

**DIGITAL TRANSFORMATION STRATEGIES AND PERFORMANCE OF  
COMMERCIAL BANKS IN NAIROBI CITY COUNTY, KENYA**

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KENYATTA UNIVERSITY**

**OCTOBER 2025**

## **DECLARATION**

### **Declaration by Candidate**

This research project is my original work and has not been presented for a degree or other award in any university. No part of this research proposal should be reproduced without authority of the author or/and University.

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### **Approval by Supervisor**

This research project has been submitted for examination with my approval as the University Supervisor.

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## **DEDICATION**

I dedicate this work to my family in appreciation of their prayers, encouragement, and support thus far. May God bless all.

## **ACKNOWLEDGEMENT**

I give thanks to the Lord for giving me life and the chance to reach this point. Second, I express my gratitude to my supervisor, Dr. Janet Muthimi, for her guidance over the entire study proposal writing process. In addition, I acknowledge the dedication and support offered by my friends and colleagues in making this study a success.

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## **ABBREVIATIONS AND ACRONYMS**

<b>BSC</b>	Balance Scorecard
<b>CBK</b>	Commercial Bank of Kenya
<b>ICT</b>	Information Communication Technology
<b>IT</b>	Information Technology
<b>KCB</b>	Kenya Commercial Bank
<b>NACOSTI</b>	National Council of Science, Technology, and Innovation
<b>NSE</b>	Nairobi Securities Exchange
<b>RBV</b>	Resource Based View
<b>SME</b>	Small and Medium Enterprises
<b>SPSS</b>	Statistical Package for Social Sciences
<b>TAM</b>	Technology Acceptance Model
<b>US</b>	United States
<b>VIF</b>	Variance Inflation Factors
<b>VRIN</b>	Valuable, Rare, Inimitable, And Non-Substitutable

## OPERATIONAL DEFINITION OF TERMS

- Cloud computing adoption** - Involves the use of internet-based servers to store, manage, and process data, enabling businesses to access flexible and scalable computing resources. In this study, cloud computing adoption was measured through workload migrated, uptime of cloud-based services and reliability of cloud based services
- Data analytics** - Involves examining large data volumes in identifying patterns and intuitions that support strategic decision-making. In this study, data analytics was measured through actionable insights, speed and efficiency of data analytics
- Digital banking platforms** - Refer online and mobile technologies use in banks to deliver financial service and enable customers to conduct transactions remotely. In this study, digital banking was measured through mobile app usage, online transaction volume and reliability of platforms
- Digital transformation strategies** - Refer to the comprehensive integration of digital technologies in a firm's operations to boost efficacy, customer practice, and performance. In this study, digital transformation was measured through digital banking platforms, data analytics, fintech partnerships as well as cloud computing adoption.
- Fintech partnerships** - Involve collaborations between traditional banks and financial technology companies to leverage innovative solutions and enhance service delivery. In this study, fintech partnership was measured through number of collaborations, new products and new delivery channels.
- Organization Performance** - Refers to how effectively a firm achieves its objectives by utilizing available resources optimally. For this research, performance was assessed via operational efficiency, customer retention and employee productivity

## ABSTRACT

Commercial banks in Nairobi County, Kenya are facing significant performance challenges due to rapid technological changes, heightened competition, and shifting customer expectations. These factors have impacted key performance metrics such as operational efficiency, customer retention, and employee productivity, pressuring banks to adopt effective strategies that can drive sustainable growth. Digital transformation has emerged as a crucial approach to address these challenges, enabling banks to improve efficiency, boost customer experience, and maintain competitive positioning. This research aimed to evaluate digital transformation strategies impact on the performance of commercial banks in Nairobi City County, Kenya. Precisely, it examined the effects of digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption on the performance of the commercial banks in Nairobi City County, Kenya. The research was anchored in Technology Acceptance Model, Diffusion of Innovation Theory, Resource Based View, and Agency Theory. A descriptive correlational research design was used, targeting all 39 commercial banks in Nairobi City County, Kenya, with the head of IT and heads of strategy or a similar role in each bank as the respondent, totaling to 78 participants. Data was collected via structured questionnaires administered through Google Forms. A pilot test was performed to verify the validity and reliability of the research tool, and internal consistency was evaluated using Cronbach's alpha. Descriptive statistics (mean and standard deviation) and inferential statistics were used in the data analysis process. Multiple linear regression was used to look at how each independent variable impact the dependent variable. The regression analysis discovered that digital transformation strategies explained 80.6% of organizational performance variations  $R^2 = 0.806$ , with the model being statistically significant  $F = 69.744$ ,  $p < 0.05$ . All four predictors digital banking platforms  $\beta = 0.196$ ,  $p < 0.05$ , data analytics  $\beta = 0.410$ ,  $p < 0.05$ , fintech partnerships  $\beta = 0.325$ ,  $p < 0.05$ , and cloud computing adoption  $\beta = 0.441$ ,  $p < 0.05$  had significant positive effects. The research discovered that digital transformation is a critical driver of operational efficiency, customer satisfaction, and strategic growth. It recommends that banks deepen investment in secure, data-driven, and innovation-led digital infrastructures to sustain long-term performance and competitiveness in a dynamic financial landscape.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Commercial banks in globalized economy receive heightened competition from local as well as global players, necessitating the need for superior performance to maintain market relevance and competitiveness (Xie & Wang, 2023). However, organizational performance remains a critical factor in ensuring the resilience and sustainability of commercial banks, particularly in dynamic and competitive financial markets. It is often evaluated through both financial and non-financial indicators such as revenue growth, customer retention, and employee productivity, which reflect a bank's efficiency and ability to meet stakeholder expectations. Digital transformation strategies including digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption are increasingly recognized as essential drivers of improved performance. These strategies enable banks to streamline operations, enhance service delivery, and respond effectively to evolving customer demands (Azizi, Judijanto, Mere, Moridu, & Anwar, 2024; Jo'rayev, 2024; Sugihyanto & Arsjah, 2024). Despite these advancements, many banks continue to face challenges of low profitability, inefficiencies, and declining customer satisfaction, raising questions about the extent to which digital transformation has translated into tangible improvements in organizational performance.

Digital transformation is widely recognized as a strategic approach that enables firms to leverage technology to improve efficiency, remain competitive in fast-changing markets, and enhance customer experiences (Joel, Oyewole, Odunaiya & Soyombo, 2024). It involves integrating digital technologies into various facets of business operations, fundamentally reshaping how organizations function while delivering added value to customers (Bhuiyan, Faraji, Rashid, Bhuyan, Hossain, & Ghose, 2024). In the banking sector, this transformation typically includes the use of digital banking platforms, process automation, data analytics, and collaborations with fintech firms (Oladele, 2024). Commercial banks have increasingly embraced these tools to streamline operations, improve service delivery, and meet the demands of technology-savvy consumers. Beyond efficiency, digital transformation equips firms with the

capacity to innovate, adapt to shifting market conditions, and sustain competitiveness in the financial industry (Do, Pham, Thalassinou & Le 2022).

In the global banking landscape, digital transformation has become a strategic priority to enhance efficiency, customer experience, and overall competitiveness. For instance, HSBC has invested in blockchain technology to streamline international trade finance, reducing processing times and enhancing security (Abdurrahman, Gustomo & Prasetyo 2024). Similarly, Deutsche Bank has leveraged artificial intelligence to improve risk management and automate routine banking tasks, releasing funds for more worthwhile endeavors (Adorno, 2020). In the United States, Capital One has successfully implemented cloud computing to improve data management and develop scalable digital banking solutions, underscoring the critical role of technology in modern banking (Khan, Kabanov, Hua, & Madnick 2022).

In South Africa, banks too incorporated digital transformation as a strategy of remaining competitive in a rapidly evolving financial sector (Magnus-Eweka, 2023). Standard Bank has developed a mobile banking app that integrates various services, from digital payments to loan applications, making it easier for customers to access banking solutions (Matsepe & Van der Lingen, 2022). Absa Bank has used machine learning to enhance fraud detection and improve the security of online transactions. Additionally, Nedbank has collaborated with tech startups to develop innovative fintech solutions, such as digital wallets, to cater to the growing demand for cashless payments (Jacobs, 2020).

In East Africa, banks in countries like Kenya, Tanzania, and Uganda have been at the forefront of digital transformation. For instance, Kenya's National Bank has introduced digital banking platforms that allow for seamless online transactions, while I&M Bank has adopted cloud computing to enhance data storage and processing capabilities (Mwenda & Kimutai, 2022). In Tanzania, NMB Bank has implemented a robust mobile banking service that facilitates easy access to rural customers financial services, encouraging financial inclusion (Rwigema, 2020). Uganda's Centenary Bank has integrated digital payment systems to support e-commerce, reflecting a growing trend towards digital solutions in the region (Asiimwe, 2023).

In Kenya, digital transformation has become integral to the operational strategies of many commercial banks (Hakizimana, Wairimu & Stephen, 2023). Equity Bank has been a leader in this space, rolling out a digital platform that integrates mobile banking, online banking, and agency banking, making it accessible even to customers in remote areas (Pyoko, Akims, MNYachae & Mbugua, 2023). In attempt of better understand client demands and provide individualized services, KCB Bank has developed advanced data analytics capabilities. In the meantime, Co-operative Bank has implemented robotic process automation (RPA) to improve service delivery and expedite back-office activities (Mutuku, 2023). These efforts highlight how digital transformation is not just enhancing efficiency but also driving innovation and growth in Kenya's banking sector (CBK, 2023).

The link between the sub-optimal Kenyan commercial banks performance and digital transformation tactics is evident (Ogalloh, 2023). Digital transformation initiatives like digital banking platforms adoption, implementation of data analytics, engagement in fintech partnerships, and adoption of cloud computing technologies hold promise for addressing prevalent challenges like operational inefficiencies, outdated infrastructure, and evolving customer demands (Gaya, Omoro & Kinyua, 2022). According to recent statistics, several Kenyan commercial banks reported a stagnation in revenue growth, with industry-wide profitability declining by an average of 5% in the past two years due to high operational costs and competitive pressures (Kenya Bankers Association, 2023). Additionally, customer retention rates dropped, with customer satisfaction scores falling by nearly 15% between 2022 and 2023, largely attributed to service delays and limited product innovation (Central Bank of Kenya, 2023).

Banks have also faced challenges related to employee productivity, as measured by revenue per employee, which declined by approximately 8% in the same period (Central Bank of Kenya, 2023). These figures highlight the pressing necessity for Kenyan banks to leverage digital transformation effectively to streamline processes, improve decision-making, and introduce innovative, customer-centered services. By optimizing digital transformation strategies, banks can address these specific performance issues and boost their flexibility and competitiveness in a dynamic market (Hakizimana *et al.*, 2023).

### **1.1.1 Organization Performance**

Performance denotes how effectively a firm attains its objectives by utilizing available resources optimally. In the case of commercial banks, performance encompasses the successful integration of strategies that enhance operational efficiency, customer satisfaction, and employee productivity (Ibrahim & Obuba, 2023). As Adeniyi (2023) explains, performance is the attainment of set goals through the efficient use of resources. This involves not just financial success but also the capacity to adjust to evolving market environments and technology. Performance can thus be measured by assessing how well a bank leverages digital tools like data analytics, cloud computing, and digital banking platforms to advance service delivery while upholding competitive edge (Islam, Amin, Hossain, Islam & Popp, 2023).

Measuring performance is essential, as it provides insights into the efficacy and sustainability of a firm's processes. For commercial banks, effective performance reflects the success of initiatives that enhance customer engagement, reduce operational costs, and drive employee productivity (Gagai, 2022). For example, data analytics use can lead to improved sound decisions, while cloud computing can streamline processes, allowing banks to respond swiftly to customer needs (Adhikara & Nur Diana, 2022). Bank managers play a critical role in driving performance by implementing strategies that maximize the benefits of digital transformation and ensuring that the institution remains competitive (Demir, 2022).

Performance is best measured via financial and non-financial metrics, as a single index is often insufficient (Israel, Mahuwi & Mwenda, 2023). The Balanced Scorecard (BSC) offers a thorough framework for evaluating performance in terms of internal procedures, learning, customer satisfaction, and financial results (Zarzycka & Krasodomska, 2022). This study measured performance via three non-financial measures namely: operational efficiency, customer retention and employee productivity as performance indicators to assess how digital transformation strategies influence Kenyan commercial banks performance. The choice of this metrics was justified in that they offer a clear assessment of how digital transformation strategies streamline operations, enhance customer satisfaction, and improve workforce performance in Kenyan commercial banks.

### **1.1.2 Digital Transformation Strategies**

Digital transformation strategies refer to the inclusive digital technologies integration into a firm's operations in enhancing efficiency, client experience, and overall performance (Chen & Williams, 2022). In the commercial banks context, these strategies include the adoption of digital banking platforms, data analytics, fintech partnerships, and cloud computing (Gurcan, Boztas, Dalveren & Derawi, 2023). Kim and Kim (2022) discovered by implementing digital transformation, banks can rationalize processes, minimize costs, and offer personalized services that meet evolving customer demands. For instance, data analytics assist banks in making well-informed decisions based on consumer behavior, while digital banking systems enable users to conveniently perform transactions online (Treceñe, 2021). Embracing these strategies enables commercial banks in Kenya to remain competitive, improve operational efficiency, and adapt swiftly to market environment alterations, thus ensuring sustainable growth and enhanced customer satisfaction (Troise, Tani, Matricano & Ferrara, 2022).

Digital transformations offer a crucial mandate in improving customer experiences and satisfaction levels, which are key determinants of organizational success in the highly competitive banking industry (Kothari & Seetharaman, 2022). By offering intuitive and user-friendly digital banking platforms, commercial banks can meet the evolving expectations of tech-savvy customers and provide seamless, personalized services across various touchpoints (Magnus-Eweka, 2023). Additionally, fintech partnerships and collaborations enable banks to leverage innovative technologies and solutions to address customer needs more effectively, such as faster payment processing, enhanced security features, and access to advanced financial management tools (Chen, 2024). As a result, satisfied clients are more likely to remain loyal, increase their usage of banking services, and promote the bank to others, contributing to better customer retention rates and employee productivity (Hakizimana *et al.*, 2023). Digital banking platforms, process automation, data analytics, and cloud computing are the key elements of digital transformation strategies. These technologies aid firms rationalize their operations, provide better goods and services, and withstand technological changes (Edmond, Prakash, Garg & Bawa, 2022).

Digital banking platforms refer to application of online and mobile technologies by banks to deliver financial services and enable customers to conduct transactions remotely (Indriasari, Prabowo, Gaol & Purwandari, 2022). By adopting digital banking platforms, banks demonstrate their commitment to enhancing customer convenience, improving service accessibility, and staying competitive in a tech-driven market. Without having to go to a physical branch, these platforms let users to carry out a variety of banking role, like paying bills, transferring money, and checking account balances (Pal, 2022). Sanyaolu, Adeleke, Azubuko and Osundare (2024) claim such initiatives not only improve customer satisfaction by providing a seamless and efficient banking experience but also help banks reduce operational costs associated with maintaining traditional branches. Additionally, digital banking platforms enable banks to gather valuable data on customer behavior, which can be used to offer personalized services, enhance marketing efforts, and streamline risk management processes. By embracing digital banking, banks can promote long-term growth, increase client loyalty, and improve operational efficiency, demonstrating that digital transformation can align with business success and customer satisfaction (Lottu, Abdul, Daraojimba, Alabi, John-Ladega & Daraojimba, 2023).

Data analytics is the procedure of looking at vast data amounts to find inclinations and insights that help with making sound decisions (He, Hung & Liu, 2023). In banking, it enables institutions to understand customer behavior, optimize operations, and improve risk management. Banks can boost marketing efforts, provide individualized services, and more successfully identify fraud by utilizing data analytics, which will boost client satisfaction and operational effectiveness (Kamdjoung, Sando, Kala, Teutio, Tiwari & Wamba, 2024). Furthermore, data-driven insights assist banks in making well-informed decisions that spur expansion, proving that integrating data analytics is decisive for long-term accomplishment and attractiveness (Devan, Prakash & Jangoan, 2023).

Fintech partnerships involve collaborations between traditional banks and financial technology companies to leverage innovative solutions and enhance service delivery (Chernoff & Jagtiani, 2024). Through these collaborations, banks are able to include leading-edge technologies like digital wallets, blockchain, as well as artificial intelligence, into their operations. By collaborating with fintech firms, banks can offer faster payment solutions, improve security, and provide more personalized service,

yielding to superior customer gratification and loyalty (Cheng, Daum & Alioto, 2024). Moreover, fintech partnerships help banks stay competitive in a quickly developing market by permitting them to acclimate quickly to new technological trends and customer needs, demonstrating that such collaborations are key to driving innovation and growth (Bakken & Skjeltorp, 2023).

Adoption of cloud computing gives businesses access to scalable and adaptable computing resources by storing, managing, and processing data on internet-based servers (Adwan & Alsaeed, 2021). In the banking sector, cloud computing allows institutions to streamline operations, enhance data security, and reduce infrastructure costs. By adopting cloud technologies, banks can improve efficiency, scale services as needed, and offer more reliable digital platforms to customers (Qatawneh, 2024). Additionally, cloud computing supports better data management and faster innovation, enabling banks to adjust quickly to fluctuating market demands. This flexibility makes cloud adoption vital in driving competitiveness and long-term growth in the digital age (Edmond *et al.*, 2022)

### **1.1.3 Commercial banks in Nairobi City County, Kenya**

Commercial banks in Nairobi City County, Kenya are supervised and regulation by the CBK (CBK, 2021), which ensures financial stability, compliance, and efficient banking operations across the segment. By delivering financial services including taking deposits, making loans, processing payments, and promoting trade and investment, these banks contribute significantly to the economy (Kariuki, 2022). Eleven of Kenya's 39 commercial banks, according to the most recent data, are listed on the NSE, giving them access to capital markets for development and expansion (Kirimu, Kariuki, & Ocharo 2022).

Kenyan commercial banks have actively embraced digital transformation strategies by adopting mobile and internet banking platforms, automating processes, and partnering with fintech firms in offering innovative financial resolutions. The initiatives have enhanced customer convenience, streamlined operations, and expanded access to banking services (Kimoni, 2023). However, as per Halima, (2023), challenges such as cybersecurity risks, high implementation costs, and resistance to change have hindered broader adoption. Despite these obstacles, there is still significant room for further

digital transformation, predominantly in areas like advanced data analytics, cloud computing, and enhanced digital payment systems, which can drive greater efficiency and customer engagement (Kariuki, 2022).

Kenyan banks have shown robust performance in recent years, driven by a growing customer base that continues to expand due to increased financial inclusion efforts. Innovations like mobile banking, digital wallets, and agency banking have played a key role in reaching previously unbanked populations, making banking services more accessible across the country (Chimakati & Macharia, 2024). Musyoki, (2023) claim, leading banks, such as Equity Bank and KCB, have leveraged digital platforms to attract and retain millions of customers, resulting in strong growth in deposits and loan portfolios. However, maintaining high levels of customer satisfaction remains a challenge, as competition intensifies and customers seek more personalized and seamless banking experiences (Makau & Olando, 2021).

## **1.2 Statement of the Problem**

In an ideal state, commercial banks performance might be characterized by robust operational efficiency, high customer retention rates, and enhanced employee productivity, achieved through optimized digital transformation strategies (Selevani, 2023, Musau & Muathe, 2025). However, research indicates that banks in Kenya are facing substantial challenges in these areas, which digital initiatives have not fully resolved. According to Mwakera, Riwo-Abudho and Abudho (2024), digital innovations offer potential benefits such as improved transaction efficiency, personalized services, and real-time sound decisions. Yet, as Njagi, Mainam and Ngali (2023), the performance of Kenyan commercial banks remains below expectations. Specifically, challenges around operational efficiency, customer retention, and employee productivity persist, despite investments in digital transformation. Methodologically, most existing studies have predominantly employed qualitative approaches, limiting the generalizability of findings on the association amidst digital transformation and performance indicators. Conceptually, there is a lack of consensus on the specific digital transformation strategies that drive performance outcomes, creating a gap in understanding their direct influence on operational efficiency, customer retention, and employee productivity (Xie & Wang, 2023, Mundia, 2025).

Industry reports further illustrate these issues: several banks report declining profitability margins, reflecting limited operational efficiency; others struggle with customer attrition, which affects long-term customer retention (Theiri & Hadoussa, 2024). Additionally, inefficiencies within internal processes and stagnant employee productivity levels contribute to this underperformance. If these challenges continue unaddressed, they pose risks to the banks' market share, customer loyalty, and overall financial stability (Kimani & Kibera, 2023). Thus, there is a desire to discover the scope digital transformation strategies can effectively address these specific indicators of performance, including operational efficiency, customer retention, and employee productivity, in Kenya's commercial banking sector.

While some studies have explored impact digital transformation on performance in the banking segment, there exists an empirical gap specifically regarding commercial banks in Kenya context. Existing research often focus on developed markets or generalize findings across diverse geographical regions, overlooking the exceptional encounters and opportunities faced by banks in Kenya's dynamic economic landscape (Azizi *et al.*, 2024; Shanti, Siregar, Zulbainarni & Tony 2023). Moreover, conceptual gap exist since previous research predominantly examined individual aspects of digital transformation, such as digital banking platforms or data analytics, rather than comprehensively analyzing the combined multiple digital strategies impact on performance (Kothari & Seetharaman, 2022; Oladele, 2024). Although Abdurrahman *et al.* (2024) emphasized digital transformation capabilities in Indonesia, their study did not focus on specific strategies such as digital banking platforms, data analytics, fintech partnerships, and cloud computing, creating a conceptual gap on how these dimensions affect broader organizational performance. Similarly, Gaya *et al.* (2022) examined digital banking and financial performance of listed banks in Nairobi but overlooked key performance indicators like customer retention and employee productivity, thereby presenting both a contextual and conceptual gap for the current study.

Thus, the current research purposed addressing this gap by undertaking a inclusive scrutiny of digital transformation strategies effect on the performance of commercial banks in Nairobi City County, Kenya, providing valuable intuitions for researchers and practitioners.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The general objective of this research was to determine the effect of digital transformation strategies on performance of commercial banks in Nairobi City County, Kenya.

#### **1.3.2 Specific Objectives**

The following specific goals served as the study's guidelines

- i. To establish the effect of digital banking platforms on performance of commercial banks in Nairobi City County, Kenya.
- ii. To find out the effect of data analytics on performance of commercial banks in Nairobi City County, Kenya
- iii. To establish the effect of fintech partnerships on performance of commercial banks in Nairobi City County, Kenya
- iv. To evaluate cloud computing adoption effect on performance of commercial banks in Nairobi City County, Kenya.

### **1.4 Research Questions**

The research questions below guided by this research:

- i. What is the digital banking platforms impact on performance of commercial banks in Nairobi City County, Kenya?
- ii. How do data analytics effect performance of commercial banks in Nairobi City County, Kenya?
- iii. To what scope does fintech partnerships affect performance of commercial banks in Nairobi City County, Kenya?
- iv. What is the effect of cloud computing adoption on performance of commercial banks in Nairobi City County, Kenya?

### **1.5 Significance of the Study**

For commercial bank executives, this research provides intuitions into the effectiveness of numerous digital transformation tactics, helping them understand which technologies

can improve operational efficiency, enhance customer satisfaction, and improve. By identifying successful practices and potential challenges, executives can make informed decisions on future investments in digital tools and platforms.

For policymakers, the research highlights the implication of digital innovation in banking, which can contribute to broader economic development and financial inclusion. The findings can guide the devising of guidelines that encourage digital technologies adoption while ensuring robust cybersecurity measures, fair competition, and consumer protection.

For future researchers, this survey adds to the existing literature on digital transformation by concentrating on the unique context of commercial banks in Nairobi City County, Kenya. It provides a further research basis into specific technologies, their adoption challenges, and their impact on bank performance, offering a basis for comparative studies in different regions or industries.

## **1.6 Scope of the Study**

This investigation scrutinized the digital transformation tactics impact on the performance of Kenya's 39 licensed commercial banks, categorized into Tier 1, Tier 2, and Tier 3 banks based on asset size and market share. The research specifically focused on the head offices located within Nairobi City County, as these offices drive strategic decisions on digital transformation. The theoretical scope of the study drew upon the TAM to explain the adoption of digital technologies; the Diffusion of Innovation Theory to understand how innovative technologies like data analytics and cloud computing are integrated within banks; the RBV to frame digital transformation as a resource-based approach where banks leverage unique digital assets such as fintech partnerships for competitive advantage; and Agency Theory to examine how leadership and decision-making within banks affect the implementation of digital initiatives. The study analyzed the association between digital transformation strategies namely digital banking platforms, data analytics, fintech partnerships, and cloud computing and the performance of commercial banks, assessed by operational efficiency, customer retention, and employee productivity (dependent variable). By establishing these parameters, this research purposed to offer a detailed digital transformation role plays in boosting the performance outcomes of Kenya's commercial banks. Data collection

and analysis was performed via a descriptive correlational research design supported by descriptive, correlation, and regression analyses.

### **1.7 Limitations of the Study**

Reliance on self-reporting from bank executives and IT managers, which may introduce bias. To mitigate this, respondents were briefed on the confidentiality of the information and the importance of honest responses. Another limitation was the challenge of reaching all targeted respondents owing to busy timetables. To address this, the researcher used digital tools like Google Forms to distribute and collect questionnaires, allowing for flexibility and convenience. Additionally, the data collection instruments may not achieve 100% accuracy, as responses could still be influenced by personal biases. A pilot study was performed first to guarantee the instruments' validity and reliability.

There was also a possibility that some respondents may be hesitant to contribute in the research. To overcome this, the scholar secured necessary permits and approvals from relevant bodies, including the University and NACOSTI. Respondents were fully conversant with the study's goal, confidentiality protocols, and option of withdrawing at any point, and ethical considerations were closely adhered to. Furthermore, the researcher expressed a willingness to share the study findings with interested respondents to encourage participation.

### **1.8 Organization of the study**

This research contains five chapters: In Chapter One, key sections include the background of the study, statement of the problem, study objectives, research questions, significance, scope, and limitations of the study. Chapter Two discusses relevant theories that form the foundation of the study, along with empirical literature, to highlight existing gaps. Chapter Three details the research design, population, sampling methods, data collection procedures, data analysis techniques, and ethical considerations. Chapter four entails data analyses; presentation and interpretation whereas chapter five covered the summary, conclusion and recommendation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter encompassed the theoretical framework in the survey, along with a review of previous studies conducted on digital transformation strategies and performance. It includes a theoretical, empirical and literature review summary, and identification of research gaps. Additionally, the chapter offers a conceptual framework that illustrates the imagined relationships amidst the research variables.

#### **2.2 Theoretical Framework**

This segment contains discussion of appropriate models that expounds the connotation between digital transformation strategies and performance. RBV served as the anchor theory, Technology acceptance model, diffusion of innovation theory and agency theory were adopted.

##### **2.2.1 Resource-Based View Theory**

Penrose (1959) founded the RBV theory and advanced by Wernerfelt (1984) and Barney (1991) in describing how firms can attain and endure competitive edge by effectively utilizing their internal resources. The Resource-Based View (RBV) was first conceptualized by Penrose (1959) to explain firm growth through the effective use of internal resources, and its later introduction to strategic management reframed these ideas by emphasizing that valuable, rare, inimitable, and non-substitutable resources form the foundation of sustainable competitive advantage. Resource-Based View theory argues that organizational performance depends on how well firms utilize unique resources that provide value, rarity, inimitability, and non-substitutability (VRIN). When banks mobilize and manage these resources effectively, they are able to achieve stronger outcomes such as profitability, customer loyalty, and workforce productivity. A company with valuable resources might take advantage of market opportunities or counteract dangers. Rare resources are ones that not in possession by numerous competitors, making them a source of competitive advantage (Vasudevan, 2021). Non-substitutable resources indicate that there are no substitutes that can offer the same advantages, and unique resources are challenging for other businesses to imitate. The RBV infers a firm's unique internal capabilities, like technology, skills, and knowledge,

can be leveraged to drive long run success and growth (Freeman, Dmytriiev & Phillips, 2021).

One limitation of the RBV is that it primarily focuses on internal resources failing to adequately address the external aspects likely to impact a firm's performance, such as market competition, economic conditions, and regulatory changes (Greve, 2021). Nonetheless, the theory remains a powerful tool for understanding how digital transformation can be a strategic asset (Barney, Ketchen Jr, & Wright, 2021). This study's use of the RBV will demonstrate how Kenyan commercial banks can utilize internal digital resources in gaining long-term competitive advantages and enhance overall performance (Helfat, Kaul, Ketchen Jr, Barney, Chatain & Singh, 2023).

The RBV Theory was valid to this research as it underscores internal digital transformation strategies for commercial banks in Kenya. By investing in and effectively managing resources like advanced digital banking platforms, data analytics systems, and skilled IT personnel, banks can build unique capabilities that set them apart from competitors. For example, a bank that successfully integrates data analytics to provide personalized services can create a customer experience that is difficult for others to replicate, leading to higher customer loyalty and improved performance. Furthermore, cloud computing adoption provides banks with scalable and cost-efficient solutions that boost operational efficiency, offering a competitive edge in the market. This theory anchored all four digital transformation strategies, highlighting how leveraging valuable, rare, inimitable, and non-substitutable resources enhances competitive advantage and performance. This theory anchored fintech partnerships and cloud computing adoption, since it emphasizes how innovations are adopted, diffused, and integrated within organizations.

### **2.2.2 Technology Acceptance Model**

Davis (1989) introduced the TAM to explain how and why individuals resolve to admit and use new technologies. Perceived utility and perceived use ease are the two basic variables upon which TAM is based. Perceived usefulness denotes the magnitude a party trust that utilizing a specific system or technology might boost their performance at work. Arguably, consumers are more inclined to accept a digital tool or system if they believe it will enable them to complete activities more quickly or effectively. Conversely, perceived ease of use denotes the degree to an individual reason exploiting

a system will be straightforward. In further words, even when technology is seen as beneficial, users may be reluctant to adopt it if it appears complex or difficult to use (Yang *et al.*, 2021). TAM suggests that these two factors; usefulness and ease of use; unswervingly impact a person's attitude toward adopting a new technology, which subsequently impact actual use of the technology. Wide application of the model is evident in various contexts to understand how users interact with digital innovations, creation it as valuable basis for assessing technology adoption (Aburbeian *et al.*, 2022).

The limitation of TAM is that it primarily focuses on the user's perception and does not account for external aspects like organizational culture, financial constraints, or market competition, that can too influence new technologies adoption (Musa *et al.*, 2024). Despite this, the model remains valuable as it highlights the importance of user acceptance, which is imperative for digital transformation initiatives success (Fussell & Truong, 2022). Therefore, applying TAM in this study will help to understand the factors prompting digital technologies adoption in commercial banks, guiding the development of effective digital strategies to enhance performance (Getugi *et al.*, 2023).

Because it offers insights regarding Kenyan commercial banks' adoption of digital transformation initiatives, TAM is relevant to the current research. By understanding the perceptions of both employees and customers regarding digital banking platforms, data analytics, and other technological innovations, bank executives can develop strategies that enhance acceptance and utilization. This model emphasizes that the successful implementation of digital tools depends on how well these tools meet user needs and expectations. For instance, digital banking platforms that are easy to navigate and offer clear benefits, such as faster transactions, are likely to see higher adoption rates among customers, ultimately improving performance. This theory anchored digital banking platforms and data analytics, as it explained user acceptance and utilization of technological innovations in banking operations.

### **2.2.3 Diffusion of Innovation Theory**

In order to describe how, why, and how quickly new concepts and technology spread throughout cultures and societies, Rogers (1962) developed the Diffusion of Innovation Theory. The theory claim, relative edge, compatibility, trialability, complexity, and

observability are the five main elements that affect how quickly innovations are adopted. The extent to which an invention is regarded as better than existing solutions, increasing its likelihood of adoption, is known as its relative advantage. According to Okour *et al.* (2021), compatibility refers to how well the invention turns with the preexisting requirements, values, and probable consumers experience. Conversely, complexity denotes degree of struggle in understanding and utilizing the innovation; simpler solutions are more easily embraced. Observability is the magnitude advantages of the innovation are apparent to others, promoting broader acceptability, while trialability is the capacity to test or experimentation with the invention before obliging to full adoption (Al-Razgan *et al.*, 2021).

The limitation of this theory is in its assumption that innovation adoption is a linear process that progresses uniformly across all individuals and organizations (Acikgoz *et al.*, 2023). It fails to fully account for external variables like regulatory constraints, economic conditions, or organizational culture that may affect the rate of adoption. In spite of this, the Diffusion of Innovation Theory continues to be a helpful basis for comprehending how digital innovations might be adopted by the banking industry. (Oyelana *et al.*, 2021). Applying this theory in the current survey will help identify key elements that facilitate or hinder the adoption of digital transformation strategies, providing intuitions for commercial banks to improve their digital integration efforts (Kimoni, 2023).

The theory was suitable as it helps explain how digital transformation strategies, such as data analytics, fintech partnerships, and cloud computing, spread amidst Kenyan commercial banks. By considerate the factors that drive technologies adoption, bank executives can implement strategies that encourage faster uptake and utilization. For example, if the relative cloud computing edge, like cost savings and enhanced data security, is clearly communicated and demonstrated, banks are more likely to adopt these solutions. Similarly, showing the compatibility of digital banking platforms with customers' existing banking habits can improve acceptance and usage, leading to enhanced efficacy. This theory anchored fintech partnerships and cloud computing adoption, since it emphasizes how innovations are adopted, diffused, and integrated within organizations.

#### 2.2.4 Agency Theory

The interaction between principals (shareholders) and agents (managers or directors) in a corporate context was explained by Jensen and Meckling (1976) through the introduction of Agency Theory. The theory discusses how conflicts between the interests of principals and agents can result in problems like information asymmetry and moral hazard. According to agency theory, agents are expected to act in principals' best interest, but they might pursue their own goals, which can lead to inefficiencies and reduced performance (Aluchna, 2023). The theory suggests that to mitigate these issues, mechanisms like performance-based incentives, monitoring, and governance structures should be put in place to ensure that agents' actions align with the principals' objectives (Thompson, 2023).

Agency theory has been criticized on that it assumes all agents act opportunistically, seeking to maximize their own interests, which may not always be the case. It also focuses mainly on resolving conflicts through monitoring and incentives, potentially overlooking the importance of building trust and collaboration amidst principals and agents (Musa *et al.*, 2022). Despite this, the theory remains valuable for understanding how governance and control mechanisms can be enhanced through digital transformation (Solomon *et al.*, 2021). Applying this theory in the study will highlight how commercial banks in Nairobi City County, Kenya can use digital strategies to improve governance, reduce conflicts, and enhance performance by aligning the interests of managers and shareholders (Davis *et al.*, 2021).

Agency Theory was appropriate to this research as it helps explain how digital transformation strategies can address the potential conflicts between bank executives and shareholders in commercial banks in Kenya. By executing digital tools like data analytics and automated reporting systems, banks can enhance transparency, improve monitoring, and reduce information asymmetry, ensuring that managers' actions align with the shareholders' interests. For example, digital transformation can facilitate real-time monitoring of financial transactions, enabling shareholders to better track the bank's performance and make informed decisions. Additionally, integrating performance-based digital metrics can help align the incentives of managers with the overall strategic goals of the bank, driving improved efficacy. This theory supported organizational performance, as it addressed the alignment of managers' decisions with

shareholders' interests, particularly in adopting digital transformation strategies that maximize profitability, efficiency, and customer satisfaction

## **2.3 Empirical Literature Review**

The connection between digital transformation strategies and performance has been explored in several empirical studies both locally and internationally, with mixed results.

### **2.3.1 Digital banking platforms and Organization Performance**

An empirical meta-analysis on digital banking platforms impact on firm efficiency was undertaken by Kumar *et al.* (2024). The researchers analyzed over 5,000 findings from 120 studies, revealing that the adoption of digital banking platforms significantly enhances bank performance. The research discovered positive correlation between digital banking platforms and improved profitability, operational efficiency, and customer satisfaction. Additionally, the scholars noted that digital platforms reduce transaction costs and increase service speed. They concluded that digital banking platforms could be an effective strategy for driving performance. However, as a literature review, this study lacked context-specific empirical validation, indicating a need for further research in varied economic settings.

Xie and Wang (2023) examined digital banking platforms impact on commercial banks performance in China, using panel data from 2008 to 2021. Utilizing a fixed-effects regression model to control for endogeneity, the authors found that digital banking adoption was associated with improved financial performance, predominantly in relation to operational efficiency and reduced operational costs. The study also highlighted that these effects were more substantial in banks with greater investment in digital infrastructure. Since this study focused on a developed banking environment with different economic conditions, it presents a contextual gap this research seeks addressing in the Kenyan context.

A meta-analysis by Sharma *et al.* (2022) explored digital banking impact on performance, analyzing findings from 140 studies. The conclusions indicated a positive affiliation amidst digital banking platforms and enhanced efficacy, with notable improvements in customer satisfaction, employee productivity, and financial outcomes. The authors found that digital banking platforms contributed to lower customer churn

and higher transaction volumes. However, as a review of existing literature, the study's conclusions lack empirical specificity, underscoring the need for context-driven research in diverse geographical regions, including Kenya.

Ondiek (2021) explored digital banking platforms impact on Kenyan commercial banks performance. Utilizing 2010-2020 data and multiple regression analysis, the research discovered that digital banking platforms significantly improved operational efficiency, customer satisfaction, and employee productivity. The authors noted that mobile banking adoption was particularly influential in expanding financial inclusion and increasing transaction volumes. Nevertheless, they too observed encounters like cybersecurity risks and high maintenance costs associated with digital banking platforms. Given its focus on Kenya, this study provides relevant empirical evidence but highlights an area for further exploration in understanding how other digital strategies, beyond mobile banking, can impact performance in local banks.

### **2.3.2 Data Analytics and Organization Performance**

Adeniran *et al.* (2024) investigated data analytics influence on the financial performance of banking institutions in the United States. The research analyzed data from 50 banks over a three-year period, examining how data analytics adoption influenced profitability and cost-efficiency. The findings indicated that banks leveraging data analytics for decision-making and customer insights reported higher profit margins and reduced operational costs. However, the study ignores other crucial performance factors like employee productivity and customer happiness in favor of concentrating only on financial achievements, which were encompassed in the current research.

Ladeira *et al.* (2024) steered a meta-analysis on data analytics effect on efficacy across 40 studies in service industry, including banking, healthcare, and telecommunications. The analysis discovered a positive affiliation amidst data analytics adoption and enhanced operational efficacy, with significant improvements in decision-making speed and accuracy. The study's impact was most notable in customer relations and operational efficiency. However, the research depicts a methodological gap as it is a literature review rather than an empirical investigation, underscoring the need for context-specific empirical research in Kenyan commercial banks.

Mittal and Mittal (2023) explored the affiliation between data analytics and client fulfilment among retail banks in India. They surveyed 500 customers to assess their satisfaction levels and perceptions of personalized services driven by data analytics. Results showed that banks using data analytics to tailor products and services saw higher client fulfilment and loyalty rates. However, the research presented conceptual gap as it primarily focused on customer satisfaction without considering internal factors like operational efficiency, which are relevant to the present study.

Oladeinde *et al.* (2023) surveyed data analytics impact on employee productivity and engagement within enterprises in the Nigeria. Through a survey of 200 employees, the study assessed perceptions of data-driven decision-making and its influence on work effectiveness. Findings revealed that employees in data-empowered environments reported higher productivity and engagement levels. The study, however, has contextual gap, for being it pursued in a advanced economy with societal and fiscal conditions distinct from those in Kenya, the context of the current research.

### **2.3.3 Fintech Partnerships and Organization Performance**

Agu *et al.* (2024) analyzed fintech partnerships effect on supply chain efficiency and performance in Nigerian financial sector. The study, involving 150 firms, revealed that partnerships with fintech providers enabled better inventory management, faster payment processing, and improved supplier relations, ultimately boosting overall performance. Nonetheless, this study presents a conceptual limitation by focusing predominantly on supply chain efficiency without considering customer-focused outcomes, which the current study addressed.

Munangi and Sibindi (2022) conducted a meta-analysis on the role of fintech partnerships across various industries, including retail, telecommunications, and finance, analyzing data from 60 studies. The results showed that fintech collaborations positively impacted customer engagement, cost reduction, and internal process efficiency. The effect was particularly pronounced in firms that integrated fintech solutions for automation and real-time analytics. However, since this was a literature review, the study lacks empirical specificity, suggesting the need for a context-driven investigation, which the current study aimed to provide in the Kenyan market.

Wang *et al.* (2022) scrutinized fintech partnerships impact on organizational efficacy within the retail segment in India. The study surveyed 300 retail firms that collaborated with fintech companies for digital payment solutions, loyalty programs, and customer data analytics. Findings indicated that these partnerships significantly enhanced customer satisfaction and sales growth, especially when fintech innovations were used to streamline transactions and personalize marketing efforts. However, this research has conceptual gap since it focused primarily on customer satisfaction, omitting other metrics like operational efficacy and worker efficiency, which were included in the current study.

Anifa *et al.* (2021) investigated how fintech partnerships influenced operational efficiency and financial outcomes within the healthcare industry in the US. Using a sample of 250 healthcare providers, the study discovered that fintech collaborations in areas like billing automation and patient financing significantly improved cost efficiency and revenue cycle management. The study noted that fintech partnerships reduced manual billing errors and expedited payment processing. However, contextual gap exists as the research was based in a developed economy, differing from Kenya's social and economic context.

#### **2.3.4 Cloud Computing Adoption and Organization Performance**

Hui and Mohammadi (2024) examined cloud computing adoption impact on organizational efficacy across multiple industries in China. Conducting a longitudinal study with 150 firms, they collected data from annual reports and news articles over five years. Their findings revealed that cloud computing adoption certainly impacted efficacy, with firms showing enhanced operational efficiency, cost savings, and customer satisfaction. However, because the research was carried out in a developed economic situation that is diverse from Kenyan, the current research setting, it presents a contextual gap.

Kavre *et al.* (2023) pursued the connection between cloud computing adoption and performance in India's manufacturing sector, conducting a case study on three large manufacturing firms. Data collected from company reports indicated that cloud adoption led to enhanced process automation, reduced IT costs, and faster decision-making. Despite these benefits, the study focused primarily on manufacturing

processes, leaving a contextual gap as it did not address the unique requirements and performance metrics relevant to the banking industry.

Raj and Jeyaraj (2023) steered a meta-analysis on the effect of cloud computing on performance, analyzing 90 studies across various industries, including healthcare, finance, and telecommunications. The meta-analysis discovered a positive correlation between cloud adoption and improved operational efficiency, flexibility, and customer engagement. However, the study has a methodology limitation, as it is a review of existing literature without empirical data, emphasizing the need for a context-specific study in Kenya's commercial banking sector.

Odero (2021) explored cloud computing adoption impact on performance in Kenya's SME's sector. Through a survey of 120 SME's, the study assessed the benefits of cloud services in data management, customer interaction, and operational processes. The results indicated that companies using cloud computing experienced improved data accessibility and customer service efficiency. The research does, however, have a contextual gap because it was performed in the retail sector, which operates differently than the banking sector where the current study was done.

#### **2.4 Summary of Literature and Research Gaps**

Various theories have provided insights into the connection amidst digital transformation strategies and performance, including the TAM, Diffusion of Innovation Theory, RBV, and Agency Theory. Numerous empirical studies, both locally and globally, have examined digital transformation impact on performance. Table 2.1 exhibits the research gaps that have been discovered.

**Table 2.1: Summary of Literature and Knowledge Gaps**

<b>Author</b>	<b>Focus of study</b>	<b>Key findings</b>	<b>Knowledge gaps</b>	<b>Focus of the current study</b>
Adeniran <i>et al.</i> (2024)	Data analytics' effects on US banking organizations' financial performance	Banks leveraging data analytics for decision-making and customer insights reported higher profit margins and reduced operational costs	The study's exclusive focus on financial success creates a conceptual gap.	This research explored digital transformation strategies effect on performance of banks in Kenya with customer satisfaction and employee productivity focus
Agu <i>et al.</i> (2024)	To investigate effect of fintech partnerships on supply chain efficiency and performance in Nigerian financial sector	Partnerships with fintech providers enabled better inventory management, faster payment processing, and improved supplier relations, ultimately boosting overall performance	The study presents a conceptual limitation by focusing predominantly on supply chain efficiency without considering customer-focused outcomes	With an emphasis on client fulfillment, this study looked into how digital transformation tactics affect Kenyan banks' performance.
Hui and Mohammadi (2024)	Cloud computing adoption impact on performance across multiple industries in China.	The study found cloud computing adoption positively impacted efficacy, with firms showing enhanced operational efficiency, cost	Because the study was performed in a developed economic setting that is diverse from Kenya's, it provides a contextual gap.	Digital transformation tactics influence on Kenyan commercial banks' performance were examined in this research.

		savings, and customer satisfaction		
Kumar <i>et al.</i> (2024)	Effect of digital banking platforms on performance	The research discovered a positive link between digital banking platforms and improved profitability, operational efficiency, and customer satisfaction	The study was a literature review, lacking context-specific empirical validation	This study focused on digital transformation strategies on performance of Kenyan commercial banks
Ladeira <i>et al.</i> (2024)	A meta-analysis on the effect of data analytics on efficacy	Positive affiliation between data analytics adoption and enhanced efficacy, with significant improvements in decision-making speed and accuracy	Offers a methodological gap as it is a literature review rather than an empirical investigation	Empirical study on digital transformation strategies on performance of Kenyan commercial banks in Nairobi City County.
Kavre <i>et al.</i> (2023)	Association amidst cloud computing adoption and performance in India's manufacturing sector	Cloud adoption led to enhanced process automation, reduced IT costs, and faster decision-making.	Depicts a contextual gap by primarily focus on manufacturing processes, leaving a contextual gap as it did not address the unique requirements and performance metrics	The research focused on banks in Kenya

			relevant to the banking sector	
Mittal and Mittal (2023)	To explore the affiliation amidst data analytics and customer fulfilment among retail banks in India	Results showed that banks using data analytics to tailor products and services saw higher customer satisfaction and loyalty rates.	Study presented a conceptual gap as it primarily focused on customer satisfaction without considering internal factors like operational efficiency, which are relevant to the present study	Digital transformation strategies on performance of commercial banks in Kenya with focus on internal and external performance factors focus
Oladeinde <i>et al.</i> (2023)	Data analytics effect on employee productivity and engagement within enterprises in the Nigeria	Employees in data-empowered environments reported higher productivity and engagement levels.	The research offers a conceptual gap owing to it was based in a developed economy with societal and economic conditions distinct from those in Kenya, the current research	The impact of digital transformation tactics on Kenyan commercial banks' performance was the main topic of this study.
Raj and Jeyaraj (2023)	A meta-analysis on the effect of cloud computing on performance	discovered a positive correlation between cloud adoption and improved operational efficiency, flexibility, and customer engagement.	The study has a methodological limitation, as it is a review of existing literature without empirical data	Digital transformation strategies on performance of commercial banks in Nairobi City County, Kenya

Xie and Wang (2023)	Digital transformation of commercial banks in China	Digital banking adoption was associated with improved financial performance, particularly in terms of revenue growth and reduced operational costs	Since the research was done in a developed economy with social and economic circumstances diverse from those in Kenya, the current research context, it presents a conceptual gap.	Digital transformation strategies on performance of commercial banks in Nairobi City County, Kenya
Munangi and Sibindi (2022)	A meta-analysis on the role of fintech partnerships across various industries, including retail, telecommunications, and finance	Fintech collaborations positively impacted customer engagement, cost reduction, and internal process efficiency	Since this was a literature review, the study lacks empirical specificity, suggesting the need for a context-driven investigation	Digital transformation strategies on performance of commercial banks in Kenya
Sharma <i>et al.</i> (2022)	A meta-analysis exploring digital banking impact on performance	Positive relationship between digital banking platforms and enhanced performance, with notable improvements in customer satisfaction, employee productivity, and financial outcomes	Since this was a literature review, the study lacks empirical specificity, suggesting the need for a context-driven study	Digital transformation strategies on performance of commercial banks in Kenya

Wang <i>et al.</i> (2022)	Impact of fintech partnerships on performance within the retail sector in India	Findings indicated that these partnerships significantly enhanced customer satisfaction and sales growth, especially when fintech innovations were used to streamline transactions and personalize marketing efforts	Due to its primary focus on customer contentment and exclusion of other performance criteria like operational efficiency and personnel productivity, the study exhibits a conceptual gap.	Performance indicators including personnel productivity and operational efficiency were the study's main focus.
Anifa <i>et al.</i> (2021)	Investigated how fintech partnerships influenced operational efficiency and financial outcomes within the healthcare industry in the US	The research concluded fintech partnerships reduced manual billing errors and expedited payment processing	Since the research was performed in a developed economy with social and economic circumstances diverse from those in Kenya, where the current study would be undertaken, it presents a conceptual gap.	<b>Digital transformation strategies on performance of commercial banks in Nairobi City County, Kenya</b>
Odero (2021)	Investigated cloud computing adoption effect on performance in Kenya's SME's sector.	The results indicated that companies using cloud computing experienced improved data	The research offers contextual gap as it was conducted within the retail industry	Effect of digital transformation strategies on performance of commercial banks in Nairobi City County, Kenya

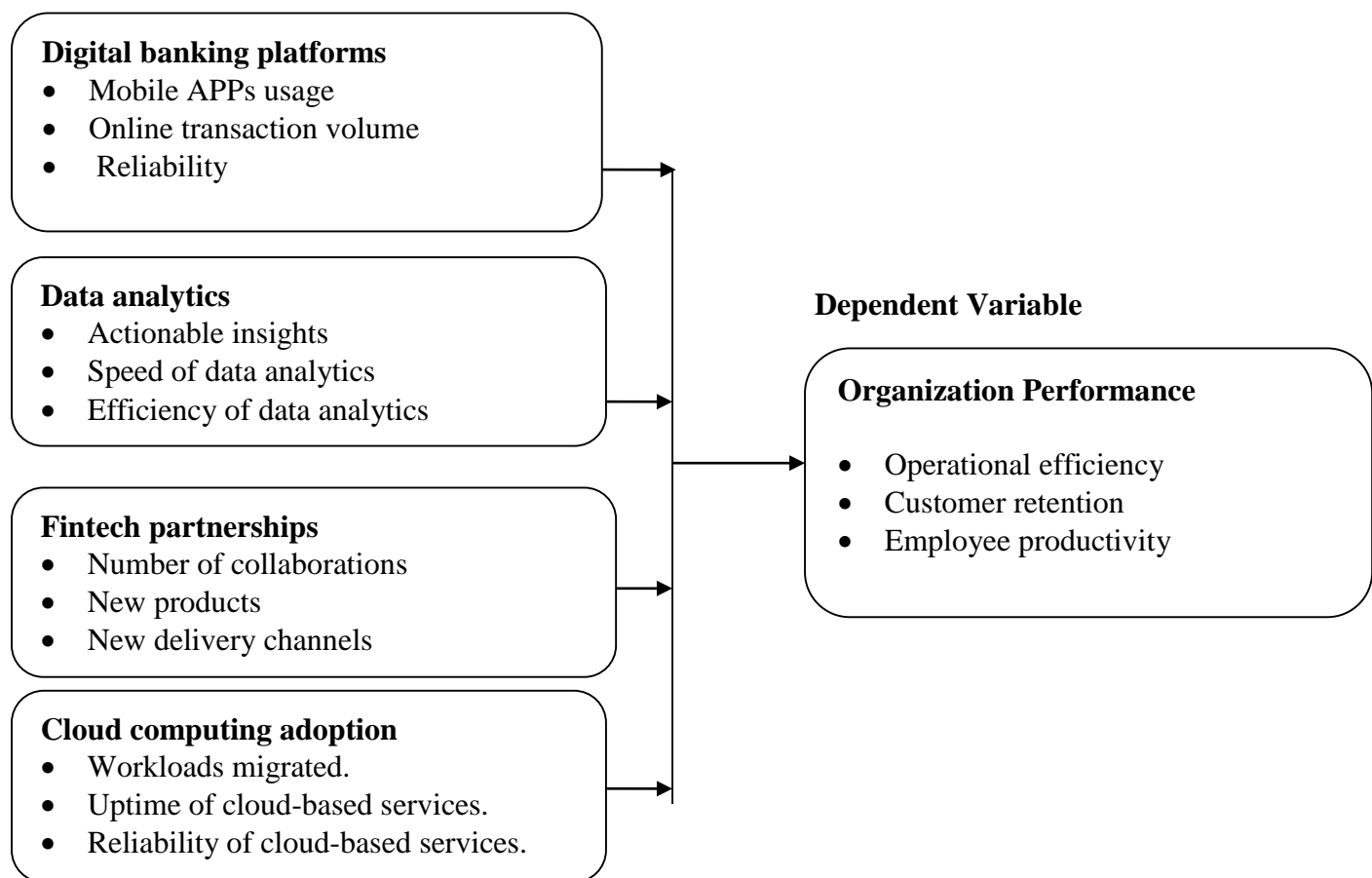
		accessibility and customer service efficiency		
Ondiek (2021)	Digital banking platforms impact on Kenyan commercial banks performance	Mobile banking adoption was particularly influential in expanding financial inclusion and increasing transaction volumes	The research offers a contextual gap as it solely focused on digital banking platforms	Digital transformation strategies effect on performance of commercial banks in Nairobi City County, Kenya encompassing other strategies

Source: Author (2024)

## 2.5 Conceptual Framework

The following model exhibits the anticipated associations among the research variables. The independent variables were digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption. Performance was the dependent variable, which was analyzed and measured through operational efficiency, customer retention and employee productivity.

### Independent Variables



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2025)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This segment encompasses the research methodology, including the design, population, sampling, pilot study, data collection and analysis methods. Ethical considerations were also discussed to ensure the study's integrity.

#### **3.2 Research Design**

A research design is the overall plan or framework that guides how a study is conducted, outlining the methods and procedures for collecting, analyzing, and interpreting data (Kothari, 2019). The research problem was addressed using a descriptive correlational research design. Because it enabled the investigation of descriptive links between digital transformation methods and performance of Kenyan commercial banks, a descriptive correlational research approach was justified in this research. By employing this design, the research can establish whether the implementation of specific transformation strategies, such as digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption, directly influences key performance metrics, offering treasured sound decision intuitions in strategic planning within an organization. Additionally, descriptive correlational research design enables the identification of potential confounding variables and the control of extraneous factors, ensuring the validity and reliability of the research.

#### **3.3 Target Population**

The population denotes to all observations of interactions within the entire population, like human events as defined by a investigator (Burns & Burns, 2018). All 39 of Kenyan commercial banks made up the population for this research (appendix III). Given the limited target population size, the sampling design was a census. Heads of ICT and heads of strategy or a similar role were the unit of observation, and commercial banks unit of analysis.

### **3.4 Sample Size and Sampling Design**

A portion of the population chosen to represent the complete group in a research is called a sample. Given the limited size of the target group, the design was a census. Commercial banks served as the unit of analysis, and ICT heads and heads of strategy or their equivalents served as the unit of observation.

### **3.5 Data Collection Instruments**

This research primarily dependent on the collection of primary data via structured questionnaire containing closed-ended questions administration. This method ensured consistency and standardization in data collection, facilitating efficient analysis and comparison of responses. By utilizing closed-ended questions, respondents were offered predefined reply options, streamlining data gathering while enabling quantitative analysis. This approach also allowed for the systematic exploration of specific variables linked to digital transformation strategies effect on Kenyan commercial banks performance, ensuring that relevant insights can be derived from the gathered data.

Responses to the study's questionnaire were on a Likert scale from 1 to 5, options including strongly disagree, disagree, neutral, agree, and highly agree. This scale allowed for the rating and testing of respondents' attitudes toward digital transformation strategies. The questionnaire was structured into three sections: Section A General Information; Section B focused on Digital Banking Platforms, Section C Data Analytics, Section D Fintech Partnership, Section E Cloud Computing Adoption and Section F addressed Performance.

### **3.6 Pilot Study**

A pilot study was steered to assess the feasibility of the main study. This preliminary testing helped classify the strengths and limitation of the research instrument, ensuring its accuracy, clarity, and suitability. To assess the questionnaire's efficacy, eight respondents roughly 10% of the target population filled it out. The 8 respondents were from microfinance banks which are also regulated by CBK. According to Kothari (2019), a pilot test with at least 5% of the target population is sufficient. The final study did not include

these four respondents. Using Google Forms, the investigator sent the pilot questionnaires to a chosen group of participants.

### **3.6.1 Validity of Research Instrument**

Validity refers to the extent to which a research tool measures what it is intended to measure (Kothari, 2019). In this study, content validity was ensured by aligning questionnaire items with the study objectives and seeking expert judgment from the supervisor to confirm adequate coverage of digital transformation strategies and organizational performance. Face validity was addressed by reviewing the wording, clarity, and logical flow of the questionnaire to ensure the items were appropriate and easily understood by respondents. Construct validity was achieved by grounding the questions in established theories such as the Technology Acceptance Model, Diffusion of Innovation Theory, Resource-Based View, and Agency Theory, ensuring that the items reflected the theoretical dimensions of the study variables. Additionally, a pilot study was conducted to refine unclear or irrelevant items, further enhancing the overall validity of the instrument.

### **3.6.2 Reliability of Research Instrument**

Reliability denotes measurement tool consistency in producing stable outcomes across similar conditions (Cooper & Schindler, 2018). An instrument is regarded highly reliable if it produces steady outcomes under repeated testing. To assess the research tools reliability, questionnaire's internal consistency was verified via Cronbach's alpha analysis. Cronbach's Alpha provides a base score that designates reliability even when similar questions are alternated, ensuring the tool's accuracy and dependability (Khan, 2018). While scores above 0.8 indicate exceptional reliability, the standard used in this study a reliability threshold of 0.7 is typically considered acceptable. Table 3.1 displays the findings of the research reliability test.

**Table 3.1: Reliability Analysis**

<b>Variables</b>	<b>Items</b>	<b>Cronbach's Alpha</b>	<b>Remark</b>
Digital Banking Platforms	8	0.832	Reliable
Data Analytics	8	0.879	Reliable
Fintech Partnerships	8	0.754	Reliable
Cloud Computing Adoption	8	0.801	Reliable
Performance	8	0.912	Reliable

### **3.7 Data Collection Procedure**

Permits, approvals, and consents that were required were acquired before any data was collected. A research permission permit was acquired from NACOSTI, and approval for the study was pursued from Kenyatta University's Graduate School. The questionnaires were shared to selected respondents to gather the required information. Owing to the target respondents busy schedules, questionnaires were administered through Google Forms to minimize disruptions to their daily activities and bank operations.

### **3.8 Data Analysis and Presentation**

The researcher utilized quantitative data, obtained using questionnaires. The researcher reviewed the complete questionnaires to verify the total count, completeness, and adequacy of responses. Questionnaires were then organized based on their completeness, and exclusive codes assigned to each question for scoring purposes. The data was loaded into a computer for analysis, where it was summarized to identify key trends. Descriptive statistical methods, including mean (central tendency measure) and standard deviation (measure of dispersion), were applied to describe study variables. Multiple linear regression analysis was utilized to investigate the affiliation amidst predictor and the response variable in addressing the research questions. Using SPSS Version 24, this analysis evaluated the direction and degree of correlations amidst the research variables.

The empirical model that follows was used

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y= Organizational performance

$\beta_0$  =y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4$ =are the regression coefficients

$X_1$  = Digital banking platforms

$X_2$  = Data analytics

$X_3$  = Fintech partnerships

$X_4$  = Cloud computing adoption

$\varepsilon$  =error term

### **3.9 Ethical Considerations**

Ethical consideration involves adherence to values and principles that guide individuals in responsibly addressing environmental and social issues. Researchers follow ethical standards to ensure unbiased results. In alignment with ethical research practices, the researcher got authorization from relevant authorities prior to collecting data including authorization letter from Kenyatta University. Participation in the research was entirely voluntary, and respondents were informed that they can withdraw at any stage without facing any consequences. Additionally, all collected data was used strictly for academic motives, handled with extreme confidentiality, and was not disclosed without proper authorization. Finally, all referenced literature and cited works were appropriately acknowledged and documented to maintain academic integrity.

## CHAPTER FOUR

### FINDINGS, INTERPRETATION AND DISCUSSION

#### 4.1 Introduction

This chapter contains the results of the data analysis and interprets in relation to the research objectives the findings. It offers a detailed account of the response rate, demographic characteristics of the respondents, descriptive and inferential statistics utilized in examining digital transformation strategies effect on the performance of commercial banks in Nairobi City County, Kenya. It also contains the correlation and regression output. The results are then discussed in the existing literature context and relevant theoretical frameworks.

#### 4.2 Response Rate

Table 4.1 exhibits the response rate obtained from the distributed questionnaires. Out of the targeted 78 respondents, 72 successfully completed and returned their questionnaires.

**Table 4.1: Response Rate**

<b>Response Rate</b>	<b>Frequency</b>	<b>Percent</b>
Returned	72	92.3%
Unreturned	6	7.7%
<b>Total</b>	<b>78</b>	<b>100</b>

**Source: Field Data (2025)**

The research reached a response rate of 92.3%, which is considered excellent for survey-based research and demonstrates a strong level of engagement from the targeted respondents. As per Kothari (2019), a response rate exceeding 70% is deemed satisfactory for statistical analysis and enhances the reliability and representativeness of the data obtained. The research huge response rate can be accredited to Google Forms use, which provided a convenient and time-efficient way for respondents to participate without disrupting their work schedules. The minimal number of unreturned questionnaires (7.7%) owing to busy schedules did not significantly affect the data quality, thereby allowing for robust analysis and meaningful conclusions.

### 4.3 Demographic Characteristics of the Respondents

This segment offers respondents demographic characteristics who participated in the research. Specifically, it highlights the respondents by age, education level, gender, and their years of experience working with the bank.

#### 4.3.1 Gender of the Respondent

Table 4.2 displays the respondents gender distribution who took part in the research. The table provides the frequency and percentage of male and female respondents from the total valid responses received.

**Table 4.2: Gender Distribution**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	38	52.3%
Female	34	47.2%
<b>Total</b>	<b>72</b>	<b>100%</b>

**Source: Field Data (2025)**

The results indicate a relatively balanced gender distribution, with male respondents accounting for 52.3% and female respondents comprising 47.2% of the sample. This near parity suggests that both genders are adequately represented in strategic and ICT leadership roles within commercial banks. The balanced gender representation is vital in ensuring diverse perspectives in the adoption and implementation of digital transformation strategies. As per Sharma et al. (2022), inclusive leadership structures subsidize to improved decision-making and better organizational performance. Therefore, the gender diversity reflected in this study may support more innovative and responsive digital strategies, ultimately enhancing bank performance outcomes.

#### 4.3.2 Age of the Respondents

Table 4.3 offers the respondents age composition. It outlines the frequency and percentage of respondents across four different age categories.

**Table 4.3: Respondents' Age Composition**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
30 years and below	8	11.1%
31-40 years	22	30.6%
41-50 years	24	33.3%
Above 50 years	18	25%
<b>Total</b>	<b>72</b>	<b>100%</b>

**Source: Field Data (2025)**

The conclusions display that the most respondents (33.3%) were aged 41 and 50 years, followed by 30.6% aged between 31 and 40 years, and 25% aged above 50 years. Only 11.1% were 30 years or below. The predominance of middle-aged and older professionals implies a workforce that likely has both institutional knowledge and adaptability to technological change. As noted by Xie and Wang (2023), banks with experienced leadership are more likely to make strategic investments in digital infrastructure, which contributes to improved operational efficiency and sustained performance. Therefore, the age composition enhances the credibility of the insights drawn from the study, as they reflect perspectives grounded in substantial industry experience.

### **4.3.3 Highest Education Level**

Table 4.4 reveals the respondents distribution based on their highest education level attained. It categorizes the respondents into diploma, degree, and master's qualification levels, along with their corresponding frequencies and percentages.

**Table 4.4: Distribution of Respondents by Highest Level of Education**

<b>Education</b>	<b>Frequency</b>	<b>Percentage</b>
Diploma	6	8.3%
Degree	45	62.5%
Masters	21	29.2%
<b>Total</b>	<b>72</b>	<b>100%</b>

**Source: Field Data (2025)**

The results reveal that the most respondents (62.5%) possessed a undergraduate degree, followed by 29.2% who had attained a master's degree, and 8.3% with diploma

qualifications. This implied well-educated workforce is crucial for the effective implementation and management of digital transformation strategies, as higher education level are often connected with enhanced analytical skills, adaptability to innovation, and strategic thinking. According to Mittal and Mittal (2023), educational attainment plays a significant role in how well employees understand and leverage data-driven solutions to boost client satisfaction and operational performance. Therefore, the strong representation of degree and master’s level holders backs the results reliability and suggests that the respondents were well-positioned to provide informed perspectives on digital transformation within their institutions.

#### 4.3.4 Years with the Bank

Table 4.5 displays the respondent’s distribution grounded on the duration in years they have worked with their respective banks. The table outlines three experience categories and presents their corresponding frequencies and percentages.

**Table 4.5: Years with the Bank**

<b>Years</b>	<b>Frequency</b>	<b>Percentage</b>
1-3 years	11	15.3
4-7 years	27	37.5
8 years and above	34	47.2
<b>Total</b>	<b>72</b>	<b>100</b>

**Source: Field Data (2025)**

The outcomes infer that the largest proportion of respondents (47.2%) had worked with their banks for 8 years and above, followed by 37.5% who had between 4 and 7 years of experience, and 15.3% who had been with their banks for 1 to 3 years. This distribution proposes that most of the respondents had extensive institutional experience, which enhances the reliability and depth of their responses concerning the impact of digital transformation strategies. As noted by Oladeinde *et al.* (2023), employee experience significantly influences productivity and engagement, particularly in data-driven environments. Thus, the predominance of seasoned professionals in this study adds to the robustness of the insights derived and affirms that the findings are grounded in a rich comprehending of the operational realities of digital transformation in the banking sector.

## 4.4 Descriptive Statistics

This segment offers the research variables descriptive statistics, providing an overview of respondents' perceptions regarding digital transformation strategies and performance. The analysis includes central tendency measures (mean) and dispersion (standard deviation) in summarizing responses across the key dimensions: digital banking platforms, data analytics, fintech partnerships, cloud computing adoption, and performance of commercial banks.

### 4.4.1 Digital Banking Platforms

Table 4.6 specify that respondents generally agreed with the effectiveness and reliability of digital banking platforms in their respective commercial banks. The highest-rated statement was “Our digital banking platforms consistently maintain high reliability and minimal downtime” (Mean = 4.64, Std. Dev = 0.48), suggesting that most banks have successfully developed stable and dependable systems. Similarly, strong agreement was observed for the robustness of online security systems (Mean = 4.09, Std. Dev = 0.60), the user-friendliness of mobile banking interfaces (Mean = 4.05, Std. Dev = 0.77), and the frequency of mobile app usage and customer engagement (Mean = 4.05, Std. Dev = 0.77). These results reflect the banks' focus on enhancing customer experience and securing digital transactions.

Other aspects such as infrastructure capacity (Mean = 3.98, Std. Dev = 0.73), high-volume transaction handling (Mean = 3.91, Std. Dev = 0.95), and the comprehensiveness of mobile banking services (Mean = 3.86, Std. Dev = 0.81) also scored positively, though with slightly higher variability. The statement with the lowest mean was still above average, indicating that even the least agreed-upon item was viewed relatively favourably. The overall mean score for this section was (Mean = 4.08, Std. Dev = 0.76), confirming that digital banking platforms are widely perceived as effective in enhancing banking operations, minimizing downtime, and offering secure, user-friendly experiences to customers.

#### **Table 4.6: Descriptive Statistics for Digital Banking Platforms**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev</b>
The mobile app offers comprehensive banking services that meet customer needs effectively.	72	3.86	0.81
The interface of the mobile banking app is made to be easy for users to use.	72	4.05	0.77
The bank's online transaction systems are equipped to handle high transaction volumes seamlessly.	72	3.91	0.95
Our digital banking platforms have robust security measures to protect online transactions.	72	4.09	0.60
Our mobile app usage metrics indicate high customer engagement and transaction frequency.	72	4.05	0.77
Our digital banking platforms consistently maintain high reliability and minimal downtime.	72	4.64	0.48
The mobile app and online banking systems are regularly monitored to prevent technical issues.	72	4.06	0.79
The infrastructure supporting online transactions has sufficient capacity for peak usage periods.	72	3.98	0.73
<b>Overall mean Score</b>	<b>72</b>	<b>4.08</b>	<b>0.76</b>

**Source: Field Data (2025)**

The results align to earlier research. Kumar *et al.* (2024) discovered that digital banking platforms enhance customer satisfaction, operational efficiency, and profitability through improved service delivery and cost reduction. Sharma *et al.* (2022) similarly noted that digital banking reduces transaction costs and boosts customer retention, while Xie and Wang (2023) confirmed a strong link between digital infrastructure investment and performance gains. Locally, Ondiek (2021) emphasized that mobile banking significantly improves operational efficiency and financial inclusion. The present study, therefore, reinforces existing empirical evidence by providing context-specific validation that digital banking platforms positively contribute to the performance of commercial banks in Kenya.

#### **4.4.2 Data Analytics**

Table 4.7 disclose respondents' perceptions of data analytics mandate in boosting performance within commercial banks. The highest-rated statement was "Data analytics has improved the bank's operational efficiency by automating data processing tasks" (Mean = 4.12, Std. Dev = 0.44), suggesting that automation driven by analytics is a key driver of efficiency. Two assertions tangled for the second-highest rating: "Our data analytics tools offer actionable intuitions that support decision-making within the bank"

and “Our data analytics solutions allow us to respond to market changes in a timely manner” (both with Mean = 4.09, Std. Dev = 0.67 and 0.73 respectively). This indicates that the analytical systems in place are not only functional but also strategically valuable in enabling timely and informed decision-making.

**Table 4.7: Descriptive Statistics for Data Analytics**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev</b>
Our data analytics tools offer actionable intuitions that support decision-making within the bank.	72	4.09	0.67
The insights generated through data analytics have contributed positively to strategic planning.	72	3.95	0.71
Effective understanding of consumer preferences and behaviors is made possible by data analytics.	72	3.68	1.14
The data analytics systems in place process large datasets quickly and efficiently.	72	3.64	0.88
Our data analytics solutions allow us to respond to market changes in a timely manner.	72	4.09	0.73
Speed in data processing enables faster decision-making across departments.	72	3.95	0.88
Data analytics has improved the bank’s operational efficiency by automating data processing tasks.	72	4.12	0.44
The bank’s data analytics infrastructure is reliable and performs well under high-demand conditions.	72	3.95	0.68
<b>Overall Mean Score</b>	<b>72</b>	<b>3.93</b>	<b>0.60</b>

**Source: Field Data (2025)**

Moderate agreement was recorded in areas such as data processing speed (Mean = 3.64, Std. Dev = 0.88) and understanding of consumer behavior (Mean = 3.68, Std. Dev = 1.14), with the latter exhibiting the highest variability. This suggests that while analytics are generally effective, there may be inconsistencies in their application or capability across different banks. Strategic planning (Mean = 3.95, Std. Dev = 0.71), interdepartmental decision-making speed (Mean = 3.95, Std. Dev = 0.88), and infrastructure reliability (Mean = 3.95, Std. Dev = 0.68) were also viewed positively, contributing to an overall mean score of (Mean = 3.93, Std. Dev = 0.60). The results point to a strong appreciation for data analytics in driving operational efficiency and agility, though areas like customer insight generation and processing speed may benefit from further enhancement or investment.

The conclusions concur to earlier studies on data analytics role in performance improvement. Adeniran *et al.* (2024) found that banks leveraging data analytics reported higher profit margins and cost-efficiency, while Ladeira *et al.* (2024) highlighted its contribution to faster, more accurate decision-making across sectors. Oladeinde *et al.* (2023) also noted increased employee productivity in data-driven environments. The current study confirms these benefits within the Kenyan banking context, offering empirical evidence that data analytics enhances operational performance, supports strategic planning, and enables responsive decision-making in a competitive and rapidly changing financial landscape.

#### 4.4.3 Fintech Partnerships

Table 4.8 reflect respondents’ views on the contribution of fintech partnerships to the performance of commercial banks. The highest-rated statement was “Collaborations with fintech firms have facilitated the development of new delivery channels for banking services” (Mean = 4.16, Std. Dev = 0.56), indicating that partnerships are perceived to significantly enhance how banks deliver services. This was followed closely by “Fintech partnerships have enabled the bank to reach customers more effectively through digital channels” (Mean = 3.98, Std. Dev = 0.63) and “The new products introduced through fintech partnerships have attracted a positive customer response” (Mean = 3.95, Std. Dev = 0.56). These scores suggest that fintech collaborations are not only expanding access but also improving customer engagement and satisfaction through innovative solutions.

**Table 4.8: Descriptive Statistics for Fintech Partnerships**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev</b>
The bank has enthusiastically pursued fintech partnerships to enhance its service offerings.	72	3.73	0.91
Our collaborations with fintech firms have expanded the bank’s technological capabilities.	72	3.73	0.62
Fintech partnerships have contributed to achieving our strategic goals.	72	3.86	0.55

Fintech collaborations have enabled the bank to advance new, client innovative products.	72	3.14	0.87
The new products introduced through fintech partnerships have attracted a positive customer response.	72	3.95	0.56
Fintech partnerships have accelerated the bank’s ability to bring new products to market.	72	3.82	0.72
Collaborations with fintech firms have facilitated the development of new delivery channels for banking services.	72	4.16	0.56
Fintech partnerships have enabled the bank to reach customers more effectively through digital channels.	72	3.98	0.63
<b>Overall Mean Score</b>	<b>72</b>	<b>3.80</b>	<b>0.50</b>

**Source: Field Data (2025)**

Moderate agreement was observed on statements such as achieving strategic goals (Mean = 3.86, Std. Dev = 0.55), accelerating time-to-market (Mean = 3.82, Std. Dev = 0.72), and enhancing technological capabilities (Mean = 3.73, Std. Dev = 0.62). However, the lowest-rated item was “Fintech collaborations have enabled the bank to advance new, client innovative products” (Mean = 3.14, Std. Dev = 0.87), indicating that while fintech partnerships are beneficial, their role in fostering radical innovation may still be limited or unevenly realized. The overall mean score for this section was (Mean = 3.80, Std. Dev = 0.50), suggesting that while fintech partnerships are broadly viewed as beneficial, there remains room for growth in areas such as co-creation of innovative offerings and deeper integration into strategic initiatives.

The results concur with earlier research that emphasised the positive role of fintech partnerships in enhancing organizational performance. Agu *et al.* (2024) found that such collaborations significantly improved operational processes and supply chain efficiency. Similarly, Munangi and Sibindi (2022) noted that fintech partnerships enhance customer engagement and reduce costs, particularly when integrated for automation and real-time analytics. Wang *et al.* (2022) emphasized improved customer satisfaction and sales growth through fintech-enabled personalization. The present study validates these outcomes in the Kenyan context by demonstrating that fintech partnerships strengthen service delivery and digital outreach, though there remains an opportunity to deepen their strategic impact and innovation potential.

#### 4.4.4 Cloud Computing Adoption

Table 4.9 offers respondents' views on the extent and impact of cloud computing adoption in their respective commercial banks.

**Table 4.9: Descriptive Statistics for Cloud Computing Adoption**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev</b>
A significant portion of our bank's workloads has been successfully migrated to cloud-based services.	72	3.73	0.62
Cloud computing adoption has improved the scalability of workloads across the bank's operations.	72	3.64	0.71
The transition of workloads to cloud services has positively impacted operational efficiency.	72	3.36	0.88
Our cloud-based services consistently maintain high uptime, minimizing disruptions in service delivery.	72	4.05	0.56
Cloud adoption has enhanced our capacity of offering uninterrupted services to clients.	72	3.64	0.77
The uptime performance of our cloud-based infrastructure meets the bank's reliability standards.	72	4.41	0.49
The reliability of cloud-based services has met our bank's expectations and requirements.	72	4.01	0.55
Cloud infrastructure has proven to be a dependable solution for critical banking applications.	72	3.92	0.63
<b>Overall Mean Score</b>	<b>72</b>	<b>3.85</b>	<b>0.47</b>

**Source: Field Data (2025)**

The highest-rated statement was "The uptime performance of our cloud-based infrastructure meets the bank's reliability standards" (Mean = 4.41, Std. Dev = 0.49), indicating that cloud computing is viewed as highly dependable for maintaining service continuity. This was closely followed by the reliability of cloud services (Mean = 4.01, Std. Dev = 0.55) and the ability to maintain high uptime with minimal disruptions (Mean = 4.05, Std. Dev = 0.56). These results point to strong confidence in the reliability and resilience of cloud infrastructure, especially for critical banking services.

Moderate agreement was observed on statements related to operational efficiency (Mean = 3.36, Std. Dev = 0.88) and scalability (Mean = 3.64, Std. Dev = 0.71), suggesting that

while cloud adoption has begun to yield benefits, its transformative potential in these areas may still be unfolding. The migration of workloads to the cloud (Mean = 3.73, Std. Dev = 0.62) and enhanced service continuity (Mean = 3.64, Std. Dev = 0.77) also received favourable responses. The statement “Cloud infrastructure has proven to be a dependable solution for critical banking applications” (Mean = 3.92, Std. Dev = 0.63) reinforces this positive outlook. With an overall mean score of (Mean = 3.85, Std. Dev = 0.47), the data suggests that while cloud computing adoption is still progressing in terms of full integration and operational transformation, it is already delivering meaningful performance benefits in reliability and service delivery.

The conclusions align with previous empirical research that emphasize the value of cloud computing in driving performance across financial institutions. Hui and Mohammadi (2024) found that cloud adoption significantly improved operational efficiency, cost management, and customer satisfaction across industries, while Raj and Jeyaraj (2023) reported that cloud solutions increased organizational flexibility and responsiveness. Locally, Odero (2021) observed similar advantages in Kenya’s SME sector, particularly in data management and service efficiency. The current study supports these conclusions within the context of Kenya’s commercial banking sector, reinforcing that cloud infrastructure while still evolving is a dependable and increasingly vital asset for enhancing operational performance.

#### **4.4.5 Organizational Performance**

Table 4.10 outlines respondents’ perceptions of how digital transformation policies have influenced the overall commercial banks performance. The highest-rated statements were “Digital transformation initiatives have contributed to improve accuracy and reduce errors in operations” and “The bank’s digital offerings encourage long-term customer loyalty” (Mean = 4.09, Std. Dev = 0.67 and 0.73 respectively), indicating strong consensus on the operational and customer relationship benefits of digitization. Other highly rated items included improved employee effectiveness (Mean = 4.02, Std. Dev = 0.81), enhanced productivity through digital tools (Mean = 3.98, Std. Dev = 0.67), and reduced customer churn (Mean = 3.95, Std. Dev = 0.88). These results point to significant gains in operational

accuracy, employee performance, and customer relationship management driven by digital transformation.

**Table 4.10: Descriptive Statistics for Organizational Performance**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev</b>
Digital transformation initiatives have contributed to improve accuracy and reduce errors in operations.	72	4.09	0.67
Adoption of digital transformation strategies in banks have reduced the time taken to complete banking transactions.	72	3.95	0.71
Investments in digital technology has led to a decline in the bank's operational costs.	72	3.68	1.14
Customer retention and satisfaction have increased because to digital banking services.	72	3.64	0.88
The bank's digital offerings encourage long-term customer loyalty.	72	4.09	0.73
Our digital transformation efforts have helped reduce customer churn rates.	72	3.95	0.88
Digital tools and platforms have improved employee productivity across the organization.	72	3.98	0.67
Employees are more effective in their roles due to the availability of digital resources.	72	4.02	0.81
<b>Overall Mean Score</b>	<b>72</b>	<b>3.93</b>	<b>0.73</b>

**Source: Field Data (2025)**

Moderate agreement was also noted for reduced transaction time (Mean = 3.95, Std. Dev = 0.71) and operational cost savings (Mean = 3.68, Std. Dev = 1.14), while customer satisfaction and retention from digital banking services had a slightly lower mean (Mean = 3.64, Std. Dev = 0.88), possibly reflecting variations in customer experience across different banks. The overall mean score for this section stood at (Mean = 3.93, Std. Dev = 0.73), signifying that, on average, respondents agreed that digital transformation strategies have positively impacted key aspects of organizational performance including operational efficiency, cost-effectiveness, customer loyalty, and workforce productivity. The variation in responses also suggests that while some banks have realized substantial benefits, others may still be refining their digital strategies to achieve optimal outcomes.

These findings align with several empirical studies that have linked digital transformation to performance enhancement. Sharma *et al.* (2022) and Kumar *et al.* (2024) highlighted that digital platforms and tools improve customer satisfaction, transaction speed, and cost

control. Mittal and Mittal (2023) also demonstrated that digital resources enhance employee effectiveness and client service conveyance in the banking sector. The present research reinforces these insights within the Kenyan context, illustrating that digital transformation contributes meaningfully to operational excellence, employee productivity, and customer engagement in commercial banks in Nairobi City County.

#### 4.5 Correlation Analysis

Table 4.11 offers the Pearson correlation results examining the association between digital transformation strategies and organizational performance of commercial banks in Nairobi City County.

**Table 4.11: Correlation Results**

		Organizational performance	Digital banking platforms	Data analytics	Fintech partnerships	Cloud computing adoption
Organizational performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Digital banking platforms	Pearson Correlation	.842**	1			
	Sig. (2-tailed)	.000				
Data analytics	Pearson Correlation	.855**	.577**	1		
	Sig. (2-tailed)	.000	.000			
Fintech partnerships	Pearson Correlation	.717**	.641**	.600**	1	
	Sig. (2-tailed)	.000	.000	.000		
Cloud computing adoption	Pearson Correlation	.583**	.567**	.468**	.427**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=72

**Source: Field Data (2025)**

The results reveal that digital banking platforms have a strong positive correlation with organizational performance ( $r = 0.842$ ,  $p < 0.05$ ). This infers banks with well-established and reliable digital platforms incline to experience advanced operational efficiency, customer satisfaction, and employee productivity levels. The conclusions concur to Kumar *et al.* (2024) and Xie and Wang (2023), who emphasized that digital platforms reduce

transaction costs, enhance service quality, and improve financial outcomes. The high correlation further validates that effective mobile and online banking systems are pivotal in enhancing organizational performance in the Kenyan banking sector.

Data analytics showed the strongest positive correlation with organizational performance ( $r = 0.855$ ,  $p < 0.05$ ), indicating that its role in supporting decision-making, improving responsiveness, and optimizing operations is particularly impactful. This supports results by Adeniran et al. (2024) and Ladeira *et al.* (2024), who observed that the use of data analytics enhances cost-efficiency and boosts strategic planning. The result also aligns with Oladeinde et al. (2023), who found that data-driven decision-making improves productivity and engagement. These insights underscore the importance of investing in analytics infrastructure and talent to strengthen performance outcomes in commercial banking.

Fintech partnerships also demonstrated a strong positive correlation with organizational performance ( $r = 0.717$ ,  $p < 0.05$ ), signifying that strategic collaborations with fintech firms are associated with improved service innovation, customer outreach, and process efficiency. This supports studies by Agu et al. (2024) and Munangi and Sibindi (2022), who found that fintech collaborations accelerate service delivery, enhance customer experience, and expand digital capabilities. The results confirm that partnerships can serve as a strategic lever for innovation and performance enhancement, particularly when integrated into core banking operations.

Lastly, cloud computing adoption showed a moderate but significant positive correlation with organizational performance ( $r = 0.583$ ,  $p < 0.05$ ). This suggests that while cloud technologies do contribute to operational reliability and scalability, their impact may be less pronounced compared to other digital strategies. This finding is in line with Hui and Mohammadi (2024) and Raj and Jeyaraj (2023), who acknowledged the operational benefits of cloud computing but noted that the extent of performance gains depends on the maturity and integration of cloud systems. In the context of Nairobi's commercial banks, this result implies that while cloud adoption is valuable, its full potential may still be in the process of being realized.

## 4.6 Regression Analysis

This segment displays the results of the multiple linear regression analysis used to examine the combined and individual effects of digital transformation policies on the organizational performance of commercial banks. The analysis includes model fitness, ANOVA, and regression coefficients to assess the strength, significance, and predictive power of the model.

**Table 4.12: Model Fitness**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898 <sup>a</sup>	.806	.795	.2003

a. Predictors: (Constant), Cloud computing adoption, Fintech partnerships, Digital banking platforms, Data analytics

**Source: Field Data (2025)**

Table 4.12 exhibits that the regression model had a strong goodness-of-fit, with an R value of 0.898 and an R Square of 0.806. This infers that 80.6% of the variance in organizational performance explained by the combined influence of digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption. The 0.795 adjusted R Square value, accounting for predictors number, confirms the model's robustness.

**Table 4.13: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.188	4	2.797	69.744	.000 <sup>b</sup>
	Residual	2.687	67	.040		
	Total	13.875	71			

a. Dependent Variable: Organizational performance

b. Predictors: (Constant), Cloud computing adoption, Fintech partnerships, Digital banking platforms, Data analytics

**Source: Field Data (2025)**

ANOVA results are exhibited in Table 4.13, which test the overall regression model significance. The 69.744 F-statistic value with a 0.000 corresponding p-value infers that

the model is at the 5% statistically significant level. This infers the combined effects of the independent variables significantly predict organizational performance.

**Table 4.14: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.358	.728		-1.865	.067
	Digital banking platforms	.196	.086	.274	2.276	.026
	Data analytics	.410	.121	.411	3.389	.001
	Fintech partnerships	.325	.132	.187	2.453	.017
	Cloud computing adoption	.441	.188	.155	2.353	.022

a. Dependent Variable: Organizational performance

**Source: Field Data (2025)**

The multiple regression model used is illustrated below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon,$$

$$Y = -1.358 + 0.196X_1 + 0.410X_2 + 0.325X_3 + 0.441X_4$$

Table 4.17 displays the regression coefficients, showing the discrete contribution of every predictor to performance. At the 5% level, all four factors were statistically significant. Digital banking platforms had a positive and significant effect ( $\beta = 0.196$ ,  $p < 0.05$ ), signifying that enhanced digital banking services contribute to improved performance. Data analytics had the highest positive effect ( $\beta = 0.410$ ,  $p < 0.05$ ), signifying that banks that leverage analytics effectively experience greater gains in operational efficiency and decision-making. Fintech partnerships also exhibited a significant positive effect ( $\beta = 0.325$ ,  $p < 0.05$ ), stressing the role of collaboration in expanding service delivery and innovation. Cloud computing adoption had a positive and significant impact as well ( $\beta = 0.441$ ,  $p < 0.05$ ), pointing to its role in improving scalability, uptime, and service reliability.

The significant positive effect of digital banking platforms supports previous conclusions by Kumar *et al.* (2024) and Sharma *et al.* (2022), who discovered that digital platforms reduce operational costs, boost customer satisfaction, and improve efficiency. Similarly, the strong influence of data analytics aligns with Adeniran *et al.* (2024) and Ladeira *et al.* (2024), who noted that data-driven strategies enhance profitability and responsiveness. The

current study adds empirical support in the Kenyan context by showing that analytics are not only useful for decision-making but also for driving strategic performance outcomes.

The positive effect of fintech partnerships on performance confirms earlier conclusions by Agu *et al.* (2024) and Wang *et al.* (2022), who observed that such collaborations enhance service delivery, innovation, and customer engagement. Furthermore, the significance of cloud computing adoption echoes the conclusions by Hui and Mohammadi (2024) and Raj and Jeyaraj (2023), who highlighted cloud technologies' role in increasing operational efficiency and reliability. This study demonstrates that within Nairobi's commercial banks, cloud infrastructure plays a key role in enabling uninterrupted service delivery, supporting the broader narrative that technology-driven transformation significantly boosts organizational performance.

#### **4.7 Discussion of Results**

This segment encompasses detailed discussion of the research conclusions in relation to the research objectives, theoretical framework, and existing empirical literature. It interprets the results from both descriptive and inferential analyses, highlighting how each digital transformation strategy—digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption—contributed to organizational performance. The discussion further explores the consistency of these findings with past studies and the extent to which they support or challenge existing theories and empirical evidence, thereby offering meaningful intuitions into the role of digital transformation strategy in the Kenyan banks.

##### **4.7.1 Digital Banking Platforms and Performance**

The first research objective was establishing digital banking platforms' effect on the performance of commercial banks. Descriptive statistics revealed high levels of agreement among respondents, with a strong overall mean score (Mean = 4.08, Std. Dev = 0.76). Respondents particularly agreed that digital banking platforms are reliable, secure, and user-friendly, and that they enhance customer engagement and service delivery. The correlation analysis further supported these findings by revealing a statistically significant positive link amidst digital banking platforms and organizational performance ( $r = 0.842$ ,  $p < 0.05$ ). Regression results confirmed the positive influence, with digital banking

platforms having a significant and positive coefficient ( $\beta = 0.196, p < 0.05$ ), indicating that improvements in digital banking directly enhance key performance metrics like efficiency, customer satisfaction, and employee productivity.

The results concur with TAM and the Diffusion of Innovation Theory, both emphasize the perceived usefulness and ease of use mandate in the adoption of technological solutions. The high levels of perceived reliability and effectiveness of digital platforms suggest that customers and employees find the platforms not only accessible but also valuable in improving banking operations and experiences. From a strategic perspective, the adoption of digital platforms also supports the Resource-Based View, which highlights the competitive advantage gained through leveraging technology as a unique organizational resource.

Empirically, the study's outcomes concur with Kumar *et al.* (2024) and Sharma *et al.* (2022), who reported that digital banking significantly enhances profitability, operational efficiency, and customer satisfaction. Additionally, Xie and Wang (2023) found that investment in digital banking platforms in China led to substantial improvements in cost reduction and operational agility, while Ondiek (2021) observed similar benefits in the Kenyan context, particularly through mobile banking. This study reaffirms these findings and contributes local evidence that well-implemented digital banking platforms are critical enablers of improved performance in commercial banks, especially in a dynamic and digitally evolving environment like Nairobi.

#### **4.7.2 Data Analytics and Performance**

The second research objective was to establish data analytics effect on the performance of commercial banks in Nairobi City County, Kenya. Descriptive statistics indicated strong agreement from respondents regarding the usefulness of data analytics tools in enhancing decision-making, strategic planning, and operational efficiency, with an overall mean score of (Mean = 3.93, Std. Dev = 0.60). Notably, respondents affirmed that automation of data tasks and timely market responsiveness were key benefits derived from analytics. The correlation analysis displayed a very strong statistical significant connection amidst data analytics and organizational performance ( $r = 0.855, p < 0.05$ ), the highest among all

predictors. The regression analysis further established this connection, with data analytics showing a significant positive coefficient ( $\beta = 0.410$ ,  $p < 0.05$ ), indicating that leveraging analytics leads to notable improvements in banking performance.

The results support RBV, which asserts that data-driven insights empower organizations to respond swiftly to changes and make informed, strategic decisions. The positive outcomes reported by respondents suggest that commercial banks in Nairobi are increasingly using analytics to enhance customer segmentation, risk management, and resource allocation. Additionally, the outcomes align with the principles of the RBV, demonstrating how capabilities in data management and analytics act as strategic assets that strengthen competitive advantage and operational efficiency within the banking sector.

Empirical literature reinforces these findings. Adeniran *et al.* (2024) reported that banks that use data analytics for profitability and efficiency improvements realize stronger financial performance. Ladeira *et al.* (2024) also confirmed the association amidst data analytics and enhanced decision-making speed, especially in service industries like banking. Similarly, Oladeinde *et al.* (2023) found that data-driven environments significantly improve employee productivity and engagement. While Mittal and Mittal (2023) highlighted the role of analytics in boosting customer satisfaction, this study expands on those findings by also linking data analytics to internal operational results. The results emphasise the growing significance of analytics in modern banking, positioning it as a cornerstone of digital transformation and organizational performance.

#### **4.7.3 Fintech Partnerships and Performance**

The third objective of the research was to determine fintech partnerships effect on the performance of commercial banks in Nairobi City County, Kenya. Descriptive statistics discovered a generally positive perception (Mean = 3.80, Std. Dev = 0.50). Respondents approved that fintech collaborations have enhanced customer reach, enabled the development of new delivery channels, and improved product offerings. However, there was moderate variability in views regarding the extent of innovation and speed to market, suggesting that while fintech partnerships are valuable, their impact may differ depending on the depth and structure of the collaboration. Correlation analysis displayed a strong

significant positive affiliation amidst fintech partnerships and organizational performance ( $r = 0.717$ ,  $p < 0.05$ ), and the regression analysis confirmed a significant effect ( $\beta = 0.325$ ,  $p < 0.05$ ), signifying that fintech alliances meaningfully contribute to improved performance outcomes.

These results align well with the Diffusion of Innovation Theory, which posits that innovation adoption particularly when sourced from external actors can enhance organizational capabilities and competitive positioning. Fintech firms often bring technological agility and customer-centric innovation, which, when integrated with traditional banking systems, enhance responsiveness and product relevance. From the lens of RBV, these partnerships represent strategic resources that complement internal capabilities, particularly in areas where banks may lack the speed or infrastructure to independently innovate. As a result, fintech partnerships enable banks to access advanced technologies and customer engagement tools that would otherwise require significant time and investment to develop in-house.

These findings are supported by prior empirical studies. Agu *et al.* (2024) noted that fintech partnerships in Nigeria led to improved operational processes, faster service delivery, and better supplier management. Similarly, Munangi and Sibindi (2022) found that fintech collaborations enhance internal efficiencies and customer experiences, especially when used for automation and real-time data analytics. Wang *et al.* (2022) also emphasized the positive impact of fintech solutions on customer satisfaction and revenue growth in the retail sector. The current study reinforces these findings in the Kenyan context, showing that fintech partnerships are a critical element of digital transformation that boosts performance by expanding technological capabilities and improving service delivery in commercial banks.

#### **4.7.4 Cloud Computing Adoption and Performance**

The research fourth objective was to evaluate the effect of cloud computing adoption on commercial banks in Nairobi City County, Kenya performance. Descriptive statistics showed generally favorable responses, with an overall mean score of (Mean = 3.85, Std. Dev = 0.47). Respondents acknowledged the reliability of cloud infrastructure, particularly

in maintaining high uptime (Mean = 4.41, Std. Dev = 0.49) and minimizing disruptions to service delivery. However, moderate ratings were observed on items related to operational efficiency and workload scalability, suggesting that while cloud adoption is beneficial, its full potential may not yet be fully realized across all institutions. Correlation analysis exhibited a moderate but significant positive association between cloud computing adoption and organizational performance ( $r = 0.583$ ,  $p < 0.05$ ), and regression analysis confirmed a significant impact ( $\beta = 0.441$ ,  $p < 0.05$ ), inferring that cloud solutions play a meaningful role in supporting performance outcomes.

These findings align with TAM conventions, perceived usefulness and reliability of cloud services influence their integration into core operations. The results also support the RBV, in that cloud infrastructure serves as a strategic resource that enhances flexibility, reliability, and responsiveness of banking services. Furthermore, cloud computing enables banks to scale services, reduce IT costs, and maintain continuity, especially in periods of high demand or technological disruption. As such, its positive impact on organizational performance stems from its role in stabilizing service delivery, supporting innovation, and streamlining operations.

Empirical studies have drawn similar conclusions. Hui and Mohammadi (2024) found that cloud computing adoption significantly enhanced operational efficiency and customer satisfaction in various industries, including banking. Raj and Jeyaraj (2023), through a meta-analysis, too established the positive association between cloud technologies and performance, especially in terms of service reliability and flexibility. Locally, Odero (2021) highlighted the value of cloud solutions in improving data accessibility and customer interaction in Kenya's SME sector. The current study extends this evidence to the commercial banking sector, confirming that cloud computing adoption is a valuable digital transformation strategy that supports reliable and efficient service delivery, contributing to improved organizational performance.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter offers a summary of the key findings derived from the analysis of data in relation to the study objectives. It also outlines the main conclusions drawn from the results and provides practical recommendations for commercial banks and policymakers aimed at enhancing organizational performance through digital transformation strategies.

#### **5.2 Summary of Findings**

This segment offers summary of the key conclusions based on the study's specific objectives. Each objective is addressed by highlighting the main results related to digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption in relation to organizational performance.

##### **5.2.1 Digital Banking Platforms and Performance**

The first research objective was to determine digital banking platforms effect on the performance of commercial banks in Nairobi City County, Kenya. The descriptive results showed a huge agreement level amongst respondents on digital banking platforms effectiveness in enhancing service delivery, reliability, and customer engagement. The highest-rated aspects included platform reliability, security, and user-friendliness indicating consistency in responses.

Correlation analysis discovered a strong positive association amidst digital banking platforms and performance. Regression results further confirmed that digital banking platforms had statistically significant and positive impact on performance. These results suggest that digital banking platforms contribute meaningfully to enhanced efficacy, customer satisfaction, and overall organizational outcomes in the banking sector.

##### **5.2.2 Data Analytics and Performance**

The second research objective was to determine the effect of data analytics on the performance of commercial banks in Nairobi City County, Kenya. Descriptive statistics

designated a strong agreement among respondents that data analytics supports decision-making, strategic planning, and operational efficiency. The most highly rated aspects included automation of data processing tasks, timely market responsiveness, and the generation of actionable insights.

Correlation analysis showed a very strong positive association amidst data analytics and organizational performance. Regression analysis further discovered data analytics had a statistically significant and positive impact on performance. The results infer that the use of data analytics contributes substantially to improved performance outcomes such as efficiency, responsiveness, and internal decision-making within commercial banks.

### **5.2.3 Fintech Partnerships and Performance**

The third objective was establishing fintech partnerships impact on the performance of commercial banks in Nairobi City County, Kenya. Descriptive findings showed generally positive perceptions, with respondents agreeing that fintech collaborations have expanded technological capabilities, improved service delivery, and enhanced access to digital channels. These results signifying moderate to advanced agreement on the value of fintech partnerships in banking operations.

Correlation analysis discovered strong positive relationship between fintech partnerships and organizational performance. Regression results confirmed that fintech partnerships had a statistically significant and positive impact on performance. These findings suggest that fintech collaborations contribute to better performance outcomes by enabling innovation, improving digital service delivery, and supporting the achievement of strategic goals in commercial banks.

### **5.2.4 Cloud Computing Adoption and Performance**

The fourth objective was to evaluate the effect of cloud computing adoption on the performance of commercial banks in Nairobi City County, Kenya. Descriptive statistics showed that respondents generally agreed on the reliability and operational benefits of cloud-based services, particularly in maintaining high system uptime and minimizing service disruptions.

Correlation analysis indicated a moderate but significant positive link amidst cloud computing adoption and organizational performance. Regression results established that cloud computing adoption had a statistically significant and positive impact on performance. These outcomes infer use of cloud technologies has contributed to improved reliability, scalability, and efficiency in service delivery, thereby positively influencing the overall performance of commercial banks.

### **5.3 Conclusions**

Founded on the research results, it is resolved that digital transformation strategies have a significant positive effect on the performance of commercial banks in Nairobi City County, Kenya. Each of the four digital transformation strategies examined digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption demonstrated a statistically significant contribution to organizational performance. This confirms that embracing digital technologies is critical in enhancing efficiency, improving customer satisfaction, and strengthening competitiveness within the banking sector.

Firstly, the research resolves that digital banking platforms serve a vital mandate in driving performance improvements in commercial banks. These platforms have enhanced the reliability, accessibility, and user experience of banking services, leading to operational efficiency and improved customer engagement. The strong correlation and significant regression results highlight that well-developed digital platforms are essential in supporting modern banking operations and enabling banks to meet customer needs effectively.

Secondly, the study concludes that data analytics has the most substantial effect on organizational performance among the four digital transformation strategies examined. Data analytics facilitates informed decision-making, automation of operational processes, and responsiveness to market changes, all contribute to improved internal efficiency and strategic outcomes. The findings confirm that banks that leverage data effectively are better positioned to enhance productivity and optimize performance across departments. Bank managers should invest in capacity building and continuous training of IT teams to ensure optimal use of digital platforms, data analytics tools, and cloud-based services for improved efficiency and innovation.

Finally, the study concludes that fintech partnerships and cloud computing adoption also contribute meaningfully to organizational performance. Fintech partnerships help banks expand their digital capabilities, offer innovative products, and improve service delivery through collaboration. Similarly, cloud computing supports performance by enhancing service reliability, system uptime, and scalability. Although their effects are slightly less pronounced than digital banking platforms and data analytics, both strategies remain integral to a bank's digital transformation journey and long-term performance success.

#### **5.4 Recommendations**

Grounded on the research conclusions, it is suggested that commercial banks in Nairobi City County continue to invest in and strengthen their digital banking platforms. Efforts should focus on improving user experience, enhancing platform security, and ensuring system reliability to maintain high customer engagement and satisfaction. Banks should also ensure that their digital platforms are accessible across various devices and are inclusive to a diverse customer base, including those with limited digital literacy. CBK should strengthen policy frameworks that incentivize commercial banks to accelerate adoption of digital transformation strategies such as data analytics, fintech collaborations, and cloud-based systems to enhance operational efficiency and competitiveness.

Secondly, banks should prioritize the integration of advanced data analytics tools across all departments. Investments should be made in staff training and capacity building to enhance data interpretation and utilization for decision-making. By embedding data-driven practices into their operations, banks can enhance operational efficiency, support strategic planning, and improve customer personalization. Data analytics should not only be seen as a back-end support tool but as a core element of competitive strategy. CBK should establish clear digital banking guidelines and monitoring mechanisms to ensure standardization, cybersecurity, and consumer protection, thereby fostering trust and sustainable growth in Kenya's financial sector.

Thirdly, it is recommended that commercial banks deepen their collaboration with fintech firms to foster innovation and expand digital service offerings. Banks should establish structured partnership models that promote knowledge sharing, agility, and mutual value

creation. By leveraging fintech capabilities in areas such as digital payments, automation, and customer engagement, banks can rapidly enhance their service portfolios and improve market responsiveness. Commercial banks' leadership should strengthen strategic fintech partnerships to expand service delivery channels and enhance customer experiences, while also monitoring adoption challenges to maximize organizational performance.

Lastly, commercial banks should continue adopting cloud computing solutions, especially for mission-critical applications that require high availability and scalability. Emphasis should be placed on building secure, compliant, and resilient cloud environments to support digital operations. Banks should also work with reputable cloud service providers to ensure data protection and continuity in service delivery. Strengthening cloud adoption will support long-term efficiency, reduce infrastructure costs, and enhance the flexibility of banking operations in a dynamic digital environment.

### **5.5 Suggestions for Further Studies**

This research focus on four key digital transformation strategies digital banking platforms, data analytics, fintech partnerships, and cloud computing adoption and their effect on the performance of commercial banks in Nairobi City County. Future research might explore supplementary dimensions of digital transformation such as artificial intelligence, blockchain technology, robotic process automation, and cybersecurity frameworks, to determine their specific influence on organizational performance. These emerging technologies are gaining prominence in the banking sector and may yield deeper insights into digital transformation's evolving impact.

Secondly, while this study was limited to commercial banks within Nairobi, future research might widen the geographical scope to include banks in other counties or conduct comparative studies in diverse regions or nations. This would offer a broader understanding of how contextual factors such as infrastructure, digital maturity, and regulatory environments impact the association amidst digital transformation and performance. Such comparative research would also help identify best practices and scalable models that can be adopted by financial institutions in varying contexts.

Lastly, future research could incorporate longitudinal designs to assess how digital transformation strategies impact organizational performance over time. A time-series approach would help capture the dynamic nature of technology adoption and provide evidence on the sustainability of performance outcomes. In addition, qualitative or mixed-methods studies could be conducted to capture in-depth insights from employees, customers, or strategic partners regarding the implementation challenges, user experiences, and organizational readiness allied to digital transformation in banking industry.

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## **APPENDICES**

### **Appendix I: Letter of Introduction**

Dear Respondent,

I am an MBA student at Kenyatta University. As my coursework assessment requirement, I am required to complete a research on **“DIGITAL TRANSFORMATION STRATEGIES AND PERFORMANCE OF COMMERCIAL BANKS IN NAIROBI CITY COUNTY, KENYA”**.

Your organization has been chosen to provide valuable data for this research. The data obtained will be utilized exclusively for academic motives, and your distinctiveness will persist anonymous throughout the report. Should you be interested in the research findings, we will gladly share them with you upon request.

Your assistance will be truly valued.

Thank you in advance.

**Dickson Mwenda**

## Appendix II: Questionnaire

This questionnaire is created to gather insights on digital transformation strategies effect on Kenyan commercial banks performance. Please review each question carefully and provide responses that reflect your honest views. The info obtained will be strictly for academic research purposes, kept completely confidential.

### Instructions

1. Tick appropriately
2. Please feel free to add some additional relevant information to the research.

### PART A: BACKGROUND INFORMATION

- 1 Gender: Male  Female
  
- 2 Under which age brackets are you?  
30 Years and below  31 - 40 Years   
41 - 50 years  Over 50 years
  
- 3 Which is the highest education level that you have attained?  
Diploma  Masters   
Degree  PhD   
  
Others Specify.....
  
- 4 How many years have you worked in your firm?  
Less than one year  1-3 years   
4-7 years  8 years and above

## PART B: DIGITAL TRANSFORMATION STRATEGIES

This segment has four parts; digital banking platforms, data analytics, Fintech partnerships and cloud computing adoption.

### PART B: Digital Banking Platforms

Use the likert scale provided to respond to the following questions on digital banking platforms to the best of your knowledge and ability. Where 5= Strongly Agree, 4 = Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

Statement	1	2	3	4	5
The mobile app offers comprehensive banking services that meet customer needs effectively.					
The interface of the mobile banking app is made to be easy for users to use.					
The bank's online transaction systems are equipped to handle high transaction volumes seamlessly.					
Our digital banking platforms have robust security measures to protect online transactions.					
Our mobile app usage metrics indicate high customer engagement and transaction frequency.					
Our digital banking platforms consistently maintain high reliability and minimal downtime.					
The mobile app and online banking systems are regularly monitored to prevent technical issues.					
The infrastructure supporting online transactions has sufficient capacity for peak usage periods.					

### PART C: Data Analytics

Use the Likert scale provided to respond to the following questions on data analytics to the best of your knowledge and ability. Where 5= Strongly Agree, 4 = Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

Statement	1	2	3	4	5
Our data analytics tools offer actionable intuitions that support decision-making within the bank.					
The insights generated through data analytics have contributed positively to strategic planning.					
Effective understanding of consumer preferences and behaviors is made possible by data analytics.					
The data analytics systems in place process large datasets quickly and efficiently.					
Our data analytics solutions allow us to respond to market changes in a timely manner.					
Speed in data processing enables faster decision-making across departments.					
Data analytics has improved the bank's operational efficiency by automating data processing tasks.					
The bank's data analytics infrastructure is reliable and performs well under high-demand conditions.					

**PART D: Fintech Partnerships**

Use the Likert scale provided to respond to the following questions on Fintech partnerships to the best of your knowledge and ability. Where 5= Strongly Agree, 4 = Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

Statement	1	2	3	4	5
The bank has enthusiastically pursued fintech partnerships to enhance its service offerings.					
Our collaborations with fintech firms have expanded the bank’s technological capabilities.					
Fintech partnerships have contributed to achieving our strategic goals.					
Fintech collaborations have enabled the bank to advance new, client innovative products.					
The new products introduced through fintech partnerships have attracted a positive customer response.					
Fintech partnerships have accelerated the bank’s ability to bring new products to market.					
Collaborations with fintech firms have facilitated the development of new delivery channels for banking services.					
Fintech partnerships have enabled the bank to reach customers more effectively through digital channels.					

**PART E: Cloud Computing Adoption**

Use the Likert scale provided to respond to the following questions on cloud computing adoption to the best of your knowledge and ability. Where 5= Strongly Agree, 4 = Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

Statement	1	2	3	4	5
A significant portion of our bank’s workloads has been successfully migrated to cloud-based services.					
Cloud computing adoption has improved the scalability of workloads across the bank’s operations.					
The transition of workloads to cloud services has positively impacted operational efficiency.					
Our cloud-based services consistently maintain high uptime, minimizing disruptions in service delivery.					
Cloud adoption has enhanced our capacity of offering uninterrupted services to clients.					
The uptime performance of our cloud-based infrastructure meets the bank’s reliability standards.					
The reliability of cloud-based services has met our bank’s expectations and requirements.					
Cloud infrastructure has proven to be a dependable solution for critical banking applications.					

**PART F: PERFORMANCE**

To what extent do you agree with the following assertions at your bank? Use 1- No extent, 2-Little extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

<b>Component</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Digital transformation initiatives have contributed to improve accuracy and reduce errors in operations.					
Adoption of digital transformation strategies in banks have reduced the time taken to complete banking transactions.					
Investments in digital technology has led to a reduction in the bank's operational costs.					
Customer retention and satisfaction have increased because to digital banking services.					
The bank's digital offerings encourage long-term customer loyalty.					
Our digital transformation efforts have helped reduce customer churn rates.					
Digital tools and platforms have improved employee productivity across the organization.					
Employees are more effective in their roles due to the availability of digital resources.					

**Thank you very much**

### Appendix III: Commercial Banks in Nairobi City County, Kenya

1. African Banking Corporation
2. Absa Bank Kenya
3. Access Bank Kenya
4. Bank of Africa Kenya
5. Bank of Baroda (K)
6. Bank of India
7. Citibank N.A.
8. NCBA Bank
9. Consolidated Bank of Kenya
10. Co-operative Bank of Kenya
11. Credit Bank
12. Development Bank (K)
13. Diamond Trust Bank
14. Dubai Bank
15. Ecobank Limited
16. Equatorial Commercial Bank
17. Equity Bank
18. Family Bank
19. Fidelity Commercial Bank
20. Fina Bank
21. First Community Bank
22. Giro Commercial Bank
23. Guardian Bank
24. Gulf African Bank
25. Habib Bank A.G. Zurich
26. Housing Finance Corporation
27. I & M Bank
28. Sijian Bank
29. Kenya Commercial Bank
30. Middle East Bank (K)
31. National Bank of Kenya
32. Oriental Bank
33. Paramount Universal Bank
34. Prime Bank
35. Postbank
36. Standard Chartered Bank (K)
37. Transnational Bank
38. UBA Kenya Bank
39. Victoria Commercial Bank

Source: CBK (2023)

## Appendix IV: Graduate School Approval



**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 810901 Ext. 4150

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

**Internal Memo**

**FROM:** Executive Dean, Graduate School

**DATE:** 26<sup>TH</sup> MARCH, 2025

**TO:** Dickson Mwenda  
C/o Business Administration Dept.

**REF:** D53/OL/15311/08

**SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL**

This is to inform you that Graduate School Board at its meeting of 18<sup>th</sup> March, 2025 approved your Research Project Proposal for the M.B.A Degree Entitled, "Digital Transformation Strategies and Performance of Commercial Banks in Nairobi City County, Kenya."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and progress report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

**JANE KAMONDE**  
**FOR: EXECUTIVE DEAN, GRADUATE SCHOOL**

c.c. Chairman, Business Administration.

Supervisors:

1. **Dr. Janet Muthimi**  
C/o Department of Business Administration  
Kenyatta University

JNM/6

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## Appendix V: Data Collection Letter



**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 8710901 Ext. 57530

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Our Ref: D53/OL/15311/08

DATE: 26<sup>th</sup> March, 2025

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR DICKSON MWENDA REG. NO.  
D53/OL/15311/08**

I write to introduce Dickson Mwenda who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the Department of Business Administration.

Dickson intends to conduct research for a M.B.A Project Proposal entitled, "Digital Transformation Strategies and Performance of Commercial Banks in Nairobi City County, Kenya."

Any assistance given will be highly appreciated.

Yours faithfully,

  
f/ **PROF. ELIUD NJAGI**  
**EXECUTIVE DEAN, GRADUATE SCHOOL**

EN/k


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Appendix VI: NACOSTI Permit

  
**REPUBLIC OF KENYA**

**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION.**

Ref No: **971059** Date of Issue: **16/April/2025**

**RESEARCH LICENSE**




**This is to Certify that Mr.. Dickson Mwenda of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: **DIGITAL TRANSFORMATION STRATEGIES AND PERFORMANCE OF COMMERCIAL BANKS IN NAIROBI CITY COUNTY, KENYA** for the period ending : **16/April/2026.****

License No: **NACOSTI/P/25/4172673**

Applicant Identification Number **971059**

*Walther*  
Director General  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

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