IMPACT OF ELECTRONIC MONEY TRANSACTION ON PRIVATE SECTOR CREDIT GROWTH IN NIGERIA

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Abstract
The study examined the impact of electronic money transaction on private sector credit growth in Nigeria. Annual data from 2009 to 2020 were collected from CBN Statistical Bulletin. Johansen co-integration, causality test and Ordinary Least Squares (OLS) were used to test the long run causality between electronic money transaction, automated teller machine, point of sale, internet banking and value of cheques in relation electronic money transaction. The result shows that ATM, POS and INT have a positive and significant impact on electronic money transaction which in turn translates to economic growth. While the result of VOC is not statistically significant at 5%. The study reveals that all the variables are stationary at first differenced I(1) of conducting a unit root test. Therefore, the study found a positive and significant impact of electronic money transaction on private sector growth in Nigeria. This study concludes that electronic money transaction contributes immensely to private sector growth in Nigeria. Based on this finding, it is suggested that policy measures should focus more on stimulating the services of point of sale, internet banking, enhancing automated teller machines, improve on the value of cheques and other monetary policies for rapid private credit growth in Nigeria.

Key words: Value of Cheques, ATM, POS and INT**.**

Introduction

It has been the desire of nations from all over the world to improve the welfare of their people and give them the power not only to afford the basic necessities of life, but also to empower them to be economically useful to their nations. Private sectors play such an important role towards achieving a meaningful development in a country such Nigeria. Therefore, this work seeks to examine the impact of electronic money transaction on private sector credit growth in Nigeria. Electronic money refers to money that exists in banking computer systems that may be used to facilitate electronic transactions. Although its value is backed by fiat currency and may be exchanged into a physical and tangible form. Electronic money is primarily used for electronic transactions due to the sheer convenience of this methodology. It also refers to a series of financial services delivered or to the consumer through devices such as mobile phones or automated teller machines. The services include payments, savings, credits and lodgings (Dolan, 2009). It could be a transfer of funds from

one person to another either national or international payments or person-to-business payment for goods and services or mobile banking (Dolan, 2009).

Similarly, Collins et at (2009 as cited by Odongo and Were 2017) looked at electronic money as mobile folder where payments of goods and services are done under financial regulation and executed from or through a electronics devices. This means instead of paying with cash or credit cards, a customer can pay goods and services abroad using electronic devices such as ATM card.

Financial Access Report of 2009 maintained that electronic money transactions solutions in developing countries set up to expand financial services to communities referred to as "unbanked" or "under-banked", which in turn accounts for over 50% private sector credit growth in their economies.

In Nigeria, the largest number of the general public dwells in rural areas and mostly lacked access to financial services, particularly credit facilities and savings as well as electricity and other necessities of life. These rural inhabitants are mostly subsistent farmers, fishermen, hunters and crafts person. The needy, old and young persons largely depend on their relations in the cities for financial support to educate their children and pay for other services. These rural inhabitants rarely have access to banking services and are continuously in need of raised area to carry out their financial transactions. Running banking services and money transfers for people who live in rural areas is to some extent challenging as a result of low accessibility to proper financial institutions. Rural inhabitants' have to travel a number of miles with high cost of transportation to reach the nearest bank branch. They also run into the challenges of spending a number of hours in banks to get the transactions done. Similarly, filling of application forms and completing the necessary certifications required by banks become a burden on them. Credit facilities are not easily open due to collateral and other stringent requirements. Hence, peasants have to borrow money from private money lenders at a very high interest rate (Collins et al., 2009).

In addition, those in the urban areas not often have convenient and reliable means of sending money home to their relatives who have limited access to banking services (Noz et al, 2010). So the rural dwellers are virtually almost excluded from the formal financial institutions which stop them from crossing the poverty line, hence lead to slow economic growth.

Nigeria is known as the third fastest growing in electronic mobile transaction and telecommunication in the world and the fastest growing in Africa. Similarly, the growth of e-payments tools and e-banking in Nigeria has reached a very hopeful dimension (Ovia, 2002). He emphasized on the two types of online payment are operating in Africa. These includes: Account-based system and Electronic currency system. The account-based system includes: Credit Cards, Debit Cards, Mediatory Services, Mobile payment and Telephone Account System and Payment via online banking; while the electronic currency system includes smart card system and online cash system.

Currently, there are a total number of 24 banks and 804 microfinance banks (MBIs) with numerous branches in towns and rural locations that will function as part of the infrastructures involved in the framework in addition to the mobile telecoms operators (MTOs) in Nigeria. Nigeria with a population of about 200 million people has about 100 million mobile phone subscribers and all these put together will give confidence to the system (Okifo, 2015).

Automated Teller Machine (ATM) is the most noticeable form of e-payment system in Nigeria. It keeps on leading over the years. The other means such as the Internet payments, POS and mobile payments are progressively becoming common (CBN Report, 2009).

The main objective of the study is to examine the impact of electronic money transaction on private sector credit growth in Nigeria. While the specific objectives of the research include: to ascertain the relationship between electronic money transaction and private sector credit growth in Nigeria; and to examine the major contributions of electronic money transactions on economic activities in Nigeria.

Literature reviewed has clearly shown that electronic money transaction has a considerable impact on the private sector credit growth in Nigeria. It was understood that Nigeria is rated as one of the fastest growing market in the field of communication. Recent empirical evidences show that a electronic money transaction has being the key determinant of economic growth. Therefore, it is expected that electronic mobile transaction will help immensely in improving service delivery, saving customers time, quick transaction alert and low operation cost. The general impact of electronic money transactions in Nigeria cannot be over-emphasized. It was been established that several studies were conducted to examine the benefits and challenges of cashless policies in Nigeria. The quest to examine the impact of electronic money transaction on private sector credit growth in Nigeria in particular has been the motive for this study.

LITERATURE REVIEW
Conceptual Issues
Electronic money refers to money that exists in banking computer systems that may be used to facilitate electronic transactions. Although its value is backed by fiat currency and may, therefore, be exchanged into a physical, tangible form, electronic money is primarily used for electronic transactions due to the sheer convenience of this methodology.

The Organization for Economic Cooperation and Development (OECD) member countries unanimously defined the ICT sector as a combination of manufacturing and services industries that capture, transmit and display data and information electronically. The important factor of this broad definition is that, as it breaks the traditional International Standard Industrial Classification (ISIC) dichotomy between manufacturing and services, activities producing and distributing ICT products can be found everywhere in the economy, (OECD, 2002). The definition, therefore pave the way for understanding the multi-dimensionality of ICT and its application to private sector driven development initiatives across various sectors.

More recently, as new data were made available and new methodologies were applied, empirical investigations have found evidence that Information Communication Technology is associated with improvements in service delivery performance, in intermediate measures and in economic growth (Ovia 2002). The adoption of ICT allows for a reduction of transmission costs and for a possibly to more efficient markets.

The following are some of the major challenges militating against the implementation of ICT in Nigeria. These include: lack of qualified ICT personnel; cost of equipment; workers management's attitudes to work; insufficient power supply and non-inclusion of ICT programmes in training curricula and/or at the basic levels of education.

Nwankwo, (2013). Defined electronic money as a device "fully portable, real-time access to the same information, resources, and tools that, until recently, were available only from the desktop". The wireless industry is one of the most dynamic and growing industry in the world economy today. This can be evidenced in the banking sector where, since the introduction and evolution of the electronic transactions, the ways and means of business information transfer have changed leading to more effective in service rendered to customer by the banking sector. He describe mobile banking as 'push' or 'pull' services. Pull is when a customer explicitly requests a service or information

from the bank. While push, occurs when a bank sends a alert to a customer when their accounts goes below a starting point level. Pull services are often of higher security measures.

Despite challenges of the electronic money transaction in Nigeria, it has numerous benefits. Some of which are as follows: electronic money transaction helps in preparing customers on developments happening in their accounts in order to reduce fraud; it cuts the cost of rendering services to customers; it also encourages them and wishes customers well on special events like birthdays that customers value a lot; and for service providers, mobile banking offers the next definite way to achieve growth by offering suitable services to entice new customers or maintain old ones (Agba 2010).

Internet is the global system of interconnected computer networks that uses the internet protocol suite (TC)) to communicate between networks and devices. The electronic banking system is channeled through the internet to allow ease of access to customers anywhere and at almost all times. It is a medium through which researchers obtain materials, books, journals and other data for study. In short, it refers to a library on line (Ayo, 2011).

Auma, (2017) defined Automated Teller Machine (ATM) is an ground-breaking customer delivery service instrument that offers varied services such as cash withdrawals, funds transfer, payment of bills, etc. The use of ATM as a customer service delivery strategy has enabled bank customers to transact banking business using a coded ATM card, wherever an ATM facility is located, customers can access their accounts at any hour of the day. Though, customers have to get to those ATM centres to conduct such business. This is subject to some flaws such as robberies on point of sales. There came about the introduction of the mobile view which apparently affords customers the opportunity to perform all ATM transactions aside cash withdrawals on the twinkle of an eye using their mobile cells.

Theoretical Framework
This study adopts the Diffusion Innovation Theory (DIT) which was propounded by Rogers in (1983) and reviewed in (2003). It considers electronic mobile banking as technological innovation also a theory which tries to discover the features that affect an individual to embrace a modernization or new technology. He describes diffusion as the acceptance of a modernization over time by the given social system. As stated by Rogers, there are five apparent features of innovation that can be used to form a favourable or unfavourable outlook toward a modernization, namely: relative advantage, compatibility, complexity, trialability, and observability. The five qualities and their relationship with mobile banking modernization assumption can be summarized as follows:

Relative advantage is the degree to which a modernization is observed as being better than the idea it succeeds. For a person to choose to use knowledge for a state assignment, it should provide some form of advantages for the job concerned. This means that when the users observe comparative advantage or practicality of a new know-how over an old one, they tend to accept it. In mobile banking adoption situation, advantages like suitability, speed and affordability to customers is reported. Better performance, economy and enlarged social standing brought about by mobile banking demonstrates a sense of comparative advantage.

Compatibility refers to the degree to which a service is perceived as consistent with users' existing values, beliefs, habits and present and previous experiences. Compatibility is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters. Compatibility has further been found influential in the adoption of mobile payments and mobile banking. Furthermore, compatibility may be of a technical basis such as software or hardware with a computer and therefore, interruption to one's workflow should not cross

one's value or belief system. In mobile banking compatibility represents the ability of users to adopt a reliable system which matches with the existing values, past experiences, and needs of potential adopters.

Complexity refers to the sense of difficulty that the user has in using and understanding an innovation. In mobile banking adoption, complexity in use is a major factor. There are significant amount of empirical researches on the mobile technology which suggest that users' intention to adopt mobile banking is hindered by the perceived complexity of the innovation. This means that barriers of mobile banking adoption are predominantly related to technical complexity of technical infrastructure and the design to technology.

Trialability refers to the capacity to experiment with new technology before adoption and it covers opportunities such as test drives, demonstration units and simulations. Physiologically, if potential adopters are allowed to experiment with an innovation, they will feel more comfortable with it and are more likely to adopt it. Also, argue that, if customers are given a chance to try the innovation, it will minimize certain unknown fear and lead to adoption of it. In mobile banking perspective, the perception of risks is even more important due to fear of loss of PIN codes, fear of hacker's access to bank accounts via stolen PIN codes and fear of loss or theft of mobile device with stored data or information.

Observability of an innovation describes the extent to which an innovation is visible to the members of a social system, and the benefits can be easily observed and communicated. Rogers found evidence for the power of observability when he plotted the number of adoptions over time. These plots revealed a normal Bell curve and adopter categorization on the basis of innovativeness. He then categorized innovation adopters into: innovators; early adopters; early majority; late majority; and laggards.

Empirical Literature Review

Osaretin et al (2019) in their examination on the empirical investigation into impact of electronic-banking on Nigerian economic growth, revealed that e-banking had significant impact on economic growth. The result of the study further showed that there is a long-run relationship between e-banking and economic growth and that e-banking granger causes economic growth in Nigeria. The study thus recommended the improvement of the technological base of the country and policy measures to encourage the efficient performance of the banking sector as well as a regulation and control of the banking activities will influence economic growth.

Adewoye, (2013), revealed that electronic money transaction increases banks service delivery in a form of transactional convenience, savings of time, speedy transaction alert and save of service cost which has improve customer's relationship and contentment. It then recommends that banks management should create awareness to inform the public about the benefits derived on the e-banking service products, collaboration among banks should be considered as well. Finally, his finding shows that mobile banking positively influences service delivery of commercial banks in Nigeria.

On the other hand, Rumanyika (2015) in his study of obstacles towards implementation of electronic money transaction in Tanzania revealed that poor network coverage, lack of knowledge of electronic money users, lack of enough float of electronic money intermediaries, ATM breakdown and fraud are major obstacles on the way to the adoption of electronic money transactions in Tanzania. He however, the study recommends that, the government and all other stakeholders should hastily focus their first priority to tackle the most critical obstacles instead of dealing with a huge number of obstacles, taking into account the limited resources the country is facing.

According to Adeleke and Udoji (2015) also examined the impacts of electronic money transactions on private sector credit on economic growth in Nigeria using Gregory and Hansen (1996). They found a co-integrating relationship between output and its selected determinants, albeit, with a structural break in first quarter of 2012. They confirm a positive and statistically significant effect of private sector credit on out, while increased prime lending rate was inhibiting growth.

Several researches were studied in relation to e-banking, electronic money transactions both in developed and developing countries. However, this research work is unique for the reason that it examined the impact of electronic money transaction on private sector credit growth in Nigeria.

Data Source and Methodology
In view of the main objective of this research work which is aimed at assessing the impact of electronic money transactions on private sector credit growth in Nigeria (2009-2020). The researcher uses secondary data obtained from Central Bank of Nigeria (CBN) Statistical Report (2020). A time series analysis was used for analysis and interpretation. The study employed unit root test to determine stationarity of the model. It also employed vector error correction modeling to determine the speed of adjustment either in the short run or long run. Granger causality test was also run to determine the uni-directional relationship between the variables. Similarly, heteroskedasticity was run to determine the whether the model is desirable or not. Finally, an ordinary least squares was run to determine the goodness of the model and a stability test was conducted to determine whether the model is stable or not.

Estimation Procedure
In order to determine the impact of mobile money transactions on private credit growth in Nigeria, this study model output as a function of four independent variables, and electronic money transaction as dependent variable as follows:

$$PSG = f(EMT). \qquad\qquad 1$$
$$EMT = f(ATM, POS\ INT\ VOC) \qquad\qquad 2$$

Where:
ATM   Stand for Automated Teller Machine;
POS   stand for Point of Sale;
INT   stand for Inter Bank Transfer; and
VOC   stand for Value of Cheques.

While the explicit function is as follows:
$$EMT = \alpha + \beta_1 ATM + \beta_2 POS + \beta_3 INT + \beta_3 VOC + e \qquad\qquad 3.$$

Results and Discussion
Table 4.1: OLS Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14.82030	6.642247	-2.231217	0.0275
ATM	0.090909	0.019308	4.708325	0.0000
POS	0.471653	0.044854	10.51519	0.0000
INT	0.386443	0.046414	8.325948	0.0000
VOC	0.002988	0.003097	0.965046	0.3364
R-squared	0.952440	Mean dependent var		51.78589
Adjusted R-squared	0.950906	S.D. dependent var		65.46172

S.E. of regression	14.50451	Akaike info criterion	8.224784
Sum squared resid	26087.21	Schwarz criterion	8.335630
Log likelihood	-525.4986	Hannan-Quinn criter.	8.269823
F-statistic	620.8069	Durbin-Watson stat	1.364478
Prob(F-statistic)	0.000000		

Source: Authors computation using Eviews 9.0 output

The result of Table 1 is good. This is evident from the results of the probabilities where over 80% of the independent variables are statistically significant. This implies that ATM, POS and INT have a positive impact on the electronic money transaction. Similarly, the R2 of 0.952440 implies that about 95.24% variation in electronic money transaction can be explained jointly by the independent variables. Therefore, only 4.76% can be explained by other independent variables not included in the model(residuals). The model is therefore nicely fitted. The overall model is significant as indicated by the result of F-statistics with the probability value of (0.0000). This implies all the independent variable can be jointly influence the dependent variable (electronic money transaction) which indicates that the model is good and can be used for forecasting.

Table 4.2: Stationary Test (Unit Root at 1st Differenced)

Variables	Critical Values at 1%	Critical Values at 5%	Critical Values at 10%	Lag	Order of Difference	t-statistics	Prob.
EMT	-3.486064	-2.885863	-2.579818	2	I(1)	-4.041889	0.0017
ATM	-3.484198	-2.885051	-2.579386	2	I(1)	-10.47595	0.0000
POS	-3.486551	-2.886074	-2.579931	2	I(1)	-13.50610	0.0000
INT	-3.482035	-2.884109	-2.578884	2	I(1)	-11.91282	0.0000
VOC	-3.482035	-2.884109	-2.578884	2	I(1)	-7.124814	0.0000

Source: Authors computation using Eviews 9.0 output

Results in Table 2 shows the unit root test. The result of the stationary test conducted reveals that all the variables under investigation are found to be stationary at first differenced I(1). Hence this provided the basis for conducting co-integration test to determine the long run relationship between the variables under investigation.

Table 4.3: Johansen Co-integration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.401144	96.99506	69.81889	0.0001
At most 1	0.168858	88.79737	47.85613	0.0484
At most 2	0.086100	16.85534	29.79707	0.6507
At most 3	0.049660	6.141256	15.49471	0.6788
At most 4	0.000672	0.079939	3.841466	0.7774

Source: Authors computation using Eviews 9.0 output
The result of the co-integration test in Table 3 shows that there are two (2) co-integration equations at 5% level of significance. This provided the basis for conducting error correction tests to determine the speed of adjustment of the equilibrium of the model.

Table 4.4: Error Correction Model Result

Variable	Coefficient	Standard Error	t-statistics	probability
C				
ETM(-1)	-0.049177	0.023525	-2.090412	0.0394
ETM(-2)	-0.063566	0-098585	-0.644785	0.5207
ETM(-3)	-0.113666	0.101999	-1.114384	0.2680
ETM(-4)	-0.196585	0.095802	-2.051997	0.0430
ETM(-5)	0.193179	0.092516	2.088-60	0.0396
ATM(-1)	0.016826	0.089873	0.187225	0.8519
ATM(-2)	0.006370	0.024790	0.256980	0.7978
ATM(-3)	-0.006981	0.025328	-0.275624	0.7835
ATM(-4)	-0.029540	0.027732	-1.065217	0.2896
ATM(-5)	-0.016426	0.026358	-0.623188	0.5347
POS(-1)	0.060324	0.025776	2.340342	0.0215
POS(-2)	-0.608684	0.090572	-6.720467	0.0000
POS(-3)	-0.028480	0.111999	-0.254285	0.7998
POS(-4)	0.244831	0.110515	2.215367	0.0292
POS(-5)	-0.208866	0.115695	-1.805317	0.0743
INT(-1)	0.351916	0.124306	2.831054	0.0057
INT(-2)	0.143707	0.067786	2.120016	0.0367
INT(-3)	0.438903	0.069692	6.297766	0.0000
INT(-4)	0.202831	0.084889	2.389360	0.0189
INT(-5)	-0.088039	0.080123	-1.098798	0.2748
VOC(-1)	-0.051809	0.057858	-0.895447	0.3729
VOC(-2)	-0.000220	0.003111	-0.070802	0.9437
VOC(-3)	0.000212	0.003183	0.066607	0.9470
VOC(-4)	0.000683	0.003344	0.204263	0.8386
VOC(-5)	0.001995	0.003170	0.629435	0.5306
ECM	-0.001031	0.002940	-0.350740	0.7266

Source: Authors computation using Eviews 9.0 output

The results of the error correction model in Table 4 shows that, all the parameter estimates are appropriately signed and in conformity with the Apriori expectations. The model is estimated using Eviews 9.0 econometric package. The estimated coefficient of the error correction term (-0.001031) is significantly different from zero at 5 per cent level of significance and with the appropriate negative sign. This however, implies that the validity of long-run equilibrium is at an adjustment speed of 0.10% speed per cent of adjustment of the economy in a year to its previous equilibrium.

Table 4.5: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
ATM does not Granger Cause EMT	128	4.34433	0.0150
EMT does not Granger Cause ATM		0.78498	0.4584
POS does not Granger Cause EMT	128	20.9473	1.E-08
EMT does not Granger Cause POS		12.2395	1.E-05
INT does not Granger Cause EMT	128	8.03587	0.0005

EMT does not Granger Cause INT		10.7412	5.E-05
VOC does not Granger Cause EMT	125	0.34941	0.7058
EMT does not Granger Cause VOC		0.28986	0.7489
POS does not Granger Cause ATM	128	2.00024	0.1397
ATM does not Granger Cause POS		4.85939	0.0093
INT does not Granger Cause ATM	128	0.41930	0.6584
ATM does not Granger Cause INT		3.07318	0.0498
VOC does not Granger Cause ATM	125	1.32984	0.2684
ATM does not Granger Cause VOC		1.81059	0.1680
INT does not Granger Cause POS	128	1.74638	0.1787
POS does not Granger Cause INT		4.73089	0.0105
VOC does not Granger Cause POS	125	0.92046	0.4011
POS does not Granger Cause VOC		0.28672	0.7512
VOC does not Granger Cause INT	125	0.43289	0.6496
INT does not Granger Cause VOC		0.08508	0.9185

Source: Authors computation using Eviews 9.0 output

The results of the causality test in Table 5 shows that electronic money transaction (EMT) granger cause automated teller machine (ATM). This depicts a uni-directional relationship between the two variables indicated in a probability value of 0,0154 (1.54%). Also, INT granger causes EMT with the probability value of 0.0005, implying a uni-directional relationship between the variables. The probability value of 0.0093 shows that ATM granger cause POS meaning that there is a uni-directional relationship running from POS to ATM. However, out of the four independent variables, it is only VOC that does not granger cause either of them.

Table 4.6: Heteroskedasticity Test
Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	10.96313	Prob. F(5,123)	0.0000
Obs*R-squared	59.76712	Prob. Chi-Square(5)	0.0561
Scaled explained SS	226.1297	Prob. Chi-Square(5)	0.0000

Source: Authors computation using Eviews 9.0 output

The result of the observed R-squared on Table 6 shows that the model is homoskedastic which is desirable. The corresponding probability value of the observed r-squared is 0.0561 (5.61%). This further indicates that the model can be use for forecasting and policy formulation.

Table 4.7: Serial Correlation Test
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.84638	Prob. F(2,122)	0.0000

Obs*R-squared	0.42317	Prob. Chi-Square(2)	0.3502

Source: Authors computation using Eviews 9.0 output
Table 6 is testing autocorrelation of the model. The results of the observed R-squared and its corresponding probability value of 0.3502 (35.02%) demonstrate that the model is free from serial correlation and is desirable. This means that the model is free from autocorrelation and can be used for forecasting or policy making.

Conclusion
The study reveals that there is a significant increase in the usage of e-banking or electronic money transaction in Nigeria since 2009. This is evident for all commercial banks that made it compulsory for all their customers to use ATMs and mobile money transactions in place of using cheque books.
The research work discussed the impact electronic money transaction on private sector credit growth in Nigeria (2009-2020) and reveals that there is a significant response of more than 60% of the Nigerian populace are using electronic money transactions, hence, translates to private sector credit growth.

Recommendations
It is strongly recommended that all commercial banks in the country to be up to date by improving the services of their networks to facilitate mobile money transactions. Secondly, there is also need to have a constant power supply for e-banking to function effectively. There is the need to create more awareness to customers who does not used electronic money transaction to start using the devices for better and fast operations.

References:
Abiodun, E. & Chima O. (2012). "Cashless Policy: A Burden or Relief"? Thisday Live Retrieved from http://www.thisdaylive.com/article/114483.
Adewale A. A. (2013).   The cashless Nigeria project, subsequent backpedaling in the course of implementation and recent updates: Global Advanced Research Journal of Management and Business Studies 2(1): 37-43.
Adewoye, J. O (2013)."Impact of Mobile Banking on Service Delivery in the Nigeria Commercial Banks". An International Review of Management and Business Research Journal Vol. 2 Issue 2,. www.irmbjournal.com
Adesina A. A. and Ayo C.K. (2010). An Empirical Investigation of the Level of Users Acceptance of E-banking in Nigeria. A journal of Internet Banking and Commerce, Vol.15, No.1
Adeyemi, A (2010).   The ATM debacle: Any respite for bank customer?   (Online).Available http://antifraudintl.org/showthread.Retrieved on 8th March, 2015.
Agba, D. (2010). Implications and challenges of E-payments system: User acceptability and payment problems in Ghana.
Anitha, R. I. (2011). Analysis of Mobile Banking for Financial Inclusion in Tanzania: Case of Kibaha District Council.
Anthony, O. (2012). "Bank Savings and Bank Credits in Nigeria: Determinants and Impact on Economic Growth". International Journal of Economics and Financial Issues, 2(3): 357-372.
Auma et al (2017).   Mobile Financial Services and financial inclusion: It is a boon for savings mobilization? www.sciencedirect.com.
Ayo, A.O. (2011). Emergence of Payment Systems in the era of e-commerce in Nigeria: Problems and prospects. Delta Business Educational Journal, 1(6), 64-72.
Collins et al (2009): Household savings in Idcs: Credit markets, insurance and welfare. Scand J. Econ.94(2) 253-273.

Dolan (2009): Impacts of mobile banking in Nigeria on Economic Growth: A Journal of Economic Studies. Taraba State University. Vol.2 N0.03

Dibraa M (2015). Rogers Theory on Diffusion of Innovation. The most appropriate. Theoretical Model in the study of Factors Influencing the Integration of Sustainability in Tourism Business. World Conference on Technology. Innovation and Entrepreneurship. 195(2015): 1453 – 1462. Retrieved online from science direct at www.scciencedirect.com.

Emmanuel et al (2015). "Impact of Private Sector Credit on Economic Growth in Nigeria. CBN Journal of Applied Statistics Vol. 6.No.2.

Joel D. Rumanyika (2015). "Obstacles towards Adoption of Mobile Banking in Tanzania.A Review.An International Journal of Information Technology and Business Management. Vol. 35, N0.1.ISSN 2304-0777.www.jitbm.com

Nwankwo O. and Eze R. (2013). Electronic payment in cashless economy of Nigeria. Problems and prospects. Journal of management Research. E.(1): 138.

Okifo J. (2015): Electronic payment system in Nigeria: Its Economic Benefits and Challenges. Journal of Education and Practice. Vol.6, N0.16, 2015.

Ovia, J. (2002). Payment System and Financial Innovations. A paper presented at the Annual Policy Conference (2002).

Odongo T.M. & Were M (2017). Mobile financial services and inclusion: Is it a boon for savings mobilization? 7(2):71 – 83. Retrieve on 1 February, 2021, from www.sciencedirect.com.

OECD (2002). Organization for Economic Cooperation for Development. Retrieved from www.scciencedirect.com.