

Merits and demerits of cashless policy in Nigeria

Kabiru Garba Muhammad

Lecturer, Faculty of Law, Usmanu Danfodiyo University, Sokoto Nigeria

Abstract

Information technology is beyond computers; it encompasses the data that 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 worthy of note that information technology goes a long way in helping to reduce transaction costs for banks, which translates to lower prices for services to customers. The adoption of information technology by banks has given birth to bankers' automated clearing system, automated payment systems and automated delivery channels, amongst others, which has now culminated into the implementation of cashless policy in Nigeria. The paper discusses the merits and demerits of the policy; and proffers recommendations.

Keywords: Cashless, Demerits, Merits, Nigeria, Policy.

Introduction

The focal point of this paper is on the merits and demerits of cashless policy in Nigeria. The paper discusses the scope of e-banking as comprising of – bankers automated clearing system; automated payment systems and automated delivery channels. It further discusses the cashless policy.

Information technology (IT) plays vital role in achieving sustainable development in any nation. Without optimal IT compliance, a country cannot attain speedy socio-economic growth and development. This is buttressed in the words of Kosoko thus:

The future of all business, particularly those in the service industry lies in information technology. In fact, information technology has been changing the way companies compete. Banks are companies engaged in banking business. Their future is, therefore, linked to the pervasive influence of information technology.

Information technology is beyond computers; it encompasses the data that a business creates and uses as well as a wide spectrum of increasing convergent and linked technologies that process such data. IT thus relates to the application of technical processes in the communication of data. It is worthy of note that IT goes a long way in helping to reduce transaction costs for banks, which translates to lower prices for services to customers. The scope of e-banking is not exhaustive; it keeps expanding as IT develops and new electronic devices spring up daily. However, the scope could be said to cover any electronic means used to facilitate automated clearing system; automated payment systems and automated delivery channels in the banking industry.

Bankers Automated Clearing System

Automated clearing of cheques and other financial instruments is facilitated by the Nigeria Automated Clearing System (NACS). NACS is an online service designed to facilitate the clearing of cheques, credit instruments as well as the payment and settlement of inter-bank transactions. It replaced the manual clearing house system described as cumbersome and time

consuming. Any bank selected for the purpose is a Participating Bank Clearing Centre (PBCC), and this is done after a rigorous screening by the Nigerian Inter-Bank Settlement System (NIBSS). The information technology requirements for participating include – possession of Magnetic Ink Character Recognition (MICR) which reads/sorts/encodes cheques and documents with character in magnetic ink, as specified by NIBSS technical committee; presentation of cheques and instruments that are only MICR compliant; installation of a secured communication line to the clearing house; signing of service level agreement (SLA) to guarantee high quality service of equipment; and recruitment of qualified staff, who should have a minimum qualification of a system administrator and operator.

Automated Delivery Channels

Automated delivery channels include telephone; internet; personal computer (PC); short message service (SMS); mobile and interactive television. They offer an excellent environment for banks to experiment with the delivery of electronic, home and office banking. This technology provides for exchange of data between computer applications supporting the process of business partners by using agreed-to and standardized data format. This device enables customers to carry out transactions with their bankers through connection between the customer's terminals in their homes and/or offices and the banker's computer system.

Telephone Banking

Telephone banking is a service provided by a financial institution which allows its customers to perform financial transactions over the telephone. Most telephone banking systems use an automated phone answering system with phone keypad response or voice recognition capability. To guarantee security, the customers must first authenticate their identity through a numeric or verbal password or through security questions asked by a live representative. With the obvious exception of cash withdrawals and deposits, telephone banking

offers virtually all the features of an ATM. Usually, there is the possibility to speak to a live representative located in a call centre or a branch, although this feature is not guaranteed. In addition to the self-service transactions, telephone banking representatives are usually trained to do what was traditionally available only at the branch such as loan applications, investment purchases and redemptions, cheque book orders, debit card replacements, change of address, etc.

Internet Banking

Internet banking refers to the use of the internet as a remote delivery channel for banking services. Internet banking is often confused with personal computer banking (PC banking) because most internet transactions are conducted through customer's personal computer that connects to a banking website via the internet. There is however a difference between PC banking and internet banking. With PC banking, the customer needs special software to act as an interface between the banker and his computer. The banker might provide its own proprietary software or require the customer to use a package. Internet banking requires no special dial up or software. All the customer needs is the internet browser. Once he is on the net, his bank's website is only a click away. Internet banking or online banking allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society. Internet banking offers features such as bank statements; electronic bill payment; funds transfer; loan applications and transactions, and account aggregation which allows user to monitor all of his accounts in one place. It is widely recognised that internet banking provides more revenue per customer and costs less per transaction than any other e-banking channel.

PC Banking

PC banking is a banking service that enables bank customers to access their account information and perform certain bank transactions using a personal computer and a modem. The system is based on the use of internet banking software and it enables the customer to, among other things, download his account information from his bank, upload instructions to his bank, and send and receive secure e-mails to and from his bank respectively. It allows a customer to easily control his finances from his home or office computer with his personal financial management software. Once a customer is online, he can safely and securely access his bank account information, check on balances, pay his bills, transfer funds between accounts electronically, and more.

Short Message Service (SMS) Banking

SMS banking is a technology-enabled service permitting banks to operate selected banking services over the customers' mobile phones using SMS messaging. SMS banking services are operated using both push and pull messages. Push messages are those that the bank chooses to send out to a customer's mobile phone without the customer initiating a request for the information. Typically, push messages could be either mobile marketing messages or messages alerting to an event which happens in the customer's bank account such as a large withdrawal of funds from the ATM or a large payment using the customer's credit card, etc. Another type of push message is a one-time password (OTP). Pull messages are those that are initiated by the customer using a mobile phone for obtaining

information or performing a transaction in the bank account. Examples of pull messages for information include an account balance enquiry or requests for current information like currency exchange rates and deposit interest rates. A bank customer is empowered with the capability to select the list of activities (or alerts), that he/she needs to be informed. This functionality to choose activities can be done either by integrating to the internet banking channel or through the bank's customer service call centre.

Mobile Banking

Mobile banking also known as M-Banking or Wireless Application Protocol (WAP) enabled banking, is a term used for performing balance checks, account transactions, payments etc via a mobile device such as a mobile phone. Mobile banking is most often performed via SMS or the internet accessed through the mobile device, but can also use special programmes downloaded to the mobile device. Mobile banking allows customer who is already subscribed to mobile network in Nigeria, access his bank account on his mobile phone through an interactive menu based application installed on the phone. It allows the customer to operate his account anywhere anytime using his mobile phone provided the phone is aligned to the bank's network supports or SMS service.

Interactive Television

Interactive television is an audio/video delivery technique that allows viewers to interact with television content, and equally provides return path as they view it. As long as the customer subscribes to a satellite or cable television service, some banking facilities such as checking balances, moving money between accounts, paying bills and setting up overdrafts are made available through a television set. Interactive television is developed as a means of entering customer's households to sell products and services (financial products inclusive). It requires an intelligent decoder, which acts as a computer attached to the cable of television network. It is also possible to combine satellite television with the telephone network to enable interaction outside the cable network. This helps to provide sales and loan information on the screen.

Automated Payment Systems

Automated payment systems are simply payments using electronic devices and products such as ATM, plastic cards and electronic funds transfer.

Automated Teller Machine

ATM is a computerised telecommunications device that provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. It is a remote cash dispenser that assists customers to have access to withdrawal outside the banking hall. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic strip or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date. Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals and check their account balances as well as purchase phone prepaid credit, etc.

Electronic Cards

Plastic cards are used to identify customers and pass same to machines to initiate paper or electronic payment. It is a mechanism by which customer could interface with electronic banking industry. Electronic cards are microchips that store electronic cash to use for online and offline micro payments. There are a range of electronic cards and they include, among others, credit card, debit card, cheque guarantee card and digital cash card.

Credit Card is used as a means of borrowing or as a convenient method of payment. Financial institutions issue credit cards in order to provide credit facilities to their customers.

Debit Card permits customers to pay for goods and services at the point of sale. Debit Card is a charge card designed as a convenient method of payment in place of cash or cheque.

Cheque Guarantee Card is used in conjunction with a cheque book and guarantees the payment of a cheque up to a specified amount.

Digital Cash Card is used by the customer to pay for small value items and can be used independently of a bank account. Of course, any one card may be multi-functional. Payment cards may also enable the customer to obtain cash from an ATM.

Electronic Wallet

Electronic wallet is a wallet that can be filled with the credit card data or refilled through bank transfers. Once the customer has registered the specific e-wallet (compiling a web form including both the personal and the credit card data), he needs the user identity and the password only to make an online transaction (the credit card data are not necessary anymore when making a purchasing online). Some e-wallets can even generate a temporary credit card number (i.e. a credit card number that can be used just once) that can be used on any website even though the latter does not accept the e-wallet. Electronic wallet looks like a small pocket calculator with a plug which enables electronic connection with another wallet, either directly or through telephone lines. It stores an amount of money that cannot be forged, and enables safe transaction with other wallets. It is safer than cash money since only the legitimate owner who knows the password can operate it. It replaces credit-cards, cheques and travellers' cheques and saves the paper work involved in their use.

Electronic Funds Transfer (EFT)

Electronic fund transfer (EFT) is an electronic oriented payment mechanism. It is an electronic tool that is used to effectively transfer the value of exchange process for goods and services, ideas or information from one bank account to another account in another bank. It allows customers' accounts to be credited electronically within 24 hours. The basic elements of EFT system are classified into three: clearing network characteristics, remote service or point of sale characteristics and pre-authorised debit and/or credit characteristics.

Electronic Funds Transfer at Point of Sale (EFTPOS)

Point of Sale (POS) terminals handle cheque verifications, credit authorisation, cash deposit and withdrawal, and cash payment. This enhances electronic fund transfer at the point of sale

(EFTPOS). EFTPOS enables a customer's account to be debited immediately with the cost of purchase in an outlet such as a supermarket or petrol station. It consists of the accumulation of electronic payment messages by the retailer, which are subsequently passed on to appropriate institutions for processing. The purchase price is debited on the buyer's account and credited on the seller's account. The basic components of every EFTPOS system are recognition, authorisation, message-entry and message-processing.

Electronic Letter of Credit

An electronic letter of credit is an undertaking by an issuing bank sent electronically to the beneficiary to make payment within a specified time, against the presentation of documents which comply strictly with the terms of the credit. Therefore, the risk to the seller of non-payment by the buyer is transferred to the issuing bank (and the confirming bank if the electronic letter of credit is confirmed) as long as the exporter presents the documents in strict compliance with the credit. It is important to remember that all parties in the electronic letter of credit transaction deal with electronic documents, not goods. Other than cash in advance, a letter of credit is the most secure method of payment in international trade, with the payment undertaking of the bank, as long as the terms of the credit are met. The letter of credit also provides security for the importer who can ensure all contractual documentary requirements are met by making them conditions of the letter of credit.

Electronic Cheque

An electronic cheque functions in the same way as a paper cheque. It acts as a message to a bank to transfer funds to a third party. However, it has a number of security advantages over conventional cheques since the account number can be encrypted, a digital signature can be employed, and digital certificate can be used to validate the payer, the payer's bank, and the account.

Electronic Cash

Electronic cash, also known as e-currency, e-money, e-cash, digital money, digital cash or digital currency refers to money or scrip which is exchanged only electronically. Typically, this involves the use of computer networks, the internet and digital stored value systems. Electronic fund transfer and direct deposit are all examples of electronic money. Also, it is a collective term for financial cryptography and technologies enabling it. Electronic or digital cash allows consumers to pay for goods and services by transmitting a number from one computer to another. These numbers function much like the serial numbers on real money. They are unique, and represent a specific amount of actual cash. Unlike credit-card transactions, e-cash transactions are anonymous. E-cash works just like paper cash. Once it is withdrawn from an account it does not leave a trail of digital crumbs. E-cash by its nature is portable and therefore more convenient for mobile commerce.

Electronic Billing

Electronic billing is the electronic delivery of invoices (bills) and related information by a company to its customers. Electronic billing is referred to by a variety of terms, including: electronic bill presentment and payment (EBPP) typically focused on business-to-consumer billing and payment; electronic invoice presentment and payment (EIPP) typically focused on business-

to-business billing and payment. While there are current efforts to standardise systems for electronic billing and invoicing, there is currently a wide variety of options for businesses and consumers. Most fall into one of two categories: customer service providers (CSPs) which allow a business to invoice clients electronically; bank aggregators, which allow consumers to pay multiple bills, typically through their bank.

The bankers automated clearing system, automated delivery channels and automated payment systems discussed above culminated into a policy introduced by Central Bank of Nigeria (CBN) known as 'Cash-less Nigeria'. Hence, the paper proceeds to discuss the Cash-less Nigeria.

Cashless Society

A cashless society is a culture where no one uses cash; all purchases being made are by credit cards, charge cards, cheques, or direct transfer from one account to another through mobile banking. It is an environment in which money is spent without being physically carried from one person to the other. It involves the widespread application of computer technology in the financial system.

Cash-less Nigeria

The CBN has introduced a new policy on cash-based transactions which stipulates a 'cash handling charge' on daily cash withdrawals or cash deposits that exceed five hundred thousand Naira (N500,000) for individuals and three million Naira (N3,000,000) for corporate bodies. The new policy on cash-based transactions (withdrawals and deposits) in banks aims at reducing, but not eliminating the amount of physical cash (coins and notes) circulating in the economy; and encouraging more electronic-based transactions (payments for goods, services, transfers, etc.)

Reasons for the Cash-less Policy

The new cash-less policy was introduced by CBN for a number of reasons amongst which are:

- To drive development and modernisation of the payment systems in line with Nigeria's vision 2020 goal of being amongst the top twenty (20) economies by the year 2020. An efficient and modern payment system is positively correlated with economic development; and is a key factor for 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.
- To improve the effectiveness of monetary policy in managing inflation and driving economic growth.

In addition to the above reasons, the cash policy aims to curb some of the negative consequences associated with the high usage of physical cash in the economy which include:

- High cost of cash – There is a high cost of cash along the value chain from the CBN and the banks, to corporations and traders; everyone bears the high costs associated with volume cash handling.
- High risk of using cash – Cash encourages robberies and other cash-related crimes. It can also lead to financial loss in the case of fire and flooding incidents.
- High subsidy – CBN analysis showed that only ten percent (10%) of daily banking transactions are above 150k, but the ten percent (10%) account for majority of the high value transactions. This suggests that the entire banking

population subsidises the costs that the tiny minority ten percent (10%) incurs in terms of high cash usage.

- Informal economy – High cash usage results in a lot of money outside the formal economy, thus militating against the effectiveness of monetary policy in managing inflation and encouraging economic growth.
- Inefficiency and Corruption – High cash usage enables corruption; leakages and money laundering, amongst other cash-related fraudulent activities.

Contents of the Cash-less Policy

The following aspects of the policy were applied in Lagos State from 1st January, 2012 tagged 'Cash-less Lagos':

- Only cash in transit (CIT) licensed companies are allowed to provide cash pick-up services. Banks ceased CIT lodgement services rendered to merchant – customers in Lagos State from 31st December, 2011. Any bank that continues to offer CIT lodgement services to merchants shall be sanctioned.
- Third party cheques above one hundred and fifty thousand Naira (N150,000) shall not be eligible for encashment over the counter. Value for such cheques shall be received through the clearing house.

The service charge took effect from 30th March, 2012. This gave people time to migrate to electronic channels and experience the infrastructure that has been put in place. Banks were to use this period as grace to encourage their customers to migrate to available electronic channels; and where possible, demonstrate the costs that will accrue to those that continue to transact high volumes of cash from 30th March, 2012 in Lagos State.

The pilot was run in Lagos State from January 2012; while the policy took effect in Rivers, Anambra, Abia, Kano, Ogun and the Federal Capital Territory (FCT) on the 1st July, 2013. The policy was implemented nationwide on 1st July, 2014.

The cash-less policy applies to all accounts with exception to government revenue generation account, primary mortgage institutions, microfinance banks and embassies. Banks were directed to therefore work with their corporate customers to arrange for suitable e-collection options.

The limits are cumulative daily limits for withdrawal and for deposits respectively (for individuals – the daily free withdrawal limit is five hundred thousand Naira (N500,000); while the daily free deposit limit is equally five hundred thousand Naira (N500,000). The limits apply to the account so far as it involves cash, irrespective of channel (such as over the counter, ATM, third party cheques encashed over the counter, etc) in which cash is withdrawn or deposited. For instance, if an individual withdraws four hundred and fifty thousand Naira (N450,000) over the counter, and one hundred and fifty (N150,000) from the ATM on the same day, the total amount withdrawn by such customer is six hundred thousand Naira (N600,000); and the service charge will apply on one hundred thousand Naira (N100,000) which is the amount above the daily free limit. The limit also applies to cash brought through CIT companies, as the CIT companies only serve as means of transportation.

The charges became applicable from 30th March, 2012 in Lagos; and 1st October, 2012 in Rivers, Abia, Anambra, Ogun, Kano and the FCT respectively. The service charge for daily cumulative deposits/withdrawals above the limit shall be borne by the account holder. The policy does not however prohibit withdrawals or deposits above the stipulated amounts, but that such transactions will be subject to cash handling charges.

Demerits of the Cash-less Policy

There are a number of constraints on the cash-less policy in the Nigerian economy. They include:

- **Network unreliability:** Instability of POS networks which is prevalent across all operators poses a challenge which may serve as a barrier to usage especially when money sent is not received when needed, which is crucial.
- **Fraud:** Prevalent fraudulent acts among ATM scammers are likely to occur on the POS channels.
- **Security:** There are great concerns about trust in the agents providing cash-in and cash-out services. This could be risky for customers and the agents if there is no form of adequate security.
- **Charges determinants:** The question of how will charges be determined is a factor. Will the charges be determined by location/proximity; amount involved; periodic monthly charges or occasional access fees?
- **System instability:** The instability in the economy in general and banking in particular (both deposit money banks and microfinance banks) has created and is continuously creating fears in the public.
- **Literacy issue:** Both consumers and business enterprises have limited knowledge of what services exist, how they operate and what benefits to be derived from cash-less economy. This is a situation where many of the targeted populace are illiterate of the e-banking applications. For instance, a dubious businessman may capitalise on a customer ignorance of the e-banking applications to the disadvantage of the customer.
- **Inadequate infrastructural development:** Lack of infrastructural development particularly energy puts a lot of constraints to the operations of e-payment machines. There are also great concerns on the policy operations in the rural areas, especially where there is currently no network coverage.
- **Operational disruptions:** These may greatly affect the cash-less policy. Examples abound, even in developed economies of the world. The computer problem that caused the Bank of New York a whopping \$22 billion overdraft in 1985; a roof collapse after a heavy snow resulting in a shutdown of an electronic data system facility for processing ATM transactions affecting more than 5000 ATMs in the US in 1993; the disruption of the operations of the internet as a result of the worm virus in 1987; and a host of other disruptions.

Merits of the Cash-less Policy

A variety of benefits are expected to be derived by various stakeholders from an increased utilisation of the cash-less policy. These include but not limited to:

- Increased convenience for consumers.
- Additional service options for consumers.
- Reduced risk of cash-related crimes.
- Cheaper consumer access to (out-of-branch) banking services.
- Consumer access to credit and financial inclusion.
- Faster access to capital for corporations.
- Reduced corporation revenue leakage.
- Reduced corporation cash handling costs.
- Increased tax collections for governments.
- Greater financial inclusion for government.
- Increased governmental economic development.

- Faster transactions for both banker and customer.
- Improved hygiene on site. This is so because handling of coins and notes provide an easy way for bacteria to spread quickly from one individual to another.
- Managing staff entitlements which can be programmed on to the card and be refreshed, daily, weekly or monthly.
- Increased sales as vending and catering purchases are often dictated by the amount of loose change in the pockets. But in cash-less system, the value on the card is available 24/7.
- Cash collection is made simple as time spent collecting, counting and sorting cash costs money.
- Reduced cash circulation.
- Job creation is facilitated as the licensing and establishment of payment agencies will create jobs and new business opportunities.

On the issue of awareness, the CBN ran targeted stakeholder engagement sessions for key groups that will be most impacted by the cash-less policy as a first stage of its planned communication campaign, with the objective of creating awareness and providing an opportunity for stakeholders to raise issues and get on the spot clarifications. These stakeholders include markets, associations, professional bodies, religious bodies etc. These stakeholder sessions have run nationwide while the media campaign continues.

Recommendations

In line with the preceding discussions, it is recommended that:

- The CBN should intensify in its awareness campaign by harnessing other opportunities such as the use of religious leaders in the awareness campaign since the lack of banking culture especially in the Northern part of the Country has been largely due to religious belief.
- The CBN should reconsider its punitive based system of punishing non-adherents of the cashless policy; and adopt a reward based system which rewards adherents to the policy no matters how negligible. This will serve as attraction to non-adherents and will make users be friendly to the policy that they will be eager to learn more about the policy.
- Governments at every level should collaborate in providing essential social and physical infrastructures that drive the cashless economic policy.
- The speed adopted in the implementation of the policy in the Country should be reduced that the pace of the implementation should now be gradual.

Conclusion

The paper discussed the scope of e-banking as consisting of bankers' automated clearing system; automated payment systems and automated delivery channels. It further discussed the constraints and benefits of cashless policy; and proffered recommendations for the effective and efficient implementation of the policy.

Information and communication technology (ICT) has no doubt brought about innovations in the economic life of the Country. However, there is dearth of legal instruments to meet up with the developments occasioned by the influence of ICT. Law maker therefore need to be up and doing as well as proactive in enacting laws in this regard. Nevertheless, the constraints associated with the effective implementation of the cashless economic policy are clearly surmountable; and regardless of the constraints, the policy is a welcome development that should be sustained.

References

1. Kosoko S. Banks and Information Technology Contracts: Some Legal Considerations, *MILBQ*, Lagos, 79-88.
2. Ibid.
3. <<http://www.jidaw.com/itnewsaprilfull.html>> (28 December 2012).
4. Ibid.
5. Agboola AA. Optimizing the use of Information and Communication Technology in Nigerian Banks, *Journal of Internet Banking and Commerce*, 2008, 13, http://www.arraydev.com/commerce/jibc/2008-04/Agboola_fianl_accepted.pdf, (28 December 2012).
6. <<http://www.tiresias.org/research/guidelines/ebanking.htm#telephonebanking>> (04 February 2013).
7. Ibid.
8. Olukole O. Nigerian Electronic Banking Law, (Nonesuchhouse, Ibadan), 2009, 25-26.
9. See ante footnote 6.
10. <<http://www.canequity.com/mortgage-resources/?p+D>> (05 February 2013).
11. Olukole O. op cit, 24.
12. <<http://www.suntrust.com.portal/server.pt/community/pc-banking/402>> (05 February 2013).
13. Ibid.
14. Ibid.
15. Olukole O., op cit, 22.
16. Agboola AA. Electronic Payment Systems and Tele-Banking Services in Nigeria, *Journal of Internet Banking and Commerce*, 2006, II, <<http://www.arraydev.com/commerce/JIBC/2006-12/agboola.asp>> (07 February 2013).
17. Ibid.
18. R. Cranston, *Principles of Banking Law*, (Oxford University Press, Network, 1997, 297).
19. Ibid.
20. Ibid.
21. Ibid.
22. M. Riccardo, Payment Systems in the B2C e Commerce: Are They a Barrier for the Online Customer? 2009. <http://www.arraydev.com/commerce/JIBC/2009-08/SI_Riccardo_2.pdf>(20 February 2013).
23. Even S, Goldreich O. *Electronic Wallet* <<ftp://ftp.hacktic.nl/pub/mirrors/Advances%20in%20Cryptography/HTML/PDF/C83/383.PDF>> (20 February 2013).
24. Ibid.
25. SITPRO, Report on the Use of Export Letters of Credit, 2001/2002, <<http://www.sitpro.org.uk/reports/lettcredr/lettcredr.pdf>> (20 February 2013).
26. Ibid.
27. <<http://www.encyclopedia.com/doc/1-12-electroniccheque.html>> (22 February 2013).
28. <http://en.wikipedia.org/wiki/Electronic_money> (22 February 2013).
29. L. Walker, *Electronic Cash: A New Way to Pay*, <<http://www.writeedge.com/articles/electroniccash.asp>> (22 February 2013).
30. <http://en.wikipedia.org/wiki/Electronic_billing>, (22 February 2013).
31. V. Obi and R. Lebona, *Imperatives of Advancing a Cashless Nigeria*, <<http://nsacc.org.ng/imperatives-of-advancing-a-cashless-nigeria/>>, (27 August 2012).
32. Central Bank of Nigeria, *Cash-less Nigeria*, <<http://www.cenbank.org/cashless/>> (07 July 2014).
33. Ibid.
34. Ibid.
35. Ibid.
36. Ibid.
37. Ibid.
38. Ibid.
39. Ibid.
40. Ibid.
41. O Nwankwo, OR Eze. Electronic Payment in Cashless Economy of Nigeria: Problems and Prospect, *Journal of Management Research*. <[file:///C:/Users/user/Downloads/2650-11227-1-PB%20\(1\).pdf](file:///C:/Users/user/Downloads/2650-11227-1-PB%20(1).pdf)> (25 July 2014). 2013; 5(1): 146-147.
42. VE Ejiofor, JO Rasaki. Realising the Benefits and Challenges of Cashless Economy in Nigeria: IT Perspective, *International Journal of Advances in Computer Science and Technology*, 2012; 1(1): 11. <<file:///C:/Users/user/Downloads/ijacst02112012-libre.pdf>> (25 July 2014).
43. See ante footnote Nwankwo O, Eze OR, op cit, Ejiofor VE, Rasaki JO, op cit, 36(11):146-147.
44. Ibid.