Current and Potential Users Adoption of Mobile Payment Technology in Nigeria

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Abstract: Mobile technology advancement has significantly transformed the functionality of smartphones, into a one-stop-shop from conventional communication to wireless technology for purchase and transactions through mobile payment technology. The bond between the smartphone and the users in recent times has increasingly replaced the bond between the physical money wallet and the owner. Necessitating the need to adopt mobile payment service technology. Most empirical studies focus on single users in Europe, Asia, America among others, developing constructs that work in these technologically advanced nations. This study examines the impact of current users of mobile payment technology on potential user's adoption in Nigeria. Developing constructs factors that impact on an individual's intention to adopt m-payment technology services. The construct tests the behavioral intention of 40 current users and 330 potential users. The results revealed that 11% risk, 35% trust, 48% ease of use, 52% usefulness, 10% personal innovation and cost significantly influenced current users' intentions while 27% Subjective norms, 34% self-efficacy, 10% personal innovation and cost, 35% trust, 11% risk and 52% usefulness serves as a stimulus to potential users' intentions to adopt m-payment service in Nigeria. Recommendation there is need to integrate the construct into the strategies designed to promote the service adoption in Nigeria for future marketsby managers and mobile App developers in Nigeria.

Keywords: Adoption intention, mobile payment services, potential users, current users, Nigeria

I. INTRODUCTION

The impact and benefit of Information, Communication Technology (ICT) on the financial sectors especially the banking sector globally cannot be overemphasized. Mobile technology advancement has significantly transformed the functionality of mobile phones, into a one-stop-shopfrom the conventional instantaneous communication to wireless technology for financial transactions through mobile payment service technology.According to (50)there is a significant nexus between innovation and improvement in ICT and financial sector development. Financial sector development through e-commerce createsthe desirefor refined financial services which in many cases the traditional banking and payment systems cannot effectively and efficiently provide to consumers.

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(51), opine that mobile communication services create a handyrelationship between the deviceand the userespecially the smartphonesfor convenient of communication, entertainment, and transactions. The mobile technology services embrace a wide-range technology from network infrastructure to software application and communication equipment (53;54).

The services are considered, portable, efficient and universal.

The mobile payment (m-payments) technology is the fulcrum of mobile commerce (m-commerce) facilitating financial transactions and purchases.Electronictransaction (E-transaction) encircles the application of ICT, online and computerizedbusiness transaction system (39). The benefit and successof mobile commerce depend exclusively on consumers' acceptance, safety,and efficiency of m-payments transactions conducted through mobile phones, tablets or IPadterminals channels (36).

The improved functionality of mobile phones into a one-stop-shop has proportionately increased the number of active mobile phone lines in Nigeria. According to the Nigerian Communication Commission reportactive mobile phone lines increased from 144,631 in December 2017to 146 million in 2018showing an increase of 2,233,467. Smartphone users in Nigeria estimated at about 25 million and 40 million. It's projected to increase to 140 million by 2025.

The mobile telecommunication sub-sector contributes about 7.4% to the GDP in 2018 compared to 5.5% in 2017. According to the report, about 44% of mobile subscribers are users of 3G technology and about 4% users of 4G technology in direct comparison to over 18% 4G penetration in South Africa, and 16% in Angola.

Mobile broadband penetration in Nigeria is forecast to grow by 55% of the total population in 2025, 70% of the populacesare projected to adopt 3G connectivity and 17% 4Gconnectivity. From 2019 -2025 it's estimated that new mobile subscribers globally will increase by about 700 million to boost the number of mobile subscribers to 6billion in2025. Nigeria is expected to contribute 4-5% of the estimated 700 million new subscribers.

On average Nigeria is expected to contribute 7million new mobile subscribers annually to meet the 28 million quotas by 2025 (57).

The mobile market communication sub-sector in Nigeria has grown proportionately with large consumer-based. The acceptance rate of m-payment services is still below the threshold compared to the number of active mobile phone lines and smartphone users in Nigeria. (26) observed that only 23% of smartphone users in Nigeria are users of m-payment service. Despite innovation and advancement in mobile technology networks from 2G, 3G, 4G and the projected 5G by 2020.

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The rate of acceptance and adoption of m-payment services among smartphone users in Nigeria falls belowthe threshold. Empirical studies of (13); (15)focus on single user's perspective "the potential users"ignoring current users of m-payment; (19a,20b) focus on internet users, (22); (26); and (48); focus on owners of mobile phone. Employing the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT) to investigate individual consumer intents and acceptance of m-payment services. These studies ignore current user's experiences which has a ripple down influence on potential user's acceptance rate of m-payment especially in technologically evolving nations like Nigeria.

To empirically examine the cause-effect relationship between current and potential user's acceptance and adoption of m-payment in Nigeria. It's essential to examine current users' experience, perceive usefulness, trust, risk,ease ofamong otherinfluential factors as it may affect potential users, perceptions towards adopting m-payment services.

II. REVIEW OF LITERATURE

Mobile Payment Services (MPS) is a financial transaction process designed to fast track purchase, payment or transfer of monetary values of goods and services enjoy and delivery through the mobile device without the interfaces of the bank (55). Mobile devices encompass cell and smartphones, tablets and iPad.

The M-payment system technology offersservice providers and consumersa secure universal financial transaction platform from transaction initiation, to authorization, and confirmation (29). The M-Payment service transaction and confirmation terminals model include; Short message service (SMS), unstructured supplementary service data (USSD), the wireless application protocol (WAP) and mobile wallet and near field communication (NFC).

M-payment Service Workability

The M-payment service can be achieved:
Remotely and within network proximity.

1. Remotely achieved independently from initiationtoconfirmation using the transitional network, without interfaces"staff, merchant or POS system" (6; 21).
2. Network, proximity transaction requires interfaces "staff, merchant or POS system" (Smart Card) (56).

The bond between the smartphone andthe user has progressivelyreplaced the bond between the physical cash wallet and the users. The replacement Providesthe justification and the need for potential users to adopt m-payment technology which offers fast, safe, convenient, flexible and cashless transactions (25; 33).

M-payment services serve as a business strategy in technologically advanced nationsenhancing the competitive advantage prowess of financial and non-financial institutions, providing consumer's satisfaction through the ease of transaction.

Mobile banking and mobile payment are not comparable or alike phenomena as projected by various scholars. Mobile banking connects directly with the financial institution (the banks and the user), m-payment, requires a third party confirmation of the successful transaction (23); (30). M-payment allows direct payment of bills.

M-Payment Transaction Model

a. Carrier Billing:

The carrier billing is an m-payment model that transfers all charges from any technique of transaction directly to the user's phone bill. The carrier bill interface is regarded as the most user-friendly and most acceptable medium of m-payment service by current users, due to its fastness, flexibility, and proficiency in bypassing bureaucratic barriers. The registration process is less burdensome, understandable, accessible and compatible with any mobile device and brand (56). Its predominantly used for the purchase of digital content from developers and where there is no immediate access to any form of debit or credit card by consumer.

The advent of smartphones has reintroduced the carrier billing. The carrier billing servicestotal revenue in 2014 stood at about 3billion dollars and above in the United States. The revenue in 2019 and 2020 is projected to increase to $24.7billion. The introduction of carrier billing into google play increase sales by 300%.

According to Juniper Research, the potential value of digital content in Europe using carrier billing is projected to increase from 2.6billion euros in 2015 to about 14billion euros in 2020.

b. Near Field Communication (NFC):

the NFC technology aid financial transactions by allowing users to confirm transactions through their mobile app secure password. The NFC technology is compatible with mobile devices within network proximity establishing a two-way, short-range communication for instant exchange and transmission of information betweenmobile devices and terminal.

The NFC is not compatible with a wider network (30). (50) observed that NFC allows customers to customize their purchasing profiles and receive personalized offers, where available.

The features of NFC technology are relatively contemporary, having surmounted original hurdles that made it non-practicable among the mainstream user. The card reader interface between the smartphone and the user aid the personal setup of NFC terminalfor direct transactions bypassing terminal hurdles.

The card reader technology is currently adopted by mobile payment companies of PayPal, Intuit, and Verifone for ease of payment, and exchange for a minimal fee and is provided by the PayAnywhere technology.

c. Mobile Application:

Are specialized Apps, developed and designed by financial institutions or other money transfer service providers. The mobile app offers users a more streamlined interface and transaction setting that acceptsminimal input from users, whose transactions are measured to be de facto secured.

Despite the massive use of smartphones in everyday professional, operational and personal activities of Nigerians, m-payment service is still very unpopular among Nigerians. Hence, the acceptance rate and adoption of m-paymenttechnology depend solely on user's intentions, ease of use, risk factor, cost benefits, behavior among other constructs. The study reviewed the reasoned action theory (RAT),Planned Behavior Theory (PBT), and the Acceptance Model Theory (TAM) to examine factors that may influence the acceptance and adoption of m-paymenttechnology in Nigeria.

1. Theoretical Framework

a. The Reasoned Action Theory (RAT):

The reasoned action theory (RAT) of (2) propose that the behavior of a customer is directly dependent on his intentions to achieve a specific objective (subjective norms). Subjective norms are dependents on the individuals' attitudelink to beliefs, behavior, and motivations.

The weakness: The reasoned action theory fails to specify a particular type or model of belief or behavior proposed to influence consumer intention to achieve a specific objective. The Planned Behavior Theory (PBT) was proposed by (1) to address the gap in RAT.

b. Planned Behavior Theory (PBT):

The Planned Behavior Theory (PBT) of (1) introduce the Perceived Behavioral Control (PBC), to measure and control beliefs, behavior, and intentions influencing customer's abilities, situation, and assets towards adopting new technology and lifestyle.

The weakness: (32) observed inconsistency in results of studies using the control and PBC measure in envisaging the behavioral intentions and actual behavior of an individual.

c. Acceptance Model Theory (TAM)

(10) proposed the Acceptance Model Theory (TAM) to examine factors such as perceived usefulness (PU), and ease of usage (EOU)as factors responsible for the acceptance of new and improve the technology. The TAM model is important in examining and categorizing users of new and improved technology into more or less technologically savvy users. Studies of (52); (2014a, 2014b); (4); (22); (26;27); (48); 35) and (37) substantiate the above claims using the TAM model to segregate users into early users of smartphone, mobile phone users, online payment users, Internet users, and precise m-payment users. The TAM model is not without its shortcomings. (34) observed the frugal nature of the TAM model.(34) recommend familiarizationof the TAM through value-addition components to fast track better prediction on an individual's technology acceptance rate. Social and organizational variables of subjective norms, image, job relevance, output quality, and result demonstrability were familiarized into the TAM model using the TAM2 model.

(37) observed that innovations and advancement in technology are adopted by users majorly by decision process observation. The decision processobservation consists of; knowledge, persuasion, decision, implementation, and confirmation.Potential users consider acceptance based on their sensitivities of comparative advantage, ease of usage, compatibility, trialability, and observability.

The models adopted to examine the link between current and potential users of m-payment has its strengths and weaknesses.

The benefits, effectiveness, and efficiency of the TAM model in predicting and explaining potential user's actual behavior and intentions in adopting new innovation provides model credibility over other models in addressing the problem of this study.

The findings of (8)(4) and (26;27) substantiate these clams. This study adopts and modified the TAM model, in line with the recommendations of previous theoretical and empirical findings through the major constructs of usefulness, trust, ease of use, personal innovativeness, self-efficacy, behavioral intentions and actual use among other relevant constructs.

According to (41), and (21) market conditions, economic, financial sector development, cultural differences, and religious beliefs influence the behavioral intentions of individuals and play a vital role in the process of adopting new and innovative technology.

The construct used in studies in America, Europe, Asia, and the recommendation from these constructs may not necessarily work in Nigeria. According to (43) technologically developed nations especially Japan, China, USA, UK, Korea, will easily appreciate and adopt at ease new technologies than nations with a moderate level of technical know-how in technology like Nigeria.

This study employed the construct in figure (i) below to test and measure individual perceptions vis-à-vis the adoption of new financial technology the M-payment services.

Figure (I) M-Payment Adoption Intention Model in Nigeria
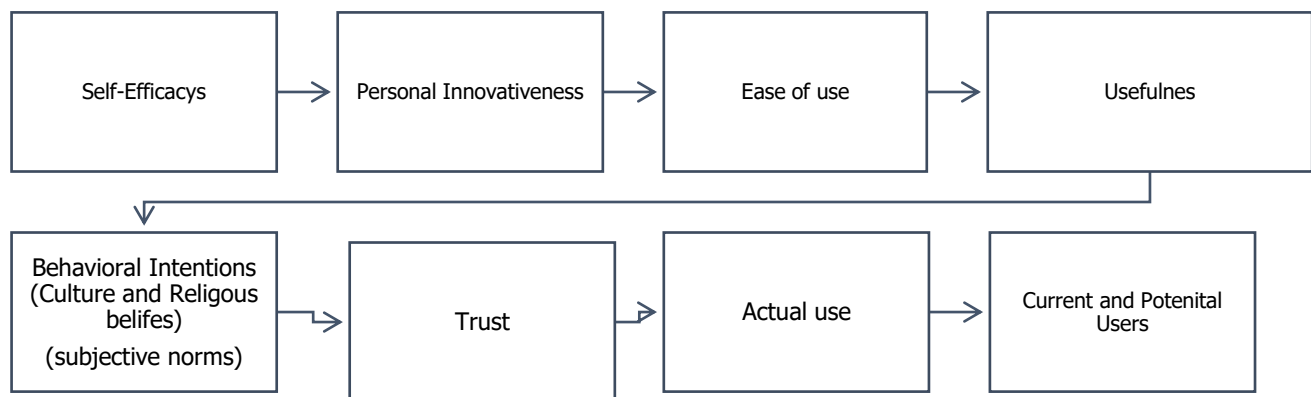
Source: Authors (2019).

a. Self-efficacy

Self-efficacy measures the extent an individual relies on a specific set of skills and abilities to execute and achieve a specific objective(29). (24) opined that there is a positive and significant nexus between ease of use, self-efficacy, and consumer intention to adopt new mobile technology. (18) substantiated the findings. (16)

confirmed that self-efficacy positively influenced and impact on m-commerce adoption through individual purchase intentions.

The self-efficacy construct is employed to test the hypothesis;

H$_0$: Self-efficacy has no significant effect on the current and potential user's behavioral intentions to adopt and sustain the use of m-payment services.

b. Subjective Norm (Behavioral Intentions)

Subjective norm measures the extent individual behavioral intentions are influenced by family, associates, cultural, and religious beliefs and other societal opinions while considering a specific decision (2). The benefit of the subjective norm cannot be overemphasized, as a result of its impact on potential adopters' of m-payment technology at the initial stage, especially where potential adopters lack adequate knowledge on the practicalities of the service (36). Depending on the current user's opinions and experiences to confess feelings of uncertainty vis-à-vis the consequences of using m-payment services at the initial stage (19). Empirical findings on subjective norm revealed that the behavioral intentions of potential adopters of m-payment are projected to be stronger and dependent on the experience shared by current users (9); (23); (48); 35. (5)opine that positive experience shared by current users like friends, relatives, associates, and family members stimulate the urge in potential adopters to adopt new services technology. The subjective norm construct is employed to test the hypothesis;

H$_1$: Subjective norm has no significant impact on current and potential users 'behavioral intentions to adopt and sustain the use of m-payment services.

c. Personal Innovativeness

Personal innovativeness measures individual urge and wiliness to adapt, explore and try out new technological innovations (29). A personal level of innovativeness varies across customers and is dependent on the level of knowledge and feasibility the potential user has (14). Innovativeness positively influences the adoption of mobile retailing (45).

Personal innovativeness in pre-adoption and post-adoption stages of m-payment services in China are crucial determinants of m-payment adoption (35). According to (29),the majority of Indians are not technological incline, exploring new information technology and mobile services requires personal innovation. It's the fulcrum for potential users adopting of m-payment technology. Ease of use significantly influences the determinant of personal innovation to m-payment adoption.The personal innovation construct is employed to test the hypothesis;

H$_1$: Personal innovativeness has no significant impact on current and potential users 'behavioral intentions to adopt and sustain the use of m-payment services.

d. Ease of Use

Ease of use shows the extent to which new technology can be adopted and use without stress and its effortless. It's considered relatively free of physical, emotional, or psychological efforts for prospective adopters. The ease of use is a necessary precondition for most consumers considering the adoption of m-payment services. (44) unanimously established that ease of use directly affects the

behavioral intention of potential users to adopt m-payment services.

The impact and benefits of ease of use vary from experience users to inexperienced users. Inexperience user is most likely to focus on ease of use while experience users focus on usefulness (32). The ease of use construct is employed to test the hypothesis;

H$_1$: Ease of use has no significant effect on current and potential users 'behavioral intentions to adopt and sustain the use of m-payment services.

e. Usefulness

The usefulness construct shows the extent to which consumer's beliefs that embracing new andparticular technology will enhance their operational performance (10). The application of the usefulness construct demonstrates the importance of the construct in m-payment service in facilitating, smooth transactions, payment of utility bills,smartphone subscriptions, and dish TV, mobile shopping, and ticket booking among others. (19) acknowledged the usefulness construct to be a strong predictor of potential user's behavioral intention to adopt m-payment services after evaluation of all related benefits among current and potential users.

(17) report a positive and significant nexus between the usefulness of m-payment service through user-centric characteristics of various users. The findings of (3); (11)(15) and (17) substantiate the importance of the usefulness construct in new technology adoption intention of potential users. Current users are less concern with the usefulness construct and are more focus on trust and risk factors.The usefulness construct is employed to test the hypothesis;

H$_1$: Usefulness constructhas no significant effect on current and potential users 'behavioral intentions to adopt and sustain the use of m-payment services.

f. Trust

Trust measures expectations of consumers towards service providers in providing stable, reliable and responsive services to facilitate smooth and efficient transactions. Trust comprises of reliability, facility, and goodwill. Reliability measures service providers'trust to uphold their obligations of providing reliable and responsive services.The facility measures the technical-knowhow of the service providers to fulfill their promises and safeguard consumer interest against internet fraudsters. Trust is the ultimate requirement determining consumer's adoption of a particular technology provided by the financial service institutions.

(31), (7) proposed a trust-based model in Singapore and acknowledged trust as a vital force compared to other factors in adopting new and innovative technology. (35) report that trust significantly impacts on cross-environmental relationships through a proposed trust transfer theory and valence framework. Service quality significantly impacts trust and influences users' continuous use of m-payment services (37). Trust is a multidimensional construct in different domains of human endeavors (6).The trust construct is employed to test the hypothesis;

H$_1$: There is no significant relationship between trust, current and potential users' behavioral intentions to adopt m-payment services.

g. Risk

Risk is the degree of uncertainty associated with the adoption and use of new technology among consumers. High-risk factor detersimprove technology adoption. The higher the risk level associated with new technology the lower the adoption and acceptance rate. Thus, a higher risk rate directly influences potential adopters' intention to adopt m-payment services. (28) observed, that potential adopters are less motivated to adopt new payment methods if the risk associated with the new method is higher than the former. (48) confirmed the negative impact of risk on behavioral intentions of Malaysians to adopt new mobile banking services. Risk is identified as a critical determinant in adopting new innovation in technology. The risk construct is employed to test the hypothesis;

H₁: Risk has no significant effect on current and potential users' behavioral intentions to adopt m-payment services.

III. METHODOLOGY

This study used the survey design to examine current and prospective users of m-payment services in Nigeria. The study developed various constructsto test the research hypotheses from extant literature, to align with m-payment service. Nigeria is a country with a young population. The target population includes individuals age 18 years and above who are current users of smartphones giving the possibility of adopting m-payment services than individuals without smartphones.

Data were collected through questionnaires and interviews. Current and potential users where randomly interview in Abuja the capital of Nigeria and Lagos state the business hup of Nigeria. To ensure the understanding of the respondents, the following conditions were set bothering on if they had participated in any survey of this nature before and whether they were users and potential users of m-payment services.

The population of the study is 500, a total of 497 questionnaires was collected. Out of which 27 were dropped due to incomplete information and many missing values. 470 collected questionnaires were used toevaluate the effect of current users on potential users of m-payment in Nigeria. Descriptive statistics were used for demographic analysis of the respondents, and the Cronbach's alpha test was conducted for internal consistency and for the construct reliability.

Model Specification

The regression equation formulated based on the construct is as follows:

$MP = \beta_0 + \beta_1 SE_1 + \beta_2 SN_2 + \beta_3 PI_3 + \beta_4 EU_4 + \beta_5 US_5 + \beta_6 TR_6 + \beta_7 RI_7 + \mu$ …………eq (1)

Where; MP = M-payment Services adopters (current and potential users)
SE = Self-Efficacy,
SN = Subjective Norm,
PI = Personal Inventiveness,
EU = Ease of Use
US = Usefulness
TR = Trust
RI = Risk
B_1, β_7, = coefficients of the parameter estimate or the slopes
β_0 = Intercept of the regression equation
μ = Error term

IV. DATA PRESENTATION AND INTERPRETATION

Table 1 shows a pooled summary of respondents group into current and potential users and locations

Table 1

Users		Frequency	Percent
Valid	Current Users	140	29.8
	Potential Users	330	70.2
	Total	470	100.0
Location		**Frequency**	**Percent**
Valid	Abuja FCT	235	50.0
	Lagos State (Business Hup)	235	50.0
	Total	470	100.0

Source: Authors (2019)

Table 2. Demographic Profile of Respondents

Summarizes the demographic profile of the 470 respondents in terms of their gender, age, and occupation.

Gender		Frequency	Percent
Valid	Male Potential Users	60	12.8
	Female Potential users	80	17.0
	Male current Users	150	31.9
	female current users	180	38.3
	Total	470	100.0
Age		**Frequency**	**Percent**
Valid	40-49 Potential User	53	11.3
	18-20 current User	10	2.1

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	20-29 Current User	50	10.6
	30-39 Current User	32	6.8
	40-49 Current User	29	6.2
	50-59 Current User	15	3.2
	60 above Current User	5	1.1
	18-20 Potential User	40	8.5
	20-29 Potential User	119	25.3
	30-39 Potential User	97	20.6
	40-49 Potential User	3	.6
	60 above Potential User	8	1.7
	50-59 Potential User	9	1.9
	Total	470	100.0
Occupation		**Frequency**	**Percent**
Valid	Pensioner Current user	5	1.1
	Student current User	75	16.0
	Civil Servant current User	11	2.3
	Entrepreneur current User	20	4.3
	Company Staff current User	30	6.4
	Pensioner Potential User	15	3.2
	Students Potential user	115	24.5
	Civil Servant potential user	48	10.2
	Entrepreneur Potential user	100	21.3
	Company staff potential user	51	10.9
	Total	470	100.0

Source: Authors (2019)

Reliability and Validity Analysis

To ensure that collected data are reliability for a meaningful analysis. Cronbach's alpha test was conducted on all the constructs. The values of all constructs are 0.763 (Table 3).

Cronbach's alpha value of 0.763 is a good indicator of reliability (49). Therefore, the proposed model is reliable as well as valid for further analysis.

Table 3 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.763	.733	7

Source: Authors (2019)

Test of Hypotheses

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.911[a]	.830	.827	.19019	.830	322.212	7	462	.000	.025

a. Predictors: (Constant), Risk, Subjective Norm, Self-Efficacy, Personal Innovation, Ease of Use, Trust, Usefulness
b. Dependent Variable: M-Payment
Source: Authors (2019)

Table 5 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.586	7	11.655	322.212	.000[b]

Residual	16.712	462	.036		
Total	98.298	469			

a. Dependent Variable: M-Payment

b. Predictors: (Constant), Risk, Subjective Norm, Self-Efficacy, Personal Innovation, Ease of Use, Trust, Usefulness

Source: Authors (2019)

Table 4 report model summary and the fitness of the regression model. The higher the R^2 value the more robust the regression model. The R^2 of 0.83 (83%) is the coefficient determinant explaining the variation in the dependent variable as accounted for by the independent variables with an unexplained variation of 17%. The F-statistics of 322.212 and the corresponding probability value of 0.000, shows that the overall result is statistically significant for a robust analysis. The study constructs of self-efficacy, personal innovativeness, ease of use, usefulness, trust, risk, and subjective norms significantly impact on current and potential users 'behavioral intentions to adopt m-payment services at 5% significant levels.

Table 5 the ANOVA results shows that the independent variables are statistically significant in predicting the impact on the dependent variable, F = (7,462) = 322.212, P< 0.000. The ANOVA result further validates the robustness of the regression analysis. The constructs of self-efficacy, personal innovativeness, ease of use, usefulness, trust, risk, and subjective norms significantly impact on current and potential users 'behavioral intentions to adopt m-payment services at 5% significant level.

Table 6   **Coefficients**[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.693	.046		14.965	.000		
Self-Efficacy	.134	.030	-.191	-4.420	.000	.198	5.053
Subjective Norm	.027	.021	-.039	-1.289	.198	.407	2.454
Ease of Use	.348	.035	.653	10.050	.000	.087	11.475
Personal Innovation	.010	.036	-.016	-.272	.786	.109	9.146
Usefulness	.052	.058	.082	.905	.366	.045	22.040
Trust	.351	.053	.532	6.669	.000	.058	17.265
Risk	.111	.051	-.166	-2.194	.029	.064	15.615

a. Dependent Variable: M-Payment

MP = 0.693 + 1.34SE + 0.027SN + 0.348ES + 0.010PI + 0.052US + 0.351TR + 0.111RI

From the result in table 6, it can be inferred that a unit increase in current user's self-efficacy increases potential user's self-efficacy to adopt m-payment services by 1.34%, subjective norm 27%, personal innovation 10%, risk 11%, ease of use .348%, usefulness.052% and trust .351%.

V.   DISCUSSION OF THE RESULTS

H₁: current user's self-efficacy has a significant effect on potential user's behavioral intentions to adopt m-payment services. The effect of self-efficacy on current users' will be greater on potential users at 1.34%. Finding is consistent with the results of (8) and (11).

H₁: The subjective norm of current users has a significant effect on the potential user's behavioral intentions to adopt and sustain the use of m-payment services. The effect of Subjective norm on current users' will be greater on potential users at 27%.

H₁: Personal innovativeness of current users has a significant effect on potential user's behavioral intentions to adopt m-payment services. The effect of personal innovativeness on current users' will be greater on potential users at 10%.

H₁: Current user's ease of use significantly impact on potential user's behavioral intentions to adopt m-payment services. The effect of ease of use on current users' will be greater on potential users by 0.348%. positive ease of use (+0.348) proves its relevance to potential users as a key factor in adopting and using m-payment service in Nigeria.

The result substantiates the results of (3) and (4) among others. Potential users can adopt m-payment only when they find it easy in comparison with other traditional methods of financial transactions.

H₁: Usefulness of m-payment services to current users significantly impact on potential user's behavioral intentions to adopt m-payment services. The effect of usefulness on current users' will be greater on potential users by 0.052%. Usefulness is positive (+0.052), plays a vital role in motivating potential users to appreciate its usefulness, effectiveness, and efficiency over existing channels of payment. The result buttresses the results of (11) and (37) among others. Potential user adopts only when there are extra benefits and cost is less.

H₁: Current user's trust in m-payment services significantly impacts on potential user's behavioral intentions to adopt m-payment services. The effect of trust on current users' will be greater on potential users by 0.351%. Trust rate is positive (+0.351), that is trust plays a vital role in the adoption of new technological innovations especially network providers providing efficient networks for successful transactions.

H₁: the risk factor of m-payment on the current user's significantly impact on potential user's behavioral intentions to adopt m-payment services. The effect of risk on current users' will be greater on potential users by 0.111%.

The risk rate is negative (−0.111), that is, the higher the risk perceived, the lower the intention of adopting new technological innovations such as m-payment, which has a significant effect on potential user's adoption (40).

VI.   CONCLUSION

Innovation in technology and the financial system globally especially in Nigeria has made m-payment an alternative system for financial transactions. The m-payment is gradually gaining users in Nigeria. The construct factors affecting m-payment adoption varies across countries. This study fills the gap by developingconstruct factors affecting m-payment adoption intention in Nigeria. Using the Abuja and Lagos the business hup of Nigeria as the scope of the study. The findings indicate that the constructs of SE, SN, PI, EU, US, TR, and RI" significantly impact on the current and potential user's adoption behavior of m-payment services in Nigeria.

The findings also revealed that individuals' perceptions of the constructs are vital elements in their consideration of m-payment services. The practical implications of these findings show potential users' intentions are dependents on subjective norms, self-efficacy, personal innovation, and cost, trust, risk, and usefulness. There is a need to integrate the construct into the strategies designed to promote the service adoption in Nigeria for future markets by managers and developersof mobile App for Nigeriens.

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