

Mobile Banking Advancement Towards Cashless Economy in Nigeria.

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ABSTRACT : *Cashless economy is a type of economy whereby the use of physical cash for commerce and trading is discouraged. The form of payment in cashless economy is electronic payment also known as e-payment whereby electronic cash is majorly involved in business transaction. The emergency of internet, mobile applications for e-payment, mobile devices for e-payment are added advantage to achieving cashless economy in Nigeria since buyers can pay through their mobile devices. The research looks at level of usage of mobile banking with a view to seeing the advancement towards cashless economy in Nigeria. The research conducted through questionnaire reveals that a lot of the respondents have not been buying items using mobile banking either from supermarket or local markets (50.8% and 60.1% respectively). But interestingly, 70.1% prefer purchase of VTU and 51.1% prefer loading cable TV via mobile banking.*

KEYWORDS: *Business transaction, Cashless economy, e-payment, mobile banking, POS.*

I. INTRODUCTION

A cashless economy is an environment in which money is spent without being physically carried from one place to another. Electronic devices as means of information that reveal how much a person has deposited and has spent are needed. Information technology (IT) plays a major role in achieving cashless economy for any interested nation. Without an optimal use of IT, no country can attain a speedy social- economic growth and development. IT is a pivot for any meaningful development in the future of economy of a nation. IT has brought a revolution to banking industry and has changed the state of economy of nations that have integrated the use of IT in their national policy. Traditional banking has changed to electronic banking and even now mobile banking where you can do banking even when you are on a journey inside your vehicle. Information technology is more than computers, it encompasses the data a business creates and uses as well as a wide spectrum of increasing convergent and linked technologies that process such data. Information technology thus relates to the application of technical processes in the communication of data. It is no doubt that information technology can help to reduce transaction costs for banks, which will translate to lower prices for services to customers. Information technology for banks takes different forms which include: computerization of customers' accounts and information storage and retrieval, deposit and withdrawal through Automated Teller Machine and networking to facilitate access to accounts from any branch of the bank. Other forms include bio-metrics used in finger-printing and identification which should dispense the use of passwords or personal identification by customers. The use of internet and websites to bundle a host of services that go beyond transactional financial services which is increasing among banks.

Cashless economy is an economy where transaction can be done without necessarily carrying physical cash as a means of exchange of transaction but rather with the use of credit or debit card payment for goods and services. The cashless economy policy initiative of the Central Bank of Nigeria (CBN) is a move to improve the financial terrain but in the long run sustainability of the policy will be a function of endorsement and compliance by end-users (Ejiro, 2012). The CBN cash policy stipulates a daily cumulative limit of N150, 000 and N1, 000,000 on free cash withdrawals and lodgments by individual and corporate customers respectively in the Lagos State with effect from March 30, 2012. Individuals and corporate organizations that make cash transactions above the limits will be charged a service fee for amounts above the cumulative limits. Furthermore, 3rd party cheques above N150, 000 shall not be eligible for encashment over the counter with effect from January 1, 2012. Value for such cheques shall be received through the clearing house. The policy through the advanced use of IT facilitates fund transfer, thereby reducing time wasted in Bank(s). The introduction of the implementation of cashless policy began in Lagos State, Nigeria. The reason being given by CBN in 2011 is that Lagos state accounted for 85% of POS and 66% of cheques transaction in Nigeria. Cashless economy aims at reducing the amount of physical cash circulating in the Nigeria economy and thereby encouraging more electronic form

of transaction. According to Central Bank of Nigeria the policy is expected to reduce cost incurred in maintaining cash-based economy by 90% upon its full implementation in Nigeria.

The cashless policy of the CBN is designed to provide mobile payment services, breakdown the traditional barriers hindering financial inclusion of millions of Nigerians and bring low cost, secure convenient financial services to urban, semi-urban and rural areas across the country. The CBN has gone ahead to license six Payments Terminal Service Providers to support and maintain Point of Sale (P.O.S) terminals. This step is a bold demonstration that apex bank is determined to see the policy work which has been kick started in Lagos early 2012 (Olajide, 2012)

II. LITERATURE REVIEW

Cashless economy is not the complete absence of cash, it is an economic setting in which goods and services are bought and paid for through electronic media. According to Woodford (2003), Cashless economy is defined as one in which there are assumed to be no transactions frictions that can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return. In a cashless economy, how much cash in your wallet is practically irrelevant. You can pay for your purchases by any one of a plethora of credit cards or bank transfer. Roth (2010) observed that developed countries of the world, to a large extent, are moving away from paper payment instruments toward electronic ones, especially payment cards. Some aspects of the functioning of the cashless economy are enhanced by e-finance, e-money, e-brokering and e-exchanges. These all refer to how transactions and payments are effected in a cashless economy (Moses, 2011). Marco and Bandiera (2004) argue that increased usage of cashless banking instruments strengthens monetary policy effectiveness and that the current level of e-money usage does not pose a threat to the stability of the financial system. However, it does conclude that central banks can lose control over monetary policy if the government does not run a responsible fiscal policy. According to David (2012), Nigeria did not embrace electronic banking when compared to developed countries. Nigeria adopted electronic banking system in early 2000s. CBN came out with two laudable agenda- the Islamic banking (non-interest banking) and the cashless economy (e-payment system) (Babalola, 2008). Efficiency through electric payment processing, reduced cost of operations and increased banking penetration (Oyetade and Ofoelue, 2012). In Nigeria, as it is in many developing countries, cash is the main mode of payment and a large percentage of the population is unbanked which makes the economy to be heavily cash-based (Ajayi and Ojo, 2006)

Modes of cashless transactions: a. **Cheque** The cheque is one of the oldest methods of cashless payment. It is a known method to everyone. In this method, you issue a cheque for the specific amount to someone else. The cheque gets deposited in the respective bank. The bank processes a payment through a clearing house. The entire transaction done through cheque gets recorded and there is a proof of payment. However, there are instances where cheque payments get dishonored due to signature mismatch or insufficient fund. In order to avoid such issue, we can use other cashless payment options.

Demand Draft: Demand draft is another rudimentary way of cashless transaction. It is safest option to receive payment from anyone. Demand draft (DD) never gets defaulted as it is signed by the banker. The disadvantage of DD and cheque is you need to visit a bank in order to deposit cheque and demand draft. The clearance of cheque or DD takes additional time.

Online Transfer – NEFT or RTGS: The third simplest method for the cashless transaction is online transfer using NEFT or RTGS. In order to do online money transfer, you need internet banking facility. Online transfer using NEFT or RTGS is comparatively faster than cheque or DD. Online transfer can be done from anywhere using internet facility.

Credit Card or Debit Card: Credit card or debit card is another cashless payment method. The usage of credit card and debit card was limited in India. However, usage of credit card and debit card is increasing now because of demonetization. The limitation of this payment method is an availability of swipe card facility (PoS) at merchant end.

E-Wallets: E-Wallet is next cashless payment option. E-Wallet can be used to purchase products starting from grocery to airline tickets. In order to use E-Wallet customer and merchant, both require a smart phone with active internet connection. The most popular example of E-Wallet is PayPal. After registering for E-Wallet you need to link your credit card or debit card with your E-Wallet id. You can use E-Wallet for fund transfer or online shopping. It is simplest cashless method.

Mobile Wallets:The next cashless payment method is a mobile wallet. You do not need a debit card, credit card or internet banking password for making payment using a mobile wallet. Just load money in your wallet via IMPS and use it on the move. You can download mobile wallet app from play store. Few examples of mobile wallets are Paytm, PayUmoney, MobiKwik, etc.

Statement of the Problem: Majority of Nigerian operates mobile banking with the advancement of information technology and mobile devices. Cashless economy being a policy adopted by central bank of Nigeria (CBN) has a relation with mobile banking

Purpose of the Study : The purpose of this research is to examine is to examine the level of mobile banking in relation with cashless economy as a policy adopted by CBN.

III. METHODOLOGY

About three hundred questionnaires were administered on population distributed across geographical location in south west, Nigeria. The questionnaires were analysed using statistical tools. Table 1 shows the statistical analysis

Table 1: Descriptive Statistics on Opinions of respondents on mobile banking

Variables	n (%)
Possession of bank account	
Yes	252 (90.6)
No	26 (9.4)
Possession of mobile banking application	
Yes	174 (62.6)
No	104 (37.4)
Various banks used	
Don't have bank account	35 (12.6)
First Bank	59 (21.2)
GTB Bank	23 (8.3)
Fidelity Bank	12 (4.3)
Access Bank	25 (9)
Diamond Bank	13 (4.7)
Stanbic Bank	18 (6.5)
Skye Bank	9 (3.2)
Union Bank	14 (5)
Wema Bank	24 (8.6)
UBA	20 (7.2)
Eco-bank	5 (1.8)
FCB Bank	3 (1.1)
Heritage	5 (1.8)
Zenith Bank	4 (1.4)
Starling Bank	8 (2.9)
Unity Bank	1 (0.4)
Purchase of items via mobile banking	
Yes	137 (49.3)

No 141 (50.8)

Purchase of items in supermarket via mobile banking

Yes 111 (39.9)

No 167 (60.1)

Purchase of items in local market via mobile banking

Yes 72 (25.9)

No 206 (74.1)

Variables	n (%)
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Transaction using mobile banking rejected

Yes 77 (27.7)

No 201 (72.3)

**Minimum amount of cash ever used
in transaction**

1000-2000 66 (23.7)

2000-4000 81 (29.1)

1000 below 131 (47.2)

Maximum amount of cash ever used in transaction

4000-5000 110 (39.5)

5000-6000 73 (26.3)

6000 above 95 (34.2)

Preference of buying VTU via mobile banking

Yes 199 (70.1)

No 83 (29.9)

Preference of loading cable TV using mobile banking

Yes 142 (51.1)

No 136 (48.9)

Preference of booking flight ticket using mobile banking

Yes 127 (45.7)

No 151 (54.3)

Ever updated BVN details using mobile banking	
Yes	166 (59.7)
No	112 (40.3)
Using mobile banking is difficult	
Yes	42 (15.1)
No	236 (84.9)
Mobile banking interface is user friendly	
Yes	173 (62.2)
No	105 (37.8)
I can recommend use of mobile banking to my friend	
Yes	163 (58.6)
No	115 (41.4)
Ever had any challenge with transaction using mobile banking	
Yes	122 (43.9)
No	156 (56.1)
Challenges are solved easily	
Yes	162 (58.3)
No	116 (41.7)
Mobile banking is secure	
Yes	211 (75.9)
No	67 (24.1)

Source: Survey through questionnaire, 2018

IV. Discussion

Out of the 278 respondents interviewed, only 26 claimed not to have a bank account of their own, this means the larger percentage have tendency of having access to use of mobile banking to carry out any business transaction. 63% claimed having a mobile application that can be used to carry out their activities. The table also reveal that a lot of the respondents have not been buying items using mobile banking either from supermarket or local markets (50.8% and 60.1% respectively). But interestingly, 70.1% prefer purchase of VTU and 51.1% prefer loading cable TV via mobile banking.

Test statistic

$$\chi^2_{\alpha, (r-1)(c-1)} = \sum_{i=1}^r \sum_{j=1}^c \left(\frac{O_{ij} - E_{ij}}{E_{ij}} \right)^2$$

Where O = observed frequency

E = expected frequency

(r-1)(c-1) = degree of freedom

α = level of significance

You take your observed data (o) and subtract what you expected (e). You square the results, and then divide by the expected data in all the categories.

Statement of hypothesis

Hypothesis 1

Ho: Having bank account and use of mobile banking are not related

H_i: Having bank account and use of mobile banking are related

It is clearly seen from table 2 that all other factors have significant relationship with *having a bank account* except *Rejected transactions made through mobile banking*, and *Minimum cash for transaction* at 5% level of significance. The significant factors include *Purchasing items using mobile account*, *Purchasing items in any supermarket*, *Purchasing items in any local market*, *Preference to purchase VTU via mobile banking*, *Preference to load cable TV using mobile banking*, *Booking for flight ticket*, *Updating BVN using mobile banking*, and *Mobile banking security*. They all have significant relationship at 5% significance level

The bar chart in Figure 1 reveals the hidden the information gathered on the field as well as the relationship that exist among the factors.

Table 2: Tests of relationship between *having a bank account* and other factors:

Factors	χ^2	P-value	Status
Purchasing items using mobile account	24.061	0.001	Significant
Purchasing items in any supermarket	19.064	0.002	Significant
Purchasing items in any local market	10.025	0.003	Significant
Rejected transactions made through mobile banking	8.885	0.068	Not significant
Minimum cash for transaction	5.379	0.544	Not significant
Preference to purchase VTU via mobile banking	29.675	0.001	Significant
Preference to load cable TV using mobile banking	21.607	0.001	Significant
Booking for flight ticket	18.684	0.001	Significant
Updating BVN using mobile banking	23.420	0.002	Significant
Mobile banking security	37.611	0.001	Significant

Discussion of Results

Hypothesis 2

Ho: Having mobile banking application and use of mobile banking are not related

H_i: Having mobile banking application and use of mobile banking are related

Table 3: Tests of relationship between *having a mobile banking application* and other factors:

Factors	χ^2	P-value	Status
Purchasing items using mobile account	91.686	0.001	Significant
Purchasing items in any supermarket	35.084	0.001	Significant
Purchasing items in any local market	10.025	0.003	Significant
Rejected transactions made through mobile banking	27.721	0.001	Significant
Minimum cash for transaction	8.965	0.011	Significant
Preference to purchase VTU via mobile banking	33.915	0.001	Significant
Preference to load cable TV using mobile banking	20.191	0.001	Significant
Booking for flight ticket	6.840	0.009	Significant
Updating BVN using mobile banking	28.433	0.002	Significant
Mobile banking security	21.868	0.001	Significant

Discussion of Results :Table 3 shows that all the factors considered have significant relationship with *having a mobile banking application* at 0.05 level of significance

The multiple bar charts reveal the hidden the information gathered on the field as well as the relationship that exist among the factors.

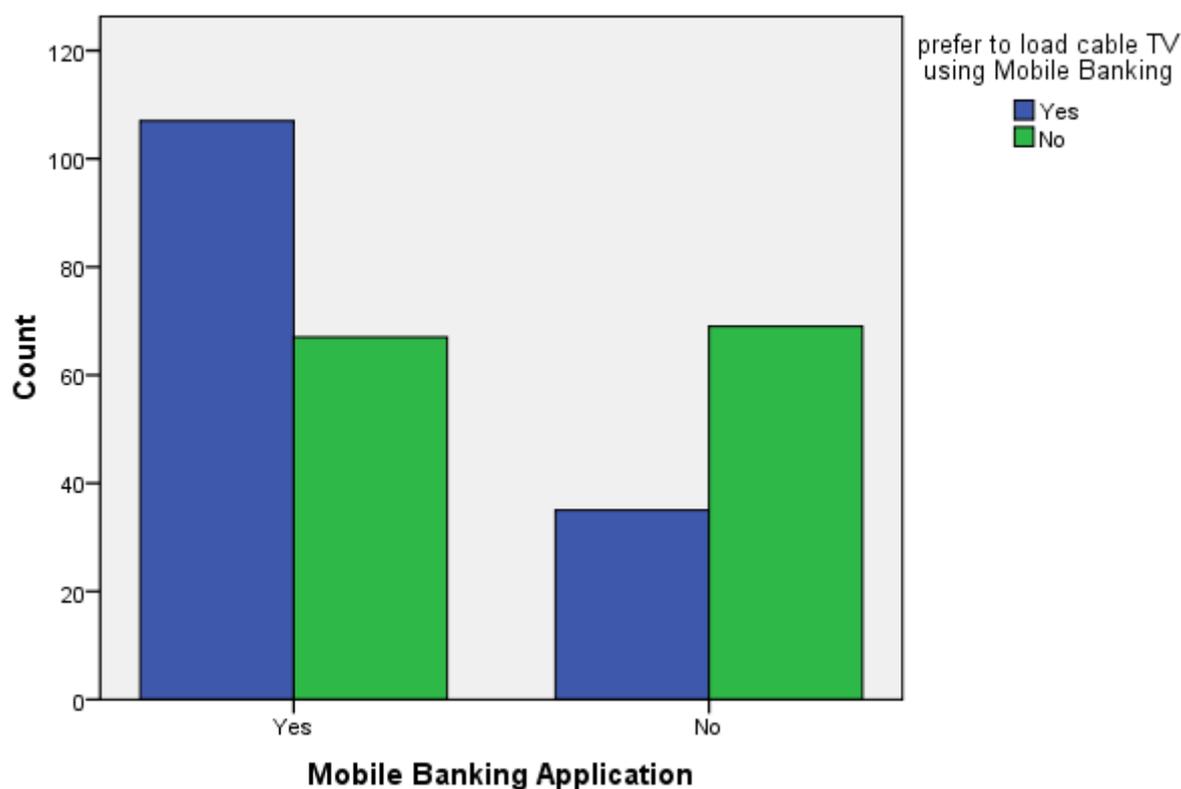


Figure1. Bar chart showing the level of use of mobile banking applications

V. CONCLUSION

The use of mobile banking applications, ATM, POS and CBN policy in Nigeria has drastically reduced cash carrying in the economy of the country. This study showed that a lot of Nigerian are not used to e-cash payment for their day to day business transaction as majority prefer physical cash payment for their purchase. This attitude of physical cash payment by Nigerian for their purchase might have to do with security issues that are related to electronic payment system. For Nigeria to achieve her desire output on cashless economy, it might requires more orientation on electronic payment among her population especially among market women as cashless economy tends to reduce theft since physical cash is not involved

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