Gender and Mobile Payment System Adoption among Students of Tertiary Institutions in Nigeria

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Abstract— **This study examines the relationship between gender and the factors that determine the adoption of mobile payment system among the students of tertiary institutions in Nigeria. The researchers focused especially on examining how the influence of the predicting variables differs by gender of the users. Technology Acceptance Model (TAM) was used with two additional variables to form the conceptual model which comprises of perceived usefulness (PU), perceived ease of use (PEOU), perceived compatibility (PC) and social norm (SN). Survey research method was used which involved the students of Bayero University Kano (BUK), North-West University, and Kano University of Science and Technology (KUST) Wudil, Kano, Nigeria. Of the 400 questionnaires distributed, 214 valid questionnaires were used. Our findings reveal that PEOU, PU and SN influence the behavioural intention to adopt mobile payment system among the students. The findings from the independent t-test also revealed that the influence of PEOU and SN differs among the gender of the students, with male students having high perceived ease use (PEOU) over their female counterpart, while social norm (SN) influences female students more than their male counterpart in adopting mobile payment. However, no significant difference was found in the general adoption of the mobile payment system among gender. The implications for both practitioners and academia as well as recommendations for future studies were also discussed.**

Keywords-mobile payment system; students of tertiary institutions; technology acceptance model (TAM); gender; Nigeria

I.   INTRODUCTION

The proliferation of handheld devices coupled with the high-speed mobile network has paved way for people to constantly interact and conduct their transactions. Just as the Internet and e-commerce transformed the way we advertise, shop for and buy goods and services, wireless devices and mobile payment system are poised to create another revolution in the world of commerce. Consumers can enjoy the advantages of convenience and time saving by using mobile payment system. The number of mobile users is continually growing, so this platform will serve as a facilitator for mobile payment development and applications. Hence, there is a brighter future for mobile payment system. Mobile payment system is the technology trend all over the world. Mobile phones are convenient, it is something you can use at any point and anywhere. Therefore, it is the fastest way to promote financial inclusion. The cashless economy policy of the Central Bank of Nigeria (CBN) was designed to provide mobile payment services, break down the traditional barriers hindering financial inclusion of millions of Nigerians and bring low-cost, secure and convenient financial services to urban, semi-urban and rural areas across the country. The pilot scheme of mobile money, one of the financial services introduced by the Central Bank of Nigeria (CBN) to achieve a cashless economy took off in Lagos one of the Nigerian states in January 1, 2012 and followed by a phased implementation to additional five states in July, 2013 in order to create more awareness and aid the adoption of the new initiative in the country. Under the payment system, customers can do their normal basic financial transactions on a daily basis by making payments for goods and services or by engaging in person-to-person transfer directly on their GSM phones. For instance, the system also allows for payment to be made through a mobile phone after purchases have been made at a grocery store. The shop owner in turn, receives instant payment electronically [1].

According to the Central Bank of Nigeria (CBN) [2], the payments system plays a very crucial role in any economy, being the channel through which financial resources flow from one segment of the economy to the other. It, therefore, represents the major foundation of the modern market economy.

Statistics from the Nigerian Communication Commission (NCC) revealed that Nigeria currently has over 120 million mobile subscribers as of June, 2013. MTN is the largest mobile operator in Nigeria with a total of 55,238,430 subscribers, Globacom is the second largest with 25,019,862 subscribers, Airtel has 21,591,904 subscribers, Etisalat has 15, 303,647 subscribers, Mtel has 258, 520 subscribers, while all the Code Division Multiple Access (CDMA) operators have a total of 2, 818, 422 subscribers in Nigeria [3].

As almost two third of Nigerians already have and use mobile phones, mobile payments may be better received by consumers than cards as the technology simply offers another service within a popular pre-existing product. The mobile payment system providers are making investments into the mobile payment infrastructure for effective provision of mobile payment service to the market. Hence, it is important for mobile payment service providers to understand the factors

influencing the intention to use or adopt mobile payment especially from the aspect of gender, in order to obtain the expected return on investment made [4]. A clear understanding of these factors will enable mobile payment service providers to develop suitable marketing strategies, business models, processes, awareness programmes and pilot projects [5].

Considering the proliferation of mobile technological devices and how they are being used coupled with the continuous rise of consumers' desire for a timely and convenient payment system [6], researchers made prediction that there is a brighter future for mobile payment in facilitating the attainment of mobile commerce to a higher level [7] [6]. Mobile payment system is poised to create another revolution in the world of commerce. It has been asserted that in developing countries where the adoption of mobile phones is very high but the diffusion of banks is inadequate, mobile payment system will positively impact their socio-economic status [8].

However, findings from various researches show that despite the continuous emerging payment solutions and abundant facilitating technologies, the level of mobile payment system adoption is quite low [9] [10] [11]. Some service providers and consumers are still reluctant to adopt because they are skeptical about the advantages of the mobile payment system. Researchers have explained the way some of the initiatives of mobile payment were discouraged to stop in the European Union [10]. It has also been observed that both consumers and the service providers have the habit of wait and observe the trend in adopting and delivering mobile payment system, as a result of which the rate of adoption is not very encouraging [12].

This situation necessitated the research in order to find out factors that influence the decision of consumers to adopt the mobile payment system, and also to find out whether the influence of the predicting factors differs by gender. Having a proper knowledge of the factors and their influence among the gender of the mobile payment consumers will provide great management insight to ensure that people make use of the new payment service. This may subsequently change and influence the behavioural intention of the consumers to adopt the technology [13] [8]. It has also been shown based on the literature reviewed that researchers focused their attention mainly on mobile payment business model [14] [15] [16] and mobile payment software/infrastructures architectures [17] [18]. As such more studies on factors influencing the adoption of mobile payment system from the aspect of gender are required. Observation was made that researchers paid very little attention on issues regarding Mobile payment system in developing countries [19].

Therefore, there is need for research on mobile payment system to be conducted especially from the view of developing countries like Nigeria, in understanding the factors influencing the decision of consumers to adopt the new technology. Thus, this study explores the predicting factors and their influence on gender in the adoption of mobile payment system among students of tertiary institutions in Nigeria, in order to assist policymakers, to ensure a successful implementation of the scheme in the country.

II. LITERATURE REVIEW

One of the most widely employed theoretical model for explaining user's acceptance of a new information technology is the Technology Acceptance Model (TAM) by [20]. This is mostly because of its advantages, such as excellent measurement properties, empirical soundness, and conciseness [21]. Based on the model, Davis posits two attitudinal determinants, namely, perceived usefulness (PU) and perceived ease of use (PEOU) in predicting the adoption of new technology. However, perceived compatibility (PC) and social norm (SN) were integrated into the original TAM in order to form a strong conceptual model for this study. PC from Innovation Diffusion Theory [22], was included in this study as this construct is consistently related to consumer's adoption [23]. To increase the predicting power of m-payment adoption, SN is also included from the extended TAM model, namely, TAM II as the construct is vital in influencing the user's behavioral intention to use mobile services [24].

A. Perceived Ease of Use (PEOU)

PEOU refers to the extent in which an individual believes that a system would be easy to use [20]. A system should not be complex in order to encourage its adoption [22]. To encourage the adoption of mobile payment system it should be made easier for consumers to learn and use, this will increase the rate of adoption [25]. In a study conducted by Jeong and Yoon, they found that perceive ease of use positively influences the adoption of mobile payment services [26]. Similar findings by other studies on the adoption of mobile technology confirmed that [27] [28].Thus, the researchers hypothesized the following hypothesis:

H1: there is positive and significant relationship between Perceived ease of use and adoption of mobile payment system.

B. Perceived Usefulness (PU)

PU refers to the extent to which a person believes that using a particular system would benefit an individual's job performance [20]. Employing the services of mobile payment system by people is subject to the condition that the system is useful for their financial transactions [25]. There are literatures proving that PU is positively linked with the adoption of mobile payment [29] [30] [25]. Ghur [31] through a survey on 270 respondents in Finland, Germany, USA and Japan found that PU positively influences the adoption of mobile payment system. Therefore, the researchers proposed the following hypothesis:

H2: Perceived usefulness has positive significant influence on adoption of mobile payment system.

C. Perceived Compatibility (PC)

PC is defined as "the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters" [22]. Any idea

that is not compatible with the values and norms of an individual will not be adopted as an innovation that is compatible. From the perspective of mobile payment, compatibility means the ability of the users to mix the service with behavioural pattern [13], which may subsequently increase the adoption of mobile payment [6]. Chen [7] found that perceived compatibility has positive significant relationship towards mobile technology and service adoption. Therefore, the researchers proposed the following hypothesis:

H3: Perceived compatibility has positive significant influence on adoption of mobile payment system.

D. Social Norm (SN)

SN is defined as "the degree to which an individual believes that people who are important to him think he should or should not perform the behavior in question" [32]. Evidence from empirical research also showed that social norm affects e-payment and internet banking adoption positively [24]. Venkatesh & Davis [33] provide a connection between social norm and behavioral intention as they believe that people may choose to carry out a behavior even if they do not feel comfortable about it provided some important referent individuals have the believe that they should perform the behavior (i.e., obeying a compulsory policy). Social norm has also been found to have positive relationship towards the adoption of mobile payment [10]. This factor plays a very important role in influencing the decision of consumers to use a new technology especially when introduced for the first time. Mobile payment system is being tested in the country for the first time. Therefore, due to the cultural sensitivity of the people in northern Nigeria, especially the core North which affects most of the policies of the federal government in the region, the researchers proposed the following hypothesis:

H4: Social norm has positive significant influence on adoption of mobile payment system.

E. Gender and Adoption of New Technology

There are evidences from various studies suggesting that men are more likely to adopt a new technology than their female counterpart, even those women who adopted it use it at a lower degree compared to men. For instance, a study conducted by Liaw [34] found that the positive perceptions of male students towards the use of web technologies and computers are more than that of their female counterpart. Similar finding also revealed that the willingness of males to adopt a newly introduced technology is by far more than that of their female counterparts [35]. Shashaani and Khalili [36] also found that in terms of confidence, males had high confidence to operate computers than females, although women strongly believe in equal gender skill and expertise in operating computers. Allyn [37] found that there are different purposes for which males and females employ the services of the computer in their work. Another study revealed that it is less likely for female students to pick a profession in information technology [38]. It has also been found that in terms of status update and uploading photographs in mobile Facebook adoption there were differences in gender [61].

However, there are studies indicating that the gap in gender is diminishing [39]. Morahan-Martin and Schumacher [40] claimed that gender do not predict competency and experience in Internet and computer, but the attitude towards the new technology. Few studies have considered gender differences on consumer behaviour [27] and in the perceptions and adoption of technology [41].

Gender yields different manners of technology use. Many studies have shown the gender-associated differences about the acceptance of new technology [42] [43]. Some studies [44] [35] found that males are more influenced by perceive ease of use (PEOU) and perceive usefulness (PU) than females. Social norm (SN) was also found to have significant influence on gender [45]. Women were found to be influenced by social norm more than men [35]. Therefore, the researchers hypothesized the following hypotheses:

H5: The influence of PEOU on Intention to adopt mobile payment is significantly higher among men than women.

H6: The influence of PU on Intention to adopt mobile payment is significantly higher among men than women.

H7: The influence of SN on Intention to adopt mobile payment is significantly higher among women than men.

III. RESEARCH FRAMEWORK

Based on the literature reviewed, a research framework is developed to explore the relationship between the various constructs. The proposed research framework is as shown in Fig 1. The model consists of four independent variables namely: perceive usefulness, perceived ease of use, perceived compatibility, and social norm. The dependent variable is the behavioural intention to adopt mobile payment system. The purpose of this research is to answer the following research questions:

RQ1: What are the significant predictors of mobile payment system adoption among mobile users?

RQ2: Does the influence of the predicting variables differ by gender of the mobile users?

RQ3: Is there any difference in the general adoption of mobile payment among gender?
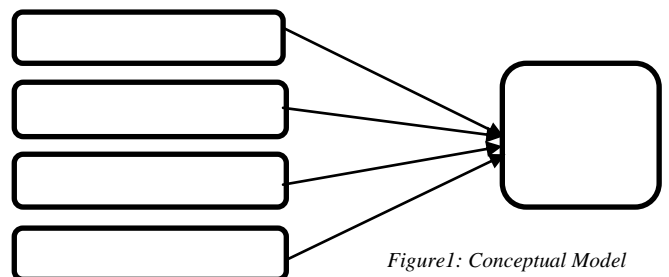

Figure1: Conceptual Model

IV. METHODOLOGY

A. Participants

The research study involves students in higher institutions of learning that comprises of Bayero University Kano (BUK), North-West University, and Kano University of Science and Technology (KUST) Wudil, Nigeria who owned account with a bank and use mobile payment system as the target population. Though their exact data was not readily available the researchers used purposive sampling technique to reach the target respondents. According to [46] purposive sampling starts with a purpose in mind and the sample is thus selected to include people of interest and exclude those who do not suit the purpose.

B. Procedure

The researchers personally administered the questionnaire to the target respondents who operate an account and use mobile payment system. The respondents were met in their respective universities and the questionnaires were administered to them after thorough explanation of the purpose of the study and the instrument regarding how to respond to the demographic items of the questionnaire. The respondents were asked to answer the questionnaires instantly and submit back to the researchers. There are two sections contained in the self-administered questionnaire used for this study.

C. Instrument

The first part of the questionnaire involves nominal scale items which cover demographic information consisting of gender, mobile payment experience and usage. The second part of the questionnaire includes the conceptual variables which were measured using five-points Likert scales, ranging from (1) "strongly disagree" to (5) "strongly agree". The items in the questionnaire were adapted from different sources. PEOU was measured with 2 items adapted from [47] [33] [48]. PU with 3 items adapted from [47] [48]. PC with 3 items adapted from [49] [25] [48]. SN with 4 items adapted from [33] [50] [48]. Lastly, student's intention to adopt mobile payment system with 4 items adapted from [20] [25] [48].

The researchers distributed 400 questionnaires to the students' sample from the universities based on the 5% margin error. Cochran [51] contends that "one method of determining sample size is to specify margins of error for the items that are regarded as most vital to the survey. An estimation of the sample size needed is first made separately for each of these important items". He further argued that 400 samples size are adequate to take care of non-responsive bias and result of the survey can be generalized to the population within the limits of random error. Out of the 400 questionnaires distributed only 214 were valid and used for the study making 53.3% response rate. Reliability and validity of the measurement instrument were first established. Then, multiple regression analysis was used to examine the research hypotheses, and independent t-test was employed to determine whether the influence of the predicting variables differs by gender of the students. The services of Statistical Package for Social Science (SPSS) software version 20 was used in analysing the data.

V. DATA ANALYSIS

Table 1 presents the descriptive results of the nominal scale values in the study across gender. The results show that male respondents who owned accounts with commercial banks are higher 163 (76.2%) as against female counterpart with 50 (23.4%). The findings show that male respondents tend to operate account in the banks more than female students, indicating that male students are likely to have independent sources of income more than their female counterparts. Besides that the findings regarding mobile payment transaction show that male respondents use mobile payment system more than female counterparts with 161 (75.2%) against 49 (22.9%) respectively, indicating that male students use and recognize the mobile payment system more than female students.

The results on the frequency of using mobile payment show that on the part of males 45 (21.0% of the male respondents) use it 2 to 3 times within a week, 68 (31.8% of the male respondents) use it 2 to 3 times within a month, 51 (23.8% of the male respondents) use the mobile payment system once in a month, while only 1(0.5%) of the male respondents uses the mobile payment system daily. While the results pertaining the female frequency of using mobile payment show that 4 (1.9% of the female respondents) use it 2 to 3 times within a week, 15 (7.0% of the female respondents) use it 2 to 3 times within a month, 30 (14.0% of the female respondents) use the mobile payment system once in a month.

TABLE 1: NOMINAL SCALE VALUES ACROSS GENDER

Gender		Frequency	Percentage
	Do you have Bank account?		
Male	Yes	163	76.2
	No	1	0.5
Female	Yes	50	23.4
	No	0	0
	Have you used mobile payment?		
Male	Yes	161	75.2
	No	3	1.4
Female	Yes	49	22.9
	No	1	0.5
	Mobile payment use frequency		
Male	2-3 times a week	45	21.0
	2-3 times a month	68	31.8
	Once in a month	51	23.8
	Daily	1	0.5
Female	2-3 times a week	4	1.9
	2-3 times a month	15	7.0
	Once in a month	30	14.0

As depicted in table 2, the reliability of the instrument was tested and found to have a Cronbach's Alpha ranging from 0.72 to 0.8 which is quite high considering the recommended value of minimum alpha 0.7 by Nunnally [52]. This indicates

that the items in the questionnaire have a high level of internal reliability.

The validity of the instrument was also measured through exploratory factor analysis (EFA). The outcome of EFA reveals that the items and its relevant constructs have met the requirements in which Kaiser-Meyer-Olkins (KMO) and Bartlet's test of sphericity were greater than 0.5 and 0.000 respectively. Similarly, other indicators as anti-image, communalities were all adequate and greater than the cut off value of 0.5. Principal component analysis was used in the procedure and variance explained of the respective constructs obtained were PEOU (68.91%), PU (81.20%), PC (81.35%), SN (50.86%) and BI (63.15%).

TABLE 2: CONSTRUCTS RELIABILITY AND VALIDITY ANALYSIS

Constructs	No. of Items	Mean	Std. Dev.	Cronbach's Alpha	Kaiser Meyer Olkin (KMO)
PEOU	2	4.1121	0.54518	0.753	0.605
PU	3	4.1324	0.31913	0.806	0.516
PC	3	3.9720	0.42514	0.729	0.533
SN	4	3.7664	0.35400	0.734	0.524
BI	4	4.0950	0.48321	0.801	0.705
Note: PEOU = Perceived Ease of Use, PU = Perceived Usefulness, PC = Perceived Compatibility, SN = Social Norm, BI = Behavioural Intention					

A Pearson correlation was computed in order to examine the bivariate relationships among the variables PEOU, PU, PC, SN and BI. The results of the correlation coefficients among the variables revealed that the highest correlation is 0.555 as depicted in table 3. As recommended by Field [53], the value of the correlation coefficient should be less than 0.8 in order to avoid multicollinearity. Therefore, multicollinearity problem does not exist in this research.

TABLE 3: PEARSON'S CORRELATION ANALYSIS OF THE VARIABLES

Variables	BI	PEOU	PU	PC	SN
BI	1				
PEOU	0.509*	1			
PU	0.555**	0.550**	1		
PC	0.506*	0.426	0.211	1	
SN	0.285	0.285	0.538*	0.219	1

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

In this section multiple regression analysis was used in obtaining the significant predictors and the findings were also used to test the hypotheses.

The services of Variance-Inflation-Factor (VIF) was employed in order to test whether multicollinearity problem exist among the variables. The result in table 4 shows that all the tolerance indicators are higher than 0.1 with VIF values lower than 10. Therefore, it has been proven by this result that this study does not have multicollinearity problem [54].

With regard to the coefficient of determination, R^2 indicated 0.340, meaning that 34 percent of the changes in behavioural intention (BI) to adopt mobile payment system can be explained in the variables, while the F-statistics for this research was significant at (Sig < 0.1) indicating the fitness of the model. The regression model shows that the independent variables PEOU, PU and SN are significantly and positively related to behavioural intention to adopt mobile payment system in which PEOU ($p < 0.05$), PU ($p < 0.05$) and SN ($p < 0.05$) respectively. The result of the model demonstrates that PEOU, PU and SN have positive impact on behavioural intention to adopt mobile payment system. However, individual regression indicates that PC does not significantly relate to the behavioural intention to adopt mobile payment system with ($p > 0.05$).

The following research hypotheses H1, H2 and H4 were supported and therefore accepted meaning that PEOU, PU and SN all had significant and positive influence on the intention of students to adopt mobile payment system. While hypothesis H3 was not supported and therefore rejected meaning that PC had no significant influence on the intention of students to adopt mobile payment system

TABLE 4: REGRESSION ANALYSIS RESULTS OF THE CONSTRUCTS

Model	Unstandardized Coefficients		Stdzd Coeff.			Collinearity Statistics	
	B	Std. Error	β	t	Sig.	Tolerance	VIF
(Const)	0.664	0.365		1.765	.000		
PEOU	0.370	0.052	0.417	7.158	.000	0.912	1.096
PU	0.467	0.088	0.308	5.290	.000	0.912	1.096
PC	0.195	0.050	0.069	1.166	.245	0.886	1.128
SN	0.381	0.053	0.206	4.814	.026	0.973	1.027
R^2	0.346						
Adj. R^2	0.340						
Sig. F	0.000						
FValue	55.742						

Dependent Variable: BI to adopt.

Table 5 depicts the independent t-test results to determine whether the influence of the predicting variables differ by gender of the students. The predicting variables are PEOU, PU and SN as revealed by the results of the multiple regression analysis. The t-test results show significant differences in PEOU (t (212) =3.05, $p < 0.05$) and SN (t (212) = -2.74, $p < 0.05$). The descriptive results show that male perceived ease of use (PEOU) higher than the female counterparts with (m =4.17 and 3.91; SD =0.468 and 0.712) respectively. Similarly, subjective norms (SN) influences female in adopting mobile payment system more than male counterpart with (m =3.88 and 3.73; SD =0.438 and 0.316) respectively, indicating that subjective norm tend to affect the degree to which female adopt mobile payment system better than male counterparts. Meanwhile, no significant difference was found in PU among gender with (t (212) =.989, $p > 0.05$).

Thus, the following research hypotheses H5 and H7 were supported and therefore accepted. Meaning that, PEOU significantly influences the intention of male students to adopt mobile payment system better than their female counterpart,

while women tend to be more driven by SN than men. However, research hypothesis H6 was not supported and therefore rejected meaning that there is no significant difference in the influence of PU on the intention of male and female students to adopt mobile payment system.

TABLE 5: INDEPENDENT T-TEST FOR INFLUENCE OF THE PREDICTORS AMONG GENDER

Variables	Gender	Mean	Std Dev.	DF	t	p
PEOU	Male	4.17	0.468	212	3.053	0.003
	Female	3.91	0.712			
PU	Male	4.14	0.320	212	0.989	0.324
	Female	4.09	0.316			
SN	Male	3.73	0.316	212	-2.748	0.007
	Female	3.88	0.438			

N =214, p =0.05

Table 6 presents the results of the independent t-test for the general adoption of mobile payment system among gender. The result shows no significant difference was found in the general adoption among the gender (t (212) = 1.594, p > 0.05), indicating that the degree of adoption of mobile payment system is similar among gender.

TABLE 6: INDEPENDENT T-TEST FOR ADOPTION OF MOBILE PAYMENT SYSTEM AMONG GENDER

	Gender	N	Mean	Std. Dev	DF	t	p
Adoption	Male	164	4.1240	.40642	212	1.594	0.112
	Female	50	4.0000	.67344			

VI. DISCUSSION

The results of this study revealed that PEOU has positive and significant influence on the behavioural intention to adopt mobile payment system. The finding is similar to some studies [26] [55]. However, the result contradicted [56] and [48] who concluded that PEOU has insignificant relationship toward the adoption of mobile payment system. Nevertheless, as proven by this study PEOU has significant influence on the decision of students to adopt mobile payment system because it is at its infant stage in Nigeria. This is so especially for those with visual problems.

Similarly, perceive usefulness (PU) was found to be significantly associated with the behavioural intention to adopt mobile payment system. The finding is in line with other related studies in the area like [41] [25] [27] and [30]. Meaning that, students tend to have the behavioural intention to adopt mobile payment system provided it is usefulness.

Furthermore, as obtained from the findings of this study social norm (SN) was found to have a significant relationship with the dependent variable (BI). The result is in line with the findings of [24] [57] [55] and [58]. Due to the fact that there is a social pressure in utilizing a given technology, users are liable to be subjected to the influence of other people which consequently influenced their decision to use a new system [59]. This implies that family members, peers as well as the media (electronic and print) might really influence the users to use the mobile payment system.

However, perceive compatibility (PC) was not found to have positive and significant relationship with the behavioural intention to adopt mobile payment system. This finding contradicted [24] who surveyed 666 Brazilian consumers and found that perceived compatibility is one of the significant predictors of mobile financial services; [60] who surveyed 155 consumers in Germany and also found that perceived compatibility is very significant in the use of mobile financial services. Nevertheless, based on the findings of this study perceived compatibility (PC) may have little influence on the use of mobile payment system.

Finally, the independent t-test results show significant difference among gender in PEOU, indicating that the influence of PEOU on Intention to adopt mobile payment is significantly higher among men than women. This result is consistent with the findings of Ong & Lai [44], and [35] who found that males are more influenced by perceive ease of use (PEOU) than females. Similarly, a significant difference was found among gender in social norm (SN), the result shows that females are more influenced by SN in adopting mobile payment system than male counterpart. Indicating that, the influence of SN is more among women than among their men counterpart. This finding is in line with that of [35] who claimed that women are influenced by social norm more than men.

VII. CONCLUSION

The main aim of this study is to extend the technology acceptance model (TAM) and explore gender differences in the adoption of mobile payment system among the students of tertiary institutions in Nigeria. This study provided both theoretical and managerial implications. From the perspective of theory, two additional variables (PC and SN) were integrated into the original TAM which provided a comprehensive understanding of the predictors of mobile payment system and how their influence differs among gender from the perspective of developing country such as Nigeria where the mobile payment system is being introduced for the first time. The findings also contribute significantly to the existing literature in the field of mobile payment, where PEOU, PU and SN were found to significantly influence the adoption of mobile payment, while PC was found not to be significant in influencing the adoption of mobile payment. Gender difference in the adoption of mobile payment was also established where men are more influenced by PEOU and women by SN. This is a significant contribution as very scanty literature exists on gender differences in the adoption of mobile payment system especially from the point of view of developing countries.

From the managerial point of view, findings from this study suggest that the regulatory authority (CBN), banks, operators of mobile network and others who provide supporting services should concentrate on strategizing towards PEOU, PU and SN.

The providers of the service should pay much attention on PEOU by making sure that the way consumers interact with the payment system has been made very easy so as to attract more adoption. The Central Bank of Nigeria (CBN) should also intensify its awareness campaign programme to promote the idea and reveal the usefulness of the new payment system to the consumers especially through the social media like television and radio since SN significantly influences the adoption of the new payment system. This can consequently increase the adoption rate and may also help reduce the gender differences in the adoption.

This study has some limitations. The sample was limited to students of tertiary institutions in kano state, Nigeria. Therefore, the results might not hold true for people from other developing countries with different culture and educational backgrounds. Hence, future research should use different sample structures and conduct a comparative study between two countries in order to improve our understanding of the determinants of mobile payment system adoption within different demographic groups. Besides the research model (TAM) used in this study, future research should also examine the predictive influence of other technology acceptance theories such as expectation confirmation theory (ECT), and unified theory of acceptance and use of technology (UTAUT).

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