

DETERMINANTS OF MOBILE MONEY ADOPTION IN NIGERIA: AN EMPIRICAL STUDY BASED ON TAM

Biliquees A. Abdulmumin

Department of Finance

University of Ilorin, Ilorin, Nigeria

abdulmumin.ba@unilorin.edu.ng

DOI: <https://doi.org/10.57233/gujaf.v6i3.02>

Abstract

In Sub-Saharan Africa, mobile money has become a game-changer for financial inclusion, enhancing the availability, quality and use of financial services. However, despite Nigeria's high mobile penetration rate, mobile banking usage is still very low. With a focus on perceived utility, transaction costs, service quality, perceived ease of use, and trust. This study investigates the variables that affect behavioral intention to use mobile money services. A sample 400 respondents completed an online survey that was disseminated via social media channels, and SPSS was used to analyze the primary data used in this study. Descriptive statistics, multiple regression, correlation, and reliability testing were all used in the analysis. The findings show that willingness to utilize mobile money is highly influenced by perceived utility, service quality, and perceived simplicity of use, but transaction costs have a negative effect. Although trust was positively correlated with behavioral intention, it did not remain significant when controlling for other variables. These results imply that utility, affordability, and service dependability are more important to Nigerian consumers than trust alone. The study emphasizes that in order to encourage widespread use of mobile money services in Nigeria, financial service providers must place a strong priority on value delivery, cost reduction, and service consistency.

Keywords: Financial inclusion, mobile money, perceived usefulness, service quality, TAM, trust, transaction costs.

1.0 Introduction

Over the past two decades, mobile technologies have become a cornerstone of socioeconomic transformation worldwide, reshaping patterns of communication, commerce and service delivery (Kouladoum et al., 2022). In Africa, the diffusion of mobile phones has been particularly significant because it has opened new channels for financial inclusion, especially among populations traditionally excluded from the formal banking sector (Andrianaivo & Kpodar, 2012). Mobile-enabled financial services have provided opportunities for households and small businesses to save, transfer and manage money, thereby reducing barriers created by weak banking infrastructure and geographic exclusion (Aker, Ray, & D'Ambra, 2021). Scholars consistently highlight that mobile money represents one of the most important technological innovations for expanding access to finance in low-income regions (Maurer, 2012; Jack & Suri, 2014).

The success of mobile money in East Africa illustrates this potential. Kenya's M-Pesa, for example, is often cited as a global benchmark for digital financial services, with adoption levels exceeding 90% among adults and measurable impacts on household welfare, business performance, and poverty reduction (Jack & Suri, 2014; Mbiti & Weil, 2015). Tanzania and Ghana have also recorded rapid growth in mobile financial services, supported by favorable regulatory frameworks, reliable agent networks, and consumer trust in service providers (Chale & Mbamba, 2014; Economides & Jeziorski, 2017). These experiences demonstrate that when affordability, accessibility, and service quality are assured, mobile money can transform financial inclusion and drive economic participation (Mistune, 2015; Mganyizi, 2023).

Despite these successes, Nigeria has not followed a similar trajectory. With a population exceeding 200 million and mobile phone penetration above 90%, Nigeria should provide fertile ground for the expansion of mobile financial services (Forenbacher et al., 2019). Yet, adoption

rates remain comparatively low. Considering the Central Bank of Nigeria's efforts to promote digital transactions through the Cashless Policy and the National Financial Inclusion Strategy, mobile money adoption has lagged behind the size and potential of the country. (Nigeria Inter-Bank Settlement System [NIBSS], 2023). Temporary shocks, such as the 2022-2023 Naira redesign and associated cash scarcity, spurred short-term increases in digital payments; however, sustainable adoption has not kept pace with expectations (Eze & Markjackson, 2020; Ogunlade & Amodu, 2024).

Several barriers have been identified in both academic and industry reports. These include network unreliability, liquidity constraints among agents, high transaction costs, low customer trust in financial institutions and a lack of financial literacy (Musa et al., 2022; Ewa & Inah, 2016). Importantly, the problem in Nigeria is not access to mobile phones per se but rather their limited use for higher-order financial functions such as payments, savings, and business transactions (John, Yusuf, & Adepoju, 2020). This situation underscores a paradox: while Nigerians embrace mobile devices for communication and social networking, their transition to mobile financial services has been far more restrained.

Although a growing body of literature has examined mobile banking and financial inclusion in Africa, much of it emphasizes East African contexts, leaving Nigeria relatively underexplored (Jack & Suri, 2014; Mbiti & Weil, 2015). Where Nigerian studies exist, they often focus narrowly on infrastructural and regulatory issues, without sufficiently addressing how behavioral and perceptual factors shape adoption decisions. In particular, the relevance of constructs from the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) including perceived usefulness, perceived ease of use, trust, service quality, and transaction costs has not been adequately tested within the Nigerian environment. Moreover, limited attention has been given to how demographic traits including education, gender, and age, and urban-rural location interact with these constructs to influence adoption outcomes. This gap is especially important because Nigeria represents one of the continent's largest potential markets for digital financial services, yet persistent structural and behavioral barriers continue to constrain adoption. Understanding these dynamics is critical not only for extending theoretical insights into technology acceptance in developing economies but also for informing financial inclusion policies.

In light of this, the current study explores the factors that influence Nigerians' use of mobile money. It specifically looks at how behavioral intentions and actual adoption are impacted by perceived utility, perceived ease of use, service quality, trust, transaction costs, and a few demographic characteristics. By doing this, the study helps close the empirical gap in the Nigerian context and offers evidence-based suggestions for fintech companies, financial institutions, and governments looking to increase digital financial inclusion.

2.0 Literature

Review Theoretical Framework

Technology acceptance model (TAM) developed by Davis (1989) has become one of the most impressive structure to explain technology in information system research. It emphasizes two major constructions, perceived utility and ease of use, which makes users' approaches and use as primary determinants of practical intentions to adopt new techniques. Over the years, TAM has been implemented in various contexts, including studies on mobile banking and mobile money (BEHL & PAL, 2016; Siano et al., 2020). Its permanent relevance lies in its simplicity and future

stating capacity, especially in settings where the perceptions of value and ease play a vital part in shaping the behavior of adoption.

To address the boundaries of the tam, its narrow attention, especially on cognitive perceptions, Venkatesh et al. (2003) propounded the unified theory of acceptance and use of technology. This model expands TAM framework by integrating additional constructs and considering broader influences on technology adoption. UTAUT highlights four core constructs performance expectancy, effort expectancy, social influence, and facilitating conditions by incorporating social effects, facilitates situations and models variables such as experience age and gender. Utaut Framework has been widely employed to investigate digital financial services, mobile payments and technology in emerging markets, where demographic and infrastructure causes greatly affect the usage patterns (Dwivedi et al., 2019; Williams et al., 2015).

Together, TAM and Utaut provide a strong theoretical basis to comprehend the adoption of mobile money. TAM captures the fundamental conceptual drivers of adoption, while UTAUT enables analysis to include relevant and demographic effects. Their joint use provides a balanced structure to investigate the dimensions of psychological, social and infrastructure of adopting technology in Nigeria.

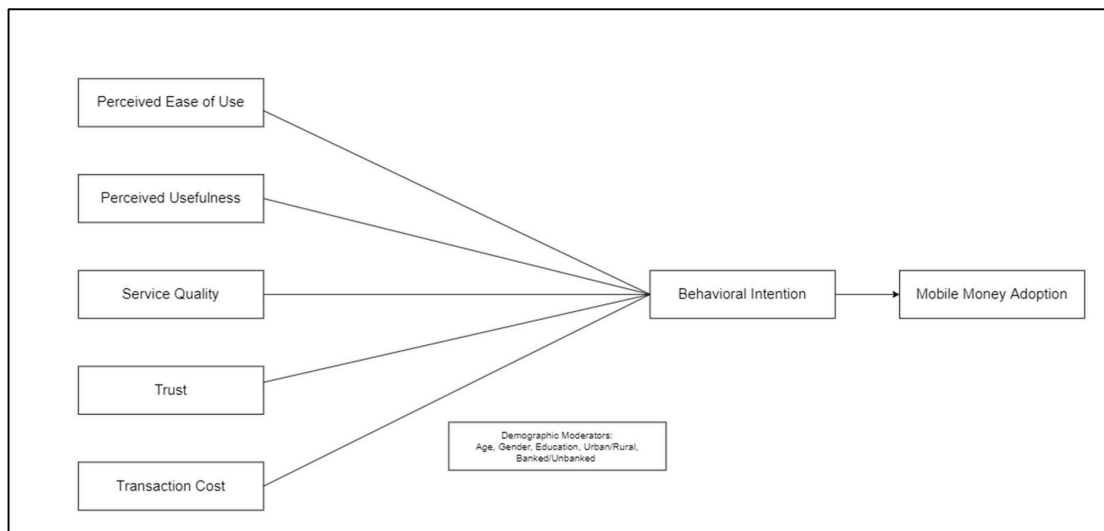


Fig 1 Conceptual diagram for adoption of mobile money

Conceptual Review

Perceived Ease of Use (PEU)

Perceived ease of use refers to how easy a person feels using a system is (Davis, 1989). It measures how simple, clear, and manageable someone finds a system. Mobile banking serves a wide group of people, including those with less experience with technology. Users who find the mobile banking app simple, easy to understand, and user-friendly are more likely to not only start using it but also use it regularly.

H₀₁: Perceived Ease of Use positively affects the intention to adopt mobile money.

Perceived Usefulness (PU)

Perceived usefulness is about how much someone believes a system can improve their work or tasks (Davis, 1989).

Banking involves tasks like checking balances, paying bills, and transferring money, all of which are aimed at achieving goals. People won't use mobile banking just because it's easy they also need to believe it offers real benefits.

H02: Perceived Usefulness positively influences the intention to adopt mobile money.2.2.2 Perceived Usefulness (PU)

Service Quality

This is the overall assessment of how well a mobile banking service fulfills or goes beyond customer expectations (Parasuraman et al., 1988). The mobile money services include the service quality, such as the accuracy and reliability of transactions, timeliness of transaction and order fulfillment, availability and effectiveness of customer service, and satisfaction with the service overall. Data suggests that service quality perception being higher might positively correlate with the level of adoption and continued usage.

H03: Service quality exerts a significant positive influence on behavioral intention to adopt mobile money.

Trust

This is defined as the confidence that a technology will be reliable, secure, and behave in the client's best interest. (Gefen et al., 2003). Trust is also critical in mobile money as customers must feel secure that their money is secure, that transactions will be executed properly, and dispute resolution will be conducted equitably. The absence of trust can be one of the top barriers to adoption.

H04: Trust positively exerts a significantly influences on behavioral intention to adopt mobile money.

Transaction Costs

These are the financial charges of transacting with mobile money products such as transfer fees, withdrawal charges, and service charges. High transaction costs will discourage adoption, particularly from low-income consumers, while low costs will increase willingness to adopt. The relationship is thus hypothesized to be negative.

H5: Transaction Costs negatively influence behavioral intention to adopt mobile money.

Empirical Review

Jack and Suri (2014) evaluated how M-Pesa affected Kenyan households' well-being. They discovered that mobile money improved women's resilience, raised savings, and decreased poverty using regression analysis and household panel data from 2008 to 2014. According to the study's findings, mobile money is revolutionizing financial inclusion. It is crucial to remember that uptake is far slower in Nigeria than it is in Kenya, where adoption is happening quickly. Boateng et al. (2016) used TAM to study Ghana's uptake of mobile money. 500 users' answers to surveys were gathered, and SEM was used for analysis. The results indicated that while trust had less of an impact, perceived utility and simplicity of use were the best predictors. The significance of system usability and functionality was emphasized in the conclusion. This creates an important point of comparison for the present study, which seeks to determine whether trust plays a similarly limited role in Nigeria or whether it exerts a stronger influence in a market with weaker regulatory confidence.

Munyegera and Matsumoto (2016) studied mobile money in rural Uganda and Tanzania using survey data from over 2,000 households and econometric models. It discovered that remittances

rose with mobile money, household income, and savings. The study concluded that mobile money drives financial inclusion in rural SSA. However, adoption determinants such as trust and cost were not examined, which are important in Nigeria. The omission of trust and transaction cost in their model further highlights the need for studies, such as the present one, that examine these variables directly within the Nigerian context.

Oliveira et al. (2014) explored mobile banking adoption in Portugal, guided by TAM and diffusion of innovation theory. An online survey of 400 bank customers was analyzed with SEM. Results showed that ease of use, compatibility, and trust predicted adoption, while risk perception reduced adoption. The conclusion was that trust-building and simplified interfaces are essential. Being set in a developed economy, the findings may not translate well to Nigeria, where cost and access barriers dominate. This contrast underscores the importance of investigating how trust and transaction costs shape adoption in an environment with more pronounced infrastructural and affordability constraints like Nigeria.

Donovan (2012) investigated mobile money adoption challenges in Sub-Saharan Africa using secondary data and case studies. Thematic content analysis highlighted high transaction costs and regulatory barriers as critical adoption challenges. The study concluded that affordable pricing and supportive policy frameworks are crucial for scaling mobile money. The study used descriptive approach, which restricted statistical generalizability. His emphasis on the role of transaction costs provides a strong basis for examining how cost influences mobile money adoption in Nigeria.

Adedoyin et al. (2022) investigated inclusive growth and digital financial inclusion in Nigeria. Using econometric models and time-series data from 1999 to 2019, the study revealed that mobile penetration and digital financial services contributed positively to inclusive growth. The conclusion emphasized mobile banking and money platforms as tools for reducing financial exclusion. The study relied on secondary macro-level data, without investigating consumer-level adoption behaviors. This creates space for the present study to focus directly on individual-level factors such as trust and transaction cost.

Ojo and Akanbi (2020) investigated mobile money adoption among Nigerian university students. Using primary survey data from 250 students, analyzed with logistic regression, the study found that perceived usefulness, peer influence, and transaction cost shaped adoption, while trust had limited effect. The conclusion was that adoption is driven by utility and affordability among younger populations. The study had a narrow demographic focus, which limited generalizability to the wider Nigerian population. The mixed findings on trust and the confirmed role of transaction cost make it necessary to examine these variables among a broader and more diverse population, which the present study addresses.

3.0 Methodology

This study uses a quantitative, cross-sectional survey design, which is adequate for testing hypotheses derived from the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). A quantitative approach permits systematic measurement of constructs such as perceived usefulness, ease of use, trust, service quality, and transaction cost, while a cross-sectional design provides information on the adoption behavior within a specific period. Although this design is limited in establishing causality, it offers a cost-effective and practical method for capturing behavioral intentions in a large and diverse population.

Research Population and Sample

Adult Nigerians constitute the population used in this study, aged 18 years and above who has mobile phones, representing both urban and rural dwellers, as well as banked and underbanked segments. Nigeria provides a compelling context due to its large unbanked population, rapid mobile penetration, and policy initiatives by the Central Bank of Nigeria (CBN) aimed at promoting financial inclusion.

Cochran's formula was employed to calculate the size of the sample. This by assuming a 95% level of confidence, 5% margin of error and adult population exceeding 100 million. This reported 384 adults as the minimum required respondents. The target sample size was 400–450 individuals in order to guarantee robustness and accommodate for missing responses. (Lakens, 2021). While this approach provides adequate statistical power, the reliance on online survey distribution introduces substantial sampling bias, as individuals who are younger, urban, educated, and digitally active are more likely to participate. This bias significantly limits the representativeness of the sample and may skew results in ways that underrepresent rural populations, older individuals, and people with low digital literacy groups that are central to Nigeria's financial inclusion challenge.

A standardized questionnaire with a five-point Likert scale that was modified from earlier research on mobile banking and mobile money adoption was employed to gather the study's data. (Siddik et al., 2014). The instrument was pretested for clarity and relevance before full deployment. The survey was administered via Google Forms and disseminated through widely used social media platforms, including WhatsApp, Facebook, and Telegram, enabling nationwide reach at minimal cost.

To encourage participation and uphold ethical standards, respondents' identity were kept confidential, with data used solely for academic purposes. Participation was at will. The data collection period spanned four weeks, allowing adequate time for responses. While online distribution maximized cost efficiency, it also amplified sampling bias, as it may have excluded individuals with limited digital literacy or internet access, particularly in rural areas. This limitation may influence the findings for example, ease of use may appear less significant than it truly is because the sample contains digitally literate respondents who already find mobile money intuitive.

4.0 Results

400 valid responses were analyzed, Out of the 400 survey participants, 136 (34%) were female and 264 (66%) were male. Table 1 showed that out of the 400 respondents that participated, 204 (51%) were between ages 18 - 25 years old, 128 (32%) were between ages 26 - 35 years old, 42 (10.5%) were between ages 36 -45 years old, 24 (6%) were 46-55 years old and 2 (0.5%) were 55 and above. This shows that there were more participants who were between ages 18 – 25 years than participants who were between ages 26 – 35, 36 – 45, and 46 and above in this study. Out of the 400 total participants, most of the respondents, 272 (69%), live in urban areas, and 128 (31%) live in rural/peri-urban areas. Out of the 400 respondents that participated in the study, 76 (19.0%) had higher secondary school, 242 (60.5%) had HND/B.Sc., 54 (13.5%) had MSc/MBA, and 28 (7%) had Ph.D., while none had non-formal and primary certificates. This shows that there were more participants who had HND/B.Sc. Than the NCE/OND, MSc/MBA and Ph.D. certificates. In terms of banking status, 280 (70%) reported having a formal bank account, while 120 (30%) were unbanked/under banked.

Table 1:
Demographics of the respondent

Demographics	Frequency	Percentage (%)
Gender		
Male	264	66.0
Female	136	34.0
Age		
18 – 25years	204	51.0
26-35 years	128	32.0
36 – 45 years	42	10.5
46 – 55 years	24	6.0
56 + years	2	0.5
Education		
Primary	0	0
Higher secondary school	76	19.0
HND/B.scv	242	60.5
Master	54	13.5
Ph.D	28	7.0
Location		
Urban	272	69.0
Rural/ Peri-urban	128	31.0
Banking Status		
Banked	280	70.0
Unbanked/Underbanked	120	30.0

Source: Online Survey, 2025.

The mean for the studied variable are computed in Table 2. From the results, it is seen that respondents have moderate to high perception of ease of use ($M = 4.072$, $SD = 0.586$), usefulness ($M = 4.501$, $SD = 0.500$), service quality ($M = 3.644$, $SD = 0.809$) and trust ($M = 3.702$, $SD = 0.775$). The mean score for transaction cost is low ($M = 3.126$, $SD = 0.528$) showing a relatively dissatisfaction with affordability.

Table 2: Descriptive Statistics of Respondents

Variable	Mean	SD
Perceived Ease of Use (PEU)	4.072	0.586
Perceived Usefulness (PU)	4.501	0.500
Service Quality (SQ)	3.644	0.809
Trust (Tr)	3.702	0.775
Transaction Cost (TC)	3.126	0.528
Behavioural Intention (BI)	3.905	0.746

Source: Author's Computation, 2025

Reliability of survey

Prior to the actual survey being conducted, 30 respondents participated in a pilot test of the questionnaire. The test was carried out in order to identify issues with the phrasing, format, content, usability, and relevance of the questionnaire. The reliability of the data is evaluated using Cronbach's alpha. According to Table 3's data analysis results, Cronbach's alpha values have above 0.7, with perceived usefulness having the highest reliability ($\alpha = 0.88$), while Transaction Costs had the lowest but still acceptable value.

Table 3:
Reliability test Using Cronbach's Alpha

	Cronbach's Alpha	Description
Perceived Ease of Use	0.851	Reliable
Perceived Usefulness (PU)	0.873	Reliable
Service Quality (SQ)	0.835	Reliable
Trust (TR)	0.870	Reliable
Transaction Costs(TC)	0.761	Reliable
Behavioral Intention	0.790	Reliable

Source: SPSS, 2025

Correlation Analysis

Table 4:
Correlation Analysis of studied variables

Variables	PEU	PU	SQ	Tr	Tc	BI
Perceived Ease of Use (PEU)	1	.814**	.357**	.215**	.259**	.189**
Perceived Usefulness (PU)	.814**	1	.320**	.207**	.258**	.380**
Service Quality	.357**	.320**	1	.646**	.307**	.450**
Trust (Tr)	.215**	.207**	.646**	1	.314**	.314**
Transaction Costs	.259**	.258**	.307**	.341**	1	.087
Behavioral Intention (BI)	.189**	.380**	.450**	.314**	.087	1

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

Source: SPSS, 2025

Pearson correlation coefficients were computed to examine associations among variables (Table 3). Results revealed that perceived usefulness has a moderate correlation with Behavioral Intention ($r = .0.380$ $p < .01$), and exhibit a strong connection towards Perceived Ease of Use ($r = 0.814$).

Trust has a moderate correlation with Behavioral Intention ($r = 0.314$, $p < .01$), but weaker compared to service quality ($r = .0.646$, $p < .01$). Perceived ease of use also correlated positively but weakly with behavioral intention ($r = .0.189$, $p < .01$). Transaction costs showed a very weak correlation towards behavioral intention ($r = 0.087$, not significant).

Overall, the strong relationship between perceived usefulness and perceived ease of use denote that respondents who find mobile money useful are also likely to perceive it as easy to use. The strong correlation between service quality and trust indicate that better service quality is associated with greater trust in mobile money services.

Hypothesis Testing

Table 5

Multiple Regression Results Predicting Behavioral Intention

Independent variable	Unstandardized B	Std.Error SE	Beta	T-statistic	P-values
Perceived Ease of Use	.18	.08	.18	2.213	<.001
Perceived Usefulness	.900	.110	0.607	8.164	<.001
Service Quality	.368	.054	0.406	6.832	<.001
Trust	.058	.055	.062	1.064	.288
Transaction Costs	-.153	0.67	-.110	-2.285	.023

Source: SPSS, 2025.

Multiple regression analysis is computed with the aid of SPSS and the result is displayed in Table 5 above. The impact of the independent variable (Perceived Ease of Use (PEU), Perceived Usefulness (PU), Service Quality (SQ), Trust (TR), and Transaction Costs (TC)) on the dependent variable (Behavioral Intention) is examined using multiple regression.

H1: Perceived Ease of Use positively influences behavioral intention to adopt mobile money from table above, perceived ease of use is shown to have a positive influence on Behavioral intention with an unstandardized coefficient of 0.18, value of t-statistic to be 2.213 and a p-value of 0.028. From the result it is proven that the relationship between PEU and BI is positive and significant. Thus, it can be said that H1 is accepted.

H2: Perceived Usefulness (PU) positively influences Behavioral Intention (BI) to adopt mobile money.

From Table 5 above PU can be concluded to exhibit a strong positive relationship significant effect on BI with an unstandardized coefficient of 0.900, value of t-statistic to be 8.164 and a p-value of 0.001. Given that this finding indicates that behavioral intention is strongly and favorably influenced by the perceived usefulness variable, H2 is accepted.

H3: Service quality exerts a significant positive influence on behavioral intention to adopt mobile money.

From Table 5 above Service quality exert a favorably influence on Behavioral Intention with a unstandardized coefficient of 0.368, a t-statistic value of 6.832 and a p-value of 0.001. This study

shows that behavioral intention is considerably and positively influenced by the service quality variable, hence H3 is accepted.

H4: Trust positively exerts a significantly influences on behavioral intention to adopt mobile money.

Trust (Tr) has a favorable influence but non-significant on Behavioral Intention e with a unstandardized coefficient of 0.058, a t-statistic value 1.064, and a p-value of 0.288. %. Thus, it can be said that H4 is not accepted.

H5: Transaction Costs negatively influence behavioral intention to adopt mobile money.

Transaction cost (T) have negative effect on Behavioral Intention with a unstandardized coefficient of -0.153, a t-statistic value of -2.285, and a p-value of 0.0023. This study proves that Transaction cost variable has a negative significant effect on intention. Thus, H5 is accepted.

Discussion of Findings

This study analyzed mobile money usage in Nigeria within the framework of the technology acceptance model (TAM) and its extensions, viz., service quality, trust, and transaction costs. From the finding, it is seen that perceived usefulness, service quality, trust, and ease of use positively influenced willingness to use mobile money. In contrast, transaction costs exuded an enormous negative impact. The findings from this study add to the current body of research and practice concerning embracing of digital financial services in SSA.

Consistent with previous research on technology acceptance model (TAM) (Davis, 1989; Venkatesh et al., 2003), perceived usefulness was shown to be variable with the strongest influence in predicting the adoption intention. The advantages of mobile money to the respondent, such as faster transactions, reducing the need for physical bank visits, and providing flexibility for payments and transfers, make it valuable. The results align with previous findings in Kenya and Ghana (Jack & Suri, 2014; Boateng et al., 2016), where perceived usefulness act as the main driver in the adoption of M-Pesa and MTN Mobile Money.

Service quality was found to be significant, implying that the extent to which a service fulfills the needs and expectations of the client enhances the willingness to use mobile money. The results support the findings of Munyegera & Matsumoto (2016), conducted in Tanzania and Uganda, which highlighted that perceptions of reliability and institutional trust strongly predict continued use of mobile money.

The results show that perceived ease of use exert moderately positive significant effect on behavior intention. This is consistent with TAM predictions and prior studies (Oliveira et al., 2014) showing that user-friendly interfaces and simple USSD codes encourage adoption, particularly among less technologically literate users. The simplicity of use that users experience, such as how simple it is to access, comprehend, and interact with the system, will encourage them to keep using it.

Despite Trust having a positive correlation with Behavioral Intention ($r = 0.314$, $p < 0.01$) but its effect is not significant the multiple regression analysis., this indicates that Trust's impact on the willingness to use mobile money in Nigeria is likely to be mediated through Service Quality, with which Trust has a strong correlation ($r = 0.646$).

From the results, it can be seen that trust has a positive correlation with Behavioral intention ($r = r = 0.314$, $p < 0.01$), but its effect is not significant the multiple regression analysis.

From the results, transaction cost is shown to have negative relationship with behavioral intention, which confirms previous studies in Sub-Saharan Africa by Donovan (2012). Respondents expressed dissatisfaction with high fees and hidden charges, particularly for peer-to-peer transfers and cash withdrawals. Based on the study's findings, commercial banks will take into account the variables that influence people's behavioral intentions regarding the adoption (or continued use) of mobile banking. This will help them develop an efficient plan to draw in new clients and retain existing ones by increasing customer satisfaction and operational effectiveness, which will ultimately have a favorable effect on the nation's financial inclusion.

5.0 Conclusion

This study investigated the determinants of mobile money adoption in Nigeria using the Technology Acceptance Model (TAM) and its extensions, focusing on service quality, trust, and transaction costs. The findings reveal that perceived usefulness, service quality, and ease of use significantly enhance willingness to adopt mobile money services, whereas transaction costs exert a strong negative effect on behavioral intention. Trust was positively correlated with behavioral intention but lost significance when other variables were controlled, suggesting that its influence may be mediated through perceptions of service quality.

In light of these results, the study suggests that mobile money companies should focus on reducing transaction costs to encourage greater adoption, particularly among low-income users. Also, financial institutions must invest in improving service quality, ensuring reliability, speed, and customer support to build confidence in the system. User-friendly platforms should be designed to accommodate individuals with varying levels of digital literacy, thus widening accessibility. Finally, policymakers such as the Central Bank of Nigeria should create supportive regulatory frameworks that incentivize cost reduction, promote competition among providers, and expand agent networks to reach underserved communities.

References

- Adedoyin, L. I., Olayemi, A. A., & Adegbite, O. O. (2022). Digital financial inclusion and inclusive growth in sub-Saharan Africa: Evidence from Nigeria. *Journal of African Business*, 23(1), 67-86. <https://doi.org/10.1080/15228916.2021.1880975>
- Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), 207–232. <https://doi.org/10.1257/jep.24.3.207>
- Akter, U., Anwar, S. R., Mustafa, R., Ali, Z., & Cumilla, B. (2021). Revisiting the impact of mobile banking in financial inclusion among the developing countries. *International Journal of Financial Research*, 12(2), 62–74.
- Andrianaivo, M., & Kpodar, K. (2012). Mobile phones, financial inclusion, and growth. *Review of Economics and Institutions*, 3(2), 30.
- Behl, A., & Pal, A. (2016). Analysing the barriers towards sustainable financial inclusion using mobile banking in rural India. *Indian Journal of Science and Technology*, 9(15), 1–11. <https://doi.org/10.17485/ijst/2016/v9i15/92146>
- Boateng, H., Adam, D. R., Okoe, A. F., & Anning-Dorson, T. (2016). Assessing the determinants of Internet banking adoption intentions: A social cognitive theory perspective. *Computers in Human Behavior*, 65, 468–478. <https://doi.org/10.1016/j.chb.2016.09.017>
- Chale, P., & Mbamba, U. (2014). The role of mobile money services on growth of small and medium enterprises in Tanzania: Evidence from Kinondoni District in Dar es Salaam Region. *Business Management Review*, 17.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Donovan, K. (2012). Mobile money for financial inclusion. In T. Kelly & M. Minges (Eds.), *Information and communications for development 2012: Maximizing mobile* (pp. 61-73). World Bank. https://doi.org/10.1596/9780821389911_CH04
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers*, 21(3), 719-734. <https://doi.org/10.1007/s10796-017-9774-y>
- Economides, N., & Jeziorski, P. (2017). Mobile money in Tanzania. *Marketing Science*, 36(6), 815–837.
- Ewa, K., & Inah, E. (2016). Evaluating Nigeria cashless policy implementation. *International Journal of Business and Social Research*, 6(5), 11–27. <https://doi.org/10.18533/ijbsr.v6i5.941>
- Eze, G., & Markjackson, D. (2020). Cashless policy and financial inclusion in Nigeria.
- Forenbacher, I., Husnjak, S., Cvitić, I., & Jovović, I. (2019). Determinants of mobile phone ownership in Nigeria. *Telecommunications Policy*, 43(7), 101812.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Höfler, F., Ruiz-Martínez, A., Misiti, A. J., Reifferscheid, A., Bisping, C., & Dodsworth, T. J. (2019). Advances in mobile payment. In *Advances in mobile payment* (p. 320). Springer.
- Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183–223. <https://doi.org/10.1257/aer.104.1.183>
- John, N. J., Emmanuel, N. C., Ikechi, K. S., & Eke, C. K. (2020). Cashless policy and the Nigerian payment system. *International Journal of Innovation and Economic Development*, 5(6), 7–28.
- Kikulwe, E. M., Fischer, E., & Qaim, M. (2014). Mobile money, smallholder farmers, and household welfare in Kenya. *PLoS ONE*, 9(10), e109804. <https://doi.org/10.1371/journal.pone.0109804>
- Kouladoun, J., Wirajing, M., & Nchofoung, T. (2022). Digital technologies and financial inclusion in Sub-Saharan Africa. *Telecommunications Policy*. <https://doi.org/10.1016/j.telpol.2022.102387>
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267.
- Maurer, B. (2012). Mobile money: Communication, consumption and change in the payments space. *The Journal of Development Studies*, 48(5), 589–604. <https://doi.org/10.1080/00220388.2011.621944>
- Mbiti, I., & Weil, D. N. (2015). Mobile banking: The impact of M-Pesa in Kenya. In *African successes, Volume III: Modernization and development* (pp. 247–293). University of Chicago Press.

- Mganyizi, R. (2023). Analysis of the contribution of mobile money on financial inclusion growth in Tanzania (Doctoral dissertation). The Open University of Tanzania.
- Munyegera, G. K., & Matsumoto, T. (2016). Mobile money, remittances, and household welfare: Panel evidence from rural Uganda. *World Development*, 79, 127–137. <https://doi.org/10.1016/j.worlddev.2015.11.006>
- Musa, I., Magaji, S., & Hassan, A. (2022). Analysis of infrastructural challenges, cybercrime, and the cashless policy in Nigeria. *Advanced Research on Information Systems Security*, 2(1). <https://doi.org/10.56394/aris2.v2i1.15>
- Ndung'u, N. (2018). The M-Pesa technological revolution for financial services in Kenya: A platform for financial inclusion. In D. Lee & R. Deng (Eds.), *Handbook of blockchain, digital finance, and inclusion, Volume 1* (pp. 37–56). Academic Press.
- Nigeria Inter-Bank Settlement System. (2023). Nigeria recorded ₦600 trillion e-payment transactions in 2023. NIBSS. <https://nibss-plc.com.ng/nigeria-recorded-n600-trillion-e-payment-transactions-in-2023/>
- Nyonzo, F. (2024). Assessing Tanzanians' response to the implementation of a mobile money transaction levy. *African Multidisciplinary Tax Journal*, 4(1), 167–186.
- Ogunlade, D. A., & Amodu, M. A. (2024). The influence of the cashless policy on economic growth and development. *NIU Journal of Social Sciences*, 10(1), 39–50.
- Olajide, A. R., Afolabi, A. A. R., & Titilayo, A. O. (2022). Effects of monetary policy on financial inclusion: Empirical evidence from Nigeria. *Annals of "Dunarea de Jos" University of Galati, Fascicle I. Economics and Applied Informatics*, 28(3), 74–80. <https://doi.org/10.35219/eai15840409113>
- Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2014). Mobile banking: An empirical analysis of the determinants of adoption in Portugal. *International Journal of Information Management*, 34(3), 352–364. <https://doi.org/10.1016/j.ijinfomgt.2014.03.001>
- Oliveira, T., Faria, M., Thomas, M. A., & Popovič, A. (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34(5), 689–703.
- Oluwatolani, O., Joshua, A., & Philip, A. (2011). The impact of mobile banking on customer service delivery in the Nigerian commercial banks. *International Journal of Business and Management*, 6(6), 53–61. <https://doi.org/10.5539/ijbm.v6n6p53>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Siano, A., Raimi, L., Palazzo, M., & Panait, M. C. (2020). Mobile banking: An innovative solution for increasing financial inclusion in Sub-Saharan African countries: Evidence from Nigeria. *Sustainability*, 12(23), 10130.
- Siano, A., Vollero, A., Conte, F., & Amabile, S. (2020). "More than words": Expanding the taxonomy of greenwashing after the Volkswagen scandal. *Journal of Business Research*, 114, 390–395. <https://doi.org/10.1016/j.jbusres.2019.08.041>
- Siddik, M. N. A., Sun, G., Yanjuan, C., & Kabiraj, S. (2014). Financial inclusion through mobile banking: A case of Bangladesh. *Journal of Applied Finance and Banking*, 4(6), 109–120.

- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292. <https://doi.org/10.1126/science.aah5309>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. *Journal of Enterprise Information Management*, 28(3), 443–488. <https://doi.org/10.1108/JEIM-09-2014-0088>
- World Bank. (2022). *The global finindex database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://doi.org/10.1596/978-1-4648-1897-4>