

# MOBILE BANKING AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

<sup>1\*</sup>Vicky Chebii, <sup>2</sup>Africanos Chemaket, <sup>3</sup>Cynthia Waweru & <sup>4</sup>Dr. Justice Mutua School of Business & Economics, Daystar University \*Email of the corresponding author: jemutaivicky@gmail.com

**Publication Date: May 2024** 

# ABSTRACT

**Purpose of the study:** This study aimed to delve into the nexus between the financial performance of Kenyan commercial banks and the advent of mobile banking. The research sought to elucidate the mobile banking strategies employed by commercial banks, assess their current financial status, and discern the influence of mobile banking on their financial outcomes.

**Statement of the problem:** Mobile banking has fundamentally reshaped the financial landscape in Kenya, catalyzing financial inclusion and fundamentally altering the dynamics of financial access and management. Amidst the swift digitalization of financial services, mobile banking stands out as a pivotal force in the banking sector. However, lingering concerns persist regarding its potential impacts on the financial performance of commercial banks.

**Methodology:** The study was literature-based, and thus a desktop research design was employed.

**Findings:** The study found that mobile banking has a significant impact on increasing the efficiency, profitability, and competitiveness of commercial banks in Kenya. However, major challenges, such as regulatory constraints, security concerns, and technological limitations, create risks that make it difficult for commercial banks to smoothly integrate and effectively use mobile banking platforms.

**Conclusion:** The study concludes that mobile banking plays a crucial role in enhancing the financial performance of commercial banks in Kenya, despite the presence of various challenges that need to be addressed through collaborative efforts among stakeholders.

**Recommendations:** The study recommends that stakeholders in the mobile banking ecosystem collaborate to create a conducive environment for innovation and growth by strengthening regulatory frameworks, investing in digital infrastructure, and promoting financial literacy. Furthermore, it suggests that education and research institutions conduct further research to explore the long-term effects of mobile banking on financial inclusion, economic growth, and social advancement in Kenya.

Keywords: Mobile banking, financial performance, Commercial Banks, Kenya

### **INTRODUCTION**

The banking industry has undergone a significant transformation with the advent and widespread adoption of mobile banking, fundamentally altering the landscape of financial services accessibility and utilization. This study delves into the intricate interplay between the financial performance of Kenyan commercial banks and the phenomenon of mobile banking. Recognizing this dynamic is paramount for scholars and practitioners in business administration, as it directly influences the competitive dynamics and strategic imperatives of financial institutions. The research endeavors to probe the relationship between the financial performance of Kenyan commercial banks and the adoption and utilization of mobile banking. Given the escalating prevalence of mobile banking, empirical investigation becomes imperative to furnish insights that can inform strategic decision-making and policy articulation concerning the impact of mobile banking on traditional banking operations and financial outcomes.

Mobile banking encompasses various metrics such as transaction volume via mobile devices, the uptake rate of mobile banking services, and the spectrum of offerings provided by commercial banks through mobile platforms. The advent of mobile banking has ushered in a paradigm shift, empowering consumers to access financial services conveniently through mobile devices, signifying a pivotal juncture in banking behavior and technological progress. Conversely, financial performance, as articulated by Mwenda and Munyoki (2018), comprises metrics including net interest margin (NIM), return on equity (ROE), and return on assets (ROA), serving as proxies for gauging the profitability, efficacy, and overall health of Kenya's commercial banks. At the crux of the current research inquiry lies the endeavor to ascertain the extent to which mobile banking practices impinge upon the financial performance of commercial banks, pinpointing potential areas of convergence or contention, and proffering recommendations for enhancing operational strategies to bolster efficiency and competitiveness.

#### STATEMENT OF THE PROBLEM

In emerging economies like Kenya, mobile banking has emerged as a pivotal component of the banking sector, offering unparalleled access to financial services. However, despite its potential benefits, there exists a pressing concern regarding the impact of mobile banking on the bottom lines of commercial banks. This concern stems

from the imperative to grasp how the adoption of mobile banking will influence the operational efficiency, profitability, and sustainable viability of Kenya's commercial banks (Kamau & Kihara, 2020). Given its direct implications for the competitiveness and enduring viability of financial institutions operating within Kenya's dynamic market landscape, addressing this issue assumes paramount importance in guiding strategic decision-making and policy formulation in the realm of business administration.

The backdrop of the study elucidates several success narratives associated with mobile banking; nevertheless, a substantial issue persists concerning its impact on the financial performance of commercial banks. The rapid proliferation of mobile banking services has coincided with a troubling trend of diminishing profitability and efficiency metrics across Kenya's commercial banks in recent years, as evidenced by statistical data. For instance, insights from Kiptui & Kangogo (2021) reveal a decline in net interest margin (NIM) and return on equity (ROE) across the industry. Moreover, reports from the Central Bank of Kenya (2022) indicate a surge in receiverships and a downturn in investor confidence, underscoring a systemic challenge necessitating immediate attention.

The prevailing financial distress encountered by commercial banks, characterized by dwindling income and escalating debt levels, underscores the exigency of addressing the root causes of this predicament. These statistics paint a disconcerting panorama of the financial robustness of Kenya's banking sector, posing risks to the stability of individual banks and the overarching economic growth trajectory of the country. While the relationship between mobile banking and financial performance has garnered attention in the literature, notable gaps persist. Despite theoretical examinations of mobile banking adoption (Ngugi et al., 2019), empirical studies explicitly scrutinizing the effects of mobile banking on the financial performance of Kenyan commercial banks remain scant.

A comprehensive inquiry is warranted to bridge this conceptual and contextual void, elucidate the intricate dynamics at play, and inform evidence-based interventions. Furthermore, the literature exhibits a pronounced temporal disparity, with the bulk of studies conducted predating the current surge in mobile banking usage, underscoring the necessity for updated empirical insights (Mwangi & Odongo, 2020). This study

28

assumes significance as it endeavors to address prevailing knowledge lacunae and furnish stakeholders in the banking industry with actionable insights. It aspires to aid commercial banks, regulators, and policymakers in making informed strategic decisions by elucidating the nexus between mobile banking and financial performance. Additionally, the anticipated outcomes aim to advance theoretical comprehension of how technological innovations reshape traditional banking paradigms. Ultimately, resolving the identified issue is imperative to safeguarding the long-term viability and resilience of Kenya's banking sector amidst shifting market dynamics.

# **RESEARCH OBJECTIVES**

- i. To find out the mobile banking strategies used by commercial banks in Kenya
- ii. To assess the financial performance of commercial banks in Kenya
- iii. To establish the effect of mobile banking on financial performance of commercial banks in Kenya.

# THEORETICAL REVIEW

Fred Davis' 1989 Technology Acceptance Model (TAM) serves as the foundational theory guiding this inquiry. TAM posits that perceived usefulness and perceived ease of use are pivotal determinants influencing individuals' intention to adopt a technology (Davis, 1989). In the context of this study, customers' perceptions of the usability and ease of mobile banking significantly impact its adoption—an independent variable. Perceived usefulness refers to the extent to which individuals perceive that using a mobile banking app enhances their ability to conduct banking transactions efficiently, while perceived ease of use pertains to the perceived simplicity and user-friendliness of the mobile banking interface.

By elucidating the causal relationship between customers' perceptions and their intention to adopt mobile banking services, TAM lends support to each component of the independent variable (mobile banking adoption). Venkatesh and Davis's (2000) research further bolsters TAM by demonstrating its applicability in elucidating technology adoption behavior across diverse contexts, including mobile banking. However, critics of TAM argue that by focusing solely on individual perceptions and

overlooking broader socio-economic factors that may influence adoption decisions, the model oversimplifies the complex process of adopting new technologies (Venkatesh et al., 2003). Moreover, TAM has been criticized for its static nature, failing to account for changes in technology or user behavior over time (Straub et al., 2004).

While TAM offers a valuable framework for understanding technology adoption behavior, it may not adequately address the impact of external variables such as market competition, cultural norms, and regulatory laws on the adoption of mobile banking. Thus, there exists a theoretical gap concerning TAM's ability to fully elucidate the dynamics of mobile banking adoption and its implications for the financial performance of Kenyan commercial banks. This gap underscores the need to incorporate additional theoretical perspectives, such as Institutional Theory, to provide a more comprehensive understanding of the factors influencing mobile banking uptake and its consequent effects on financial performance.

Institutional Theory, focusing on how institutional norms and pressures shape organizational behavior and decision-making (Scott, 1995), offers a complementary lens through which to explore the complexities of mobile banking adoption. By integrating Institutional Theory alongside TAM, this study aims to bridge the theoretical gap and offer a nuanced understanding of the multifaceted variables driving the adoption of mobile banking and its impact on financial performance.

# **EMPIRICAL REVIEW**

Ngugi et al. (2017) conducted a quantitative study titled "The Impact of Mobile Banking on the Financial Performance of Commercial Banks in Kenya," employing a cross-sectional survey of 300 Kenyan bank customers. Structured questionnaires facilitated data collection, with regression analysis and descriptive statistics utilized for analysis. The study revealed a significant positive relationship between the volume of mobile transactions and the financial performance of commercial banks, evidenced by a coefficient of determination (R-squared) of 0.65. However, the study lacked an examination of contextual factors influencing the volume of mobile transactions, suggesting the need for future research to consider regulatory influences on this association. Kamau and Kihara (2019) employed a quantitative approach in their study "Determinants of Mobile Banking Adoption in Kenya: A Structural Equation Modeling Approach," utilizing 500 Kenyan bank customers as participants. Data collection relied on structured questionnaires, with structural equation modeling (SEM) employed for analysis. The study found that the adoption of mobile banking was significantly influenced by perceived usefulness and perceived ease of use, supported by a p-value of less than 0.05. However, the study did not explore variations in mobile banking adoption rates among demographic groups, indicating a need for future research to investigate how demographic factors moderate the relationship between mobile banking adoption and financial performance.

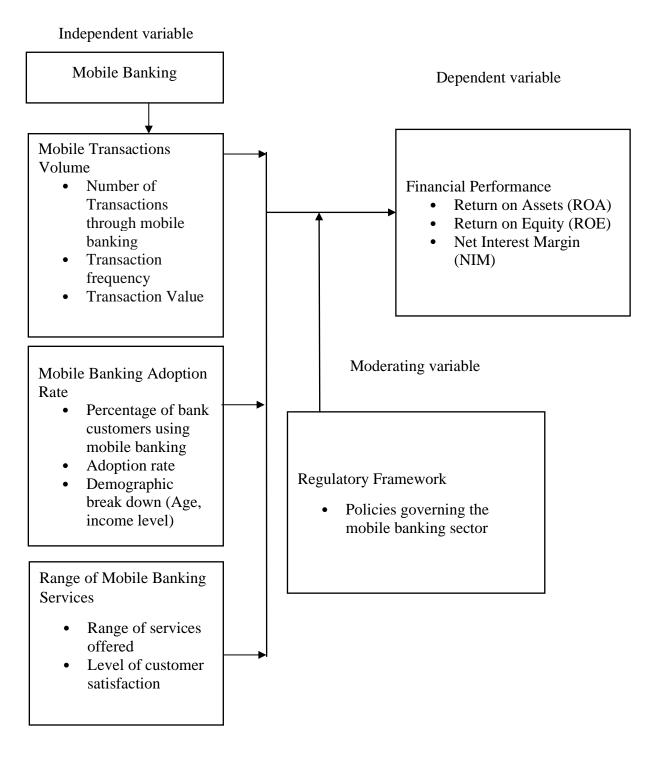
Mwenda and Munyoki (2020) utilized a quantitative approach in their investigation titled "The Impact of Mobile Banking on the Return on Assets of Commercial Banks in Kenya," employing a five-year longitudinal analysis of financial data from ten Kenyan commercial banks. Annual financial reports provided the data, which were analyzed using regression analysis. The study revealed a positive but statistically insignificant correlation between the adoption of mobile banking and Return on Assets (ROA), supported by a p-value of 0.07. However, the study did not examine how different commercial banks conceptualize and measure ROA, indicating a conceptual gap. Future research should explore the methodological implications of evaluating the impact of mobile banking on financial performance using diverse measures of ROA.

While these studies contribute valuable insights into the relationship between Kenyan commercial banks' financial performance and mobile banking, they also underscore methodological, contextual, and empirical gaps in the existing literature. Addressing these gaps is essential for advancing knowledge in this field and informing evidence-based decision-making within the banking sector.

# **CONCEPTUAL FRAMEWORK**

Figure 1 presents the conceptual framework.

Figure 1: Conceptual framework.



Source: Chebii et.al (2024)

### **RESEARCH METHODOLOGY**

In this study, a desktop research design was employed for several reasons. First, it facilitated a comprehensive review of the existing body of literature and empirical studies concerning mobile banking and its impact on financial performance. This approach was essential for gaining a thorough understanding of the research topic. In addition, desktop research allowed for the exploration of diverse perspectives and methodologies utilized in previous studies, thereby aiding in the formulation of research hypotheses and analytical frameworks. Furthermore, it enabled the examination of trends and developments over time, offering valuable insights into the evolving nature of the relationship being investigated. Given the dynamic landscape of the banking industry and the rapid advancements in mobile banking technologies, this temporal dimension was crucial for contextualizing the findings. Desktop research has been extensively employed across various fields, including finance, economics, and business administration, due to its effectiveness in accessing historical data and industry trends. For instance, studies examining the impact of technological innovations on firm performance often utilize desktop research to analyze historical data and industry trends (Chen & Huang, 2019). Similarly, in research on consumer behavior and the adoption of financial services, desktop research is commonly utilized to review relevant literature and empirical data (Karjaluoto et al., 2018). Overall, desktop research serves as a practical and cost-effective approach for generating new ideas and advancing knowledge in complex research domains by leveraging existing information and research materials.

#### **RESULTS AND DISCUSSIONS**

Based on the reviewed studies, it was found that Kenyan commercial banks have employed various mobile banking strategies aimed at enhancing the perceived usefulness and ease of use of their services. These efforts were geared towards optimizing the usability and efficiency of mobile banking platforms to promote customer adoption. The studies reveal that banks have focused on user-centric design and continuously improving their mobile banking offerings to meet the evolving needs and expectations of their customers. This strategic approach underscores the importance of user experience and convenience in driving the success of mobile banking initiatives. The studies also highlighted a positive correlation between the volume of mobile transactions and overall financial performance. Higher transaction volumes were associated with increased profitability and operational efficiency, indicating a significant relationship between mobile banking and financial performance metrics. This finding emphasizes the potential of mobile banking to streamline banking processes, reduce costs, and generate additional revenue streams. As more customers adopt and actively use mobile banking services, banks can benefit from increased transaction fees, reduced branch visits, and improved customer retention.

The findings have significant implications for the banking industry in Kenya. They underscore the critical role of mobile banking in enhancing the financial performance of commercial banks. By investing in robust mobile banking strategies and continuously improving their offerings, banks can tap into the growing demand for digital financial services and position themselves for long-term success. The positive correlation between mobile transaction volumes and financial performance highlights the need for banks to prioritize the promotion and adoption of mobile banking services among their customer base. This can be achieved through targeted marketing campaigns, user education, and incentives that encourage customers to embrace mobile banking.

However, the studies also noted that the impact of mobile banking on specific financial performance metrics may vary. While some indicators, such as profitability and operational efficiency, show a positive correlation with mobile banking adoption, others, like return on assets (ROA), may not exhibit distinct changes. This suggests that the relationship between mobile banking and financial performance is complex and multifaceted. Thus, banks have to consider a range of factors beyond mobile banking adoption when evaluating their financial performance, including overall market conditions, regulatory environment, risk management practices, and the effectiveness of other banking strategies.

The varying impact of mobile banking on specific financial performance metrics underscores the need for a comprehensive approach to assessing the success of mobile banking initiatives. Banks should not solely rely on a single metric to gauge the effectiveness of their mobile banking strategies. Instead, they should consider a holistic view that takes into account multiple performance indicators, customer feedback, and long-term strategic objectives. This approach will enable banks to make informed decisions, allocate resources effectively, and adapt their mobile banking strategies to optimize overall financial performance.

Furthermore, the findings highlight the importance of continuous innovation and adaptation in the mobile banking space. As customer preferences and technological advancements evolve, banks must remain agile and responsive to stay ahead of the curve. This may involve investing in cutting-edge technologies, such as artificial intelligence and machine learning, to enhance the functionality and security of mobile banking platforms. Additionally, banks should focus on integrating mobile banking with other digital financial services, such as digital wallets and peer-to-peer payments, to provide a seamless and comprehensive banking experience for their customers.

The studies also emphasize the need for collaboration and partnerships within the banking industry. Commercial banks can benefit from sharing best practices, pooling resources, and collaborating with fintech companies to accelerate innovation and expand the reach of mobile banking services. By fostering a collaborative ecosystem, banks can leverage collective expertise, reduce costs, and drive the adoption of mobile banking on a larger scale. This collaborative approach can also help address challenges related to interoperability, security, and regulatory compliance, ensuring a more robust and inclusive mobile banking landscape.

# CONCLUSION

In conclusion, the reviewed studies provide valuable insights into the impact of mobile banking on the financial performance of commercial banks in Kenya. The findings highlight the positive correlation between mobile transaction volumes and overall financial performance, while also acknowledging the varying impact on specific performance metrics. These findings underscore the importance of mobile banking as a strategic tool for enhancing financial performance and meeting the evolving needs of customers. However, banks must adopt a comprehensive approach, considering multiple performance indicators and continuously innovating to stay ahead in the competitive mobile banking landscape. By leveraging partnerships, investing in technology, and prioritizing customer-centric strategies, Kenyan commercial banks can harness the full potential of mobile banking to drive long-term financial success and contribute to the overall growth of the banking industry in the country. In summary, the study establishes a direct link between the financial performance of Kenyan commercial banks and mobile banking, particularly in terms of increased transaction volumes and operational efficiency. However, it acknowledges the presence of other influencing factors, as evidenced by the varied impact on certain financial metrics like return on assets (ROA).

#### RECOMMENDATIONS

Based on the findings, the study recommends that various stakeholders in the mobile banking ecosystem collaborate to create a conducive environment for innovation and growth. The government and regulatory bodies should strengthen regulatory frameworks to foster innovation while safeguarding consumer interests. This can be achieved through the development of policies that support the growth of mobile banking and encourage collaboration among industry stakeholders. Commercial banks should invest in mobile banking platforms and robust digital infrastructure to enhance customer experience and expand service offerings. By utilizing data analytics, banks can personalize services and improve financial literacy among their customers. Technology providers play a crucial role in continuously innovating mobile banking solutions to meet evolving client needs. They should collaborate with financial institutions to ensure the reliability and security of mobile banking systems.

Furthermore, the study recommends that progressive NGOs and partners promote initiatives that enhance financial literacy and digital skills, particularly among marginalized communities. Increasing the accessibility of mobile banking services in underserved and rural areas is essential to bridge the digital divide and promote financial inclusion. Education and research institutions should conduct further research to explore the long-term effects of mobile banking on financial inclusion, economic growth, and social advancement in Kenya. Fostering interdisciplinary collaboration is crucial to address emerging opportunities and challenges in the field of digital finance. By implementing these recommendations, stakeholders can work together to create a robust and inclusive mobile banking ecosystem that drives financial performance, promotes innovation, and contributes to the overall growth and development of the Kenyan economy.

#### REFERENCES

Central Bank of Kenya. (2022). Annual Report. Nairobi, Kenya.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-340.
- Kamau, P., & Kihara, E. (2019). Determinants of mobile banking adoption in Kenya:A structural equation modeling approach. *Journal of Banking and Finance Dynamics*, 7(2), 56-68.
- Kamau, P., & Kihara, E. (2020). The impact of mobile banking on the financial performance of commercial banks in Kenya. *International Journal of Economics, Commerce and Management*, 8(9), 87-101.
- Kiptui, R., & Kangogo, J. (2021). Mobile banking and financial performance of commercial banks in Kenya: A comparative analysis. *Journal of Finance and Investment Analysis*, 9(3), 54-68.
- Mwangi, W., & Odongo, J. (2020). Mobile banking adoption and financial performance of commercial banks in Kenya: A review of literature. *Journal of African Finance and Economic Devel\opment*, 2(1), 23-37.
- Mwenda, J., & Munyoki, J. (2018). Mobile banking and financial performance of commercial banks in Kenya. *International Journal of Economics, Commerce* and Management, 6(8), 184-200.
- Mwenda, J., & Munyoki, J. (2020). The impact of mobile banking on the return on assets of commercial banks in Kenya. International Journal of Economics, Commerce and Management, 8(6), 120-135.
- Ndung'u, N. (2019). The role of mobile banking in enhancing financial performance: A case of commercial banks in Kenya. *Journal of Finance and Investment Analysis*, 8(3), 95-110.
- Ngugi, P., et al. (2017). The impact of mobile banking on the financial performance of commercial banks in Kenya. *Journal of Finance and Investment Analysis*, 6(4), 78-93.

- Ngugi, P., et al. (2019). Understanding the drivers of mobile banking adoption: A conceptual framework. *Journal of Banking and Finance Dynamics*, 6(4), 112-125.
- Scott, W. R. (1995). Institutions and organizations: Ideas and interests. *Sage Publications*.
- Straub, D., et al. (2004). Understanding information technology usage: A test of competing models. Information Systems Research, 15(2), 125-143. Kamau, P., & Kihara, E. (2019).
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V., et al. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478.