

Cash-less Nigeria: Suitability, Sustainability and Constraints.

Ernest Paul Oleabhielle*

Department of General Studies, Federal Polytechnic Bauchi

Ehizuelen Michael Mitchell Omoruyi*

Zhejiang Normal University, Jinhua, China

Abstract

The advent of cashless policy into the Nigerian banking sector has brought mixed feelings to all stakeholders in the sector. The development has brought relief to a segment dominated by the operators (bankers), while the other segment dominated by the customers has complained about the challenges associated with the operation of the policy; in relation to the policy's suitability, sustainability and constraints. The central Bank of Nigeria (CBN) introduced the policy in April, 2011 in line with global best practice that is targeted at ranking Nigeria amongst the top 20 economies of the world by the year 2020. Secondary data and Survey research was conducted with questionnaire as data collection instrument. Statistical findings from respondents show that cash-less Nigeria would ensure accurate payments and revalue our currency especially the kobo. Availability of robust infrastructure which is perceived to be a huge constraint can sustain the policy. Cash-less Nigeria would be generally inclusive if adequate awareness is systematically engineered in order for all stakeholders to fully participate. Hence, it was therefore recommended, among others, that infrastructures should be improved upon to ensure easy operation of the policy in Nigeria.

Keywords: Cashless policy, Nigerian banking sector, Customers' orientation and Banking performance

1. Introduction

In the quest to move Nigeria into the league of a cashless society, the central Bank of Nigeria (CBN) in April, 2011 introduced the cashless policy. The policy is destined to reduce the volume of cash circulation in the Nigerian economy (CBN 2011). This is in consonance with (Humphrey, 2004) suggestion of a movement from paper money payment instruments to electronically oriented payment system like payment cards that could move with the current technological age. In a concerted effort to make Nigeria cashless, the CBN decided to launch a pilot scheme in Lagos on January 1st 2012. Also, commercial cities like Port Harcourt (River State), Kano (Kano State), Aba (Abia State), Abeokuta/Agbara (Ogun State), Onitsha (Anambra State) and FCT (Abuja) has followed since July 1st 2013 (CBN2012). So far reports from the CBN cashless policy indicates that in Lagos where the pilot scheme was launched, the point of sale (POS) payment option is working effectively in departmental stores. But the informal sector that drives the Nigerian economy is still cash dependent.

Over the course of history, different forms of payment systems have been in existence. Initially, "trade by barter" was common. However, the problems of barter such as the double coincidence of wants necessitated the introduction of various forms of money. Nevertheless, pundits have been predicting the complete demise of study instruments and the emergence of potentially superior substitute for cash or monetary exchanges that is cashless society. Since Nigeria's Independence in 1960, there have been different governments, constitutional reforms, change in economic policies and banking reforms, mainly directed at enhancing social welfare and achieving developmental goals but there has been no substantial positive change in Nigeria's Human Development Indicators. This also calls to question the effectiveness of the cash-less policy of the Central Bank of Nigeria (CBN) in some selected states in Nigeria,

It is no longer news that advanced economies have integrated their business transactions through the use of modern technological medium of information and communication like the World Wide Web (WWW) and the internet. These are now platforms that have made the whole world a global village (Laukkanen 2007; Lichtenstein and Williamson 2006). Research shows that 30 million people and 20,000 firms worldwide use the internet. The number is calculated to be rising by more than 10 percent a month (The Economist 1994). At the end of the 1980s, the use of cash for purchasing consumption goods in the US has constantly declined (Humphrey, 2004). Hence, most LDCs (Less Developed Countries) like Nigeria are on the transition from a pure cash economy to cash-less one for developmental purposes.

An economy where the informal sector is still heavily cash dependent, a movement to cashless transactions will no doubt reduce the high cost of cash related transactions. In the same vein, the move to alternate the current payment method (cash to cash-less) especially in the informal sector in order to realize the tall dream of ranking among the top 20 economies by the year 2020 could be a herculean task. But if this direction perceived to be suitable for the Nigerian economy could be sustained and the foreseen constraints attended, then cash-less Nigeria will indeed become a reality.

According to CBN, the new cash policy was introduced for a number of key reasons, including: To

drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being among the top 20 economies by the year 2020. An efficient and modern payment system is positively correlated with economic development, and is a key enabler for Nigerian economic growth. To reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach and to improve the effectiveness of monetary policy in managing inflation and driving Nigerian economic growth (CBN,2013). In addition, the cashless policy aims to curb some of the negative consequences associated with the high usage of physical cash in the economy, including: high cost of cash: high risk of using cash, high subsidy, informal economy and inefficiency & corruption (CBN, 2011).

In Nigeria, customers of banks today are no longer about safety of their funds and increase returns on their investments only. Customers demand efficient, fast and convenient services. Customers want a Bank that will offer them services that will meet their particular needs (personalized Banking) and support their

Business goals for instance; businessmen want to travel without carryout cash for security reasons. They want to be able to check their balance online, find out if a cheque is cleared, transfer funds among accounts and even want to download transaction records into their own computer at work or home. Customers want a preferential treatment and full attention by their choice Bank. All these are only achievable through electronic Banking based on cashless policy which was introduced by Central Bank of Nigeria.

This study is set to examine three major objectives. Firstly, we intend to look into the suitability of the desired cash-less policy in the Nigeria economy and secondly, to determine its sustainability. Thirdly, we intend to discuss its attendant constraints. This paper therefore, is divided into five sections. Section 1 is about the introduction. Section 2 deals with the literature review. Section 3 offers the state of cash-less Nigeria. Section 4 will focus on analysis of data/findings and using secondary/survey research via questionnaire as data collection instrument to ascertain the prospects of cash-less Nigeria in terms of its suitability, sustainability and constraints. Chi-square statistical test will be run on the data gathered via the questionnaire using statistical package for social science (SPSS). And section 5 sums up the study by drawing conclusion and give some suggested recommendations.

2.0 Conceptualization of a cashless society

This section seeks to study the principles that govern the cashless policy. Money has been referred to as the life blood of any economic system. It simply provides a platform for measuring economic value of things and for facilitating trade. Money can be described as a medium of payment in the form of currency and checks exchanged for things. Therefore money can be seen as a lubricant that regulates exchange. Money should be an instrument that everyone should trust and generally accept as payment for goods and debts; this will in turn facilitate trade. History shows that some time ago, many economies functioned without money.

Before the advent of money, people tend to barter their products and labour with one another. However, these were simple economies with relatively few things to exchange. At that time most people provide themselves basic necessities of life like food, shelter and clothing. This made trading with other limited and was strictly for a few items like implements, amenities and luxuries. Today, one can only but imagine how difficult economic life would become if you had to barter goods for goods. Let see this scenario for instances, I produce a chair and I want some apples, do I have to exchange one chair for one apple? We see here how awkward barter economy operates. The colonial era in British West Africa, bottles and cases of gin served as money, these items often pass from hand to hand without being consumed (Samuelson, Paul. A and Nordhaus, William. D 2005; Thomas Sowell, 2011). If specialization allows people and nations to concentrate on the perfection of particular tasks, a medium of exchange (money) will make it easy for people and nations to facilitate trade. They could trade their specialized produces for varieties of goods and services produced by others (Samuelson et.al 2005).

The effect of the cashless policy on economic growth has been one of the most debated and controversial issues in present economy. The policy was introduced by Central Bank of Nigeria (CBN) in April 2011 and was kick-started in Lagos in January 2012. Survey research was adopted with questionnaire as data collection instrument. Responses from the respondents show that cashless policy increased employment; reduce cash related robbery thereby reducing risk of carrying cash; cashless policy also reduce cash related corruption and attract more foreign investors to the country. It is expected that its impact has been felt in modernization of Nigeria payment system, reduction in the cost of banking services, reduction in high security and safety risks and also curb banking related corruptions.

The concept of cash-less society that is now getting a global attention does not in any way suggest the out-and-out elimination of cash transactions. Even though countries like Sweden is aiming to take a step further by moving away completely from coins and bills Bernardo, et al (2012). Rather it involves reduction in the volume of cash based transactions in the economy (Daniel, et al 2004).

Roth, (2010) pointed out that in a cash-less economy the amount of cash in your wallet is of less importance when you shop as you can pay for purchases with a credit card and you are done. Furthermore, Woodford (2003) postulated that ideal cash-less economy is assumed to have no transactions frictions. This

indeed can minimize using money balances. Based on this assumption, there will be no need holding such balances. Money circulated in the economy for investments can easily earn rate of returns. Al Shaikh (2005) is of the opinion that heavy usage of the point of sales (POS) for payment transactions could increase demand deposit in the banks. Thereby making funds available at low cost for investment, money circulated in an economy could eventually drive the overall economic activities.

Several researches done on electronic payments like that of Hord (2005) observed that the cost of running businesses could be minimized if transactions are done electronically. She emphasized that when payments are processed electronically, money spent on paper and postage are reduced. She further suggested that when transactions are processed electronically, customers' retention tends to increase. More so, customers are most likely to revisit or shop on sites where their information has been processed and stored. As this they believe would save them some time and stress of filling in their personal detail for their transactions to be effected. This indeed we can attest to as we have all experienced this phenomenon as described by Hord (2005) in our online purchases. At this juncture it will be pertinent to cite the works done by Daniel, Swartz and Fermar, (2004); Moses-Ashike, (2011) which observed that electronically processed functioning like e-finance, e-brokering, e-exchange and e-government would help the cash-less economy to operate smoothly.

2.1 Rationale for cash to cash-less (Suitability)

Records shows that John Diebold of an American consulting company, the Diebold Group, famous for the term "automation", in the 1960s worked out series of networked computer systems for commercial banks and wrote about an impending "transaction overload". He stated that "the cash-less society is no longer an option but a necessity". This vision was ardently supported by George Mitchell a member of Governors of the Federal Reserve of America. In 1966, George urged the banking industry to begin to work out ways through which the computer can be used to change money and its use as the costs of processing paper checks are becoming of increase value (Bernardo, et al 2012).

There are attendant resultant effects on the banking sector and the economy at large occasioned by heavy dependent on cash. Statistics done by CBN in 2012 shows how much the Nigeria economy is cash dependent. See figure I and II below;

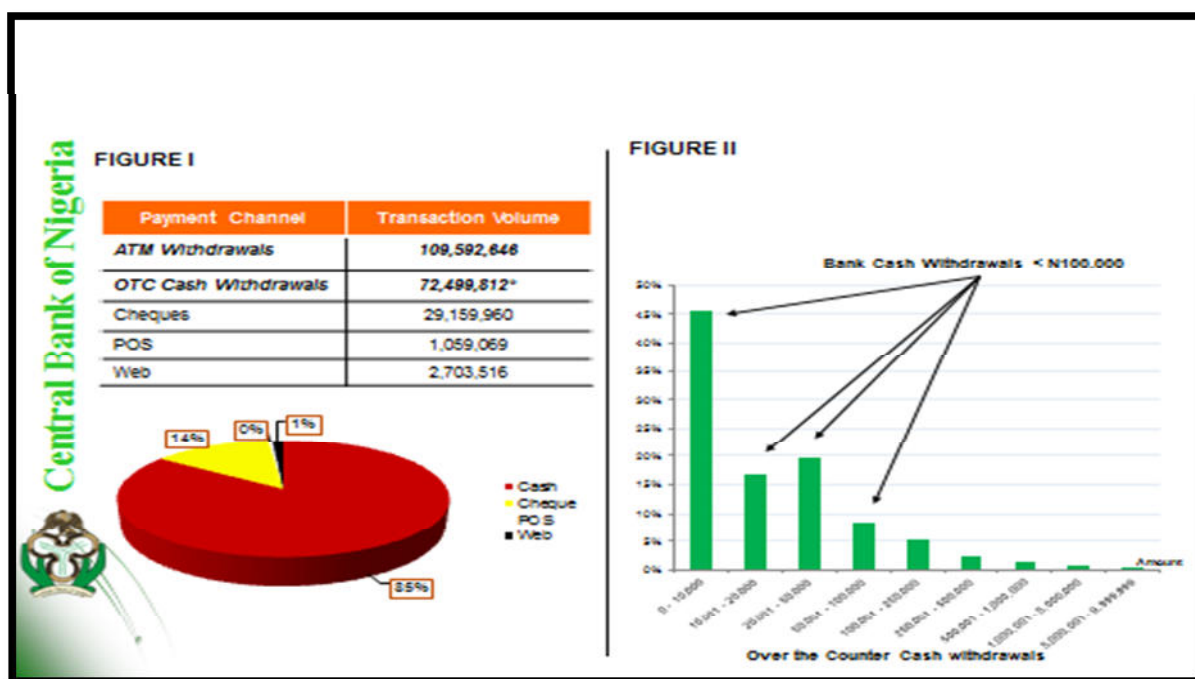


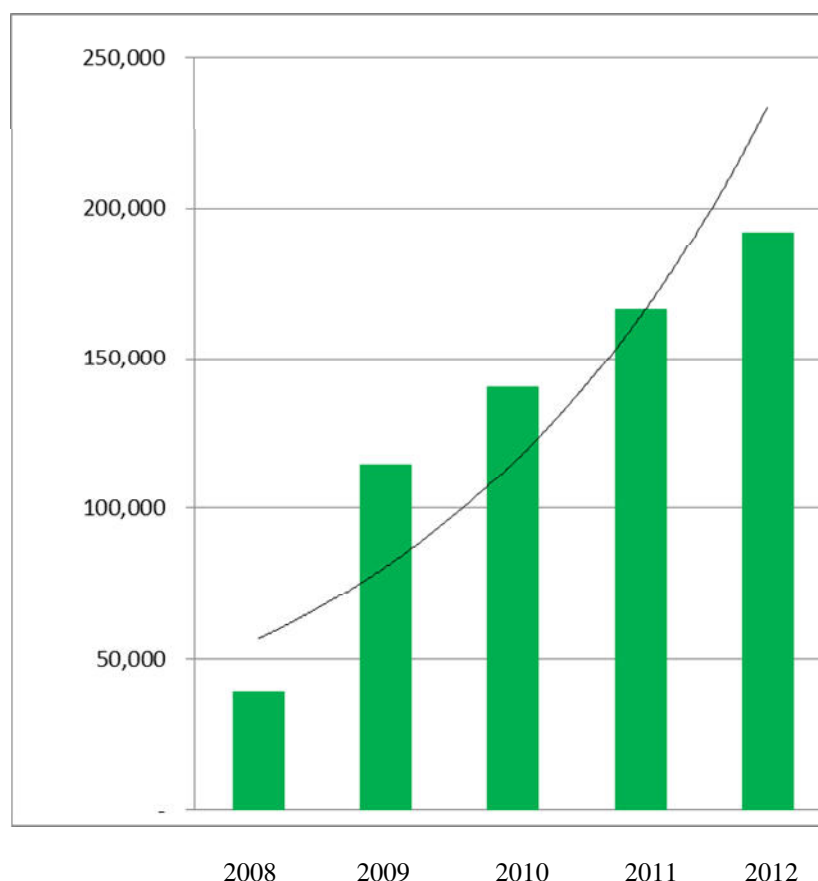
Figure 1 and 2: Nigeria economy and cash dependent
 (Source: CBN 2012)

Based on the given statistics in figure (i), cash based transactions (ATM withdrawal, OTC cash withdrawal) for year 2012 represents a whopping 85 percent while cash-less based transactions (3rd party cheques, POS, and web) represents a meager 15 percent. This is a clear indication that it is high time for Nigeria to reverse this trend in line with international best practice. Again, statistics showed in figure (ii) above also indicates that about 86% made in branch bank cash withdrawal of less than N100, 000, while about 15% made the same transactions of over N100, 000. If the rate at which a large population of Nigerians withdraws cash to

meet economic activities could be reversed to the alternative payment methods (cash-less channels), then the tall dream of being amongst the top twenty economies in the world by the year 2020 would become a reality. The Central Bank of Nigeria (CBN) also came up with the estimated cost of cash in the Nigerian economy as at 2008 as fifty billion naira. This figure is projected to rise in 2012, and will reach almost one hundred and ninety-two billion Naira (CBN 2012).

FIGURE III

A 5-year projection of the direct cost of cash to Financial System



In this vein, the cash-less economy as practiced by most advanced countries like Sweden would likely save the Nigerian economy up to 90 percent of cost incurred to maintain a cash oriented economy (CBN 2011). Apart from the huge reduction of cost associated with the processing of cash borne by institutions across the value chain. There are other motives for cash-less Nigerian economy. For instance, the high rate of cash – related crimes like armed robberies, would be drastically minimized. There will be an improvement in the monetary policy which could promote transparency and mitigate corruption/leakage which constitutes a major setback in the Nigerian economy. Cash-less Nigeria would also capture the unbanked in the society which in turn would promote the issue of financial inclusion. It would also modernize the Nigerian payment system in line with international best practice. This again would propagate the vision 20:2020 agenda for Nigeria (Adebisi, 2012; NIBSS 2012; CBN 2011).

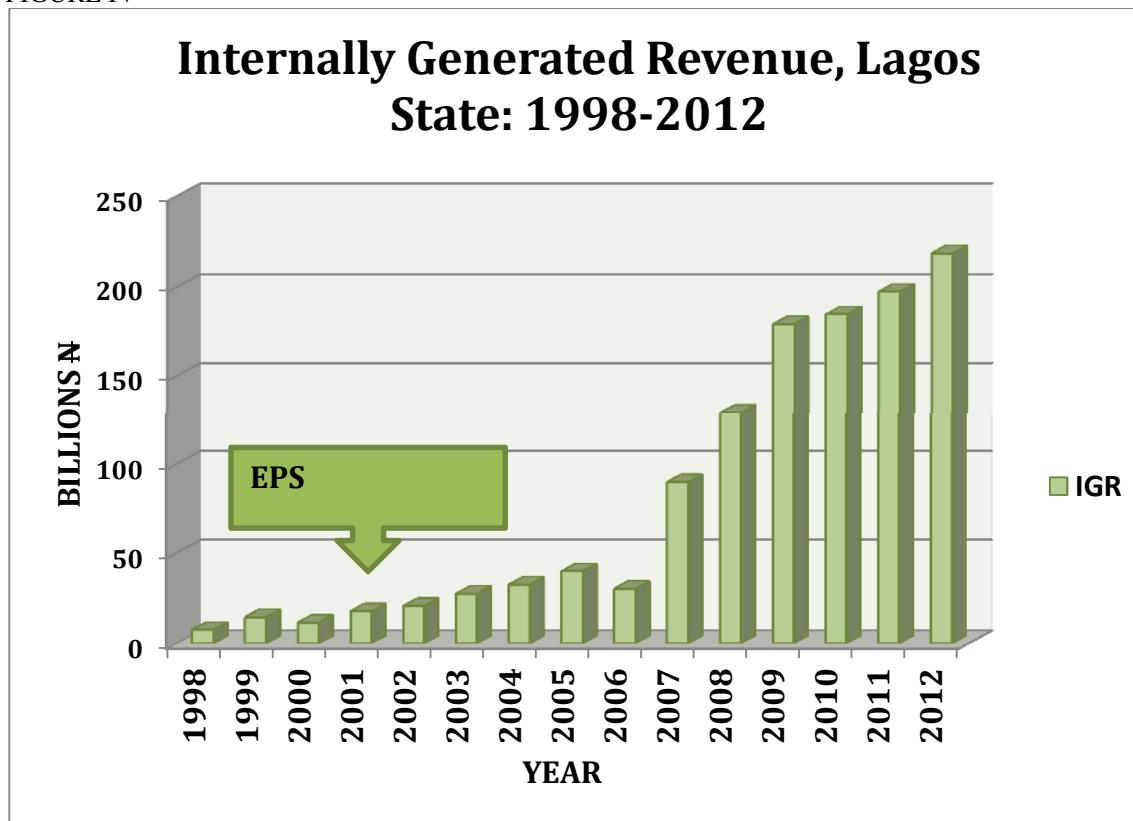
1. State of Cash-less Nigeria (Sustainability and Constraints)

History has it that in (2004) the apex bank in Nigeria (CBN) issued out guidelines on e-banking to the commercial banks. This move awakened the banks to an era of electronic medium in facilitating their transactions (CBN 2003). Studies have shown that the Automated Teller Machine (ATM) is most popular as a channel for electronic banking and transactions in Nigeria (Ayo, et al 2010; Adepoju and Alhassan 2010). The introduction of cash-less policy in Nigeria on April, 2011 might have taken off late as countries like Kenyan and South African have already achieved a feet in the era of electronic payment system. There is a mobile banking company in South Africa called Wizzit which service more than three hundred thousand customers. The story is even better in Kenyan as M-PESA an electronic payment platform operated from an ordinary mobile phone

introduced in March 2007 has already gained nine million users which constitute 40% of the adult population in Kenyan. These countries have become role models for Nigeria to emulate as they have been able to provide electronic financial transaction across long distance. The electronic payment method adopted by these countries has helped to reduce bank charges, risk involved of carrying cash and traveling (Akintaro, 2012).

The choice of Lagos on 1st January 2012 from the existing 36 states in Nigeria and the federal capital territory (Abuja) as the pilot state for cash-less Nigeria is predicated on the fact that Lagos has attained a more robust penetration in terms of banking and payment infrastructure which is obviously a step in the right direction by the Central Bank of Nigeria (CBN). Records from the Lagos state budget office (2012) shows that in 2001, the state transited from paper cash payments to electronic platform. This move has evidently increased the growth of internally generated revenue (IGR).

FIGURE IV



Note: Electronic Payment System (EPS)

Source: Lagos state budget office 2012

The Lagos state internally generated revenue is projected to grow annually at 6 percent since the introduction of the electronic payments system. Other states like Ogun and Osun that have adopted the cash-less payments system also have their success story to share in line with increased (IGR). In the case of Osun state, the government confirmed an incredible increase in internally generated monthly revenue from N300 million to N1.5 billion. This is a pointer that adoption of electronic (cash-less) payments system in government establishments will no doubt help to checkmate duplicitous debits, diversion of funds and extra charges on state accounts which is all associated with cash based payments. Furthermore, the Lagos government observed that the Electronic Payment System has helped government in monitoring and effectively coordinating all revenue collection activities.

Furthermore, the CBN has put in place some fundamental laws that could help sustain the cash-less Nigeria policy. According to CBN (2011), the following aspects of the policy shall apply from January 1st 2012 in Lagos state (“tagged” Cashless Lagos). These policies are;

- Only CIT licensed companies shall be allowed to provide cash pick-up services. Banks will cease cash in transit lodgment services rendered to merchant-customers in Lagos state from December 31st 2011. Any bank that continues to offer cash in transit lodgment services to merchants shall be sanctioned.
- Third party cheques above N150, 000 shall not be eligible for encashment over the counter. Value for such cheques shall be received through the clearing house.
- Limit

The limits are cumulative daily limits each for withdrawal and for deposits (e.g. for individuals, the daily free withdrawal limits is N500, 000; while the daily free deposit limits is N500, 000)

The limits apply to the account so far as it involves cash, irrespective of channels (e.g. over the counter, ATM, third party cheques encashed over the counter, etc) in which cash is withdrawn or deposited (e.g. if an individual withdraws N450, 000 over the counter, and N150, 000 from the ATM on the same day, the total amount withdrawn by the customer is N600, 000, and the service charge will apply on N100, 000 – the amount above the daily free limit). The service charge also applies to cash brought in by CIT companies in excess of the stipulated cash limit. These fundamental laws by the CBN are put in place to help the cashless Nigeria policy to run hitch free.

More so, the CBN also emphasized that in the drive to go cash-less, alternatives to cash will be available for both retail and wholesale cash users. Other strategies to make the cash-less Lagos come alive would include;

- **Point of sale system:**

Interoperability will be ensured for all payment cards. Improved connectivity; greater reach/deployment

- **Mobile Payments:**

Eleven players have been fully licensed for business. Few others in pilot mode

- **Multi-functional ATMs**

Automated teller machines will perform other functions other than cash withdrawal. Cash deposit will be made and utility bills paid using the ATMs.

- **Internet banking:**

This platform will henceforth feature intra and interbank transfer.

- **Electronic fund transfer:**

Instant transfer option currently offered through NIBSS.

- **Direct Debit:**

Automated Direct Debit option being piloted with a few banks and billers

Statistics from CBN shows that point of sales transaction (POS) in Lagos state represent 85 percent; while 66 percent accounted for cheques transactions. Data sourced from CBN shown Lagos state as having more numbers of POS (61) outlets per one hundred thousand persons. The data also reveal twenty bank branches and only twenty four ATMs per a hundred thousand persons (CBN 2011). Compared with a population of 17 million, these figures show clearly the low level of necessary infrastructure needed to effectively run the cash-less economy in Nigeria. Based on these available data it is obvious that more ought to be done to enhance the effectiveness of the cashless Nigeria policy in Lagos.

The initial plan by CBN was for the pilot scheme in Lagos to run till June, 2012 and the entire states in the nation will go cash-less by January 1st 2013. The CBN has redefined the nationwide rollout of the cashless policy based on the reality on ground evident on the pilot project. The nationwide commencement date has been shifted to July 1st 2014. It is believed that the pilot scheme in Lagos have shown some constraints that need fixing. For instance, the issue of ATMs insufficiency, still leaves long queues and most times there is the issue of network failure which is a bane to effective usage. Less usage of POS by business entrepreneurs mandates lots of Nigeria to still carry cash around. It seems the culture of carrying cash around in Nigeria is a habit that requires vibrant orientation to reverse in line with international best practice. Despite these constraints the CBN observed recently based on available statistics that the daily value of Nigeria's electronic fund transfer is put at N123 billion and N50 million for point of sales (POS) transactions. These records have been seen by the apex bank as a significant success. Hence, this has motivated the CBN resolution to extend the cashless policy to all states in Nigeria by July 1st 2014.

2.2 Concept of Cashless Policy

Electronic – based transaction seeks to drive the development and modernization of Nigeria's payment system in line with her goal of being among the top 20 economies of the world by the year 2020 (Central Bank of Nigeria, 2011). The essence of the policy is to shift the economy from a cash-based economy to a cashless one. Thus, it is geared towards engendering an efficient payment system anchored on electronic – based transactions. It is a truism that an efficient and modern payment system is a key enabler and a sine qua non for driving growth and development. The policy also aims at improving the effectiveness of monetary policy in managing inflation in the economy (CBN, 2011)

The cashless policy applies to all accounts, including collection accounts and the cash limits apply to an account irrespective of channel (i.e. whether it is over the counter, ATM, third party cheques cashed over the counter etc). As far as cash is involved, any withdrawal or deposit that exceeds the limits attracts a service charge (Central Bank of Nigeria, 2011). The charge is borne by the account holder and is about N100 per every 1000 in bank charges (This day Live 2012, April 25). The limit however does not prevent customers from withdrawing or depositing beyond the pegged limits but such customers should be prepared to pay the aforementioned penalty fee.

One of the prerequisite for the development of national economy according to Ajayi and Ojo (2006) is to encourage a payment system that is secure, convenient, and affordable. In this regard, developed countries of the world, to a large extent, are moving away from paper payment instruments toward electronic ones, especially payment cards (Humphrey, D. B. 2004). In these countries, for instance, it is possible to pay for a vending machine snack by simply dialing a number on one's phone bill. In recent times, the mobile phone is increasingly used to purchase digital contents (e.g. ringtones, music or games, tickets, parking fees and transport fees) just by flashing the mobile phone in front of the scanner at either manned or unmanned point of sales (POS). Increasing numbers of countries have adopted policies to accelerate the use of electronic channels and reduce the use of cash. The motivation for these policies varies: many are primarily concerned with reducing tax evasion, some with fighting crime, and a few are now explicitly linked to financial inclusion-though the latter link is not necessarily immediately nor automatically achieved. In Ogun State, the Central Bank of Nigeria (CBN) announced its cash-less policy in 2011 and commenced a pilot of the policy in Lagos State in January 2012. The policy, intended to reduce the use of cash, is in fact a package of measures, with three key stated objectives:

- ✚ To drive the development and modernization of the payment system in line with vision 2020.
- ✚ To reduce the cost of banking services and drive financial inclusion by providing more efficient transaction options and greater reach.
- ✚ To improve the effectiveness of monetary policy in managing inflation and driving economic growth.

2.3 Instruments of cashless policy

Humphrey and Berger (1990) present one of the earliest attempts to comprehensively estimate the private and social costs for nine separate payment instruments- cash, cheques, credit cards, money orders, point of sale (POS), Automated Clearing House Transfers (ACH), ATM bill payments, travelers' cheques and wire transfers. They find that from a social cost perspective, cash is the cheapest payment instrument, followed by ACH, POS and ATM bill payment. From a private perspective, cheques emerge as the cheapest payment method followed by cash, ATM and POS bill payments. However, the influence of government intervention was prematurely considered as there was no calculation of net benefits of such payments instruments (Daniel et al, 2004). In recent times, there is a consensus that central banks have the capacity to control the price level. One of the approaches is through controlling money supply (advocated by monetarists) and has led many central banks to implement money-supply-targeting procedures (Claudia, 2001). Another approach is the Taylor-principle, which is, adjusting short-term interest rate in response to movements in expected inflation and state of economic activity, as shown in Taylor (1993), Clarida et al (1997) and Woodford (2003).

At present, the situation does not seem to have shown any significant improvement. Whereas about 90 percent of the banks in the country offer other forms of electronic banking services like telephone banking. ATM and electronic fund transfer, Internet banking is yet to take centre stage. This aspect of banking is still at the basic informative stage (Ovia, 2001) this is so despite the widely acclaimed benefits of Internet banking against the traditional branch banking practice. Part of the reasons identified for the inability of banks in Nigeria to take full advantage of this mode of banking includes lack of adequate operational infrastructure like telecommunication and power, upon which Electronic banking generally relies. Due to the inability of the banks to integrate their operations into the Internet development process, Internet banking can be said to have less in the existing banking structure in the country.

In addition, the fact that internet usage in the country has been abused by cyber criminals makes its window unattractive for domestic banking operations and legitimate international operations. The inherent fear associated with patronizing internet banking services in Nigeria is again re-enforced by the growing evidences that the world over, dubious Nigerians use fake websites to scoop funds from unsuspecting victims. In some cases, these crimes are committed using existing bank sites.

2.4 The Automated Teller Machine (ATM) and Cheque

Worldwide, the use of paper cash still remains the most widely used and acceptable means of settling financial transactions and obligations. However, the proportion of cash transactions is increasingly on the decline, especially in advanced economics (Amedu, 2005). In USA, where the use of cash is still prominent, compared with European countries, it represents 50 percent or more of the total transactions. Of course, cash is a non electronic payment method. However, the physical carriage of cash as well as the visit to the bank branches is being reduced by the introduction of an electronic device. A cheque is a paper based payment instrument whose usages are still gaining ascendancy. The Automation focus on this instrument is to reduce the number of clearing days and improve on security arrangement in the course of settlement and collection. For example, in Nigeria the Central Bank of Nigeria CBN has just embarked upon online clearing and Nigeria has signified interest and signed path to this project (Johnson, 2005).

Desirous of making the policy succeed, the apex bank has introduced a number of financial services which among others include mobile money payment system, point of sale terminals, Alerts and Automated

Teller Machines (ATM). Essentially, Mobile Payment System introduced at the dawn of January 1, 2012 allows users to make payments with their GSM phones. It is a saving device and transfer system that turns GSM phone into a saving account platform, allowing owners to save money in it and also make transfers. The Point of Sale (POS) terminals are installed by businesses and connected to the Nigeria Inter Bank Settlement System for purposes of making payments during business transactions.

The study presented significant recommendation: availability of sufficient and well-functioning infrastructural facilities (notably Roads and Electricity), harmonization of fiscal and monetary policy, regular assessment of the performance of cashless banking channels (individually and collectively), consideration of the present state and structure of the economy, redesign of monetary policy framework and greater efforts towards economic growth whilst managing inflation. In conclusion, the shift towards a cashless Ogun State seems to be beneficial though it comes with high level of concerns over security and management of cost savings resulting from its implementation.

2.5 Cardinal Objectives of Cashless Policy

As mentioned earlier, one of the cardinal objectives of the cashless policy is to actualize the Nigeria's Vision 20:20 20. What then is vision 20: 20 20? Vision 20:20 20 is an economic transformation blue print which articulates "the long term intent to launch Nigeria onto a path of sustained social and economic progress and accelerate the emergence of a truly prosperous and United Nigeria". In other words, the blueprint expresses Nigeria's intent to improve the living standards of her citizens, taking cognizance of the enormous human and material resources in Nigeria and drive the economy to be among the top 20 economies in the World with a minimum GDP of \$900 billion and a per capital income of no less than \$4000 per annum (Nigeria vision 20:20 20, 2009)

The economic blueprint intent is aptly captured in the vision statement: "By 2020 Nigeria will have a strong diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and responsibly exploits its natural endowments to guarantee a high standard of living and quality of life to its citizens" (Nigeria vision 20: 20 20, 2009). To achieve the provisions of Nigeria Vision 20: 20 20, efficient and modern payment system is critical, which the cashless policy seeks to address (CBN, 2011).

2.6 The Card System

The card system is a unique electronic payment type. The smart cards are plastic devices with embedded integrated circuit being used for settlement of financial obligations. The power of cards lies in their sophistication and acceptability to store and manipulate data, and handles multiple applications on one card securely (Amedu, 2005). Depending on the sophistication, it can be used as a Credit Card, Debit Card and ATMs (Automatic Teller Machine). While the electronic card is gaining popularity in USA and Nigeria, the Spanish financial Institution demonstrated the highest implementation and update of smart cards across Europe (Amedu, 2005). The Smart Card was introduced into the Nigerian market to reduce or eliminate problems of carrying cash about (Amedu, 2005). It is electronically loaded with cash value and carried about like credit card and stores information on a microchip. The microchip contains a "purse" in which value is hold electronically. In addition, it also contains security programs; these protect transactions between one card user and the other. It can also be transferred directly to a retailer, merchant or other outlet to pay for goods and services, and like cash, transaction between individual without the needs for banks of the other third parties. Also, the system does not require central clearing. It is valued immediately. Also the system allows transfer of one value to the other hence it operates like cash.

2.7 Cash Based Economy VS Cashless Economy

Looking at empirical issues, however, in a cashless economy, money demand equation can be derived without influencing output and inflation (Gali, 2008). In this case, money plays the role of a unit of account and the amount of real money balances follows residually after output, inflation and interest rate have been determined. In examining the cost implications of cashless banking instruments, Gresvik and Owre (2002) studied how much it costs Norwegian banks to process various payment instruments. It finds that payment cards used for cash withdrawals at ATMs cost considerably more since the transactions involve cash replenishment, maintenance and security costs. In addition, the cost of using cheques for cash withdrawals was found to be three times more expensive than cash withdrawals at ATMs. Cross country studies such as Humphrey et al (1996) analyzed patterns in the use of cash and other e-payment instruments in 14 developed countries, including the US. Whilst treating payment instruments as if they were traditional goods, the authors construct measures of the cost (analogous to prices) of various payment methods in order to study whether differences in cashless instrument usage across countries can be explained by differences in the relative prices of such instruments. The result showed that such price differences failed to determine the usage of e-banking instruments. In other words, the convenience of using a particular instrument—a factor that is not measured --- may outweigh the price

differences that users face (Carrow and Staten, 2000).

Ogun State banks have no doubt invested much on technology; and have widely adopted electronic and telecommunication networks for delivering a wide range of value added products and services. They have in the last few years transformed from manual to automated systems. Unlike before when ledge-cards were used, today banking has been connected to information technology networks, thereby facilitating the practice of inter banking and inter-branch banking transactions. Development domestically has the introduction of mobile telephone in 2001 and improved access to personal computers and internet service facilities have also added to the growth of electronic banking in the Nigeria banking sector. However, whereas local banks most commonly practice real time online internet banking, the integration of customers into the process is far from been realized.

2.8 Electronic Banking Guidelines

The electronic banking guidelines emerged from the findings of a Technical Committee on Electronic Banking set up by the Central Bank of Nigeria in 2003 to find appropriate modalities for the operation of electronic banking in the country. It was indeed the findings and recommendations of the committee that led to the adoption of a set of guidelines on Electronic Banking in August 2003. Of the key provisions of the guidelines, only a section deals with issues relating to Internet Banking Section 1.3 paragraph 4 of the guidelines, exceptionally stresses that banks should put in place procedures for maintaining the bank's Web site, including the various security features needed for Internet banking services (CBN, 2003). Despite its numerous technical specifications, the guidelines have been widely criticized as not being enough to check the growing popularity of Electronic banking against the backdrop of growing sophistication in technology related crimes and frauds. Closer examination of the contents of the guidelines equally shows that the document fails to meet up with the four key areas where Electronic banking may have regulatory impact – changing the traditional lines upon which existing regulatory structures are laid; handling concerns about existing public policy issues; changing the nature and scope of existing risks; and re-balancing regulatory rules and industry discretion. Again, some important recommendations of the Technical Committee that gave rise to the adoption of the guidelines were completely omitted. This is especially so with paragraph 6.1 of the Committee's report, which among others recommended that all banks, intending to offer transactional services on the Internet /other e-banking products, should obtain an approval-in-principle from CBN prior to commencing these services.

2.9 Criticisms on Guidelines

Part of the criticisms is that the recent guidelines are capable of constraining the practice and development of Electronic Banking in Ogun State. One of such areas, for instance, is the requirement on electronic banking product development. While acknowledgment that the existing regulations would apply wholly on electronic banking, section 4.2 of the Guidelines emphasizes that only banks, which are licensed, supervised and with physical presence in Ogun State, are permitted to offer electronic banking services in Ogun State, and that virtual banks are not to be allowed. The Guidelines also gives indications that the products/services can only be offered to residents of Abeokuta with a verifiable address with the geographic boundary of Ogun State; any person residing physically in Ogun State as a citizen, under a resident permit or other legal residency designation under the Nigerian Immigration Act; any person known herein as a "classified person" who neither is temporarily in Nigeria.

The Guidelines further indicates that the e-banking service should be offered in Naira only; and that where such a service is to be provided in foreign currency, it should be to only the holders of ordinary domiciliary accounts, and conform with all foreign exchange regulations. On some other aspects, the Guidelines have been criticized by stakeholders and customer for not addressing adequately the critical issues concerning Internet security. It failed to explicitly recommend a standard that allows banks to examine potential threats that may already be in existence in each individual financial institution's current network. In addition to this array of criticisms, the workability of proper Internet framework is also queried amidst the poor state of basic information technological infrastructure in the country. This is essentially necessary since Electronic Banking generally relies on the existence of adequate operational infrastructure like telecommunications and power to function effectively. Though little success has been recorded, the supply of these requisite facilities is very erratic in the Nigerian case. Where they exist, high cost of acquisition and maintenance tend to deny a greater percentage of the population access to them. The case of Internet access is a glaring one where majority of the citizens rely solely on the services of commercial cyber cafes to meet their Internet needs.

4.0 Analysis of Data/ findings

Cash-less Nigeria is gradually becoming a reality as the challenges that are cropping up in the policy are also been remedied. This section shall discuss the findings of the research conducted on the Academic and Non-Academic staffs of The Federal Polytechnic Bauchi, Nigeria. Also merchants doing business in the metropolis of Bauchi state, Nigeria were sampled in this study. Thirty (30) persons each were selected from the various group

identified above. Questionnaire was administered as instrument of data collection and questions were centered on the use of electronic platform for payment transactions in relation with the newly introduced cash-less policy. The questionnaire contained six questions which will be analyzed in pairs, i.e. two questions for one analysis using chi square statistical test. Please see a sample of the questionnaire administered in the appendix page (*appendix*). The questions will hence be analyzed in the following order, Question 1&2, 3&4 and 5&6 respectively. Minitab Statistical package was used to run the findings gathered from the questionnaire administered.

Hypothesis

We reject H_0 if the calculated value is greater than the tabulated value and accept H_U .

I.e. $H_0 > H_U$, we reject.

We accept H_0 if the calculated value is less than the tabulated value and reject H_U .

I.e. $H_0 < H_U$, we accept.

Based on the selected questions that cover issues on suitability, sustainability and constraints of the cash-less policy in Nigeria, respondents' views were codified and analyzed using statistical package for social science (SPSS). See *Table V* below;

Table V

A Cashless economy would reduce cash related crimes/ A Cashless economy would curb inefficiency and corruption

		A Cashless economy would curb inefficiency and corruption			Total
		Strong Agree & Agree	Undecided	Disagree & Strong Disagree	
A cash-less economy would reduce cash related crimes	Strong Agree & Agree	74	3	4	81
	Undecided	2	0	0	2
	Disagree & Strong Disagree	3	0	1	4
Total		79	3	5	87

Table VI

Chi-Square Tests

	Value	df.	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.141	4	.535
Likelihood Ratio	2.293	4	.682
Linear-by-Linear Association	1.522	1	.217
N of Valid Cases	87		

At 10% level of significance, the critical value, X^2_v , (where 'v' is the degree of freedom) is equal to $X^2_4 = 7.779$. Chi square test result on table v show that the tabulated value (7.779) is greater than the calculated value (1.378), and based on our stated hypothesis, we therefore accept the null hypothesis and conclude that the category of people this study examined are generally in agreement that the Cashless economy would curb inefficiency and corruption in the Nigerian economy i.e. leakages and money laundering, bribery amongst other cash related fraudulent activities. Also, the Chi square test result suggests that there is a general consensus that the cash-less policy will reduce cash related crimes like armed robbery. Though this research has already established an opinion based on several literatures studied on cash-less policy that it could check inefficiency, corruption and cash related crimes, statistical findings from our survey have further concretized the opinion of several literatures reviewed on cash-less economy. We suggest that this development emanate from high level of confidence on the part of our respondents that the cash-less policy may be able to out-rightly prevent corruption and cash related crime in the Nigerian economy. This finding also suggests that stakeholders are generally in support of the issue of moving from a cash based economy to cash-less based economy.

Table VII

Alternative cash payment system would save time/Adequate infrastructures are not efficient and effective

		Adequate infrastructures are not efficient and effective			Total
		Strong Agree & Agree	Undecided	Disagree & Strong Disagree	
alternative cash payment system would save time	Strong Agree & Agree	54	7	8	69
	Undecided	7	0	0	7
	Disagree & Strong disagree	8	3	0	11
Total		69	10	8	87

Table VIII

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.831	4	.212
Likelihood Ratio	7.565	4	.109
Linear-by-Linear Association	.432	1	.511
N of Valid Cases	87		

The Chi square test result for table VIII shows that the calculated value is less than the tabulated values i.e. (5.831). This result is in line with our perceived expectations. The category of people examined are in consonance that alternative payment system would save time and ensure accurate payments and revalue our currency especially the kobo. Our statistical findings also suggest that availability of robust infrastructure would provide a level ground for the cash-less policy to thrive.

TABLE IX

Rural dwellers could use mobile banking with adequate sensitization/There is low level of awareness about the cashless policy among the stakeholders.

		There is low level of awareness about the cashless policy among the stakeholders.		Total
		Strong Agree & Agree	Undecided	
Rural dwellers could use mobile banking with adequate sensitization	Strong Agree & Agree	50	2	52
	Undecided	15	0	15
	Disagree & Strong Disagree	20	0	20
Total		85	2	87

Table X
 Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.378	2	.502
Likelihood Ratio	2.090	2	.352
Linear-by-Linear Association	1.168	1	.280
N of Valid Cases	87		

The Chi square test result in table X shows that the calculated value (1.378) is less than the tabulated value (4.605), this suggest that people in the rural areas would participate and enjoy the cash-less policy if properly sensitized. However this would require a massive drive on the part of the policy makers to educate the populace especially the illiterate on the gains of cash-less policy. Varieties of methods should be used to pass the message of the cash-less policy to the rural dwellers.

5.0 Conclusion/Recommendations

Cash-less Nigeria is gradually becoming a reality, concrete evidences from the pilot state(Lagos) where the policy started and the other five states that followed in quick secession has all reported a level of success that could be maximized for the ultimate goal of being among the top 20 economies in the world by year 2020 to be achieved. However, the teething problems of this policy experienced in the pilot state and the other five states in Nigeria where the policy has been implemented should be addressed thoroughly. This will give the entire populace the confidence to embrace the policy wholeheartedly when it goes nationwide by July 2014.

Though Nigeria still grabbles with a huge problem of decay infrastructure, it is high time she remedy her image in the eyes of the nation and international community by putting an end to the constraints that so easily distort economic growth and development. Constraints like epileptic power supply, network connectivity, ATM card fraud and dispense errors that often drag too long. The success of cash-less Nigeria which is overdue at this time of globalization is predicated mainly on the resolution of these incessant constraints.

Furthermore, the attitude of customers to these policies also go along way at influencing the banking activities that would develop a conscious efforts and positive attitude to policies always gather more information and make a response on their own. Well-structured policy give the way for the customers to be active in their dealings and to be able to discover satisfaction through their efforts, this is because customers enjoyed better when they relate with the banks. Adequate implementation is needed in providing a better services for the customers and to satisfy them, this has been as a result of the fact that the customers enjoyed better when they are actively involved, this means that they should be an active rather than passive as this enhance potential customers satisfaction. Sequel to the findings of this research, it is recommended that;

- ✚ The recently introduced cashless policy should be sustained.
- ✚ The policy should be operated in all the states of the federation.
- ✚ At the moment, there should be continuous stakeholders' interactive engagements.
- ✚ Mass media campaign should be geared up in relation to high level grass root sensitization in varieties of practical programs.
- ✚ Basic infrastructure required to facilitate cash-less Nigeria should be made readily available especially in the rural areas for proper integration to ensure easy operation of the policy.
- ✚ Continuous innovations and consolidation in the (CHIP and PIN) technology to prevent ATM cards fraud.
- ✚ Institutionalization of a vibrant legal frame work that could support stakeholders in the event of abuse.

Appendices

Appendix 1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
A Cashless economy would reduce cash related crimes/ A Cashless economy would curb inefficiency and corruption	87	100.0%	0	.0%	87	100.0%

A Cashless economy would reduce cash related crimes/ A Cashless economy would curb inefficiency and corruption

		A Cashless economy would curb inefficiency and corruption			Total
		Strong Agree & Agree	Undecided	Disagree & Strong Disagree	
A cash-less economy would reduce cash related crimes	Strong Agree & Agree	74	3	4	81
	Undecided	2	0	0	2
	Disagree & Strong Disagree	3	0	1	4
Total		79	3	5	87

Chi-Square Tests

	Value	df.	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.141	4	.535
Likelihood Ratio	2.293	4	.682
Linear-by-Linear Association	1.522	1	.217
N of Valid Cases	87		

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Alternative cash payment system would save time/Adequate infrastructures are not efficient and effective	87	100.0%	0	.0%	87	100.0%

Alternative cash payment system would save time/Adequate infrastructures are not efficient and effective

		Adequate infrastructures are not efficient and effective			Total
		Strong Agree & Agree	Undecided	Disagree & Strong Disagree	
Alternative cash payment system would save time	Strong Agree & Agree	54	7	8	69
	Undecided	7	0	0	7
	Disagree & Strong Disagree	8	3	0	11
Total		69	10	8	87

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.831	4	.212
Likelihood Ratio	7.565	4	.109
Linear-by-Linear Association	.432	1	.511
N of Valid Cases	87		

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Rural dwellers could use mobile banking with adequate sensitization/There is low level of awareness about the cashless policy among the stakeholders.	87	100.0%	0	.0%	87	100.0%

Rural dwellers could use mobile banking with adequate sensitization/There is low level of awareness about the cashless policy among the stakeholders.

		There is low level of awareness about the cashless policy among the stakeholders.		Total
		Strong Agree & Agree	Undecided	
Rural dwellers could use mobile banking with adequate sensitization	Strong Agree & Agree	50	2	52
	Undecided	15	0	15
	Disagree & Strong Disagree	20	0	20
Total		85	2	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.378	2	.502
Likelihood Ratio	2.090	2	.352
Linear-by-Linear Association	1.168	1	.280
N of Valid Cases	87		

Appendix 11

QUESTIONNAIRE

We are conducting a research on Cash-less Nigeria: Suitability, Sustainability and Constraints. The questionnaires below will guide us in getting relevant data for our study. Your responses will be used solely for the research and shall be kept confidential.

INSTRUCTION: please circle or tick the appropriate option accordingly.

KEY: SA = STRONGLY AGREED, A= AGREED, U= UNDECIDED, D= DISAGREED, SD= STRONGLY DISAGREED

SECTION A: BIO DATA

Age: (a) 20-30, (b) 31-40, (c) Above 40. Sex: (a) Male, (b) Female

Educational Qualification: (a) SSCE/WAEC (b) ND (c)HND, B.Sc. (d) MSc, (e)PhD, others (specify)

Occupation/Rank:

SECTION B: QUESTIONNAIRE

Q1. A Cashless economy would reduce cash related crimes like armed robbery.

SA/A/U/D/SD

in the Nigerian economy i.e. leakages and money laundering, bribery amongst other cash related fraudulent activities. SA/A/U/D/SD

Q3. Alternative cash payment like point of sale (POS) terminals, mobile payments system, internet banking, multi-functional ATMs, electronic fund transfer systems, and direct/credit would save time and ensures accurate payment and thereby revalue our currency especially the kobo. SA/A/U/D/SD

Q4. Adequate infrastructure that would support the seamless electronic payment systems like robust GSM network, powers etc. are not efficient and effective in Nigeria. SA/A/U/D/SD

Q5. Rural dwellers could also use the alternative cash payment especially the mobile payment system if properly educated and sensitized. SA/A/U/D/SD

Q6. There is low level of awareness about the cashless policy among the stakeholders. SA/A/U/D/SD

Yours faithfully,

MR. PAUL, E.O

REFERENCE

- Adepoju, A. S. & Alhassan, M. E. 2010. Challenges of Automated Teller Machine (ATM) Usage and Fraud Occurrences in Nigeria – A Case Study of Selected Banks in Minna Metropolis. *Journal of Internet Banking and Commerce*, 15, 10
- Aina-Blakson L.P. (2012). *The New CBN Cash-less Policy*: Newsletter, February.
- Ajayi, S. I. and Ojo, O. O. (2006). “*Money and Banking: Analysis and Policy in the Nigerian Context*”, Ibadan, Daily Graphics
- Akhalumeh, P.B. and Ohiokha, F. (2012). Nigeria Cashless Economy: The Imperatives. *International Journal of Management and Business Studies*, 2 (12), 31-36.
- Amedu, U. M. (2005). Domestic electronic payment in Nigeria: The Challenges. *Central Bank of Nigeria Bullion*, vol. 29, No. 1, January/March.
- Anyanwaokoro, M. (1999). “Theory and Policy of Money and Banking” Hosanna Publication, Enugu, Nigeria
- Ayo, C. K., Adewoye, J. O. & Oni, A. A. 2010. The State of e-Banking Implementation in Nigeria: A Post-Consolidation Review. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 1, 37-45.
- Baddeley, M. (2004). Using E-Cash in the New Economy: An Economic Analysis of Micro payment Systems, *Journal of Electronic Commerce Research*, Vol. 5, No.4, UK, Cambridge
- Bank for International Settlements (2001). *Committee on Payment and Settlement System Survey of electronic money developments* prepared by the Committee on Payment and Settlement Systems of the Central Banks of the Group of Ten countries, November.
- Bernardo Batiz-Lazo., (2013), Cashless in Cyprus {online} Available from <http://cashlessociety.wordpress.com/>> accessed on March 20th 2014
- Bernardo, B., Thomas, H., and David, S. (2012) Visions of a Cashless Society: Echoes [online] Available from <<http://www.bloomberg.com/photo/echoes-amex/-iV89rTvGeo9E.html>> accessed on 20th March 2014
- Bernardo Batiz-Lazo., (2013), Historical and contemporary perspectives on the future of money [online] Available from <<http://cashlessociety.wordpress.com/2013/09/03/the-challenge-of-digital-micropayments-in-mexico/>> accessed on 20th March 2014
- Bernardo Batiz-Lazo., (2013), The challenge of digital micropayments in Mexico [online] Available from< <http://cashlessociety.wordpress.com/2013/09/03/the-challenge-of-digital-micropayments-in-mexico/>> accessed on 20th March 2014
- CBN 2003. Guidelines on Electronic Banking in Nigeria. In: NIGERIA, C. B. O. (ed.). Central Bank of Nigeria. Central Bank of Nigeria (2003). Guidelines on Electronic Banking in Nigeria. August.
- Central Bank of Nigeria (2003). Report of the Technical Committee on Electronic Banking, February.
- Central Bank of Nigeria (2011) Towards a Cashless Nigeria: Tools and Strategies. *Nigerian Journal of Economy* 3(2), 344-350
- Central Bank of Nigeria (2011). “Further Clarification on Cashless Lagos Project” Retrieved from <http://www.cenbank.org/cashless>
- CBN (2014), Payment System Transformation: Phase III Cash-less Nigeria implementation. A presentation to Stakeholders at Bauchi.
- CBN (2011), Questions and Answers on the CBN Policy on Cash Withdrawal/Lodgement Limit. In: NIGERIA,

- C.B.O. (ed.). Abuja: CBN
- Daniel, D. G., Swartz, R. W. and Fermar, A. L. (2004). Economics of a Cashless Society: An Analysis of Costs and Benefits of Payment Instruments, AEI-Brookings Joint Center
- Gal'ı, J. (2008). *Monetary Policy, Inflation and the Business Cycle: An Introduction to the New Keynesian Framework*, Princeton University Press.
- Gardial, et.al (1994). "Comparing Consumers' Recall of Prepurchase and Postpurchase Product Evaluation Experiences." *Journal of Consumer Research* 20 (March): 548-560.
- Greener Journal of Internet, *Information and Communication Systems* ISSN: 2354-2373 Vol. 1 (2), pp. 040-043, April 2013.
- Humphrey, D. B. (2004). Replacement of cash by cards in U.S. Consumer Payments, *Journal of Economics and Business*, 56, 211–225.
- Joan L. Giese and Joseph A. Cote, (2002). Definition of Customer Satisfaction, *Academy of Marketing Science Review*, Vol 2000, No. 1
- Laukkanen, T. (2007) "Internet versus Mobile Banking: Comparing consumer value perceptions". *Business Process Management Journal*; vol. 13 No. 6, pp. 788-797
- Lichtenstein, S. and Williamson, K. (2006) 'Understanding consumer adoption of internet banking: an interpretive study in the Australian banking context', *Journal of Electronic Commerce Research*, Vol. 7, No. 2, pp.50–66. *Journal of Economics and Sustainable Development* Vol.3, No.14, 2012 ISSN 2222-1700 (Paper) ISSN 2222- 2855 (Online)
- Nigeria Vision 20: 20 20 (2009). *Economic Transformation Blueprint*. Nigeria: National Planning Commission.
- Mowen, John C. and Michael Minor. (1998). *Consumer Behaviour* 5th edition. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Moses, A. H., (2011), Cashless Economic can reduce Risk of carrying huge cash, (online) Available from <http://www.businessdayonline.com/.../22217> accessed on 4th April 2014
- Patinkin, D. (1965): -Money, Interest and Prices, Second Edition, New York, Harper and Row
- Rotenberg, et.al (1997). *New Keynesian Framework*, Princeton University Press
- Roth, B.L. (2010), The Future of Money: The Cashless Economy – Part 1 (online) Available <http://www.x.com/.../future-money-cashless-economy-parti> accessed on 4th April 2014
- Samuelson, P. A., and Nordhaus, W. D. (2005), *Economics*, 8th edition New York: Mc Graw-Hill Companies Inc.
- Sanusi, L.S. (2012). *Banking reform and its Impact on the Nigerian Economy* a Lecture delivered at the University of Warwick's Economic Summit, UK in February
- Shih, Y. and Fang, K. (2004). 'The use of decomposed theory of planned behaviour to study internet banking in Taiwan', *Internet Research*, 14 (3): 213-223,
- Siyabola, T. T. (2013). The Effect of Cashless Banking on Nigerian Economy, Babcock University, Ilishan Remo, Ogun State, Nigeria, Vol.1, Issue 2. (pp.9-19).
- Soludo, C. C. (2005). A keynote address delivered at the inauguration of the National Payments System Committee (NPSC) at Central Bank of Nigeria head office, Abuja in May
- Taylor (1993). Monetary Policy in a World Without Money, *International Finance. European Scientific Journal* June edition vol. 8, No.12 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 293.
- Teas, et.al (1997). "The Realms of Scientific Meaning Framework for Constructing Theoretically Meaningful Nominal Definitions of Marketing Concepts." *Journal of Marketing* 61 (April): 52-67.
- The GUARDIAN Newspaper (2001), *Challenges of Internet Banking, How Nigeria Can Benefit from the System*. Page 41. Published Nov. 21.
- The Survey of Organizational Excellence, The School of Social Work, <http://www.survey.utexas.edu>.
- THISDAY Live (2012). Nigeria, Business, Featured, Cashless Policy', April
- Thomas Sowell (2011), *Basic Economics* 4th Edition New York: Basic Books
- Woodford, M. (2003). *Interest and Prices: Foundations of a Theory of Monetary Policy* Princeton University Press

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

