

“Mandatory adoption of the Central Bank of Nigeria’s cashless and e-payment policy: implications for bank customers”

AUTHORS	Kingsley Aderemi Adeyemo  https://orcid.org/0000-0002-3583-0819 David Isiauwe  https://orcid.org/0000-0001-8285-0604 Dorcas Adetula  https://orcid.org/0000-0001-5411-0019 Olusanmi Olamide  https://orcid.org/0000-0002-2729-119X Owolabi Folashade  https://orcid.org/0000-0002-0054-2526
ARTICLE INFO	Kingsley Aderemi Adeyemo, David Isiauwe, Dorcas Adetula, Olusanmi Olamide and Owolabi Folashade (2020). Mandatory adoption of the Central Bank of Nigeria’s cashless and e-payment policy: implications for bank customers. <i>Banks and Bank Systems</i> , 15(2), 243-253. doi: 10.21511/bbs.15(2).2020.21
DOI	http://dx.doi.org/10.21511/bbs.15(2).2020.21
RELEASED ON	Friday, 03 July 2020
RECEIVED ON	Tuesday, 12 September 2017
ACCEPTED ON	Wednesday, 10 October 2018
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Banks and Bank Systems"
ISSN PRINT	1816-7403
ISSN ONLINE	1991-7074
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

45



NUMBER OF FIGURES

0



NUMBER OF TABLES

4

© The author(s) 2025. This publication is an open access article.


BUSINESS PERSPECTIVES


LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 12th of September, 2017

Accepted on: 10th of October, 2018

Published on: 3rd of July, 2020

© Kingsley Aderemi Adeyemo, David Isiavwe, Dorcas Adetula, Olusanmi Olamide, Owolabi Folashade, 2020

Kingsley Aderemi Adeyemo, Ph.D.,
ACA, Department of Accounting,
Covenant University, Ota, Ogun State,
Nigeria. (Corresponding author)

David Isiavwe, Ph.D., FCA, General
Manager, Union Bank of Nigeria Plc.,
Nigeria.

Dorcas Adetula, Ph.D., ACA,
Department of Accounting, Covenant
University, Ota, Ogun State, Nigeria.

Olusanmi Olamide, ACA, Department
of Accounting, Covenant University,
Ota, Ogun State, Nigeria.

Owolabi Folashade, ACA, ACCA,
Department of Accounting, Covenant
University, Ota, Ogun State, Nigeria.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:

Author(s) reported no conflict of interest

Kingsley Aderemi Adeyemo (Nigeria), **David Isiavwe** (Nigeria), **Dorcas Adetula** (Nigeria),
Olusanmi Olamide (Nigeria), **Owolabi Folashade** (Nigeria)

MANDATORY ADOPTION OF THE CENTRAL BANK OF NIGERIA'S CASHLESS AND E-PAYMENT POLICY: IMPLICATIONS FOR BANK CUSTOMERS

Abstract

This study seeks to uncover the projected gains and challenges of a cashless and e-payment policy in Nigeria, with particular emphasis on the wellbeing of bank clients, and to examine the extent to which the promised benefits of the policy were realized eight years down the line of implementation. Researchers provided copies of a research questionnaire to selected bankers and bank customers in Ogun and Lagos states of Nigeria to find perceptions of the two stakeholder groups regarding the subject matter. Three hypotheses formulated were tested using ANOVA. The paper reveals that the cashless banking initiative in Nigeria has significantly enhanced bank customer satisfaction; the implementation of the cashless banking structure in Nigeria has not led to a significant reduction in the level of cash fraud in Nigerian banks; and the adoption of a cashless economy practice in Nigeria has significantly improved the management of bank customer funds in terms of spending and saving. The paper, in particular, recommends that bank regulators constantly and widely cooperate with all key stakeholders in the system in the fight against cybercrime. This will make the electronic space safe and reliable for use in doing banking in Nigeria and beyond.

Keywords

cashless banking, customer satisfaction, payment channels, fraud, fund management

JEL Classification

E58, E59

INTRODUCTION

The relevance of the banking industry in any country stems from its financial mediation traits, establishment of a well-ordered settlement structure and acceleration of the enactment of the monetarist policy. With respect to an intermediary, banks muster funds from the superfluous units of the nation and transfer these funds to the insufficient parts, predominantly private sector, to expand production capacity (Isiavwe, 2017; Adeyemo, Isiavwe, Adetiloye, & Eriabie, 2017). Researchers maintained that empirical evidence exists that suggests a positive correlation between money supply, bank assets and economic development (Olisabu, 1991 as cited in Adeyemo, 2012; Nyong, 1996 as cited in Ekpung, Udude, & Uwalaka, 2015; and Ogbonna, 2016; Alashi, 1991 as cited in Sepehrdoust & Berjisian, 2013).

In 2012, the Central Bank of Nigeria (CBN) embarked on the implementation of a cashless banking system in the nation with the prime ambition of plummeting significantly (not eradicating), the volume of cash in the system and enhancing automated based dealings. The CBN, in driving a cashless strategy for the nation, emanated a circular Ref: COD/DIR/GEN/CIT/05/031 on April 20, 2011. The bill was dubbed "Industry Policy on Retail Cash Collection and Lodgments"

and sent to the entire banks in the country, CIT (Cash in Transit) establishments, Payment system service merchants, Switches, Card purchasers, Issuers and processors starting from June 1, 2012, the day-to-day cumulative maximum of ₦ 500,000 (USD 1,300) and ₦ 3,000,000 (USD 7,800) on unrestricted cash withdrawals and lodgments by individuals and corporate clientele respectively with commercial banks shall be enforced. Fine of 5% and 3% correspondingly are to be levied on extra ₦ 1,000 (USD 2.6) (Ezumba, 2011). Thus, even third party cheques above ₦ 500,000 (USD 1,300) would no more be cashed over the counter as they would be projected to go through the clearing house (Ikpefan & Ehimare, 2012).

The future workability of this procedural change will be dependent on the ratification and acquiescence by end-users (Ejiro, 2012). A cashless banking system is an economic setting that moderates the use of cash by offering alternate fashion for effecting disbursements (Alilonu, 2012, as cited in Rofiat, 2017; Obi, 2013).

According to the Report of Technical Committee on e-banking (CBN, 2003), e-banking can be conceptualized as the operation of banking activities via high-tech and electronic means, such as telephones, facsimiles, card payments, personal computers, Internet, and other electronic channels. Summarily, electronic banking comprises the use of computer setup in giving out cash and making payments (Fatokun, 2017).

The objectives of this paper are, inter alia, to unearth prospects and limitations of a cashless transaction and E-payment policy in Nigeria, with specific focus on the wellbeing of bank clients, and to examine the degree to which the promised benefits of the policy have been realized four years down the line of implementation. Additionally, the paper hopes to find out if the adoption of the new policy has enhanced bank customer satisfaction and generally educate readers about the steps Nigerian government has taken to transform Nigeria to a cashless economy.

The remaining part of this paper comprises five subsections: Sections 1 and 2 are centered on the summary of relevant literature and method of data analysis, respectively. Section 3 focuses on the results of the test of hypotheses, while sections 4 and 5 focus on discussing findings and conclusion and recommendations, respectively.

1. LITERATURE REVIEW

A cashless strategy was compelled by the growing ascendancy of cash in the Nigerian system with its accompanying repercussions for charge of cash administration to the finance sector, safe-keeping, money concealment, amid other colossal cost (Ezuwore-Obodoekwe, Eyisi, Emengini, & Alio, 2014; and Eniang-Esien, & Ekpe, 2019). The cashless strategy was authorized by the Bankers Committee, which is made up of the CBN, the Nigeria Deposit Insurance Corporation (NDIC), Discount Houses and the then 24 commercial banks in the country (Odior & Banuso, 2019).

As already stated, a cashless system is not a financial system with out-and-out obliteration of cash, but a financial scenery in which goods and services are exchanged via electronic media. According

to Ochie (2013) and Alilonu (2012), in commencing the cashless system, it was the discernment of the CBN that, by fixing the extent of physical currency to be drawn out or lodged at a given period in banks, it will shrink (not eradicate) the volume of physical currency (coin and/or notes) in exchange in the financial system, and inspire further electronic-based businesses.

Conversely, a cash-based economy is a development in which economic transactions are made primarily on the basis of cash. Numerical indices provided by the Central Bank of Nigeria (CBN, 2012) uncovered that cash associated deals accounted for 99% of punters' undertakings in the Nigerian banking system as of December 31, 2011. According to Osazevbaru and Yomere (2015), and Odior and Banuso (2019), a cash-based system enforces some charges on the banking sectors, per-

sonages, and the governmental authorities. The greater the speed of currency circulation, the higher the associated charge incurred by the individuals in the transaction process, notably, the charge of reproduction of fresh notes to substitute those that are tatty or damaged owing to everyday usage. Additionally, Lamikanra (2012) and Eboh (2011) posit that the charge of currency handling to the Nigerian economic system in 2009 was ₦ 114.5 billion (USD 297.7 million). This amount consisted of cash in transit charge ₦ 27.3 billion (USD 70.98 million) (24%), cash handling fee ₦ 69.1 billion (USD 179.66 million) (67%) and Vault administration charge ₦ 18.1 billion (USD 47.06 million) (9%). This amount was projected to outstrip ₦ 192 billion (USD 499.2 million) in 2012. Hence, the required interposition in 2012 by the institution of the cash policy change.

According to Osazevbaru and Yomere (2015), it was in rejoinder to this development that the CBN, by its lawful obligation, originated the strategy modification from a cash-backed structure to a cash-less one. Firstly, in 2005, the CBN hosted the National Payment Systems (NPS) to accomplish the intents of inspiring adeptness and efficacy of payment arrangement, boosting safe and thorough banking activities and fortification against internal and external threats. Another objective was to migrate the economy from cash to cashless style of economic transactions, such as automated credit/debit mechanisms, debit/credit cards, ATM – sharing Electronic Fund Transmission at Points of Sales and Real Time Gross Settlement System (RTGSS). A further objective of NPS includes assured disbursement system audit pellucidity and full operational reportage, as well as accomplishing reception and assurance via evidence diffusion, client accessibility and overall excellent delivery (Princewell & Anuforo, 2013). Ultimately, the NPS ingenuity transmuted into the cashless strategy on April 20, 2011. The apex bank made it clarified that its decision to inaugurate the new strategy was actuated by the heightening ascendancy of cash in the Nigerian economic system with its unsavory entailment for cost of currency management to the banking subsector, security, concealment of illegally gotten money, etc. To guarantee deference, the CBN spelled out repercussions for any infringements (Ikpefan & Ehimare, 2012).

According to Obi (2013), in the industrialized nations today, almost 97% of business deals are done devoid of physical currency being substituted, and this has extremely cut down cost, putrescence and concealment of illegally obtained money. In Nigeria today, the contrary is the case with bulk of business deals being done with hard cash.

To dissuade the reliance on cash payments, Nigeria has sanctioned the non-cash payment system, presented below.

1.1. Cheques

A check, as a fiscal official document, was officially 358 years old on February 16, 2017. The usage of check is gradually declining worldwide. According to the Bank for International Settlements (BIS), as cited in the NIBSS Report (2016), the number of checks written by 18 countries who still utilize checks dropped by 10.7% to 22.4 billion in 2014 compared to 2010. Unfortunately, its usage in Nigeria arose by 22% during the same period. However, this emplacement did not last long, since from 2014 to 2015 in Nigeria, there was a sharp decrease in the use of checks by 13%. At this rate of this diminution, it is proposed that a check book will likely be wholly swept into oblivion by the year 2050. The fall in the usage rate of checks is ascribed to the CBN strategy on checks procedures issued in 2014, which placed a prohibition on defrayal of value above ₦ 10 million (USD 26,000) through checks and apprised that such payment should be effected via electronic defrayment conveys.

1.2. Automated Teller Machines (ATM)

This is a high-tech telecommunications strategy that provides customers of a fiscal institution with access to financial transactions in the global space without calling a staff or a bank teller. The ATM is a vital element of the CBN's cashless scheme, an opening move estimated to save banks over ₦ 200 bn cost of accomplishing, handling and managing cash. The NIBSS disclosed that utilization of automated teller machines (ATMs) by deposit money banks in the country is currently in shortfall of 72.33 per cent. In its industry account in 2017, NIBSS posits that ATMs set up by commercial banks in the country have gone up to 16,600,

against the expected number of 60,000 units specified by the CBN.

1.3. Electronic point of sale (e-POS) terminal

A point-of-sale (POS) terminal can be viewed as a cybernetic substitution for a cash record. It has the ability to record and data trail client purchase order, march credit and debit cards, link to other systems in a network, and handle stocktaking. Fundamentally, the e-POS enriches electronic monetary fund transmissions at the point of sales (POS terminal, n.d.; Olanipekun, Brimah, & Akanni, 2013). According to Adebayo, Osayinlusi, and Adekeye (2017), e-POS supports the operatives to oversee outflows by a client in an unassuming fashion. According to Komolafe (2017), POS transactions grew by 1,087.5 per cent, from ₦ 48 billion (USD 124.8 million) to ₦ 570 billion (USD 1.482 billion) between 2012 and 2016. The value of transactions through Point of Sale payments increased significantly by 65% to ₦ 651.37 billion (USD 1.693562 billion) in 11 months (January to November 2016). The figure almost doubled the ₦ 395.05 billion (USD 1.02713 billion) recorded in the corresponding period of 2015.

1.4. Online/web payment

The online banking system, as opposed to traditional system of banking, is devoid of human contact between clients and the bank. The most frequently employed internet banking operations in Nigeria are payment of commercial bills, procurement of air tickets, hotel booking, and other prompt settlement services through dealers websites (Olanipekun, Brimah, & Akanni, 2013). According to the NIBSS report of 2016, web-based business deals arose by 2,150 per cent, from ₦ 32 billion to ₦ 101 billion, between 2012 and 2016.

1.5. The Nigerian Interbank Settlement System (NIBSS) fund transfers

Nigeria Inter-Bank Settlement System (NIBSS) Plc. was established in 1993 and is controlled by all certified banks, including the Central Bank of Nigeria (CBN). The company also governs

the Nigeria Automated Clearing System (NACS), which fast-tracks the electronic clearance of cheques and hard copy-based instruments, electronic funds transmission, Automated Direct Credits and Automated Direct Debits.

1.6. Mobile banking payment system

Mobile disbursement, also referred to as Mobile wallet, is an uncommon payment system using handheld phone for payment of economic dealings (Adebayo, Osayinlusi, & Adekeye, 2017). The dealers of these services and solutions are compelled to function within the specified regulatory framework indicated in this document. With mobile banking payment strategy, in lieu of settlement of transactions with cash, check or credit cards, a client can employ a handheld phone to make payment for diverse range of dealings.

1.7. Card system

It is an exceptional automatic settlement type, which is made up of the use of smart cards. Smart cards are instruments with implanted unified circuits being accepted for payment of pecuniary dealings. It can be employed as a debit card, a credit card, and ATM cards.

1.8. Challenges of a cashless economy

Throughout the world, cashless initiatives are usually not rooted due to many problems. These problems include security, fraud, consumer literacy, weak social infrastructure, privacy concerns, awareness, reliability of platforms/networks, charges, regulation, and lack of necessary types of end devices, and these are just some of them. Specifically referring to Nigeria's experience, Lamikanra (2012), Adekoya (2011), Ikpefan and Ehimare (2012), and Akano (2012), raised the following concerns:

- i. Poor communication network.
- ii. Limited POS deployed.
- iii. Interoperability of cards on the platforms.
- iv. Poor customer response time.

- v. User apathy.
- vi. Vulnerability to online (cyber) fraud.
- vii. Insufficient sensitization.

80% of cash in Nigeria's economy is still in the hands of informal economic actors.

1.9. Cashless banking policy and SDGs

Mobile payments are directly or indirectly relevant to almost all the 17 Sustainable Development Goals (SDGs), including SDG 1, because it helps to eliminate extreme poverty; SDG 5, because financial services empower women economically; and SDG 9, because digital payments and access to credit services lead to new industries. The digitization of payments can open the door to an assortment of inexpensive financial services to make bank customers save safely, take advantage of economic opportunities and cut back their vulnerability.

Cashless banking economy allows households to better manage health emergencies without being impoverished. Healthcare providers can outspread their facilities into low-density rural areas via digital payments and financing.

A cashless banking and e-payment system can help farmers gain access to the funds they need to acquire fertilizers and produce higher yields with lower risks, thus, snowballing overall agricultural productivity. E-payment system provides faster, safer, and more reliable social transfers for the undernourished.

1.10. The concept and the model of customer satisfaction

Customer satisfaction depicts the extent to which goods and services delivered by an organization meet or exceed purchasers' anticipation. Oliver (1997) defined customer satisfaction as the customer's gratification reaction. It's a ruling that an invention or service characteristic, or the product or service itself, fulfil (or is meeting) the expectation of users, as well as the degree of under- or over-accomplishment of such expectations. More specifically, this is the proportion of customers

whose proven relationship with the organization, its products or services exceeds the expected satisfaction intents.

There are numerous incentives that affect customer satisfaction. Such influences comprise welcoming workers, well-mannered staffs, well-informed workers, obliging workforces, exactness of charging, charging timeliness, reasonable pricing, service excellence, good value, charging lucidity and prompt service (Hokanson, 1995; Atkinson, 2012; and Uzoma, Olokoyo, Babajide, Folashade, & Adetula, 2016).

2. METHOD

The study assesses the impact of the mandatory adoption of a cashless and e-payment economy on bank customers in Nigeria. The research designs employed in this study are both the content analysis and the descriptive survey method. According to Selltize (1977), content analysis is "a research procedure for the objective, systematic and computable portrayal of the noticeable content of communication." The descriptive survey approach comprises the use of an evocative sample from the population (Adetula, 2016). The population of this research comprises the entire Nigerian banking public. The sample size was 1,000 bank customers from Lagos and Ogun states of Nigeria. The choice of Lagos and Ogun states is rooted in the cosmopolitan nature of the states and the fact that they form part of the seven pilot states by CBN. Thus, a non-probabilistic accidental sampling technique was adopted.

2.1. Data sources and instruments for data gathering

The mechanism for data gathering that was adopted by an investigator is the questionnaire. The questionnaire was centered on close-ended interrogations premeditated to elicit succinct and straightforward rejoinders from the respondents. Out of the 1,000 copies of the questionnaire distributed, 869 copies were reverted, amounting to external decline rate of 13.1%. Out of the 869 copies returned, only 823 were discovered to be useable. This translates to 5.29% internal turn down rate. The questionnaire is five-point Likert

scale questions, which is a special type of multiple choice questions with a rating of (5) indicating Strongly Agree, (4) Agree, (3) Indifference, (2) Disagree, and (1) Strongly Disagree. A similar scale was used by Iyoha (2011).

3. HYPOTHESES

The following three hypotheses stated in their null form were formulated and tested in the course of this paper:

- H1: *The cashless banking initiative in Nigeria has not significantly increased bank customers' satisfaction.*
- H2: *The adoption of a cashless banking system in Nigeria has not significantly reduced the incidence of cash fraud.*
- H3: *The adoption of a cashless banking practice in Nigeria has not significantly enhanced management of customers' funds in terms of spending and saving.*

4. RESULTS

Before testing the hypotheses, a validity and reliability check on the instrument was carried out. The respective methods and test results are presented below:

Test-retest reliability of the survey device was measured by executing similar investigation with the same respondents at unalike era of time. Thus, the nearer the outcomes, the greater the test-retest dependability of the survey tools.

Cronbach's alpha defines the internal constancy or normalcy of the relationship between the particulars in a survey implements to measure its reliability. The Statistical Package for the Social Sciences (SPSS 20.0) was applied in this test of reliability, and the outcome shows a Cronbach's Alpha of 0.815.

Thus, it is obvious that the questionnaire is internally consistent to a very high degree. The closer the Cronbach alpha is to 1.0, the more outstand-

ing the internal reliability of the parameters in the scale. According to a widely accurate guide or principle based on practice, rather than on the theory provided by George and Mallery (2003), " $\alpha > 0.9$ – Exceptional, $\alpha > 0.8$ – Respectable, $\alpha > 0.7$ – Satisfactory, $\alpha > 0.6$ – Doubtful, $\alpha > 0.5$ – Meagre, and $\alpha < 0.5$ – Intolerable."

The frequency distribution of the respective indicators used to test the hypotheses is indicated in Table A1 (Appendix A).

4.1. Hypothesis 1

4.1.1. Cashless banking and bank customer satisfaction

Decision: In relation to the first hypothesis, as tested in Table 1, the result shows that $F(2, 823) = 7.263$, while $P = 0.006$. Since $P < 0.05$, the null hypothesis is rejected and the alternative hypothesis, which states that cashless banking initiative in Nigeria has significantly enhanced bank customer satisfaction, is accepted.

Table 1. ANOVA test for H1

Source: Field survey, 2019.

	Sum of squares	Df	Mean square	F	Sig.
Between groups	29.610	2	14.805	7.263	.006
Within groups	540.308	821	2.814	–	–
Total	569.918	823	–	–	–

4.2. Hypothesis 2

4.2.1. The adoption of a cashless banking system and the incidence of cash fraud

Decision: As for the second hypothesis, as tested in Table 2, the result shows that $F(2, 823) = 3.152$, while $P = .698$. Since $P > 0.05$, the null hypothesis is accepted, which states that the adoption of the cashless banking system in Nigeria has not significantly brought down the incidence of cash associated fraud in Nigerian banks.

Table 2. ANOVA test for H_2

Source: Field survey, 2019.

	Sum of squares	Df	Mean square	F	Sig.
Between groups	174.914	2	87.457	3.152	.698
Within groups	512.734	821	1.659	–	–
Total	687.648	823	–	–	–

4.3. Hypothesis 3

4.3.1. The adoption of cashless banking and customers' fund management in terms of spending and saving

Decision: As for the third hypothesis, as tested in Table 3, the result shows that $F(2, 823) = 4.261$, while $P = 0.030$. Since $P < 0.05$, the null hypothesis is rejected, and the alternative hypothesis, which states that the implementation of a cashless banking practice in Nigeria has significantly boosted bank customers' fund management with regards to spending and saving, is accepted.

Table 3. ANOVA test for H_3

Source: Field survey, 2019.

	Sum of squares	Df	Mean square	F	Sig.
Between groups	175.610	2	87.805	4.261	.030
Within groups	540.308	821	2.814	–	–
Total	715.918	823	–	–	–

5. DISCUSSION

It is clear from the test of the first hypothesis that the cashless banking initiative has enhanced bank customer satisfaction, despite the innumerable challenges facing the policy. Bank customers are satiated with the fact that they now have so many options from which they can withdraw or transfer funds at any time of the day. The alternative platforms discussed are: ATM, POS, Electronic/mobile banking, debit cards, internet banking, etc.

These options are convenient and not restricted to banks' operational hours of 8 a.m. to 4 p.m. It was responsible for the far-reaching diminution in operational charges on the divide of both banks and clients. This finding is in harmony with the discovery of Taiwo, Oluwafemi, Afieroho, and Agwu (2016), Ogbonna (2016), and Jumba and Wepukhualu (2019).

The test of the second hypothesis reveals that the implementation of the cashless banking initiative has not significantly reduced the incidence of bank fraud. For instance, according to 2015 statement of account, presented in 2016 by the Nigerian Deposit Insurance Corporation, the banking industry had 12,279 reported cases of fraud in 2015, which comprises an increment of 15.71 per cent above the 10,612 recorded in 2014. Agreeing with these findings, Akhalumeh and Ohioka (2011), in their study on identifying the challenges of cashless banking in Nigeria, stated that 34.0% of their respondents mentioned the problem of internet fraud, 15.5% noted the challenge of limited POS/ATM, 19.6% alluded to challenge of analphabetism, and 30.9% remained inert.

In the test of the third hypothesis, it was observed that the introduction of cashless banking has enhanced customers' fund management in terms of liquidity. This finding validates the position of Nonor (2011) who averred that: "...cashless banking system will bring up the refinement of savings in the unbanked key population in the nation." Even within the banking public, the fact that money can be available when needed (as a consequence of cashless policy) has made people to move around with less cash, thus limiting the challenges of impulsive purchase.

Though the gains in effectuating a cashless procedure may be colossal, it must be said that dealings under this policy regime are not without their associated costs. For instance, using a few available POS terminals comes with a prohibitive cost. Akhalumeh and Ohiokha (2012) put the cost of employing POS for transactions very succinct when they averred that: "Besides being an extra burden on bank clientele, the charges seem on the high side. Normal bank commission on turnover is N 5 for every N 1,000, signifying 0.5% of the volume of such dealings, likened to

the CBN approved charges of 1.25% on POS usage, which would entail N 12.50 for every N 1,000". Additionally, since September 1, 2014, Nigerian ATM users had 'remote-on-us' ATM cash withdrawal transaction fee of N65 for the fourth and subsequent withdrawal in a month. Given the

poor condition and dearth of ATM machines in Nigeria, people are compelled to be engaged in the so called 'Remote-on-us' withdrawals. Thus, bank customers are being made to bear the cost of the infrastructural inadequacies in the system. This is a burden that urgently must be addressed.

CONCLUSION AND RECOMMENDATIONS

This paper depicts the merits of a cashless banking initiative and the E-payment structure in the Nigerian banking sector. Outlining the main findings of this study, one can argue that: the cashless banking initiative in Nigeria has significantly enhanced bank customer satisfaction with regards to availability of different alternative platforms for e-payments, speed of processing and overall efficacy of the procedure; the introduction of the policy has not reduced cash fraud cases; and the adoption of the cashless initiative has enhanced funds management and saving culture among bank customers.

For the cashless economy to have unremitting communally appropriate effects on the Nigerian economy, it is suggested to do the following:

- The number of POS terminals deployed and ATM machines installed should be increased astronomically and evenly spread as required by retailers. Troubles in implementing connections due to repeated network interruption and insufficient funds should be addressed permanently.
- Banks and other regulators should create continuous awareness of the e-banking benefits and the need to key into it in order for the unbanked segment of the population to adopt banking services. This will help achieve the objective of the CBN financial inclusion.
- Suitable and effective investment in requisite technological and infrastructural facilities must be put in place by government and banks to guarantee seamless and efficient delivery of e-payment services.
- To tackle cybercrimes and e-payment related fraud, which are the bane of Nigerian cashless initiative today, the focus must be on reinforcing trust between public and private sectors; enhancing knowledge and training amid experts involved in the fight against cybercrime; establishing and implementing relevant governance structures within the banking sector. For stakeholders to win the war for the prevention, exposure and reprisal of e-payment fraud wrongdoers, two strategies have to be engaged. First, to reduce the attraction to engage in financial deceit, and second, to heighten the leeway of exposure. Whereas an affirmative work atmosphere will assist in achieving the first objective, the second one can be accomplished through a well-articulated internal control structure.
- The regulatory authorities should develop ways to reduce the various charges imposed on customers if the widespread usage of the e-payment platform is an objective.
- In the fight against cybercrime, there should be continuous and widespread cooperation amongst all key stakeholders in the system. This will make the electronic space safe and reliable for use in carrying out banking transactions.

ACKNOWLEDGMENT

The authors wish to acknowledge Covenant University for its financial support during the work on this paper.

REFERENCES

1. Adekoya, F. (2011, June 22). *Cashless Economy: The Many Hurdles before CBN*. The Guardian.
2. Adetula, D. T. (2016). Financial Accounting Numbers and the Emerging Nigerian Stock Market. *The Social Sciences*, 11(14), 3434-3439. Retrieved from <http://eprints.covenantuniversity.edu.ng/8394/1/3434-3439.pdf>
3. Adeyemo, K. A. (2012). Frauds in Nigerian Banks: Nature, Deep-Seated Causes, Aftermaths and Probable Remedies. *Mediterranean Journal of Social Sciences*, 3(2), 279-289. Retrieved from <http://www.richtmann.org/journal/index.php/mjss/article/view/11022>
4. Adeyemo, K. A., Isiawwe, D., Adetiloye, K. A., & Eriabie, S. (2017). Financial Reports and Shareholders' Decision Making in Nigeria: Any Connectedness? *Journal of Internet Banking and Commerce*, 22(8), 1-14. Retrieved from <http://www.icommercecentral.com/open-access/financial-reports-and-shareholders-decision-making-in-nigeria-any-connectedness.pdf>
5. Akan, P. (1995). Dimensions of service quality: A study in Istanbul. *Managing Service Quality: An International Journal*, 5(6), 39-43. <https://doi.org/10.1108/09604529510796575>
6. Akano, S. (2012). Cashless transactions: platforms, challenges and opportunities. *Conference at the computer professionals registration council of Nigeria*. Retrieved from <https://slideplayer.com/slide/6988929/>
7. Akhalumeh, P. B., & Ohiokha, F. (2012). Nigeria's cashless economy: the Imperatives. *International Journal of Management and Business Studies*, 2(2), 31-36. Retrieved from <http://www.ijmbs.com/22/akhalumeh.pdf>
8. Atarere, O. L., & Osemwegie-Ero, O. J. (2014). Cashless banking and small and medium scale enterprises growth in Nigeria. *International Journal of Innovative Social Sciences & Humanities Research*, 2(2), 98-105. Retrieved from <http://seahipaj.org/index.php/journals/education-social-sciences-and-arts/ijisshr/archive/vol-2-issue-2/>
9. Atkinson, A. (1988). Answering the eternal question: What does the Customer Want? *The Cornell Hotel and Restaurant Administration Quarterly*, 29(2), 12-14. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0010880488801526>
10. Central Bank of Nigeria (CBN). (2003). *Report of Technical Committee on Electronic Banking*. Abuja: CBN. Retrieved from <https://www.cbn.gov.ng/OUT/PUBLICATIONS/BS/2003/E-BANK-INGRPT.PDF>
11. Eboh, M. (2011, October 6). *Cashless economy policy'll save Nigeria N192 Billion* – CBN. Vanguard Nigeria. Retrieved from <http://www.vanguardngr.com/2011/10/cashless-economy-policy-ll-save-nigeria-n192bn-cbn/>
12. Ejiro, O. (2012). What Nigerians Think of the Cashless Economy Policy. *Nigerian Journal of Economy*, 4(6), 97-102. Retrieved from <https://www.scribd.com/document/102953302/What-Nigerians-think-of-the-Cashless-Economy-policy>
13. Ekpung, G. E., Udude, C. C., & Uwalaka, H. I. (2015). The impact of monetary policy on the banking sector in Nigeria. *International Journal of Economics, Commerce and Management*, 3(5), 1015-1031. Retrieved from <http://ijecm.co.uk/wp-content/uploads/2015/05/3566.pdf>
14. Eniang-Esien, O., & Ekpe, M. D. (2019). CBN Cashless Policy Implementation as Predictor of Sustainable Administration of Higher Education in South-South Nigeria: Implication from Management Perspective. *Global Scientific Journal*, 7(12), 1515-1530. Retrieved from http://www.globalscientificjournal.com/researchpaper/CBN_CASHLESS_POLICY_IMPLEMENTATION_AS_PREDICTOR_OF_SUSTAINABLE_ADMINISTRATION_OF_HIGHER_EDUCATION_IN_SOUTH_SOUTH_NIGERIA_IMPLICATION_FROM_MANAGEMENT_PERSPECTIVE.pdf
15. Ezumba, S. (2011). *The Transition to a Cashless Nigeria* (Chronicle). Reinventing Rebuilding LLC. Retrieved from <http://www.allAfrica.com>
16. Ezuwore-Obodoekwe, C. N., Eyisi, A. S., Emengini, S. E., & Chukwubuzo, A. F. (2014). A Critical Analysis of Cashless Banking policy in Nigeria. *IOSR Journal of Business and Management*, 16(5), 30-42. Retrieved from <http://www.iosr-journals.org/iosr-jbm/papers/Vol16-issue5/Version-5/F016553042.pdf>
17. Fatokun, D. (2017). Keynote Address presented at the ISSAN/Microsoft Cyber Security Summit. May 19, 2017. Retrieved from <https://issan.org/ng/issan-10-cyber-security-summit-presentation-materials/keynote-address-for-dbpsd-at-the-issan-cyberspace-of-africa-2017/>
18. George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon. Retrieved from <https://wps.ablongman.com/wps/media/objects/385/394732/george4answers.pdf>
19. Hokanson, S. (1995, January, 2). The Deeper You Analyze, The More You Satisfy Customers. *Marketing News*, 29(1), 16. Retrieved from <http://connection.ebscohost.com/c/articles/9501280356/deeper-you-analyze-more-you-satisfy-customers>
20. Ikpefan, O. A., & Ehimare, O. A. (2012). Fast tracking business transactions through a cashless economy in Nigeria: Benefits and challenges. *The Nigerian Banker, April-June*, 17-26. Retrieved from https://www.academia.edu/7685509/The_Nigerian_Banker_2012_April-June_pp.17-26_FAST_TRACKING_BUSINESS_TRANSACTIONS_THOUGH_A_CASHLESS_ECONOMY_IN_NIGERIA_BENEFITS_AND_CHALLENGES
21. Isiawwe, D. T. (2017). *Corporate Disclosure in the Banking Industry. Evidence from Nigeria* (158 p.). Bloomington: iUniverse. Retrieved from <https://www.amazon.com/Corporate-Disclosure-Banking-Industry-Isiawwe/dp/1532014260>

22. Iyoha, F. O. (2011). *State Agencies, Industry Regulations and the Quality of Accounting Practice in Nigeria* (Unpublished Ph.D. Thesis). Covenant University, Ota, Nigeria. Retrieved from <https://scholar.google.com/scholar?oi=bibs&cluster=16667900095689686274&btnI=1&hl=zh-TW>
23. Jumba, J., & Wepukhulu, J. M. (2019). Effect of Cashless Payments on the Financial Performance of Supermarkets in Nairobi County. *International Journal of Academic Research Business and Social Sciences*, 9(3), 1372-1397. <http://dx.doi.org/10.6007/IJARBS/v9-i3/5803>
24. Komolafe, B. (2017, February 24). *CBN reintroduces cashless charges on bank deposits*. Vanguard Newspaper. Retrieved from <http://www.vanguardngr.com/2017/02/cbn-reintroduces-cashless-charges-on-bank-deposits/>
25. Lamikanra, B. (2012, July 25). Managing the Transition to a Cashless Economy in Nigeria: The Challenges and strategies. Presented at the *Nigeria Computer Society (NCS) 24th National Conference*. Retrieved from [http://www.cpn.gov.ng/download/NCS_Conference_2012_Papers_and_Presentations/Managing-the-transition-to-a-cashless-economy%20by%20Bisi-Lamikanra%20\(KPMG\).pdf](http://www.cpn.gov.ng/download/NCS_Conference_2012_Papers_and_Presentations/Managing-the-transition-to-a-cashless-economy%20by%20Bisi-Lamikanra%20(KPMG).pdf)
26. Mastercard. (n.d.). *History of card payment*. Retrieved from <https://www.mastercard.co.uk/en-gb/about-mastercard/who-we-are/history.html>
27. Nonor, D. (2011, October 20). *Airtel leads Drive towards 'Cashless Economy* (Ghanaian Chronicle). Modern Ghana. Retrieved from <https://www.modernghana.com/news/356939/airtel-leads-drive-towards-cashless-economy.html>
28. Nyong, M. O. (1996). Monetary Policy and Commercial Bank's Performance in Nigeria: Some theoretical and Empirical Extensions. *CBN Economic and Financial Review*, 34(3), 777-795.
29. Obi, D. (2013, July 9). CSR: 8 banks spend N1.9bn to make social impact. *The Business day*. Retrieved from <https://archive.businessday.ng/brands-advertising/article/csr-8-banks-spend-n1-9bn-to-make-social-impact/>
30. Ochei, V. O. (2013). *Cashless Economy and the Nigerian banking system*. The Pointer. Retrieved from <http://thepointernews.com/?p=18027>
31. Odior, E. S., & Banuso, F. B. (2019). Cashless Banking In Nigeria: Challenges, Benefits and Policy Implications. *European Scientific Journal*, 12(8), 289-316. Retrieved from <https://ejournal.org/index.php/esj/article/view/192>
32. Ogbonna, A. (2016, July 18). *Two years of cashless banking: How e-saving products're expanding customers' choices*. The Sun. Retrieved from <http://sunnews-online.com/two-years-of-cashless-banking-how-e-saving-products-re-expanding-customers-choices/>
33. Olanipekun, W. D., Brimah, A. N., & Akanni, L. F. (2013). Integrating Cashless Economic Policy in Nigeria: Challenges and Prospects. *International Journal of Business and Behavioral Sciences*, 3(5), 1-8. Retrieved from http://www.academia.edu/15269664/Integrating-Cashless-Economic-Policy-in-Nigeria_Challenges_and_Prospects
34. Olisabu, E. S. (1991). Banking in Nigeria: Sign Post in the Nineties. First Bank of Nigeria. *PLC Quarterly Review, June Edition*.
35. Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw-Hill. <https://doi.org/10.4324/9781315700892>
36. Osazevbaru, H. O., & Yomere, G. O. (2015). Benefits and challenges of Nigeria's cash-less policy. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 4(9), 1-10. Retrieved from https://www.arabianjbm.com/pdfs/KD_VOL_4_9/1.pdf
37. POS terminal. (n.d.). *Point-of-sale terminal* (Definition). Retrieved from <http://whatis.techtarget.com/definition/point-of-sale-terminal-POS-terminal>
38. Princewell, N. A., & Anuforo, R. (2013). Shifting policy paradigm from cash-based to cashless economy: the Nigeria experience. *Afro Asian Journal of Social Sciences*, 4(4), 1-16. Retrieved from <http://www.onlineresearchjournals.com/aajoss/art/124.pdf>
39. Rofiat, A. (2017). The Effect of Cashless Banking on the financial performance of small and medium scale Enterprises. *International Journal of Advanced Research in Public Policy, Social Development and Enterprise Studies*, 2(2), 133-142. Retrieved from https://pdfs.semanticscholar.org/a042/db6cdc950cdabc86c1d-431f6096a013e5f99.pdf?_ga=2.23-9356422.400130582.1591252750-2100778558.1584432533
40. Selltize, C. (1977). *Research Methods in Social Relations*. Methuen, London.
41. Sephehdoust, H., & Berjisian, A. (2013). Credit risk management of commercial banks in Iran; using logistic model. *African Journal of Business Management*, 7(4), 265-272. Retrieved from https://academicjournals.org/article/article1380790202_Sepehdoust%20and%20Berjisian.pdf
42. Siyanbola, T. T. (2013). The Effect of Cashless Banking on Nigerian Economy. *Canadian Journal of Accounting and Finance*, 1(2), 9-19.
43. Sumra, S. H., Manzoor, M. K., Sumra, H. H., & Abbas, M. (2011). The impact of e-banking on the profitability of banks: a case study of Pakistani Banks. *Journal of Public Administration and Governance*, 1(1), 31-38. <https://doi.org/10.5296/jpag.v1i1.692>
44. Taiwo, J. N., Oluwafemi, A. K., Afieroho, E. O., & Agwu, M. E. (2016). Appraisal of Cashless Policy in the Nigerian Financial System. *West African Journal of Industrial and Academic Research*, 16(1), 105-125. Retrieved from <https://www.ajol.info/index.php/wajiar/article/viewFile/145907/135424>
45. Uzoma, A. B., Olokoyo, F. O., Babajide, A. A., Folashade, O., & Adetula, D. T. (2016). Adoption of International Financial Reporting Standards and its Implication on Banks Performance in Nigeria: A Comparative Approach. *Journal of Internet Banking and Commerce*, 21(5), 1-20. Retrieved from <http://eprints.covenantuniversity.edu.ng/id/eprint/7611>

APPENDIX A

Table A1. Frequency distribution of indicators

Source: Field survey, 2019.

S/N	Indicators	SA	A	I	D	SD	Total
Customer satisfaction							
Q6	The adoption of a cashless policy in Nigeria has led to business, price and economic stabilization.	134 16.3%	270 32.8%	205 24.9%	112 13.6%	102 12.4%	823 100%
Q7	Banker/customer relationship has been boosted through electronic banking.	108 13.1%	215 26.1%	173 21.0%	157 19.1%	170 20.7%	823 100%
Q8	Cashless policy will have a negative impact on customers living in rural areas.	125 15.2%	346 2.0%	139 16.9%	128 15.5%	85 10.3%	823 100%
Q9	Cashless banking has increased the speed of business transactions.	461 56.0%	200 24.3%	42 5.1%	70 8.5%	50 6.1%	823 100%
Q10	E-payments tend to maximize business profitability by extending customer base, boosting cash flows, reducing costs, enhancing customer service and improving competitive advantage.	124 15.1%	306 37.2%	181 22.0%	115 14.0%	97 11.7%	823 100%
Q11	The service quality of an electronic banking system in terms of ATM functionality, technical support during usage, safe service and average time spent on use is very impressive.	173 21.0%	198 24.1%	213 25.9%	127 15.4%	112 13.6%	823 100%
Q12	The system quality of an electronic banking system has a positive effect on customer satisfaction.	227 27.6%	288 35.0%	131 15.9%	98 11.9%	79 9.6%	823 100%
Q13	The information quality content of an electronic banking system has a positive effect on the client's intention to continue to use it.	189 23.0%	305 37.1%	143 17.4%	109 13.2%	77 9.3%	823 100%
Fraud reduction							
Q14	The introduction of a cashless economy has led to a reduction in money laundering and corruption in Nigeria.	46 5.6%	67 8.1%	106 12.9%	304 36.9%	300 36.5%	823 100%
Q15	Cashless policy has reduced the cases of fraud and financial irregularities in Nigeria.	35 4.3%	64 7.8%	123 14.8%	296 36.0%	305 37.1%	823 100%
Q16	Adoption of a cashless policy has led to unauthorized access to customers' accounts, untraceable embezzlement by bank officials, fake internet bank websites and cloning of smart cards.	241 29.3%	282 34.3%	135 16.3%	107 13.0%	58 7.1%	823 100%
Q17	Since the adoption of a cashless policy, there appears to be no clear and comprehensive electronic fraud management framework.	183 22.2%	264 32.1%	132 16.0%	156 19.0%	88 10.7%	823 100%
Q18	While the cashless policy was aimed at achieving transparency, curbing corruption/leakages and driving financial inclusion, the preponderance of fraud has created people's distrust of adopting cashless payment options.	156 19.0%	271 32.9%	288 35.0%	67 8.1%	41 5.0%	823 100%
Enhancing customers' savings attitude							
Q19	Cashless banking has helped customers better manage their funds.	226 27.5%	265 32.2%	173 21.0%	89 10.8%	70 8.5%	823 100%
Q20	Since people are now encouraged to switch to cashless payments, the introduction of a cashless economy has enhanced the culture of savings among Nigerians.	217 26.4%	223 27.1%	149 18.1%	121 14.7%	113 13.7%	823 100%
Q21	Cashless policy has made it easier for people to save	234 28.4%	247 30.1%	108 13.1%	121 14.7%	113 13.7%	823 100%
Q22	Cashless banking is currently fostering a culture of savings in the unbanked majority of Nigerians.	197 23.9%	233 28.3%	179 21.7%	175 21.3%	39 4.7%	823 100%