



# University of HUDDERSFIELD

## University of Huddersfield Repository

Wali, Andy, Wright, Len Tiu and Reynolds, Paul Lewis

Cashless policy, users' perception and retail marketing performance

### Original Citation

Wali, Andy, Wright, Len Tiu and Reynolds, Paul Lewis (2014) Cashless policy, users' perception and retail marketing performance. In: International Conference on the Restructuring of the Global Economy (ROGE), 23rd - 24th June 2014, Cambridge, UK.

This version is available at <http://eprints.hud.ac.uk/id/eprint/21212/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: [E.mailbox@hud.ac.uk](mailto:E.mailbox@hud.ac.uk).

<http://eprints.hud.ac.uk/>

# Cashless policy, users' perception and retail marketing performance

Andy Fred Wali; Len Tiu Wright; Paul Reynolds

Business School, University of Huddersfield, UK

---

## Key words

Cashless policy, users' perception, retail marketing performance & Nigeria.

## Abstract

*The purpose of this study was to examine the impact of the cashless system on user's perception and retail marketing performance in Nigeria retail sector. The study used survey instrument (questionnaire) and randomly selected 550 samples as to generate data on the impact of cashless systems on user' perception and retail marketing performance in Nigeria. The questionnaire instrument was designed for two categories of respondents (customers and managers) of the selected retail outlets in Nigeria. The study found that the two measures of cashless system have positive influence on the measures of retail marketing performance; while consumers perceive that the new system will be disadvantageous to them in the short run but beneficial in the long run. The study concluded that the cashless system is in line with international banking best practices as it will reduce the high cost of business operations for retail businesses in terms of learned employees, provision of security and will boost retail investments opportunities in Nigeria. The study recommended for the Central Bank of Nigeria to collaborate with the money deposit banks' as well as telecommunications firms to provide quality services as to militate against the negatives of customers' purchase experiences in using E-platforms as conceptualized in the researchers' proposed E-payment systems implementation models.*

---

## 1. Introduction

Retail is a dynamic innovative sector undergoing constant change. It is a stronger user of technology and an innovator of new products by matching consumer expectations and demands with technological developments. The sector provides ever- increasing choice at a range of prices, which suits the needs of the community. Retail continues to invest in people and places, and creates new markets, provides a focus for the implementation of social policies and plays an important role in the wellbeing of towns, cities and rural areas (Jones et al. 2007.pp. 21 cited DT1, 2004).

### 1.1 Background to Nigerian Payment Systems

The Nigerian economy is classified as cash based economy; these trends of operation over the decades resulted in all manner of financial and other economic impropriety, see figure 1 below for evidence. More so, as a result the cost of running business outfits has been quite expensive. The Central Bank of Nigeria in 1996 introduced the electronic payment scheme under the auspices of Africa Development Consulting Group (ADCG), the scheme started with six banks and later rose to nineteen, in that same year the defunct Allstate Trust Bank PLC introduced closed system electronic package called ESCA Smart card. In 1997 Diamond Bank introduced "Diamond pay card", One year later in February 1998 the scheme was boosted when a consortium of 19 banks floated a smart card company called Value Card Nigeria PLC with the mandate to produce and manage the distribution of cards issued by member banks of the consortium (Hilili, 2005).

In 1999 the CBN granted approval to twenty banks to introduce international money transfer products, telephone banking, and online banking via the internet. However, since that time banks have introduced the use of Automated Teller Machine (ATM) though with attendant frustrations and challenges abounding during customers' usage and on the other hand have also helped in elevating the suffering of customers. The introduction of electronic payment system which is still developing in Nigeria presents good prospects in the actualization of the vision of CBN cashless policy. E-payment systems for trading could be classified into two distinct parts; wholesale and retail payment systems. Wholesale payment consist of non consumer transactions, for instance, corporate purchases, while retail payment

system include: small product quantity transactions involving consumers through the use of such payment medium like smart cards, credit and debit cards as well as online payment mediums etc. Therefore, cashless policy is a state where there are assumed to be no transaction frictions that can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return (Woodford, 2003).

Moreover, several studies in literature have examined the impact of cashless systems on business success (Odior & Banuso, 2013; Akhalumeh & Ohiokha, 2012; Tunji, 2013; Muiyiwa, et al. 2013; Oyewole et al. 2013; Idowu, 2009 and Greenfield 1998). But, these researches have paid little or no attention on the influence of cashless system on users' perception and retail business performance in Nigeria. Hence, the purpose of this research is to evaluate the impact of cashless system adoption on users' perception and retail marketing performance in Nigeria. Point of sale terminals (POS) and electronic cash wallets will be used to measure cashless systems implementation; consumers' perception will be measured using repeat purchase behavior and purchase intention while profitability and sales volume will be used to measure retail marketing performance.

## 2. Theoretical Literature

According to the Central Bank of Nigeria (2012) cashless policy was introduced for the purpose of fostering banking development and modernization of payment system in keeping with banking best practices across the world, aimed at achieving the long chorused vision 2020. Also, to discourage the outrageous cost of banking services as well as other business activities; to discourage the physical carriage of excess cash; reduce robbery incidences; and to enhance inflationary rate. Cashless system from the trading perspective is an economic setting in which goods and services are purchased and paid through electronic devices (Muiyiwa et al. 2013). Also cashless policy is a government policy aimed at restricting individuals and corporate entities from carrying excess cash for transactions rather with an option of electronic payment devices. While retail marketing performance is a measure of retailing success at the market place in terms of profitability, sales volume or growth and market share. On the other hand, retailing is the buying and selling of goods and services between the retailers and the ultimate consumers. Wali (2012) citing Hilili (2005) electronic payment system is a payment system consisting of electronic mechanisms which makes the exchange of payment possible. It can also be described as payment or monetary transaction made over the internet or a network of computers (Kulkarni, 2004). However, this study draws ideas from the buyer behavior theory which examines consumer's dynamic buying patterns and behaviors.

### 2.1 Information Technology Connectivity

Duncan (1995) observed that connectivity is the ability of any technology components to communicate with any of the other components inside and outside of the organizational environment. According to Chaung et al. (2003) information technology connectivity enable seamless and transparent organizations that are independent of time and space. Also, Saaksjarvi (2000) further suggested that a robust IT infrastructure enable employees to be able to perform their respective jobs, both from having the available technology and the necessary technological skills. Byrd & Turner (2000) noted that connectivity refers to the ability of any technology to attach to any of the other technology component. It also means that every employee, every functional area, and every application in the organizations are linked to one another. Wali (2013) further assert that information technology infrastructure capabilities provide the platform for competitive advantage on business initiatives.

### 2.2 Information Technology Compatibility

Compatibility is the ability to share any type of information across any technology component throughout the organization (Duncan, 1995). Information technology compatibility help span organization boundaries, employee empowerment, make information and knowledge readily available in the organization (Mohammad and Kamaruzaman, 2009). Gibson (1993) noted that compatibility addresses the need for uniformity in technology across the organization.

### 2.3 Empirical Literature

Business activities before the era of cashless systems in 2012 by the Central Bank of Nigeria (CBN) were carried out to the turn of over 90% through cash in hand. In other words, cash based system, below is a statistical data to support the above assertion:

**Cash related transactions representing over 99% of customers activity in Nigerian Banks as at December 2011.**

PAYMENT CHANNELS	TRANSACTION VOLUME
ATM Withdrawals	109,592,646
OTC Cash Withdrawals	72,499,812
Cheque	29,159,960
POS	1,059,069
Web	2,703,516

Table 1: Cash transaction analysis in Nigeria, before December, 2011

Source: CBN Report, 2012

Also, in the bid to justify why the need for cashless system, the Central Bank of Nigeria in its Survey carried out in 2012 revealed some of the setbacks and experiences associated with the cash based systems, these we represented in a figure below:

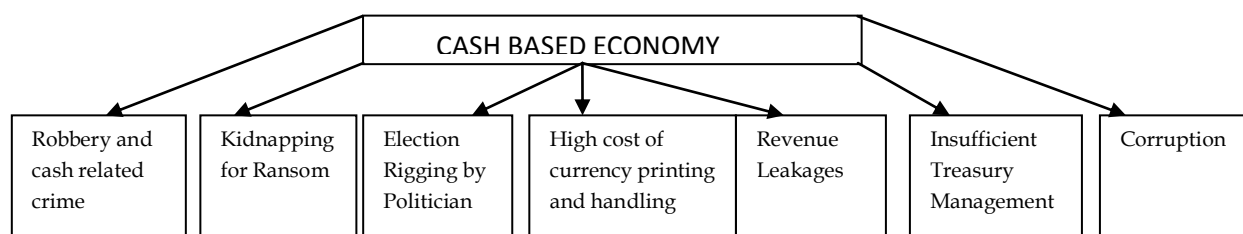


Fig.1: showing the consequences of cash based transactions in Nigeria

Source: Central Bank of Nigeria (CBN) report (2012)

Tunji (2013) examined the effect of cashless policy in Nigeria and his study found that cashless banking has positive and significant effect on national development; also his study revealed that cashless policy has positive impact on employment regime in Nigeria supported by (Akhalumeh & Ohiokha, 2012 and Okoye, 2012). Odior & Banuso (2013) looked at the challenges, benefits and prospects of cashless policy and their study found that some of the challenges that has the capacity to hamper the success of cashless policy are lack of electricity power supply and poor information technology infrastructure to mention but a few. On the other hand, their study revealed that cashless policy will promote economic growth and provide banks with more liquidity for lending to needy sectors and contribute to eliminating corruption if the right infrastructure and trust is instituted. Muiyiwa et al. (2013) found that the introduction of cashless policy will contribute in reducing robbery incidences; attraction of more foreign direct investment and creation of employment.

Also, Oyewole et al. (2013) examined electronic payment systems and its impact on economic growth in Nigeria, and their study found that e-payment systems have a positive impact on economic growth in terms of real GDP per capita as well as trade per capita, more so, it was revealed that the introduction of ATMs in doing financial transaction impacts directly on economic growth, while other forms of e-payment channels showed a negative impact on economic development. Abiodun et al. (2013) found that banking sector policies are poorly implemented in Nigeria, hence the achievement of the cashless system may be difficult to actualize; also that the financial infrastructure presently available in the banking sector is not strong enough to drive the cashless system initiatives. Thus are potential barriers to the actualization of the cashless system.

Ayoola (2013) found that cashless policy can only reduce what he called petty corruption among the public holders of trust; his finding is not convincing, because he did not statistically justify how 100 respondents selected is the true representative of over 20million holders of public trust in Nigeria. Newstead (2012) examined the influence of cashless payment on economic growth and found a positive association between cashless payment volumes and economic growth. Specifically, it was found that cashless transactions were growing twice as fast in developing economies as compared across the world. This assertion by Newstead was not supported with appropriate statistical figures, showing the pace of

cashless growth in the developing economies as compared to figures of cashless growth in the developed economies. Mallat & Tuunainen (2008) examined the adoption of mobile payment systems by merchants and found that main purpose of mobile payment adoption is to increase sales and reduce the costs of payment processing and showed a positive influence on business sales growth. But, it carries challenges such as: complexity of the systems, unfavorable revenue sharing models, lack of critical mass, and lack of standardization. Cheng et al. (2011) risk perception of the E-Payment Systems using adult consumers in Malaysia and found that e-payment systems impact negatively on firm's sales growth; also their further found that E-payment system has positive influence on consumers purchase intentions.

Yoon (2002) in his study on influence of trust on online-purchase decisions found that trust for the firm's online platform has significant influence on customers' decision to purchase online. Because, customers who hold negative perception about firms online sales systems will show negative interest in purchasing via such platform. In another research by Greenfield (1998) found that firms using internet platforms can increase the trust of their customers when they improve their payment platform. Limayem et al. (2000) found that subjective factors, such as attitude and beliefs have significant impact on consumers' intentions to purchase online; while behavioral factor significantly impacts consumers online shopping behavior. Liang & Huang (1998) found that the success of adopting an online payment by customers depends on the nature of product or services the firm offers and consumers past experiences. Also Salkin (1999) found that the key obstacle that impedes consumers interest to purchase using the online platform are fear of lack of system security and poor systems reliability. Idowu (2009) carried out a survey on minimizing the incidences of ATM fraud among customers of the Nigerian banks and found that the numerous factors enhancing the opportunity for ATM fraud in Nigeria include: poor management of policies and procedures; inadequate financial infrastructure to detect fraud; relative poor remunerations and staff long stay on a specific function; supported by Idowu (2009). Thus, we propose that:

*H<sub>1</sub>: There will be a negative influence in the uses of Point of Sale systems on the profitability of retail firms;*

*H<sub>2</sub>: The use of point of sales terminal will negatively influence the sales volume of retail firms in Nigeria;*

*H<sub>3</sub>: The use of E-cash wallet will impact negatively on consumers purchase intention;*

*H<sub>4</sub>: The adoption of Use of E- cash wallet system will not significantly influence consumers repeat purchase behavior.*

### 3. Methodology

The study population comprises the customers and operators of entire retail businesses in Nigeria. Random sampling was used to draw a sample size of 500 customers and 50 operations managers from ten retail firms Nigeria. In other words, 550 samples were selected to gain insight on their purchase perceptions and sales experiences. The survey approach (questionnaire instrument) was used to generate raw data for the study; two different instruments were structured drawing from past studies (Limayem et al. 2000; Liang & Huang, 1998 & Abiodun et al. 2013). Also the Likert seven rating scale was used to weight the variables; one instrument was designed for the staff of the selected firms, while the other for the customers' of the firms only. Content validity was used to test the validity of questions on the instruments; thereafter amendments were inputted. The quantitative descriptive statistics was adopted to analyze the data gathered for this study.

## 4. Data Presentation & Findings

### 4.1 Demographic Data Analysis

A total of 500 questionnaires were administered on customers but only 492 were successfully retrieved and attended to, this however represents a retrieval rate of 98%, while the 50 questionnaire administered on the staff of the firms were fully answered and all units retrieved, this represents 100% retrieval rate. 260 respondents representing 48% were male customers and managers, while 282 respondents representing 52% were female customers and managers, this affirms the preposition that females do more shopping than men; because majority of our respondents are female customers' and staffs of the selected firms. Also, demographic data showed that 185 respondents constituting (34%) are between 18-30years, 300 respondents making (55%) are between 31-40years and 57 respondents

representing (11%) are between 41years and above, this means that 55% of the study respondents are adults whom the researchers' believe will understand the implication of cashless policy on their purchases and firm.

More so, 110 respondents representing 20% are holders of SSCE/OND/HND, Certificate, 272 representing (50%) are holders of BSc degree, 145 respondents representing 27% are holders of Post Graduate Degrees while others are 15 representing 3%. These findings shows that virtually all the target respondents can read and understand the concept of cashless policy as to give meaningful answers to questions posed on the questionnaires. Also the other category could be holders of first school leaving certificate (FSLC) or national certificate of education (NCE).

Further, analysis shows that 120 respondents representing 22% earn between ₦1,000- 50,000 monthly, 200 respondents (37%) earn between ₦ 51,000- ₦ 200,000 monthly, while 222 respondents representing 41% earn between ₦ 201,000 and above monthly , this shows that majority of the study respondents which represents 41% have the purchasing power to buy from the retail outlets from time to time.

## 4.2 Test of Hypotheses

Test of Hypothesis one: there is no significant impact in the use of POS terminals on retail profitability.

Description	Frequency %					
	Great Extent	Considerable Extent	Moderate Extent	Low Extent	Very low Extent	Total
To what extent has the use of POS terminals influenced the profitability of your firm?	30	9	10	1	Nil	50
	(60%)	(18%)	(20%)	(2%)	Nil	100%

Table 4.2.1: Test of Hypothesis one

Source: Researchers' Survey, 2014

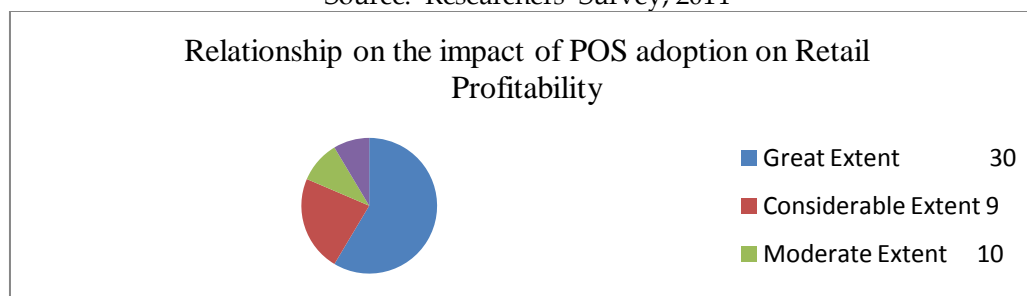


Figure 4.2.1: Pie chat on hypothesis one

Result shows that 30 managers representing 60% agreed that the use of POS terminals has influenced their firms profitability to a great extent, while 9 managers representing (18%) agreed to a considerable extent, 10 managers representing 20% consented to a moderate extent, 1 respondent representing (2%) agreed to low extent, while none agreed to very low extent. Going by the highest ranking of 60% it means that the use of POS has significant relationship with profitability, the study reject the null and accepts the alternate hypothesis that the use of POS terminals in the shops will influence its profitability.

Test of Hypothesis two: the use of POS terminals will negatively impact the sales volumes of retail firms.

Description	Frequency %					
	Great Extent	Considerable Extent	Moderate Extent	Low Extent	Very Low Extent	Total
To what extent has your sales volume increased since the introduction of E-payment channels via POS Terminals and ATM?	40	10	Nil	Nil	Nil	50
	(80%)	(20%)	Nil	Nil	Nil	100%

Table 4.2.1: Test of Hypothesis two

Source: Researchers' Survey, 2014

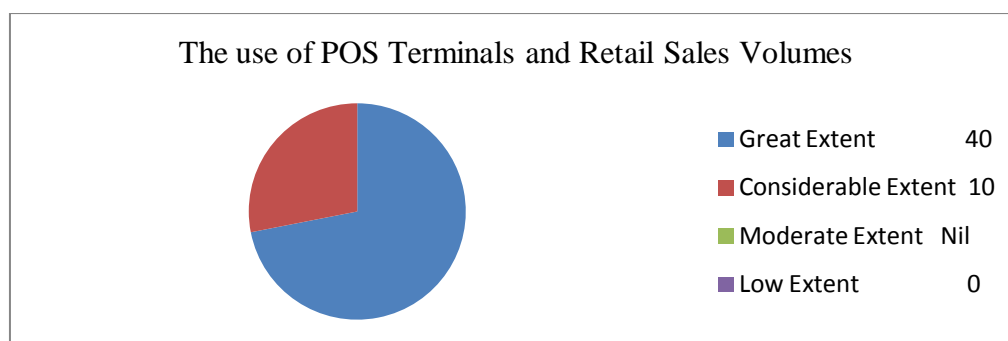


Figure 4.2.2: Pie chat on hypothesis two

Hypothesis two on the pie chart above: indicates that 40 managers representing (80%) agreed to great extent, 10 managers representing (20%) agreed to considerable extent, Nil for moderate extent, Nil for low extent and Nil for very low extent. Therefore the null hypothesis was rejected while the alternate hypothesis was accepted that there is a positive and strong relationship between the use of POS terminals and increase in sales volume of retail stores.

Description	Frequency %					Total
	Yes	NO	Yet to	Do not want it	Indifferent	
Do you have an electronic cash cards issued by your bank? E.g. Master card, Visa card, Verve card, etc	223	100	120	30	19	492
	45%	20%	24%	7%	4%	100%

Source: Researchers' Survey, 2014

Test of Hypothesis three: the use of E-wallet will have direct negative impact on customer purchase intention.

Description	Frequency %					Total
	Great Extent	Considerable Extent	Moderate Extent	Low Extent	Very Low Extent	
To what extent has the use of E-cash wallet influenced your purchase Intention?	300	80	91	21	Nil	492
	(61%)	(16%)	(19%)	(4%)	Nil	100%

Table 4.2.3: Test of Hypothesis three

Source Researchers' Survey, 2014

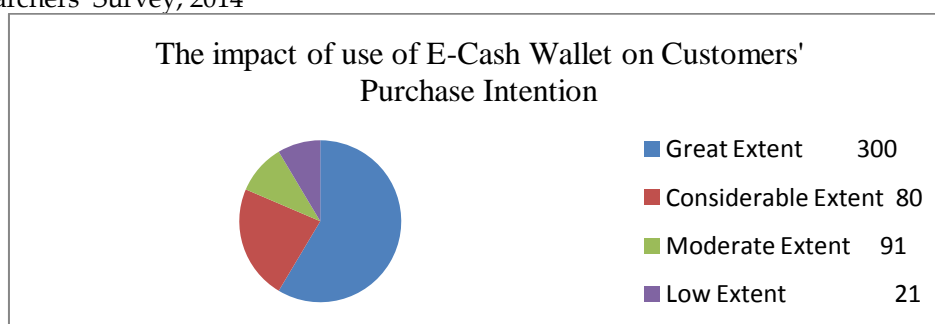


Figure 4.2.3: Pie chat on hypothesis three

Analysis on **hypothesis three**: revealed that 300 customers representing (61%) agreed that the use of E-cash wallet: such as credit, debit and master card respectively influences their purchase intention to a great extent, 80 customers representing (16%) agreed to considerable extent, 91 customers representing (19%) agreed to moderate extent, while 21 customers representing (4%) agreed to low extent. Therefore, based on the finding here, the study rejects the null hypothesis which proposed that the use of E-cash wallet medium will not influence consumers purchase intentions and accepts the alternate hypothesis and conclude that the Use of E-cash wallet influences consumers purchase intention.

Test on hypothesis four: the use of E-Cash Wallet will negatively impact on repeat customers' purchase.

DESCRIPTION	FREQUENCY %					Total
	Great Extent	Considerable Extent	Moderate Extent	Low Extent	Very Low Extent	
To what extent Does your experience in the use of E- cash wallet; Visa, Master & Verve cards influence your Repeat Purchase?	281	157	50	4	Nil	492
	(57%)	(32%)	(10%)	(1%)	Nil	100%

Table 4.2.5: Test on hypothesis four

Source: Researchers' Survey, 2014

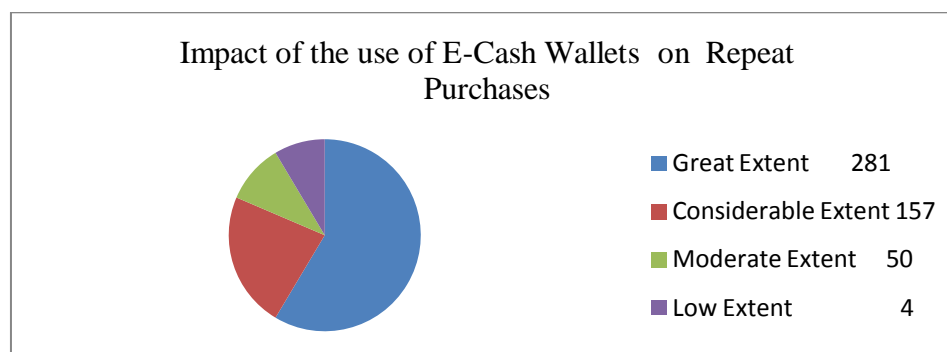


Figure 4.2.4: Pie chat on hypothesis four

Subsequent analysis on **hypothesis four** revealed that 281 customers representing (57%) accented to a great extent that the ease of use of E-cash wallet influences their repeat purchase, especially at the outlet where they had the positive experience, 157 customers representing 32% agreed to considerable extent, 50 customers representing 10% agreed to moderate extent while 4 customers representing 1% agreed to low extent. This shows that the ease of E- cash wallet systems in purchasing goods and services positively influences customers repeat purchase behaviors. The study accepted the alternate hypothesis and rejected the null hypothesis that the use of electronic payment systems via E- cash wallet mediums positively influences customers repeat purchase behavior.

Analysis on question 5: present challenges experienced by customers in using E-payment Systems.

Description	Frequency%				Total
What present challenges do you face in the use of E-payment systems for your retail purchases	Poor IT connectivity	Inability to use terminal	Debited twice or more	E-fraud	-
	178	10	297	7	492
	(37%)	(2%)	(60%)	(1%)	100%

Table 4.2.6: Analysis on Challenges

Source: Researchers' Survey, 2014

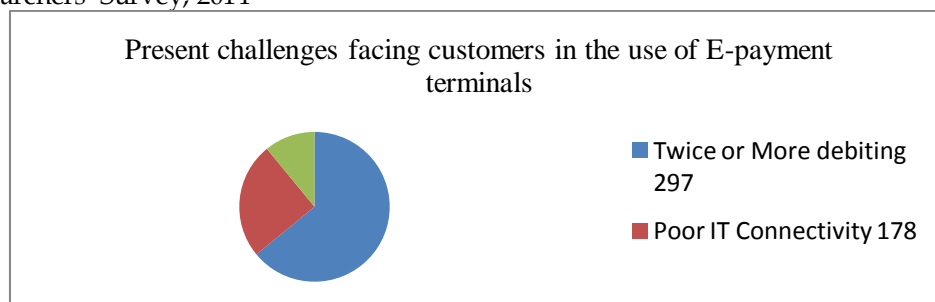


Figure 4.2.5: Pie chat on Research question 5



Further analysis on question 5 on the current challenges of using E-cash Payment terminals shows that 178 customers representing (37%) agreed that poor connectivity from their bankers is a problem they experience while using the E-money platforms, 10 customers representing (2%) agreed that it is due to their inability to use the terminal, 297 customers representing 60% said they have been debited ones or more for a single transaction in the use of E-cash platforms to make payment for purchases at the retail outlets, while 7 customers representing (1%) agreed to have being victims of E-fraud. These shows that the principal challenges customers face in transacting through E-channels as revealed by this study are; poor IT connectivity by their bankers, multiple debiting, these two are high in view of customers degree of responses.

Analysis on Q6 as shown on table: perceive challenges with the use of E-cash wallet in making retail purchases.

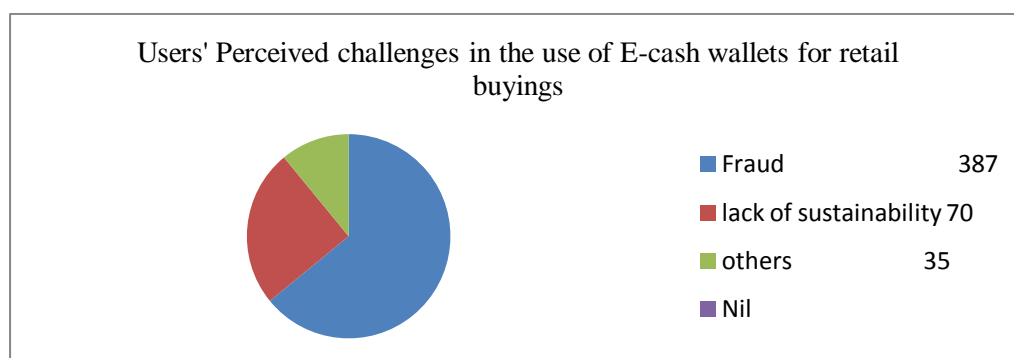


Figure 4.2.6: Pie chat on Research question 6

This shows that 387 respondents representing (79%) says that there perception is on financial fraud; 70 respondents representing (14%) says poor policy sustainability is a perceived problem; 35 respondents representing (7%) says that other factors probably not known at the moment could be a perceived challenge in the future. When using E-cash systems for retail purchasing.

Hypothesis	Descriptions	Findings
H1	There will be a negative influence in the uses of Point of Sale systems on the profitability of retail firms;	Rejected
H2	The use of point of sales terminal will negatively influence the sales volume of retail firms in Nigeria;	Rejected
H3	The use of E-cash wallet will impact negatively on consumers purchase intention;	Rejected
H4	The adoption of Use of E- cash wallet system will not significantly influence consumers repeat purchase behavior	Rejected

Table 4.2.7: Summary of findings

### Discussions on Findings

The purpose of this article is to examine the impact of cashless system on user's perception and retail marketing performance in the Nigerian retail sector. The findings show that the use of POS infrastructure impacts on retail business profitability; also, findings on hypothesis two confirmed that the adoption of POS systems by retail firms impact positively on their sales volume. These findings are in agreement with (Newstead, 2012; Akhalumeh & Ohiokha, 2012; Mallat & Tuunainen 2008; Okoye, 2012 and Tunji, 2013). This proves that the introduction of cashless policy brings some level of hope to retail business owners and will potentially serve as a source of hope to would be investors; who hitherto were afraid to invest as a result of the high cost business operations in the sector. This new trend will impact positively on commercial retail activities in Nigeria both in the short and long run. More so, the retail firms before this time have being engaged in providing some level of social and economic security to secure its business dealings especially against hoodlums'. This has obviously increased cost of operating retail firm. But, with the use of POS and online payment systems by the firms, their cost of operation will be reduced due

to decline in social and economic security challenges. The profitability of the firm will be on the increase reflecting more funds for investments.

Further, findings showed that the use of E-cash wallet systems in purchasing goods and services positively influences consumers purchase intention and repeat purchase behaviors. These findings are in agreement with (Cheng et al. 2011; Yoon, 2002; Greenfield, 1998; Limayem et al., 2000 and Liang & Huang, 1998). Thus, customers will enjoy place and time utility; knowing that you only need to work into a shop with your cash card or shop online via the shops online platform, without commuting from place to place brings some level of satisfaction to the customers. But, it is important to mention that E-payment system will course repeat purchase behavior only if the purchase experiences using the system is positive; as a negative experience will result to decline in the customers' penchant for future purchases.

87% of the customers submitted that they perceive that the lack of security on this platform and unreliable network services will be a huge disadvantage to them in the short run as online hawkers could break into their cards and defraud them; but in the long run if properly structured and monitored will be beneficial. Also, the key handy challenges customers and operators experience at present are: poor IT connectivity by their bankers' and telecommunications service providers and multiple debiting these two are ranked high with regards customers' responses. Thus with these challenges being perceived and experienced by users in the country the purpose of cashless economy will not be achieved substantially. Take an example where a customer is debited twice for a single transaction and it will take his bankers over a week to reinstate cash, perhaps it becomes a reoccurrence; the customer will obviously not be satisfied and have confidence in such payment system. Thus, it will under these circumstances bring about more frustrations than satisfaction. These findings are consistent with (Odior & Banuso, 2013; Muiyiwa et al. 2013; Abiodun et al. 2013; Idowu 2009; Akindele, 2011 and Salkin, 1999).

## Conclusions and Managerial Implications

Overall, the purpose of this study is achieved. It is given by the study findings to know that the introduction of cashless policy in Nigeria is cogent and timely. The study therefore revealed that the adoption of cashless policy impact on marketing performance of retail outlets in Nigeria. But it specifically revealed that the use of point of sale terminal (POS) as an instrument of cashless policy has strong and positive relationship with profitability and sales volume of retail outlet. The study further found that the use of E-cash wallet influences customers purchase intention as well as impact on customers repeat purchase behavior. Hence, we concluded that the Central Bank of Nigeria cashless policy is in line with international banking best practices. However, this study also revealed that in view of the implementation of cashless policy some bank's customers do not have E- cash wallet instruments for business transaction. The study further recommended as follows:

- The Central Bank of Nigeria to direct all banks' to produce and provide their new and old customers with E-cash wallets; credit card, master card and debit card, but an exception to corporate accounts holders only that is if this policy will be effective and enjoy total compliance from the Nigerian populace;
- The government should provide uninterrupted electricity power supply since it was found to be one of the challenges businesses are faced with;
- Money deposit banks' to acquire viable information technology software and collaborate with its telecommunications counterparts to provide interrupted online banking services, aimed at driving robust banking operations. This will help in militating against customers' negative experiences such as: multiple debiting, poor IT connectivity, E-fraud and others.
- Also, the CBN and commercial banks' to intensify the education on the need, benefit and how the cashless policy works to the citizenry both rural and urban dwellers, perhaps using the niche strategy through Community Town Associations; Religious organizations; schools as well as enlightenment through the use domesticated local dialects.

However, should this study recommendations be implemented it has the possibility and potentials of boosting the economy of Nigeria. Specifically, its Naira currency will attract competitive value in the long run especially in the international market arena, her image will be boosted in the committee of bankers across the world and foreign direct investment will be attracted in view of her new economic

trends. Finally, the study proposes seven conceptual models for measuring E-payment systems implementation:

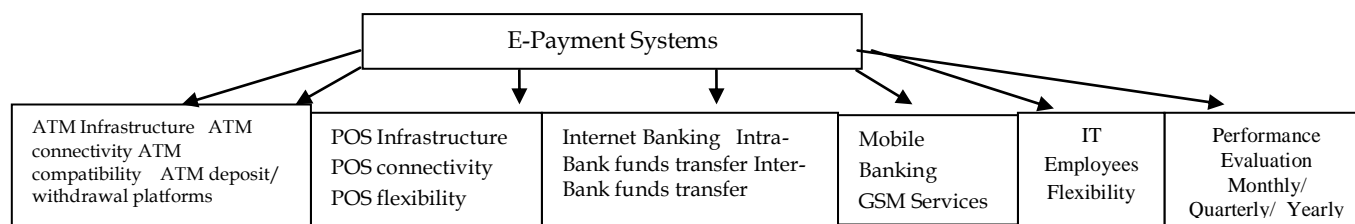


Fig. 2: Seven process E-Payment Systems implementation Model

Source: Researchers' Concept (2014)

From the model above ATM connectivity means that banks' ATM platforms should have the ability to connect and communicate with other e-payment channels within an organization as well as competitors ATMs and their e-payment platforms, while ATM compatibility means its ability to share any type of information across technology components within the bank. For instance, to identify when cash is diminishing in the machine and gives signal to the central system for reloading. Point of sale connectivity refers to the ability of the terminal to connect to a central data base network, thereby sharing information across technology component and other payment platforms to avoid incessant payment rejections and breakdowns. POS terminal flexibility refers to the ability of the terminal to diffuse to new communication technologies. IT employee's flexibility refers to the ability of the firms IT personnel to respond swiftly to customers complaints as it affects their experiences in the use of available service mediums. Internet banking infrastructure refers to banks' ability to provide reliable and dependable platforms to do intra-bank and interbank transfers.

## References

- Abiodun et al. (2013). Achieving Cashless Economy in Nigeria: The Cloud Computing Approach an Imperative of Nigeria's CBN Effective Coordination. *International Journal of Multi-Disciplinary Sciences and Engineering*, 4(6), 20-26.
- Adepoju, A. and Alhassan, G. (2010). Challenges of Automated Teller Machine (ATM) usage and fraud occurrence in Nigeria: A case of selected banks in Nigeria. *Journal of Internet Banking and Commerce*, 15(2), 2-10.
- Akhalumeh, P.B & Ohiokha, F. (2012). Nigeria's Cashless Economy: the Imperatives. *International Journal of Management and Business Studies*, 2 (2), 31-36.
- Akindele, R.I. (2011). Fraud as a Negative Catalyst in the Nigeria's Banking Industry. *Journal of Emerging Trends in Economics and Management Sciences*, Vol. 1-11.
- Ayoola, T.J. (2013). The Effect of Cashless Policy of Government on Corruption in Nigeria. *International Review of Management and Business Research*, 2(3), 682-690.
- Byrd, T. A. and Turner, E.D. (2000). An exploratory analysis of the Information Technology Infrastructure Flexibility Construct. *Journal of Management Information systems*, 17(1), 167-208.
- Central Bank of Nigeria (2005). Recent Reforms in the Nigeria Banking Industry: Issues and Prospects. Being a Paper Delivered at the 2004 End of Year Party by Clearing House Committee of Port Harcourt Branch, CBN on 29<sup>th</sup> Jan, 2005 at Port Harcourt.
- Central Bank of Nigeria (2012). Banker's Committees Resolution on the use of ATM and others.
- Central Bank of Nigeria (2012). Towards a cashless Nigeria: Tools and Strategies. NSC 24<sup>th</sup> National Conference, July, pp.1-30
- Chung, S. H., Rainer, R.K. and Levis, B. R. (2003). The Impact of Information Technology Infrastructure Flexibility on Strategic Alignment and Application Implementation. *Communications of the Association for Information Systems*, 11(11), 25-30.
- DTI (2004). Driving Change, Retail Strategy Group Report, downloaded from [www.dti.gov.uk/retaildoc/main.pdf](http://www.dti.gov.uk/retaildoc/main.pdf) on 12 Of August 2013.
- Gibson, R. (1993). Global Information Technology Architecture. *Journal of global Information Management*, 4(2), 28-38.

- Greenfield Online. (1998). Cybershoppers Research Report #13197. Online Marketing Research conducted on behalf of Better Business Bureau. [Online]. <http://greenfieldcentral.com/newsroom.htm>.
- Hilili, J.M. (2005). Overview of Electronic Payment Systems in Nigeria: Strategic and Technical. Issues. *Bullion Publication of Central Bank of Nigeria*, 29 (2), 67-79.
- Idowu, A. (2009). An Assessment of Fraud and Its Management in Nigeria Commercial Banks. *European Journal of Social Sciences*, 10(4), 220-229.
- Jones, P., Comfort, D. & Hillier, D. (2007). What's in Store? Retail marketing and Corporate Social Responsibility. *Marketing Intelligence and Planning*, 25(1), 17-30.
- Kulkarni, A. (2004). Legal Analysis of Electronic Payment Systems: Asian School of Cyber Laws.
- Liang T.P. & Huang, J.S. (1998). An Empirical study on consumer acceptance of products in electronic markets: A transaction cost model. *Decision Support Systems*, 24(1), 29-43.
- Limayem, M. Khalifa, M. & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. 30(4),
- Mallat, N. & Tuunainen, V.K. (2008). Exploring Merchant Adoption of Mobile Payment Systems: An Empirical Study. *E-Service Journal*, 6 (2), 24-57.
- Mohamad, N. M. and Kamaruzaman, J. (2009). The Effect of Information Technology Infrastructure Flexibility on Intranet Effectiveness. *Journal of Computer and Information Science*, 2(2), 57-65.
- Muyiwa, O., Tunmibi, S., & John-Dewole, A.T. (2013). The Impact of Cashless Economy in Nigeria. *Greener Journal of Internet, Information & Communication Systems*, 1(2), 40-43.
- Newstead, S. (2012). Cashless Payment Underpins Economic Growth. Retrieved online@<http://www.rbs.com> on 15th Oct, 2013.
- Odior, E.S. & Banuso, F.B. (2013). Cashless Policy in Nigeria: Challenges, Benefit and Policy Implications. *European Scientific Journal*, 8(12), 289-314.
- Oyewole et al. (2013). Electronic Payment Systems and Economic Growth: A Review of Transaction to Cashless Economy in Nigeria. *International Journal of Scientific Engineering and Technology*, 2(9), 913-919.
- Saaksjarvi, M. (2000). The Roles of Corporate IT Infrastructure and their Impacts on IS Effectiveness *Proceeding of 8th European Conference on Information Systems, Vienna, Austria.*
- Salkin, S. (1999). Fear of buying in Logistics Management and Distribution Report. *Radnor*, 8(5), 101-104.
- Tunji, S.T. (2013). The Effect of Cashless Banking on Nigeria Economy, *eCanadian Journal of Accounting and Finance*. 1 (2), 9-19.
- Wali, A. F. (2013). Information Technology Infrastructure and Customer Service Delivery. *British Journal of Marketing Studies*, 1(2), 17-32.
- Wali, A.F & Opara, B.C. (2012). E- Service Quality Experience and Customer Loyalty: Emphasis from the Nigeria Airline sector. *European Journal of Business and Social Sciences*, 1(9), 118-125.
- Woodford, M. (2003). Interest and Prices: Foundations of a Theory of Monetary Policy. Princeton University Press.
- Yoon, S.J. (2002). The antecedents and consequences of trust in online-purchase decisions. *Journal of Interactive Marketing*, 16 (2), 47-63.