Journal of Finance and Accounting

Mobile Banking and Financial Inclusion of Traders in Homa-Bay Municipal Market, Kenya

Brian Onyango Awiti, Dr. Salome Musau & Dr. Farida Abdul

ISSN: 2616-4965

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 9||Issue 2 ||Page 62-75||July|2025|
Email: info@stratfordjournals.org ISSN: 2616-4965

Mobile Banking and Financial Inclusion of Traders in Homa-Bay Municipal Market, Kenya

[1*]Brian Onyango Awiti, [2]Dr. Salome Musau & [3]Dr. Farida Abdul

[1]Postgraduate student, Kenyatta University
[2&3]Lecturers, Department of Accounting and Finance, School of Business, Economics and Tourism, Kenyatta University

How to cite this article: **Awiti, B. O., Musau, D., & Abdul, F. (2025). Mobile Banking and Financial Inclusion of Traders in Homa-Bay Municipal Market, Kenya.** ***Journal of Finance and Accounting*****, 9 (2), 62-75. https://doi.org/10.53819/81018102t5372**

Abstract

Governments and financial institutions are striving to enhance access to formal financial services for traders, particularly those in remote regions. However, in Kenya, small-scale traders still encounter significant challenges such as lack of collateral, limited credit history, and high costs associated with formal financial services, hindering their access to necessary capital for business growth. This study aimed to examine the effect of mobile banking services on financial inclusion among traders at Homa-Bay municipal market, Kenya. The study was anchored on the Technology Acceptance Model (TAM) and adopted a descriptive research design, targeting traders from the Homa Bay Municipal Market, which had a total of 2,000 traders according to the Homa Bay County Council. The study employed the Yamane (1967) formula to select a sample size of 333 respondents, who were chosen using stratified random sampling. Questionnaires were used as the primary data collection method. SPSS computer software was used to facilitate the analytical process. The findings revealed a significant positive correlation between mobile banking services and financial inclusion ($r = 0.218$, $p = 0.000$). Regression analysis showed that mobile banking services significantly affected financial inclusion with an unstandardized coefficient of 0.164 and a standardized beta of 0.156 ($\beta=0.164$, $t=2.515$, $p=0.000$). The results indicated that a one-unit increase in mobile banking services resulted in a 0.164 unit increase in financial inclusion among traders. The study concludes that mobile banking services play a pivotal role in enhancing financial inclusion among traders in Homa-Bay municipal market by offering tailored banking solutions such as account management, fund transfers, and bill payments. The study recommends that financial institutions and mobile service providers should develop targeted education and awareness campaigns, enhance security and reliability of platforms, while policymakers should prioritize expansion of mobile network infrastructure and enforce policies promoting competition among service providers to improve accessibility and affordability of mobile banking services.

Keywords: *Mobile banking services, financial inclusion, traders, Technology Acceptance Model, Homa-Bay municipal market, Kenya*

1.0 Background to the Study

Trading between producers and consumers is a crucial part of Kenya's economy. They contribute significantly to employment and foster economic growth. In Kenya, as of 2016, the Kenya National Bureau of Statistics (KNBS) reported that small and medium-sized enterprises (SMEs) make up roughly 98% of all businesses. Annually, these enterprises generate approximately 30% of job opportunities and contribute about 3% to the country's GDP. SMEs engage in diverse activities, ranging from retail trade to small-scale manufacturing. Despite their substantial impact, small-scale traders encounter financial inclusion challenges that hinder their growth potential and broader economic influence.

Small-scale traders face significant challenges when accessing credit from formal financial institutions. The lack of collateral, limited credit history, and the perception that lending to SMEs is risky create substantial barriers to obtaining loans from banks and other formal lenders. In Kenya, the formal banking sector traditionally favors large-scale enterprises, leaving small traders dependent on more expensive and less reliable informal sources of finance (Beck et al., 2015). The bureaucratic processes involved in obtaining credit from formal institutions are cumbersome for small traders who often lack the necessary financial literacy to navigate these requirements. These barriers significantly limit traders' ability to expand their businesses, invest in new opportunities, or build financial resilience against economic shocks.

The introduction of M-Pesa by Safaricom in 2007 revolutionized Kenya's financial landscape, providing an accessible platform for the unbanked population. This innovation spawned various mobile money services including mobile banking, which enables users to access and manage banking services through mobile devices. Mobile banking services allow traders to check account balances, transfer funds, pay bills, and access loan facilities without visiting physical bank branches. M-Pesa facilitates credit access through mobile-based lending platforms like M-Shwari and KCB M-Pesa, which rely on mobile transaction history rather than traditional credit scores. This innovation has significantly empowered small-scale traders to secure funds for business sustainability and growth. Mobile banking represents a critical component of mobile money services that has significantly impacted financial inclusion, particularly for small-scale traders.

Mobile banking services have transformed how traders interact with financial institutions by providing convenient access to banking facilities through mobile devices. According to CGAP (2019), mobile banking not only enhances credit access but also improves financial management through account monitoring, balance inquiries, and transaction history tracking. These services enable traders to perform banking operations remotely, reducing the time and costs associated with visiting physical bank branches. Mobile banking platforms offer features such as fund transfers, bill payments, loan applications, and savings account management, making formal financial services more accessible to previously underserved populations. This has led to greater integration of small-scale traders into the formal financial system, enhancing business stability and growth potential.

Financial technology adoption plays a pivotal role in advancing financial development, supporting critical objectives such as stability, integrity, inclusion, efficiency, innovation, and competition (World Development Report, 2022). These innovations offer various

advantages including expanded financial access, cost reduction, and improved availability of credit and financial services (World Bank, 2018). Mobile banking services further enhance transparency and security in financial transactions, thereby mitigating risks associated with fraud and other financial crimes (Arner, Barberis, & Buckley, 2015). The transformative potential of mobile banking extends beyond simple transaction facilitation to encompass comprehensive financial ecosystem development that can bridge the gap between formal and informal financial sectors.

Internationally, mobile banking services have delivered comparable benefits across different contexts, though with variations in scope and impact. In Bangladesh, where rural areas often lack access to traditional banking services, mobile banking has significantly influenced economic dynamics, enabling users to access banking services remotely and reducing the likelihood of financial exclusion (Moore, Ghosh, Krishnan, & Zimmermann, 2019). Similarly, in other developing countries, mobile banking has empowered women by providing convenient access to financial services, enhancing their decision-making authority within households and enabling better financial management (Dupas & Robinson, 2013). A study revealed that mobile banking access increased formal financial service utilization among previously excluded populations, demonstrating mobile banking's beneficial effect on financial inclusion (Prina, 2015).

In the African context, mobile banking adoption has shown remarkable growth and impact. Mobile money accounts are used by 55% of adults in Sub-Saharan Africa, with mobile banking representing a significant component of these services (Demirgüç-Kunt et al., 2018). This region boasts the largest share of mobile financial service ownership globally, surpassing the 10 percent global average by more than threefold. According to a World Bank study, people who use mobile banking are more likely to save and to use additional financial services such as credit and insurance (Jack & Suri, 2016). In Tanzania, mobile banking has significantly improved financial inclusion among small-scale traders, leading to increased business productivity and economic resilience (Mkenda & Mushi, 2018). However, the regulatory environment in Tanzania has been less supportive compared to Kenya, which has somewhat limited the full potential of mobile banking in enhancing financial inclusion.

Despite the widespread adoption of mobile banking services in Kenya, many traders still grapple with financial sustainability and inclusion challenges. While mobile banking can enhance economic well-being and stability, it is not a comprehensive solution for all the hurdles faced by traders (Suri & Jack, 2016; Beck et al., 2015). These challenges may impede technology adoption and market competitiveness, leading to underperformance and financial vulnerability (Sospeter & Wamalwa, 2019). Additionally, increased financial inclusion from mobile banking services may lead to over-borrowing, with individuals potentially using funds for activities that may hinder their growth and welfare in the long run (Cook & McKay, 2017; Morawczynski & Pickens, 2019). Understanding the specific impact of mobile banking services on trader financial inclusion becomes crucial for developing targeted interventions that maximize benefits while mitigating potential risks.

1.1 Statement of the Problem

Governments and financial institutions are striving to enhance access to formal financial services for traders, particularly those in remote regions. However, in Kenya, small-scale traders still encounter significant challenges such as lack of collateral, limited credit history, and high costs associated with formal financial services, hindering their access to necessary capital for business growth. Despite significant advancements in financial technology, particularly mobile banking services, a substantial number of small-scale traders remain financially excluded. There are still barriers that prevent small-scale traders from accessing the financial services needed to grow their businesses and participate fully in the formal economy, such as inadequate infrastructure, insufficient digital literacy, and limited awareness of available mobile banking services. Furthermore, while mobile banking usage is widespread, translating this usage into substantive financial inclusion for small-scale traders has been less successful. Approximately 83% of adults use mobile money services like M-Pesa, but comprehensive utilization of mobile banking features for business financial management remains limited among small-scale enterprises (Suri & Jack, 2016).

Moreover, studies reveal that even with the advent of mobile banking services, a significant portion of small-scale traders remain financially excluded. The barriers include not only traditional issues but also concerns about transaction security, service reliability, and trust in digital banking platforms. While mobile banking services have reduced some obstacles, they have not bridged the financial inclusion gap entirely, indicating a need for more targeted research to understand how specific mobile banking functionalities impact trader financial inclusion (Demirgüç-Kunt et al., 2018). Additionally, traders perceive formal financial services as costly and inaccessible, with high transaction fees and account maintenance charges. Through mobile banking platforms integrated with services like M-Pesa, Airtel Money, and Equitel, Kenyan traders have opportunities to access banking services, manage accounts, and conduct financial transactions more efficiently to address these challenges. However, while mobile banking services have enhanced financial accessibility on a broader scale, specific communities like those in Homa-Bay County still experience challenges in achieving comprehensive financial inclusion through mobile banking adoption. Accordingly, this study seeks to answer the question: what is the effect of mobile banking services on the financial inclusion of traders in Homa-Bay municipal market?

1.2 Research Objective

Assess the role of mobile banking in enhancing financial inclusion among traders at Homa-Bay municipal market.

1.3 Research Hypothesis

Mobile banking does not significantly influence financial inclusion among traders in Homa-Bay municipal market.

2.0 Literature Review

The literature review is done in sections.

2.1 Theoretical Review

Theoretical reviews play a crucial role in research as they provide a comprehensive framework that helps in understanding, interpreting, and analyzing research findings. By grounding research in established theories, researchers can build on existing knowledge, identify gaps, and propose new hypotheses. This foundation allows for a more systematic and coherent approach to research, ensuring that studies are not conducted in isolation but are connected to a broader scholarly conversation. Theoretical reviews help to clarify key concepts and variables, thereby enhancing the rigor and validity of the research. They also offer a lens through which data can be interpreted, ensuring that the findings are aligned with existing knowledge and theories. Furthermore, theoretical reviews contribute to the development of new theories and models by synthesizing existing research and highlighting inconsistencies or areas needing further exploration.

This study was anchored on the Technology Acceptance Model (TAM), proposed by Davis in 1986, which investigated how perceived ease of use and usefulness impacted technology adoption. The TAM was particularly relevant for evaluating how mobile banking services influenced adoption rates among traders for financial transactions. The model posited that the likelihood of new technology adoption increased when users found it user-friendly and beneficial, emphasizing the significance of ease of use and perceived utility in shaping individual attitudes towards technology acceptance. In the context of this study, TAM provided a valuable framework for understanding traders' attitudes towards mobile banking services and their willingness to embrace these innovations. By examining factors such as perceived benefits, ease of use, and concerns about security and privacy, TAM helped researchers identify key drivers and barriers to adoption of mobile banking services. This theoretical foundation informed the design of research approaches aimed at understanding the acceptance and usage of mobile banking among traders in Homa-Bay municipal market, ultimately contributing to enhanced understanding of their financial inclusion. The theory demonstrated how understanding and addressing adoption barriers could lead to improved service utilization, stronger financial integration, and ultimately superior financial inclusion outcomes through mobile banking adoption.

2.2 Empirical Review

Mobile banking, a key aspect of mobile money services, has gained recognition for its role in fostering financial inclusion, especially for traders. In Kenya, the rapid uptake of these services highlights the need to investigate their impact on financial inclusion. Mwangi and K'Obonyo's 2020 research assessed how mobile banking influences Nairobi traders' financial inclusion. Utilizing content analysis and multiple linear regression, the study found that mobile banking is crucial for traders to access services like savings, transfers, and bill payments. However, the research also highlighted that rural low-income households remain unaware of mobile banking's benefits and availability, suggesting the necessity for customized educational initiatives to close the knowledge gap.

In a study by Odhiambo (2018) in Kisumu County, the impact of mobile banking on financial inclusion was investigated. The research used panel regression analysis with the ordinary least squares regression model. His research highlighted that mobile banking had contributed to increased financial access for low-income households, enabling them

to conduct transactions conveniently. However, Othiambo's study identified an issue related to digital literacy and a lack of familiarity with mobile banking processes, particularly among elderly community members. This knowledge gap emphasized the necessity of promoting digital literacy initiatives to ensure the effective utilization of mobile banking services, especially among demographic segments that may face challenges in adopting new technologies.

Research by Nkuna and Ikeme (2018) found that mobile banking has notably enhanced financial access in Nigeria, particularly in remote and underserved regions. However, an important insight emerged regarding the potential for gender disparities in mobile banking adoption. The findings suggested that women in certain regions faced cultural and societal barriers that hindered their engagement with mobile banking services. This underscores the importance of considering gender-specific challenges and tailoring strategies to ensure equitable financial inclusion through mobile banking. On international level, Smith (2019) conducted a study that explored the global implications of mobile banking on financial inclusion. Various countries have reported success using mobile banking to improve financial access to marginalized populations. Nevertheless, the study pointed out the issue of transaction costs associated with mobile banking, which could disproportionately affect low-income earners. The findings indicated that while mobile banking reduced the need for physical travel to banks, the associated costs could potentially offset the overall benefits for some users. Mobile banking is pivotal in broadening financial access and inclusion. It provides a potential avenue for consumers who are unbanked or underbanked to avail safe, affordable, and convenient financial services.

2.3 Conceptual Framework

Figure 1 illustrates the relationship between independent and dependent variables.

Independent Variables

Dependent Variable

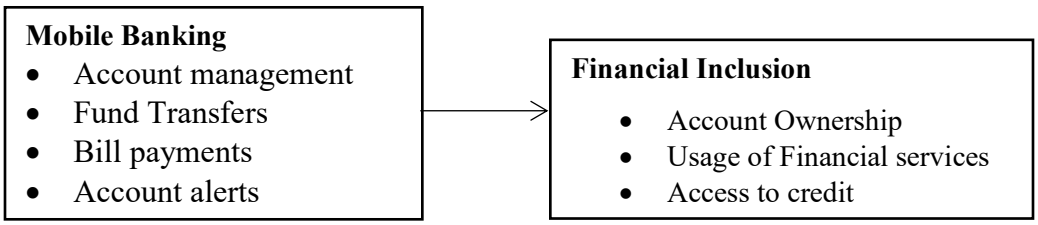

Figure 1: Conceptual Framework

3.0 Research Methodology

The study employed a positivistic philosophy approach, setting up hypotheses based on relevant theories which were then tested using statistical and quantitative techniques. A descriptive research design was adopted to define the particular subject and construct a portrait of traders through data compilation and tabulation of frequencies concerning research variables. Data was collected from traders in Homa-Bay municipal market, with a target population of 2,000 traders according to Homa Bay County Council records. Using

Yamane's (1967) formula, a sample size of 333 traders was determined and selected through stratified random sampling to ensure representation across different trader categories including small-scale, medium-scale, large-scale, informal sector, and women traders. Structured questionnaires featuring Likert-scale questions were distributed using a drop-and-pick technique, with sections covering mobile banking services and financial inclusion indicators. A pilot study with 33 respondents (10% of the sample population) was conducted from Kibuye Market in Kisumu County to test the reliability and validity of research instruments. Data analysis employed SPSS to generate both descriptive statistics (mean scores, standard deviations, and frequencies) and inferential statistics through correlation and regression analysis. The relationship between mobile banking services and financial inclusion was tested using the regression model $Y = \beta o + \beta_1 X + \varepsilon$, where X represented the mobile banking services index computed from indicators measuring account management, fund transfers, bill payments, and account alerts. Prior to regression analysis, diagnostic tests were conducted to validate assumptions including normality, multicollinearity, and heteroscedasticity to ensure the integrity of quantitative data assessment.

4.0 Data Analysis, Findings and Discussion

This section outlines the study's findings, divided into subsections aligned with research objectives. It covers the response rate, descriptive analysis results and inferential statistics.

4.1 Response Rate

The response rate of the study is shown by Table 1.

Table 1: Response Rate

Response Rate	Frequency	Percentage
Responded	284	**85%**
Not Responded	49	**15%**
Total	**333**	**100%**

The population of the study constituted traders from the Homa Bay Municipal Market. According to Homa Bay Homa Bay County Council. As such, out of a target of 333 responses, 284 respondents participated in the study which translates to a response rate of 85% which was considered to be more than sufficient in addressing the research objectives (Mugenda & Mugenda, 2008).

4.2 Background Information

The study gathered comprehensive background information from 284 traders at Homa Bay Municipal Market, revealing important demographic characteristics that influenced mobile banking adoption patterns. The age distribution showed that younger traders dominated the market, with the largest proportion (36.3%) aged between 18 and 24 years, followed by those aged 25 to 34 years (28.2%), creating a cumulative percentage of 64.4% for traders under 35 years, while traders aged 35 to 44 years and 44 to 56 years represented 11.6% and

23.9% respectively. Educational attainment demonstrated significant diversity, with certificate holders comprising the largest group at 32%, followed equally by undergraduate degree holders and diploma holders at 26% each, while postgraduate education was held by 16% of traders. The duration of mobile money service usage revealed rapid recent adoption, with 44% of respondents using these services for less than two years, 27% for 2 to 4 years (cumulative 71.1%), 15% for 4 to 6 years, and only 13% having over six years of experience. These demographic patterns suggested that mobile banking services had significant potential to impact a predominantly youthful, educated demographic that was increasingly embracing digital financial solutions, with the majority being recent adopters reflecting the dynamic growth of the financial inclusion ecosystem in the region.

4.3 Descriptive Statistics Results

The study sought to determine the effect of mobile banking on traders' financial inclusion in Homa-Bay municipal market. To achieve this, a 5 point Likert Scale was used (1=strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=strongly agree). Table 2 represents the findings obtained.

Table 2: Mobile Banking

Mobile Banking	Mean	Std. Dev
Mobile banking allows me to access my account anytime, anywhere	4.27	0.738
I find it easy to check my account balance through mobile banking	4.11	0.935
Mobile banking has improved my ability to manage my finances	4.15	1.042
I feel that mobile banking services are secure	3.64	0.865
Mobile banking has provided me with a wider range of financial services.	4.23	0.856
Average Mean Score	4.08	0.887

Source: Research Data (2024)

The findings in Table 2 reveal that mobile banking is widely perceived as a convenient tool for financial inclusion, particularly due to its accessibility, which scored a high mean of 4.27 with a standard deviation of 0.738. This reflects strong agreement among traders that mobile banking enables them to access their accounts at any time and from any location, a key factor in improving financial inclusion. The low standard deviation suggests consistency in this perception, indicating that most respondents share similar views on the accessibility of mobile banking. Additionally, the ease of checking account balances through mobile banking was rated positively, with a mean score of 4.11 and a standard deviation of 0.935, emphasizing the simplicity and user-friendliness of these platforms despite some variability in experiences.

Mobile banking's role in enhancing financial management was also positively rated, with a mean score of 4.15 and a standard deviation of 1.042. This suggests that traders find mobile banking instrumental in budgeting, tracking expenses, and making informed financial decisions. However, the relatively higher standard deviation indicates some

differences in traders' financial management practices or their perception of the effectiveness of mobile banking in this area. Security, while moderately rated, received a lower mean score of 3.64 with a standard deviation of 0.865. This indicates that some traders may have reservations about the safety of mobile banking services, which could hinder full adoption despite the overall positive perception.

Mobile banking was also found to significantly expand the range of financial services available to traders, as reflected in a high mean score of 4.23 and a standard deviation of 0.856. This indicates that traders value the diversity of financial services, such as bill payments, loans, and transfers, accessible through mobile banking. The relatively low variability suggests that most respondents appreciate the expanded services provided. The average mean score for mobile banking services was 4.08, with a standard deviation of 0.887, reflecting an overall positive reception among traders. This high average underscores the importance of mobile banking as a tool for financial inclusion, although issues such as security could be improved to address concerns and enhance adoption.

These findings highlight the critical role of mobile banking in fostering financial inclusion among traders in Homa Bay Municipal Market. Its ability to provide anytime, anywhere access, improve financial management, and offer diverse services is pivotal in empowering traders financially. However, the lower ratings for security suggest a need for service providers to prioritize security enhancements and build trust among users. Overall, mobile banking has become an integral part of traders' financial activities, enabling them to participate more effectively in the formal financial system. By addressing existing challenges and leveraging strengths, mobile banking can further bridge gaps in financial inclusion and contribute to economic growth in the region. Moreover, the study sought to determine the extent of traders' financial inclusion in Homa-Bay municipal market. To achieve this, a 5 point Likert Scale was used (1=strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=strongly agree). Table 3 represents the findings obtained.

Table 3: Financial Inclusion

Financial Inclusion	Mean	Std. Dev
Our annual revenue from business operations has increased.	3.86	0.758
The number of employees working in our business has grown.	3.83	1.133
The total assets owned by our business have expanded.	3.65	1.142
We have successfully obtained loans or credit for business purposes.	3.77	0.758
Our annual expenditure on business operations has risen.	3.14	0.699
Average Mean Score	3.65	0.898

Source: Research Data (2024)

The findings in Table 3 provide insights into the extent of financial inclusion among traders in Homa-Bay Municipal Market. The statement "Our annual revenue from business operations has increased" had a mean score of 3.86 with a standard deviation of 0.758, indicating that most respondents agreed that their revenues have grown, possibly as a result

of increased access to financial services. The low standard deviation shows a strong consensus among traders, emphasizing that financial inclusion may be positively impacting revenue generation. This highlights the role of financial inclusion in enabling traders to leverage resources and opportunities for business growth. However, traders operating at smaller scales might not have experienced significant revenue increases, which could explain the moderate mean score.

The number of employees in businesses was perceived to have grown, with a mean score of 3.83 and a higher standard deviation of 1.133. While the average score suggests that many traders have experienced workforce expansion, the relatively high variability implies diverse experiences among respondents. This variation might stem from differences in financial literacy or business models, as smaller firms may not have sufficient financial capacity to hire more employees despite improved financial inclusion. Nonetheless, the finding suggests that financial inclusion enables businesses to scale up operations, which contributes to job creation. Addressing constraints faced by smaller businesses could enhance their ability to expand and hire more staff.

The expansion of total assets owned by businesses was rated with a mean score of 3.65 and a standard deviation of 1.142, indicating a moderate level of agreement among traders. This finding suggests that while financial inclusion has facilitated asset acquisition for some traders, others might still face challenges in building their asset base. The high variability in responses could reflect disparities in the ability of traders to leverage financial services, with smaller firms potentially having less capacity to invest in assets. This underscores the need for tailored financial products and services that can support asset growth among traders of varying sizes. By addressing these disparities, financial inclusion could have a more uniform impact on asset ownership across the market.

The overall average mean score of 3.65 with a standard deviation of 0.898 reflects moderate levels of financial inclusion among traders in Homa-Bay Municipal Market. While traders acknowledged improvements in accessing credit (mean = 3.77, SD = 0.758) and managing operational costs (mean = 3.14, SD = 0.699), there is still room for growth in fully realizing the benefits of financial inclusion. The lower mean score for expenditure growth suggests that traders might be cautious about increasing their spending, possibly due to financial constraints or market uncertainties. These findings highlight the need for continuous support and targeted interventions to enhance the financial inclusion of traders, enabling them to fully capitalize on the opportunities presented by improved access to financial services.

4.4 Inferential Analysis

Inferential analysis was conducted to establish the relationships between mobile banking services and financial inclusion among traders in Homa-Bay municipal market. The analysis employed Karl Pearson's coefficient of correlation and regression analysis to determine the nature and strength of these relationships. The correlation results are summarized in Table 4.

Table 4: Correlation Results

	Financial Inclusion	Mobile Banking
Financial Inclusion	1.000	
Mobile Banking	.218**	1.000
Sig. (2-tailed)	0.000	

**Correlation is significant at the 0.01 level (2-tailed). Source: Research Data (2024)

The study discovered a positive and significant correlation between mobile banking and financial inclusion (r=0.218, p=0.000). Mobile banking was found to be positively correlated with financial inclusion ($r = 0.218$, $p < 0.05$). This shows that mobile banking services, such as managing finances and accessing account information, contribute to enhancing financial inclusion for traders. Although the correlation is moderate, it suggests that mobile banking provides access to broader financial services that are crucial for traders. These services offer a level of financial management beyond basic transactions, which is essential for sustainable business growth. The test of regression was conducted based on regression analysis. Table 5 presents the regression results focusing on mobile banking.

Table 5: Regression Analysis

	Unstandardized Coefficients		**Standardized Coefficients**	**T**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	2.797	.342		8.183	.000
Mobile Banking	.164	.065	.156	2.515	.000

a. Dependent Variable: Financial Inclusion

Source: Research Data (2024)

Mobile banking shows a positive effect on financial inclusion, with an unstandardized coefficient of 0.164 and a standardized beta of 0.156, which reflects its moderate impact on financial inclusion among traders. The statistically significant p-value ($p = 0.000$) reinforces the importance of mobile banking in enhancing financial inclusion. The regression analysis revealed that a one-unit increase in mobile banking services resulted in a 0.164 unit increase in financial inclusion ($\beta=0.164$, $t=2.515$, $p=0.000$). These findings confirm that mobile banking services significantly enhance financial inclusion among traders, reinforcing the strategic importance of mobile banking adoption for traders seeking to improve their participation in formal financial systems. Based on the regression results, the null hypothesis H_0: Mobile banking does not significantly influence financial inclusion among traders in Homa-Bay municipal market was rejected at the 5% significance level ($p=0.000 < 0.05$). Therefore, the alternative hypothesis was accepted, confirming that

mobile banking services have a statistically significant positive effect on financial inclusion among traders in Homa-Bay municipal market.

5.0 Conclusions

The study concludes that mobile banking services play a pivotal role in enhancing financial inclusion among traders in Homa-Bay municipal market by offering tailored banking solutions. Mobile banking services, such as balance inquiries, fund transfers, bill payments, and account management, provide traders with financial tools that were previously unavailable or difficult to access. This has empowered traders to manage their finances more effectively, improving their ability to save, invest, and expand their businesses. The research findings demonstrated a statistically significant positive relationship between mobile banking services and financial inclusion ($r=0.218$, $p=0.000$), with mobile banking contributing a 0.164 unit increase in financial inclusion for every unit increase in mobile banking adoption. However, the complexity of some mobile banking services and the requirement for smartphones may pose barriers for less technologically adept traders. Despite these limitations, the integration of mobile banking into the financial practices of traders has broadened their access to formal financial systems, enabling them to conduct transactions anytime and anywhere, check account balances conveniently, and access a wider range of financial services. This conclusion emphasizes the importance of designing user-friendly mobile banking services to maximize their impact on financial inclusion and underscores the transformative potential of mobile banking in bridging the financial inclusion gap for traders in rural and semi-urban markets.

6.0 Recommendations

The study recommends that financial institutions and mobile service providers should develop targeted education and awareness campaigns to promote mobile banking adoption among traders. Training programs focusing on mobile banking features such as account management, fund transfers, bill payments, and savings options should empower traders to make informed financial decisions, while partnerships with local governments and community-based organizations should help deliver these programs effectively. Additionally, financial service providers should simplify the user interface of mobile banking platforms to encourage adoption by less tech-savvy users and enhance the security and reliability of their platforms to build trust among traders. Providers should invest in advanced encryption technologies and robust authentication processes to safeguard user transactions, establish mechanisms for quick dispute resolution to address issues promptly, and maintain transparent communication about security measures to foster confidence in the system.

The study recommends that policymakers should prioritize the expansion of mobile network infrastructure to improve the accessibility of mobile banking services in underserved regions like Homa-Bay, as poor network coverage remains a significant barrier to adoption especially in rural areas. By investing in infrastructure development and incentivizing private sector players through subsidies and tax relief, mobile service providers should enhance the reliability and efficiency of their platforms, enabling more traders to benefit from financial inclusion opportunities. Regulators should also enforce

policies promoting competition among mobile banking service providers to improve service quality and affordability, monitor the market to prevent monopolistic practices, and provide incentives for new entrants to drive innovation and lower costs. Furthermore, governments and financial institutions should incentivize digital literacy programs to empower traders in effectively using mobile banking services, collaborating with educational institutions and NGOs to deliver these programs at the grassroots level and incorporating digital financial education into existing adult literacy programs to ensure widespread reach and accelerate the transition towards a more inclusive and digitally-driven financial ecosystem.

REFERENCES

Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of FinTech: A new post-crisis paradigm? *Georgetown Journal of International Law*, 47(4), 1271-1319. https://doi.org/10.2139/ssrn.2676553

Beck, T., Pamuk, H., Ramrattan, R., & Uras, B. (2015). Mobile Money and Financial Inclusion. *World Bank Research Observer*, 30(3), 198-220.

CGAP. (2019). The potential of mobile money savings in Kenya: Evidence from the M-PESA Foundation Academy. Consultative Group to Assist the Poor. Retrieved from https://www.cgap.org/sites/default/files/CGAP-Brief-MPESA-Savings-May-2019.pdf

Cook, W., & McKay, C. (2017). How M-Shwari Works: The Story So Far. Consultative Group to Assist the Poor (CGAP).

Davis, F. D. (1986). A technology acceptance model for empirically testing new end-user information systems: Theory and results. *Doctoral dissertation*, MIT Sloan School of Management.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. World Bank Publications. https://doi.org/10.1596/978-1-4648-1259-0

Dupas, P., & Robinson, J. (2013). Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya. *American Economic Journal: Applied Economics*, 5(1), 163-192. https://doi.org/10.1257/app.5.1.163

Jack, W., & Suri, T. (2016). The Long-run Poverty and Gender Impacts of Mobile Money. *Science*, 354(6317), 1288-1292. https://doi.org/10.1126/science.aah5309

Mkenda, B., & Mushi, N. (2018). Mobile Money and Financial Inclusion: A Study of Smallholder Farmers in Tanzania. *Journal of International Development*, 30(6), 1019-1037.

Moore, D., Ghosh, D., Krishnan, S., & Zimmermann, L. (2019). How mobile money reduces poverty in Bangladesh. *Journal of Development Economics*, 138, 201-216.

Morawczynski, O., & Pickens, M. (2019). Poor People Using Mobile Financial Services: Observations on Customer Usage and Impact from M-PESA. CGAP.

Mwangi, M., & K'Obonyo, P. (2020). Impact of mobile banking on financial inclusion among traders in Nairobi. *Journal of Financial Technology*, 15(3), 45-62.

Nkuna, R., & Ikeme, A. (2018). Mobile banking and financial inclusion in Nigeria: Gender perspectives. *African Financial Review*, 12(4), 78-95.

Odhiambo, S. (2018). Mobile banking adoption and financial inclusion in Kisumu County. *Kenya Economic Studies*, 25(2), 123-140.

Prina, S. (2015). Banking the Poor via Savings Accounts: Evidence from a Field Experiment. *Journal of Development Economics*, 115, 16-31. https://doi.org/10.1016/j.jdeveco.2015.01.004

Smith, J. (2019). Global perspectives on mobile banking and financial inclusion. *International Finance Journal*, 31(7), 234-251.

Sospeter, N., & Wamalwa, F. (2019). Financial Inclusion, Mobile Money, and Welfare of Smallholder Farmers in Kenya. *African Journal of Agricultural and Resource Economics*, 14(4), 311-327.

Suri, T., & Jack, W. (2016). The Impact of Kenya's Mobile Money Revolution on Financial Inclusion and Stability. *Journal of Economic Perspectives*, 30(3), 83-100.

World Bank. (2018). Global Findex database 2017: Measuring financial inclusion and the fintech revolution. World Bank Group. Retrieved from https://globalfindex.worldbank.org/

World Development Report. (2022). Data for better lives. World Bank Group. Retrieved from https://openknowledge.worldbank.org/handle/10986/35990