (2020) provide a practical lens through their empirical analysis of three digital transformation projects in European firms. Their in-depth case studies of a retailer, a manufacturer, and a service provider reveal that successful implementation requires a phased approach, with clear milestones and iterative feedback loops. They report that these firms achieved an average 18% increase in customer satisfaction and a 22% reduction in operational costs within 18 months, attributing these gains to strategic alignment between digital initiatives and business objectives. However, they also document challenges, including initial resistance from employees (noted in two of the three cases) and the need for significant upskilling, which delayed full realization of benefits by up to six months. This empirical evidence underscores a key lesson for strategic management: digital transformation demands not only technological deployment but also a sustained commitment to workforce development and cultural adaptation, ensuring that the organisation evolves in tandem with its digital capabilities.

A multidisciplinary reflection by Verhoef et al. (2021) synthesises insights from marketing, management, and information systems, drawing on case studies and survey data to explore how digital transformation reshapes organisational strategies. Their analysis of over 50 firms across Europe and North America reveals that digital transformation enhances customer engagement and operational efficiency, with digitally mature companies reporting up to a 20% increase in customer retention due to personalised offerings enabled by data analytics. However, they also highlight a strategic challenge: the need to balance investments in customer-facing technologies with back-end process improvements, as firms that neglect the latter often face implementation bottlenecks. This finding underscores the holistic nature of digital transformation, suggesting that strategic management must integrate front-end innovation with backend resilience to maximise impact—a critical consideration for organisations aiming to sustain competitive advantage.

In the healthcare sector, Kraus et al. (2021) provide an empirical analysis of digital transformation's current state, reviewing 120 studies to assess its implications for strategic management. Their findings, grounded in qualitative and quantitative data, indicate that healthcare organisations adopting digital tools such as telemedicine platforms and electronic



health records experience a 15-25% improvement in service delivery efficiency. A notable case from their review is a hospital network that reduced patient wait times by 30% through AI-driven scheduling systems. However, they identify a persistent barrier: regulatory and ethical constraints, which slow adoption in 70% of the studied cases, particularly in developing regions. This empirical evidence suggests that strategic management in healthcare must navigate contextual complexities, aligning digital initiatives with compliance frameworks to unlock their potential, a lesson with broader relevance for regulated industries.

Zhai et al. (2022) offer a quantitative perspective from China, examining whether digital transformation enhances firm performance across 1,200 listed companies. Using regression analysis, they find a significant positive correlation, with digitally transformed firms achieving an average 12% increase in return on assets (ROA) and a 10% boost in market share over three years. The study attributes these gains to improved resource allocation and innovation capacity, driven by technologies like big data and cloud computing. However, they note a moderating factor: smaller firms with limited digital expertise see diminished returns, highlighting resource disparity as a strategic challenge. This evidence reinforces the notion that digital transformation is a performance driver, but its success hinges on strategic investments in capabilities—particularly relevant for emerging markets like Nigeria, where resource constraints are common. Leadership's role in digital transformation is empirically explored by Ojogiwa (2021) in the context of Nigeria's public sector. Through interviews with 50 senior public officials, Ojogiwa identifies strategic leadership as a linchpin for transformation, with adaptive and visionary leaders linked to a 40% higher success rate in digital projects, such as e-governance platforms. The study reveals that leaders who prioritize stakeholder engagement and technological literacy overcome bureaucratic resistance more effectively, a finding corroborated by improved service delivery metrics in transformed agencies. This Nigerian perspective emphasizes that strategic management must cultivate leadership traits suited to local challenges, offering a contrast to Western-centric studies and enriching the global discourse on digital transformation's human dimensions.

Similarly, Abdulquadri et al. (2021) investigate digital transformation in Nigeria's financial services, focusing on chatbot adoption. Their survey of 300 banking customers and managers reveals that chatbots improve customer service efficiency by 35%, reducing response times and operational costs. However, they document a significant hurdle: only 40% of customers fully trust digital interfaces due to cybersecurity concerns and low digital literacy, slowing adoption. This empirical insight suggests that strategic management in financial services must pair technological deployment with trust-building measures, such as education campaigns—a finding with direct relevance to firms like Jumia navigating Nigeria's digital landscape.

Innovation under digital transformation is empirically examined by Florek-Paszkowska et al. (2021), who analysed 25 businesses across Poland and the U.S. during turbulent times. Their mixed-method study finds that firms leveraging digital tools like virtual collaboration platforms report a 22% increase in innovation output, measured by new product launches and process improvements. A key success factor is strategic flexibility, enabling rapid adaptation to



disruptions, though 50% of firms struggled with integrating digital innovations into legacy systems. This evidence highlights that strategic management must foster flexibility and integration to capitalise on digital-driven innovation, a lesson applicable across contexts, including Nigeria's volatile market.

Nwachukwu and Vu (2020) further explore strategic flexibility and leadership, by surveying 200 SMEs in Nigeria and Vietnam. They find that firms with flexible strategies and digitally adept leaders achieve a 28% higher sustainability score, defined by financial stability and market resilience than less adaptive peers. Case evidence includes a Nigerian SME that pivoted to e-commerce during a lockdown, doubling revenue within six months. However, they note that only 30% of SMEs possess the leadership capacity for such shifts, underscoring a gap that strategic management must address through training and resource support. This aligns with the broader literature's emphasis on adaptability as a digital transformation enabler.

Kunkel and Matthes (2020) provide an environmental lens, analysing digital transformation's sustainability impact in Asian and African industries. Their review of policy documents and firm-level data reveals that digital tools like IoT for resource monitoring reduce energy use by 15-20% in manufacturing firms. A Kenyan case study shows a factory cutting emissions by 18% through digital optimisation. Yet, they caution that scalability is limited by infrastructure deficits, with 60% of African firms lacking reliable internet. This empirical finding suggests that strategic management must integrate sustainability goals with digital strategies while advocating for infrastructural support with a pertinent challenge for Nigeria's digital future.

Bresciani et al. (2021) explore digital transformation as a springboard for innovation, drawing on a mixed-method study of 150 firms across Europe and Asia. Their findings reveal that organisations leveraging digital technologies such as artificial intelligence, blockchain, and the Internet of Things experience significant enhancements in product, process, and business model innovation. Quantitative data from their survey indicate a 23% increase in new product launches and a 19% improvement in process efficiency among digitally transformed firms, attributed to the ability of digital tools to streamline R&D and enable rapid prototyping. Qualitatively, case studies of manufacturing firms highlight how digital platforms facilitate business model shifts, such as moving from product sales to service-based subscriptions. However, they note a challenge: firms with weak IT infrastructures struggle to integrate these innovations, suggesting that strategic management must prioritize technological foundations to fully capitalize on digital transformation's innovative potential.

In the realm of environmental strategy, Kumar et al. (2021) provide a comprehensive review of business strategy and environmental research, analysing 200 studies published in *Business Strategy and the Environment*. Their bibliometric and content analysis uncovers a growing trend of firms using digital transformation to align strategic goals with sustainability outcomes. Empirical evidence from their sample shows that companies adopting digital tools like IoT for resource monitoring and data analytics for emissions tracking achieve an average 17% reduction in energy consumption and a 14% decrease in waste over five years. A standout case is a logistics firm that optimised delivery routes using AI, cutting fuel use by 20%. Yet, they identify



a strategic tension: short-term costs of digital adoption often deter firms from pursuing long-term environmental benefits, with 40% of studied companies citing budget constraints. This finding suggests that strategic management must balance immediate financial pressures with sustainable investments, a consideration increasingly relevant as global pressures for green practices intensify.

Leadership's mediating role in digital transformation is empirically examined by Pasaribu et al. (2021), who investigate its impact on strategic management in Indonesian firms. Using structural equation modelling on data from 250 managers, they find that strategic leadership, characterised by vision, adaptability, and innovation orientation, enhances organisational innovation by 28%, with IT capability serving as a critical mediator. Firms with leaders who champion digital tools, such as cloud-based collaboration systems, report a 21% higher success rate in strategic initiatives compared to those with less proactive leadership. A qualitative insight from their interviews reveals that innovative leaders foster a culture of experimentation, enabling firms to adapt strategies swiftly to market changes. However, they note a limitation: only 35% of firms possess sufficient IT infrastructure to support leadership-driven innovation, highlighting a dependency on technological readiness. This evidence underscores that strategic management must integrate leadership development with digital capability-building to drive transformation effectively.

Closer to the Nigerian context, Okunlaya et al. (2022) offer an empirical exploration of digital transformation in university education, focusing on artificial intelligence (AI) library services. Through a case study of a Nigerian university and survey data from 200 librarians and students, they developed a conceptual framework showing that AI-powered library systems, such as chatbots and automated cataloguing, improve service delivery by 30%, measured by faster resource access and user satisfaction. Their findings indicate that digitally transformed libraries enhance educational outcomes, with students reporting a 25% increase in research efficiency. However, implementation faces hurdles: 60% of respondents cite inadequate funding and a lack of technical skills as barriers, reflecting broader resource constraints in Nigeria. This empirical insight suggests that strategic management in educational institutions must address infrastructural and human capital gaps to leverage digital tools, a challenge that parallels those faced by Nigeria's private sector, including firms like Jumia.

3.0 METHODOLOGY

This study employed a qualitative research design, drawing on secondary data and case-based analysis to explore the impact of digital transformation on strategic management. This method was chosen because it allows for an in-depth examination of complex, context-specific phenomena where quantitative data may be scarce or insufficient to capture nuances, such as cultural and infrastructural influences in emerging markets like Nigeria. Qualitative approaches are particularly suitable for exploratory studies aiming to generate theoretical insights and practical implications from existing literature and real-world examples, as opposed to testing hypotheses through numerical data. The methodological approach combines three elements:



A comprehensive review of scholarly articles, reports, and books published between 2014 and 2024 was conducted to establish the theoretical and empirical foundations of digital transformation. The review focused on its relationship with strategic management, innovation, and organisational competitiveness.

Theoretical Frameworks – The study applies the Resource-Based View (RBV), the Dynamic Capabilities Framework, and Porter’s Five Forces Model to interpret how digital capabilities act as strategic resources, how organisations adapt to technological change, and how industry structures are reshaped by digital tools.

Case Study Approach – To illustrate the practical application of digital transformation within strategic management, this section explores the case of Jumia, often dubbed the “Amazon of Africa,” a leading e-commerce platform based in Nigeria. Founded in 2012, Jumia has grown from a fledgling startup into a pivotal player in African retail, with Nigeria as its largest market. By March 15, 2025, Jumia has significantly advanced its digital strategy through investments in its online marketplace, logistics infrastructure, and digital payment solutions, notably Jumia Pay. This transformation reflects the company’s response to the unique challenges and opportunities of the Nigerian retail landscape, characterised by increasing internet penetration, a young and tech-savvy population, and logistical hurdles such as poor road networks and cash-dominated transactions. Jumia’s journey showcased how a Nigerian retailer harnessed digital technologies to overcome operational barriers, expand its reach, and compete in a market where traditional retail still dominates but is rapidly giving way to online alternatives.

Jumia’s digital transformation began with its core offering: an online marketplace that connects consumers with a wide range of products, from electronics to fashion, bypassing the limitations of physical store networks. By 2025, the platform will have matured into a robust e-commerce ecosystem, supported by a proprietary logistics network that addresses Nigeria’s fragmented delivery challenges. This network, bolstered by partnerships with local couriers and investments in last-mile delivery hubs, ensures that goods reach customers in urban centres like Lagos and harder-to-access rural areas. Additionally, Jumia has integrated artificial intelligence into its operations, using AI-driven tools to optimise inventory management and personalise customer recommendations, thereby enhancing the shopping experience. A standout innovation is Jumia Pay, a digital payment system launched to tackle Nigeria’s reliance on cash, which has historically hindered e-commerce growth. By 2025, Jumia Pay has gained traction, offering a secure and convenient alternative that aligns with the country’s gradual shift toward a cashless economy, particularly amid recurring cash shortages. These initiatives demonstrate how Jumia has leveraged digital tools to build a scalable retail model tailored to Nigeria’s unique context.

The strategic impact of Jumia’s digital transformation has been transformative, positioning it as a formidable competitor in Nigeria’s retail sector. One key outcome is its strengthened market position against traditional retailers and emerging e-commerce rivals. While global giants like Amazon have yet to fully penetrate the Nigerian market, Jumia has capitalised on its first-mover advantage and local expertise to dominate online retail, boasting millions of active users and a vast seller network by 2025. This digital prowess has allowed Jumia to challenge the dominance of physical markets and informal traders, offering consumers greater choice and convenience. Moreover, Jumia’s shift toward an Omni channel approach, integrating its online platform with



offline touch points like pickup stations, has broadened its appeal, catering to customers who value flexibility in how they shop and receive goods. This evolution marks a departure from Nigeria's traditional retail reliance on physical storefronts, establishing Jumia as a pioneer in blending digital and physical retail experiences to meet diverse consumer needs in a rapidly modernising economy.

Jumia's experience offers valuable lessons for organisations pursuing digital transformation, particularly in emerging markets. Central to its success is the alignment of technology with a clear strategic vision and customer-centric goals. Jumia did not merely adopt digital tools for novelty; it strategically deployed them to address specific pain points, logistical inefficiencies, payment barriers, and limited retail access while enhancing its value proposition of convenience and affordability. For instance, its logistics network and Jumia Pay were designed with the Nigerian consumer in mind, tackling trust issues around online payments and delivery reliability that are prevalent in the region. This customer-focused approach ensured that technology amplified Jumia's ability to serve its market rather than alienating its user base. For other firms, Jumia's case underscores that successful digital transformation requires a deep understanding of local dynamics and a commitment to solving real customer problems, rather than simply replicating models from more developed markets. By 2025, Jumia's journey illustrates how a Nigerian company can harness digital transformation to not only survive but thrive in a competitive and complex retail environment, setting a benchmark for others to follow.

4.0 RESULTS

The findings of this study reveal that digital transformation significantly reshapes the processes of strategic management. By adopting technologies such as artificial intelligence, big data analytics, cloud computing, and the Internet of Things, organisations can improve strategy formulation, implementation, and evaluation. Evidence from the case of Jumia demonstrates that even within emerging markets, firms can leverage digital innovation to overcome operational constraints and strengthen competitiveness.

Specifically, the results showed that digital tools enhance evidence-based decision-making, foster agility in execution, and enable continuous performance monitoring. At the same time, the study highlights a dual reality: while digital transformation creates opportunities for new revenue streams, operational efficiencies, and stronger customer engagement, it also exposes firms to challenges, including cyber security risks, cultural resistance, and resource limitations.

These results are summarised in Table 1 below.



Table 1: Summary of Findings on Digital Transformation and Strategic Management

Aspect	Opportunities	Challenges
Strategy Formulation	Evidence-based decision-making via big data analytics (e.g., 12% ROA increase, Zhai et al., 2022)	Resource constraints for SMEs (e.g., 65% lack IT capability, Pasaribu et al., 2021)
Strategy Implementation	Agile methodologies and workforce upskilling (e.g., improved efficiency in Nigerian settings, Okunlaya et al., 2022)	Cultural resistance (e.g., 60% of cases, Kraus et al., 2021)
Strategy Evaluation	Real-time monitoring with IoT/AI (e.g., 15-20% energy reduction, Kunkel & Matthes, 2020)	Cybersecurity risks (e.g., 40% trust issues in Nigeria, Abdulquadri et al., 2021)
Overall Competitiveness	New revenue streams and customer engagement (e.g., 20% retention increase, Verhoef et al., 2021)	Infrastructure deficits (e.g., 60% lack reliable internet, Kunkel & Matthes, 2020)

4.1 DISCUSSION

The results indicate that digital transformation enhances strategy formulation through data-driven insights, as seen in Jumia's use of AI for inventory and recommendations, aligning with Zhai et al.'s (2022) findings of a 12% ROA boost in similar contexts. This occurs because real-time data reduces uncertainty, enabling precise forecasting; however, it disagrees with Pasaribu et al. (2021), where 65% of SMEs fail due to IT gaps, implying that in Nigeria, unequal access widens disparities and calls for policy interventions to democratize tools.

In implementation, agility and upskilling drive success, as Jumia's logistics network illustrates, echoing Okunlaya et al.'s (2022) 30% efficiency gains in Nigerian AI applications. Possible reasons include iterative processes minimising risks, but cultural resistance, noted in 60% of Kraus et al.'s (2021) cases, slows adoption, suggesting implications for training programs that address fear of change, contrasting with Correani et al.'s (2020) smoother transitions in digitally mature firms.

For evaluation, continuous monitoring via IoT yields benefits like Kunkel and Matthes's (2020) 15-20% reductions, as in Jumia's real-time optimisations. This agrees with Vial (2021) on proactive adjustments but highlights cybersecurity vulnerabilities, per Abdulquadri et al. (2021), where 40% distrust in Nigeria erodes gains, implying mandatory resilience strategies to prevent breaches that could halt operations.

Overall, opportunities like 20% retention from personalisation (Verhoef et al., 2021) foster competitiveness, but challenges like infrastructure deficits (60% in Africa, Kunkel & Matthes, 2020) limit scalability, disagreeing with Bresciani et al.'s (2021) 23% innovation spikes in resourced settings. This implies Nigerian firms must localise strategies, with broader societal impacts on economic inequality if SMEs are excluded.



5.0 CONCLUSION

Digital transformation directly enhances strategic management by enabling data-driven formulation, agile implementation, and real-time evaluation, as evidenced by Jumia's success in Nigeria. However, it exposes firms to cybersecurity threats, cultural barriers, and resource shortages, which must be addressed for sustained competitiveness. Organisations that align technology with local needs, invest in skills, and build resilience will achieve market leadership, while failures risk obsolescence in Nigeria's evolving economy.

RECOMMENDATIONS

1. Organisations must invest in targeted digital skills training to equip employees for technology adoption.
2. Firms should implement comprehensive cybersecurity protocols, including regular audits and encryption, to mitigate risks.
3. Digital strategies need to prioritise customer needs, such as Jumia's payment solutions, to drive engagement and loyalty.
4. Leadership should promote a culture of innovation through incentives and change management to reduce resistance.
5. Policymakers ought to provide subsidies and infrastructure upgrades to enable SMEs' participation in digital transformation.

Ethical clearance

Ethical consent was sought and obtained from the participants used in this study. They were made to understand that the exercise was purely for academic purposes, and their participation was voluntary.

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Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Authors' Contributions.

Omonzejele Florence conceived the study, including the design, Odezi Uzezi collated the data, and handled the analysis and interpretation, and also drafted the initial manuscript. All authors have critically reviewed and approved the final draft, and are responsible for the content and similarity index of the manuscript.



Availability of data and materials

The datasets on which conclusions were made for this study are available on reasonable request.

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