Consumer Trust and Adoption of Point of Sales of Selected Business Organizations in Lagos State Nigeria

Abstract

Nigerian payment systems are cash-driven, and it is the main mode of payments for several transactions. However, the Point of Sales (POS) which is meant to encourage cashless economy as against the cash-centered operations is challenged with issue of trust and security. This study examined the consumer trust and adoption of POS of selected business organizations in Lagos state, Nigeria.

The study adopted a cross-sectional survey research design. The population of the study consisted of individual SMEs who are users of POS in the selected sectors and business organizations in Lagos State with population figure of 11,663 and sample size of 2,059. The respondents were randomly sampled from the selected organizations where the data were collected. A validated questionnaire was used. A total of 2,059 copies of the questionnaire were administered, with a response rate of 77.1%. The Cronbach’s alpha coefficients for the constructs are 0.727 for adoption of POS and 0.810 for customer trust and 0.758 for POS security. The data were analysed using descriptive and inferential (Pearson Product Moment correlation) statistics.

The findings revealed that there was a significant relationship between customer trust and Adoption of POS (r=0.373; p<0.01) and POS security and Adoption of POS (r=0.437; p<0.01).

The study concluded that customer trust had significant and positive relationship with adoption of POS of selected business organizations who are SMEs in Lagos State, Nigeria. The study thus recommended that stakeholders should ensure that security and trust are two important considerations in order to enhance the adoption of POS of selected business organizations in Lagos state, Nigeria.

Keywords: Customer trust; Adoption of POS; E-payments; Cashless policy

Introduction

It is observed that there is a global advancement in technological development; Nigeria is not left out of this advancement. Information and Communications Technology (ICT) has evolved and has become a vehicle for technological growth in the economy of many societies as it has unarguably made life easier [1-4]. Therefore, the global acceptance of Information and Communications Technology as well as its usage have attracted and received the interest of researchers who are on regular basis out to proffer solutions for problems related to technology development for decades [5-11]. This development had encouraged further research on the utilisation and benefits of ICT to several nations in order to improve their economic development [1,9,10].

The technology acceptance is about how people accept and adopt some technology for use. The user acceptance of technology has further been explained as the willingness within a user group to employ IT for the tasks it is designed to support [12].

In the light of the industry situations necessitating the introduction of POS, it is widely recognized that POS which is regarded as safe...
and efficient retail payment systems enhanced the effectiveness of the financial system, boost the consumer confidence and facilitated the functioning of commerce by Business Information System. Since Nigerian consumers largely depended on the use of cash to conduct transactions, the introduction of POS by organizations in the country is expected to ease the carriage of large sum of money by consumers and also to enhance the effectiveness of organizations and transactions from it must be secure and trusted. In this regard, it has been observed that funds that circulate outside the banking sectors are over 90% [13] reasons are attributable to lack of trust, and security especially from the bank to destinations and transactions generated from it.

In a recent study, evolution of technology for use in financial transactions poses a lot of challenges as questions arose regarding the stability of the instrument in guaranteeing the efficiency and effectiveness of monetary policies of nations worldwide. From history, different payment systems have been in use e.g. barter system was common, but incidences of double coincidence of want necessitated the use of money. However, technological development gave rise to the use of superior instruments as the technology developed. A little over three decades ago, the use of cash in making purchases in the United States of America has declined, and increasingly adopts the use of electronic payments systems. However, developing economy like Nigeria are still at the introductory stage of the use of alternative payments platform as recently introduced by the monetary policy maker of Nigeria, the CBN Studies have shown that the use of cash for transactions made for payments of goods and services in many nations of the world is risky and complex, and is gradually giving way to alternative payments platform, this is because money outside the bank cannot be subjected to financial regulations and operational procedures by regulatory agency, and this limit the ability of the regulator to achieve the set objectives [13].

In the CBN reports cited in Adeoti and Oshotimehin [14], the cost of cash management was huge and are as follow: in 2009, CBN was said to have spent the sum of ₦114.6 b, this rose to ₦135 b in 2010, and ₦166 b in 2011, and an estimated sum of ₦196 b was projected for 2012, to manage currency production and services, these amounts are substantially large and require an urgent attention to address the situation, and could be reduced to a minimal level should the economy embrace cashless and other alternative payments system especially POS. This would then reduce the cost of printing currencies, cost of transportation of cash, cost of sorting currencies, and also reduce security cost of managing the printed currencies. Although an average Nigerian businessman prefers cash transactions and will embrace an alternative if they are well informed or educated of its benefits and assured of its transactional integrity. This therefore prompted the Federal government coming up with policy that reduces the volume of cash in the economy using Lagos as the pilot state. Despite the acceptance and increase in the use of alternative payments platform (e-payments), the adoption rate of POS was low, and this is attributable to lack of trust and security issues [15-17]. This study is therefore imperative to identify solutions needed to reduce these challenges.

In spite of the achievements recorded so far in the implementation of the cashless policy of Federal Government of Nigeria, it is observed that to sustain customer usage of e-payments platform especially POS has been difficult. This is about data obtained from CBN releases e-payments statistics for the period 2012-2016 [18] which indicates that despite the introduction of cashless economy with its attendant benefits the following data representing low penetration of POS compared to ATM was given in Table 1.

Reasons as given by CBN for low adoption of POS include but not limited to lack of trust and security of the transactions, this observation also indicated that many buyers of goods and services still do that by cash, this brings about enormous risk and high cost of cash management it also brings about inefficiency and corruption [19,20]. Similarly, as reported by Adeoti and Oshotimehin the general increase in the adoption rate of electronic payments instruments and the rate of growth of adoption of POS are still low compared with another e-payments platform such as ATM. Among the factors identified as responsible for this low adoption of POS in Nigeria is lack of adequate infrastructure that is required to run POS, irregular network connectivity hence cannot be trusted, and security of network communications.

Another issue of concern in the adoption of technology in an organization is security; this has been stressed in an article challenges to the efficient use of POS terminals in Nigeria [15]. The author asserted that the efficient use of POS terminals in Nigeria will reduce the security challenges arising from fraud, and robbery occasioned by withdrawal of cash by unsuspecting customers from the bank. The importance of security of communication over the network as the network becomes available to the public is also of immense importance, just like security on smart card a device used in POS terminal has become a critical issue as various transactions involving exchange of data and those through the internet must be well protected.

This is to prevent unauthorized access to critical data and other information of great importance by fraudsters and hackers who daily attempts breaking into systems, by the adoption of POS in an organization [21] Similar research work done by Ebitomeria and Ekuobase [17] also agreed that security has become an important issue in adopting technology, security by these authors involved access to the network resources since unauthorized access could impact negatively on the enterprise as well as the customers and therefore discourages its adoption. A study indicated that relying on traditional security control has become obsolete such as physical access controls, security guards at the gate of the organization securing their assets, processes and communications (Tarimo).

The complex nature and the possible intelligence of hackers makes it mandatory for adequate security applications to be

| Payment channel | Transactions volume |
|-----------------|---------------------|
| ATM             | 470,894,452         |
| Cheques         | 9,764,546           |
| Web             | 10,499,911          |
| POS             | 47,743,919          |

Table 1 Volume of transactions for selected e-payments platform.
installed on each layers of POS operations, in order to discourage the misuse of the technology, so the device connected to it must be well secured. Other security issues to be considered and which are of immense importance for consumer adoptions are anonymous and privacy, which relate to use access to critical personal information of customers and purchase records [22-24].

Following issues raised above, it is also pertinent to consider trust which in previous research work plays a major role in the technology deployment. Geffen [25] defined trust as a confident belief in favorable expectations about what the other party will do. In order words, a favorable expectation of the adoption of POS will encourage its use. Trust will have positive impact on a consumer’s intention towards using POS for financial transactions. Attempt to analyze the role of trust in the deployment of POS terminal in an organization have been made, Dixit and Datta noted that factors like security and privacy and trust among other factors increase the acceptance of technology deployment in India. It is also argued that the face to face interaction in business transaction involving electronic payment has made the place of trust in its adoption important (Carter and Belanger; Gilber and Balestrini).

Trust may have positive impact on the customer’s intention towards using POS for financial transactions [13] which may in turn increase the customer base in an organization in Nigeria. Creating an awareness of the importance of POS deployment in an organization has become a major factor to encourage its use and especially in line with the high number of illiterate population within the Nigerian society and vast numbers of unbanked population and porous banking systems. The majority of the unbanked population are illiterate and will therefore depend on the few literates for their transactions through the POS which may make them vulnerable on the scruples few literates therefore there is the need for serious customer assurance of non-negativity in this respect.

**Theoretical Foundation**

The definition of theories according to Wacker is that it must have four basic criteria which are conceptual definitions that are applicable variables, domain limitations i.e. where the theory applies, relationship building and predictions. Theory building is very important in the sense that it provides a framework for analysis and also needed for practical problem solving.

A number of theories have evolved to explain adoption of POS in an organization, these theories include technology acceptance theory [5] Theory of Reasoned Action (TRA) Theory of Planned Behavior (TPB). The unified theory of acceptance and use of technology (Venkatesh, Morris, Davis and Davis), Diffusion Theory (Rogers) and Social Cognitive Theory (Bandura). The listed theories form the bedrock for the adoption of POS in an organization.

Attributes of trust from Figure 1 shows that confidentiality and integrity are important elements of trust while perceived confidentiality refers to ability of the system to protect the information resource of POS, this is done by ensuring that no access is given to a wrong person. That is confidentiality is the property of an information system that ensures that transaction information cannot be viewed by unauthorized persons, so perceived strength of confidentiality would have a positive impact on a consumer’s trust in adoption of POS. Integrity means that the information and systems have not been altered or corrupted by external and unauthorized parties, integrity of data would have a positive impact on a consumer’s trust in POS adoption.

Authentication ensures that the parties to the transactions are not impostors and are trusted (Merz). Before business transactions can be performed on the POS, the Participating entities must confirm the identity of each other. This is achieved by using network-based authentication protocols and PIN. This would also have a positive impact on trust constructs for POS adoption in selected business organizations in Lagos state.

Authorization: Procedures must be provided to verify that the user can make the requested purchases or payments (Merz). This is usually ensured by the use of PIN and Passwords to validate the authority of the provider to the services or transactions requested to be performed, hence before payments are made at the use of POS, authorization processes must be activated, and this is also a positive component of trust.

The Theorem of Reasoned Action’s causal relationships in the Technology Acceptance Model (TAM) were used to explain the adoption behaviour of individuals in relation to technology adoption such as POS. This study also follows their cue and applies the model in the domain of the adoption of POS adoption. Using the TAM as the framework for this study, a conceptual model of user trust and POS adoption is presented in Figure 1, which encompasses the key factors in ensuring user trust of POS adoption and the posited resulting outcomes of intention to use POS and actual adoption of POS. This also includes the paths between Trust and Perceived ease of use, trust and perceived usefulness, Perceived ease of use and intention to use and Perceived usefulness and intention to use the technology.

**Literature Review and Hypothesis Development**

In examining the implications of adoption of POS, it is necessary to review how customers trust and POS security relates with the adoption of POS of selected business organizations in Lagos state, Nigeria.

The intention of earlier inventors of cash register was to create a system that will be used for recording cash transactions to prevent employee from tampering with the profit of the organization [26], this device soon became a tool for financial transactions as it issues receipts functioning like sales as well as keeping the records and the reports generated from it. Improvements of technology over the years gave rise to what is today refers to as POS.

Cumbersoness and risky nature of reliance on cash-based economy in any society necessitates the adoption of POS, because money outside the banks cannot be subjected to regulatory and
operational procedures and the ability of monetary policy to achieve set objectives in the presence of sizeable currency out of Bank is limited [13] this simply means the adoption of POS signify the acquisition and usage of POS.

POS as defined by some notable researchers is that it is a device used for recording transactions in a store, which can be said to be a modern-day cash register (Shari). Gilaniania et al. [27] defined POS as a device that is installed in the center of the sale of goods and services instead of paying cash by physical transportation of money, the transaction amount from an account holder i.e. customer is deducted from their account electronically using an electronic card, while the card acceptor (seller) is paid. Therefore, in this study, POS can be described as a device deployed in a merchant location where users swipe their electronic cards in order to make payment for purchases or services as against the use of cash.

Conceptually, there are benefits attributable to the use of POS, for example, World Bank says globally, the use of electronic payments systems was strategic to fast-tracking growth among the nations all over the world’s financial sectors. A world body like the World Bank stated it, it shows it is true and the following benefits are expected to be derived from the use of this platform [27]. Faster transactions, that is, reducing queue at the point of sale; improving hygiene on site, that is, eliminating bacteria through the spread of notes and coins; increase sales; cash collection made simple and; managing the entitlements of staff.

Other benefits include but not limited to the following: improves customer services, such as removes the need for invoice, cheques clearance etc; Allow purchase and instant payments through the point of sale; discount to allow online purchases etc. The utilization of the electronic payments systems will also benefit stakeholders’ e.g. For consumer; it will reduce risk of carrying huge cash, increase convenience, more service options and cheaper access to banking services; organizations; it will lead to faster access to capital as payments are almost immediate, reduce revenue leakage and reduce cost of handling cash; government; increase in tax collections and economic development; Banks; efficiency through electronic payments systems, reduce costs of operations and increase banking penetrations [28]. The listed benefits not withstanding if the system is not properly configured to work efficiently, it may be dead on arrival, especially if the infrastructures are not properly deployed.

Information usage by many organizations has become like a source of marketing tool used in a competitive environment such as Nigeria [29] and then sustained competitive advantage [30-32]. The users of information distinguish itself from those that do not use it by the level of trust users have in producers of the information, when an organization uses or adopt POS, it shows it has a measure of trust on the use. McKnight and Chervany [33] defined and described trust in technology as more encompassing than the interpersonal trust constructs used in some study of trust. The positions of these authors stem from the fact that trust is a situation of acceptance under risk believing that the object is true. Some authors stated that the most basic dictionary meaning of trust is to depend or rely on another [33]. Thus, if one can depend on an IT’s attributes under uncertainty, then trust in technology that is POS adoption is a viable concept. Trust has been found to influence the perceived quality of output derivable from the device being introduced into the market, and the level of commitment to the utilization of the product.

As a mental attitude, faith is like the attitude of trust, though the concepts differ in an important way. Faith can be seen as an emotionally charged, unquestioning acceptance; it does not require evidence [34]. It is what is left with if all cognitive content is removed from trust [35]. Trust has been defined as recognizing and accepting risk in decision making, in recognizing risk one identifies evidence for possible negative outcomes of the situation. One also willfully accepts the recognized risk based on evidence that a positive outcome is possible. Trust is an expectation based on inconclusive evidence and is tolerant of uncertainty or risk [34]. Trust in the adoption of POS is therefore expected to produce positive outcome, hence the researcher agreed and adopt this definition of trust by Hart and Kinship [34] that trust is an expectation based on inconclusive evidence and is tolerant of uncertainty. On this view, an attitude is formed that the outcome of the situation will be positive, but this attitude has little or no evidential basis, or no evidence is considered. The mental attitude of trust does involve an amount of deliberation.

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![Figure 1](http://www.imedpub.com/applied-science-research-and-review/) Conceptual framework of trust model for POS adoption.
POS Security is defined as a threat which when breached creates an unpleasant situation with the potential to cause harm such as economic hardship to data or network resources or in the form of destruction, disclosure of unauthorized information and modification of data, denial of service and or fraud, waste and abuse [36]. Under this definition, in the context of online banking or electronic payments systems, threat can be made either through network or data transaction attacks or through unauthorized access to the account by means of false or defective authentication or use of stolen POS cards. According to Milind [37], security risk is a significant impediment to the adoption of online banking and e-payments systems.

Banks and card manufacturers have over the past decades been involved in processing of financial transaction electronically. The recent technological developments in the field of e-commerce have opened up other areas of development in the electronic payments system. First, the prospects of electronic commerce over the internet are creating a large demand for electronic payment methods for open networks. Second, the introduction of online-e-business schemes is creating many more opportunities where smart cards can be used for cost-effective off-line payments. There is need for adequate security in POS electronically as the device is used basically to transact financial transactions.

In an article published in the Nation newspaper of Sunday July 16, 2017, on Cashless policy: Nigerian count losses in billions, it was revealed that though POS cannot be said not to work effectively, but that there are challenges with bandwidth of the telecommunications service providers arising from infrastructural deficiencies. Some of these challenges are manmade, for example it was posited that some supermarket attendants are sabotaging the continuous working of POS by making customers believe that POS is not working as it supposedly denied them of tips or free left-over cash of ₦20 or ₦40 from customers [38].

In an article reported in a national daily newspaper, there was a lot of concern about security in banking application including the use of POS, this have put wide embrace of e-payment channels in abeyance. In a recent survey conducted by Visa International showed that high net worth accounts holders neither own nor use ATM cards the channels of communications with POS. The study also revealed that people that earn below ₦500,000.00 per annum, who form 47% of its respondents own and are regular users of debit cards, these also includes for online purchases. It showed therefore, that, the higher people earn the less they own and use debit cards. This implies that majority of the rich think that avoiding debit cards is the best way to stay protected from online fraud. According to experts, some of these technology adopters including banks are using outdated Microsoft Windows operating system, which is vulnerable to hacking for their operations. This is partly responsible for the fraud related issues and by extension security vulnerability.

The main objectives of this study are to examine the consumer trust and adoption of POS of selected business organizations in Lagos state, while specifics objectives are to assess the relationship between customer trust and adoption of Point of Sales of selected business organizations in Lagos State and also to evaluate the relationship between POS security and adoption of Point of Sales of selected business organizations in Lagos State. In an attempt to come up with acceptable conclusions the study tested the following null hypothesis:

$H_{01}$: There is no significant relationship between customer trust and adoption of POS of selected business organizations in Lagos State, Nigeria.

$H_{02}$: There is no significant relationship between POS security and adoption of POS of selected business organizations in Lagos State, Nigeria.

Currall and Judge defined trust as an individual’s reliance on another party under conditions of dependence and risk. This supposed that making payments through electronic channels such as POS must be with some level of trust that the transactions will hit the various accounts accordingly. Studies have shown that trust is significantly related to adoption of POS in Lagos hence it is noted that transactions made must not be deniable either by the originator or the beneficiary of the transactions. Trust has also been described as an influential factor on consumer activities and hence success of e-banking services (Ganesan, Ling Chai and Piew). However, some authors do not see the significance of trust to adoption of POS in an organization. Therefore, hypothesis iii is hereby stated as follow: Customer trust does not have significant relationship with adoption of POS in selected organizations in Lagos state.

There is preponderance of academic work that links security issues to the low adoption of POS in an organization, it is noted that the key requirements for securing financial transactions in electronic environment include confidentiality, data integrity, authentication, and non-repudiation [23,24,39] all of which are concerned about security of electronic transactions and because of the vulnerability of the data [39] asserts that security issue in the use of POS must be taken seriously. Pandy in his work enumerates some of the security challenges that could negatively affect the adoption of POS, however, there are other studies that do not see the significant relationship between POS security and adoption of POS in an organizations. Based on the above, hypothesis ii was introduced.

**Methodology**

This study employed a cross-sectional survey research design, employing well validated questionnaires as the main research instrument. This is consistent with the view of Mann [40] who noted that many cross-sectional studies are completed with questionnaires and few others employ interviews to collect data. Similar studies on adoption of POS have employed a cross-sectional research design [13,15].

The population of the study consisted of all Small and Medium Enterprise (SMEs) who are the main users or adopters of POS in Lagos state and the collaborative survey conducted by Small and Medium Enterprises Development Agencies of Nigeria and National Bureau of Statistics in 2013, put the population at 11,663 in Lagos state. The SMEs are divided into sectors which
are manufacturing, mining and quarrying, accommodation and food services (Hotel services), agriculture, wholesale/retail trade, constructions, transport and storage, Information and communications technology, education, administrative and support activities, arts, entertainment and recreation, other services activities, water supply, sewage, water management and remediation act (SMEDAN) and the sampling unit is individual SMEs operating in Lagos state that uses POS. The total copies of questionnaire distributed was 2,059 and 1587 were returned representing about 77.1% of response rate.

Pilot study was conducted using small segments of the sample in order to confirm the validity and reliability of the instrument. The Cronbach’s alpha coefficients for the constructs are 0.727 for adoption of POS and 0.810 for customer trust and 0.758 for POS security, showing the reliability of the instrument while the instrument was subjected to content validity-expert opinion validity as used by Osuagwu [41]. Experts in academics, especially those in management, marketing, ICT validated the research instrument, in addition to expert opinion from some top-level organizational executives that work in the retail and banking industries.

The analysis of the study was conducted using descriptive and inferential statistics done through correlation and regression analysis, specifically; Pearson Product Moment Correlation was used to measure the relationship between the study variables.

Data Analysis, Results and Discussion

Table 2 shows responses by respondents in the questionnaires distributed and given as follows:

Statement 1 from the Table 2 shows that 575 respondents representing 41.5% strongly agreed that there is high level of confidentiality in POS, 876 respondents representing 52.7% agreed with the statement, while 98 respondents representing 4.7% fairly agreed that there is indeed high level of confidentiality in POS, 19 respondents representing 0.7% fairly disagreed and 19 respondents representing 0.5% disagreed with the statement. This implies that majority of the respondents representing about 97% agreed with the statement and that high level of confidentiality in POS is a measure of customer trust and will enhance adoption of POS in selected organizations in Lagos state.

Responses to Statement 2 in the Table 2 shows that 675 respondents representing 48% strongly agreed that there is high level of integrity in POS, 741 respondents representing 43.9% agreed with the statement, and 168 respondents representing 8.0% fairly agreed with the statement while 3 respondents representing 0.1% fairly disagreed with the statement. Therefore, majority of the respondents representing about 99% agreed with the statement there is high level of integrity in POS and measures customer trust in POS, therefore transactions generated from it can be trusted.

Responses to Statement 3 in the Table 2 shows that 525 respondents representing 38.1% strongly agreed that implementation of POS will ensure data security, 917 respondents representing 55.5% agreed with the statement, and 119 respondents representing 5.8% fairly agreed with the statement while 3 respondents representing 0.1% fairly disagreed with the statement and 22 respondents representing 1.1% disagreed. Therefore, majority of the respondents representing about 98% agreed with the statement that implementation of POS will ensure data security.

Responses to Statement 4 in the Table 2 shows that 654 respondents representing 41.2% strongly agreed that POS enables user’s identification and confirmation before usage, 811 respondents representing 51.1% agreed with the statement, 106 respondents representing 6.7% fairly agreed, 8 respondents representing 0.5% fairly disagreed and also 8 respondents representing 0.5% strongly disagreed with the notion that POS enables user’s identification and confirmation before usage. This then means that majority of the respondents representing about 97% agreed that POS enable user identification and confirmation before usage and therefore measures customer trust in POS.

Responses to Statement 5 in the Table 2 shows that 622 respondents representing 44.5% strongly agreed that transaction made in POS cannot be denied by the consumers who perform the task, 865 respondents representing 51.6% agreed with the statement, 62 respondents representing 3.0% fairly agreed and 19 respondents representing 0.7% fairly disagreed with the statement while 19 respondents representing 0.2% strongly disagreed with the statement. Therefore, majority of the respondents representing about 97% agreed that transactions made in POS cannot be denied by the consumer who performed the task and measures customer trust in POS.

Responses to Statement 6 in the Table 2 shows that 563 respondents representing 40.9% strongly agreed that POS usage is highly trusted, 781 respondents representing 47.3% agreed with the statement, 243 respondents representing 11.8% fairly agreed with the statement. Therefore, all respondents who participated in the study agreed that POS is highly trusted.

The response from participating respondents in Table 3 shows the following:

Statement 1 in Table 3 indicates that 832 respondents representing 57.8% strongly agreed that experience is an important components of adoption of POS in an organization, while 647 participating respondents representing 37.5% agreed that experience is indeed a good measure of adoption of POS in an organization, while 86 respondents representing 4.0% fairly agreed, however, 19 respondents representing 0.8% fairly disagreed that experience has a positive effect on adoption of POS in an organization. Therefore, majority of the respondents representing over 98% agreed that experience is a good measure of adoption of POS in an organization.

Response to Statement 2 in Table 3 shows that 854 respondents representing 58.9% strongly agreed that innovativeness determines the adoption of POS in an organization, while 657 respondents representing 37.8% agreed with the statement, 57 respondents representing 2.6% fairly agreed, 19 respondents representing 0.7% fairly disagreed. This show that majority of the respondents representing about 98% agreed with the
statement that innovativeness is a measure of adoption of POS in an organization.

The opinion of the respondents in Statement 3 in Table 3 indicates that 1112 respondents representing 74.2% strongly agreed that availability of infrastructure enhances adoption of POS in selected organizations, showing the importance of infrastructure availability in determining the adoption of POS in an organization, also 422 respondents representing 23.5% agreed with the statement, similarly 53 respondents representing 2.4% fairly agreed that infrastructure is key in adoption of POS in an organization. Therefore, the entire participated respondents agreed with the statement that availability of infrastructure is an important variable in measuring the adoption of POS in selected organizations in Lagos state, hence stakeholders is to ensure infrastructure is in place in order to enhanced adoption of POS. Response to Statement 4 in Table 3 indicates that 835 respondents representing 57.2% strongly agreed that ease of use of POS enhances its adoption in an organization, and that 740 respondents representing 42.2% agreed with the statement, 12 respondents representing 0.5% fairly agreed that ease of use of POS enhances its adoption. Therefore, the entire participated respondents agreed that ease of use of POS enhances its adoption, the organizations saddle with deploying the machine are to ensure ability to impact knowledge with ease to customer in order to encourage its use.

Similarly, the opinion of respondents in Statement 5 in Table 3 indicates that 679 respondents representing 47.9% of the...
participated respondents strongly agreed that perceived usefulness of POS enhances its adoption, while 803 representing 47.2% agreed, 105 respondents representing 4.9% fairly agreed with the statement. Hence, all the participated respondents agreed that perceived usefulness is a measure of adoption of POS in an organization.

Responses to Statement 6 in Table 3 indicates that 628 respondents representing 39.6% strongly agreed that ease of communicating the benefits of POS to its potential users influences its adoption in an organization, while 870 respondents representing 54.8% agreed, 70 respondents representing 4.4% fairly agreed and 19 respondents representing 1.2% fairly disagreed with the statement. This then means that majority of the respondents representing 98.8% agreed that ability to communicate the benefits of POS to its users enhances its adoption, this should be done in order to enhance the adoption of POS of selected business organizations in Lagos.

Statement number 7 in Table 3 showed that 679 participated respondents representing 47.8% strongly agreed that skill requirements of users enhances the adoption of POS in an organization, also, 809 respondents representing 47.5% agreed, while 99 respondents representing 4.7% fairly agreed with the statement, showing that the entire participated respondents agreed that skill is a required measure to adoption of POS in an organization.

Statement 8 in Table 3 shows that 892 respondents representing 61.4% strongly agreed that customer motivation is an important variable in adoption of POS in an organization, 584 respondents representing 33.5% agreed, while 111 respondents representing 5.1% fairly agreed that customer motivation measures the adoption of POS in an organization. It shows therefore that the participated respondents agreed that customer motivation enhances the adoption of POS in selected organizations in Lagos state; stakeholders are therefore to ensure adequate motivation in order to enhance the adoption of POS of selected business organizations in Lagos.

Statement 9 in Table 3 shows that 728 respondents representing 51.4% strongly agreed that Government and regulations enhances the adoption of POS in an organization, 698 respondents representing 41% agreed, while 161 respondents representing 7.6% fairly agreed that government and regulations measures the adoption of POS in an organization. It shows that the entire respondents agreed that government and regulations indeed enhance the adoption of POS of selected business organizations in Lagos.

Statement 10 in Table 3 shows that 1051 participated respondents representing 70.9% strongly agreed that security of POS is an important variable in adoption of POS in an organization, 439 respondents representing 24.7% agreed, while 97 respondents representing 4.4% fairly agreed that security of POS measures the adoption of POS in an organization. It shows therefore that all the participated respondents agreed that security of POS enhances the adoption of POS of selected business organizations in Lagos.

Statement 11 in Table 3 shows that 597 respondents representing 44.5% strongly agreed that customer trust enhances the adoption of POS in an organization, 895 respondents representing 55.5% agreed, while 95 respondents representing 4.7% fairly agreed that customer trust measures the adoption of POS in an organization. It shows that the entire respondents agreed that customer trust indeed enhances the adoption of POS of selected business organizations in Lagos.

Comparing the interpretation of the responses in Table 2 and Table 3, it shows that customer trust enhances the adoption of POS in an organization.

Table 4 shows the significant relationship between customer trust and adoption of POS in an organization. The correlation coefficient (r) of customer trust to adoption of POS in an organization is 0.373 and the significance level is 0.01 (p<0.01). The Table 4 shows that the p-value is 0.000, which is less than 0.01. The null hypothesis was then rejected, and alternative hypotheses accepted and concluded that customer trust on POS has a significant relationship on adoption of POS in Lagos. Conclusion can then be drawn that high level of trust by customers on POS will enhanced the adoption of POS of selected business organizations in Lagos. Since the correlation coefficient is positive, it indicates that there is a positive linear relationship between the independent variable and the dependent variable, any increase in the value of customer trust will correspondingly leads to an increase in the adoption of POS of selected business organization in Lagos.

Table 4 Pearson product correlation for customer trust and adoption of POS of selected business organizations in Lagos state.

| Adoption of POS in Organization test | Adoption of POS in an organization | Customer trust |
|------------------------------------|-----------------------------------|---------------|
| Pearson Correlation                | 1                                 | .373**        |
| Sig. (2-tailed)                    |                                   | .000          |
| N                                  | 1587                              | 1587          |
| Customer trust                     | Pearson Correlation               | .373**        |
| Sig. (2-tailed)                    |                                   | .000          |
| N                                  | 1587                              | 1587          |

Correlation is significant at the 0.01 level (2-tailed)
Table 5 shows responses by respondents as follows:

Responses to Statement 2 in Table 5 shows that 389 respondents representing 29.7% strongly agreed that software security will aid the security of POS, 900 respondents representing 56.5% agreed with the statement, and 276 respondents representing 13.9% fairly agreed with the statement while 22 respondents representing 0.3% strongly disagreed with the statement. Therefore, majority of the respondents representing about 98% agreed with the statement that software security will aid the security of POS which in turn aid the adoption of POS of selected business organizations in Lagos.

Responses to Statement 3 in Table 5 show that 525 respondents representing 38.1% strongly agreed that ability to secure critical data in POS enhances its security capability, 918 respondents representing 55.5% agreed with the statement, and 119 respondents representing 8.4% fairly agreed with the statement while 3 respondents representing 0.1% fairly disagreed with the statement and 22 respondents representing 0.5% disagreed. Therefore, majority of the respondents representing about 98% agreed with the statement that ability to secure critical data in POS enhances its security capability.

Responses to Statement 4 in the Table 5 shows that 656 respondents representing 47.5% strongly agreed that security across communications network is a measure of security of POS operations, 714 respondents representing 43.1% agreed with the statement, 173 respondents representing 8.4% fairly agreed with the assertion, 22 respondents representing 0.8% fairly disagreed and also 22 respondents representing 0.3% strongly disagreed with the notion that security across communication network necessarily measure security of POS. This then means that majority of the respondents representing about 96% agreed that security across communication network measures security of POS and will enhance adoption of POS of selected business organizations in Lagos.

Responses to Statement 5 in Table 5 shows that 616 respondents representing 44.1% strongly agreed that physical security of POS measures POS security and enhances adoption of POS, 876 respondents representing 52.2% agreed with the statement, 73 respondents representing 3.5% fairly agreed and 22 respondents representing 0.3% strongly disagreed with the statement that physical security of POS will encourage its adoption. Therefore, majority of the respondents representing about 97% agreed that physical security of POS is a measure of security of POS operations.

Responses to Statement 6 in Table 5 shows that 823 respondents representing 36.3% strongly agreed that different layers of security are a measure of POS security and enhances adoption of POS, 606 respondents representing 52.7% agreed with the statement, 117 respondents representing 6.2% fairly agreed, 19 respondents representing 1.2% fairly disagreed and 22 respondents representing 1.2% strongly disagreed with the statement that different layers of security will encourage its adoption. Therefore, majority of the respondents representing about 95% agreed that different layers of security will measure POS security and enhanced the adoption of POS.

Responses to Statement 7 in Table 5 shows that 576 respondents representing 42.5% strongly agreed that there is high level of 

Table 5 Respondents’ responses on POS security.

| S/N | Variables                                                                 | SA  | A   | FA  | FD  | D   | SD  |
|-----|---------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|
| 1   | Data security will enhance security capability of POS                     | 350 | 988 | 144 | 51  | 54  | -   |
|     |                                                                           | 26.7% | 62.7% | 7.3% | 1.9% | 1.4% | -   |
| 2   | Software security will aid POS security                                   | 389 | 900 | 276 | -   | -   | 22  |
|     |                                                                           | 29.3% | 56.5% | 13.9% | -   | -   | 0.3%|
| 3   | Ability to secure critical data in POS enhances its security capability.  | 525 | 918 | 119 | 3   | 22  | -   |
|     |                                                                           | 38.1% | 55.5% | 5.8% | 0.1% | 0.5% | -   |
| 4   | Security across communication network will necessarily leads to adoption of POS | 656 | 714 | 173 | 22  | -   | 22  |
|     |                                                                           | 47.5% | 43.1% | 8.4% | 0.8% | -   | 0.3%|
| 5   | Physical security of POS will encourage its adoption.                     | 616 | 876 | 73  | -   | -   | 22  |
|     |                                                                           | 44.1% | 52.2% | 3.5% | -   | -   | 0.3%|
| 6   | Different layers of security will encourage POS usage.                    | 823 | 606 | 117 | 19  | -   | 22  |
|     |                                                                           | 58.1% | 35.7% | 5.5% | 0.7% | -   | 0.3%|
| 7   | There is high level of confidentiality in POS                             | 576 | 836 | 99  | 19  | 19  | 38  |
|     |                                                                           | 36.3% | 52.7% | 6.2% | 1.2% | 1.2% | 2.4%|
| 8   | Non-disclosure of personal information in POS will enhance its security.  | 675 | 741 | 168 | 3   | -   | -   |
|     |                                                                           | 42.5% | 46.7% | 10.6% | 0.2% | -   | -   |
| 9   | Availability of superior anti-hackers software to protect the network will enhance POS security capability. | 549 | 592 | 246 | 181 | -   | 19  |
|     |                                                                           | 42.2% | 37.9% | 12.6% | 7.0% | 0.2% | -   |
confidentiality in POS and measures security of POS operations, 836 respondents representing 46.7% agreed with the statement, 99 respondents representing 10.6% fairly agreed with the statement, 19 respondents representing 1.2% fairly disagreed with the statement, 19 respondents representing 1.2% disagreed with the statement and 38 respondents representing 2.4% strongly disagreed with the statement. Therefore, it shows that majority of the respondents representing about 89% agreed that there is high level of confidentiality in POS adoption.

Responses to Statement 8 in Table 5 shows that 675 respondents representing 42.5% strongly agreed that non-disclosure of personal information in POS will enhance its security, 741 respondents representing 46.7% agreed with the statement, 168 respondents representing 10.6% fairly agreed with the statement, 3 respondents representing 0.2% fairly disagreed with the statement. Therefore, it shows that majority of the respondents representing over 99% agreed that non-disclosure of personal information in POS will enhance the security capability of POS.

Responses to Statement 9 in Table 5 shows that 549 respondents representing 34.6% strongly agreed that availability of superior anti-hacker’s software to protect the network will enhance POS security capabilities, 592 respondents representing 37.3% agreed with the statement, 246 respondents representing 15.5% fairly agreed with the statement, 181 respondents representing 11.4% fairly disagreed with the statement, while 19 respondents representing 1.2% strongly disagreed with the statement. Therefore, it shows that majority of the respondents representing over 98% agreed that availability of superior anti-hacker’s software to protect the network will enhance POS security of selected business organizations in Lagos.

Comparing the interpretation of the responses in Table 5 and Table 3 clearly shows that POS security has a positive relationship with adoption of POS of selected business organizations in Lagos.

POS security does not have significant relationship with adoption of POS of selected business organizations in Lagos.

Table 6 shows the significant relationship between POS security and adoption of POS in an organization. The correlation coefficient (r) of security of POS to adoption of POS in an organization is 0.437 and the significance level is 0.01 (p<0.01). The Table shows that the p-value is 0.000, which is less than 0.01. The null hypothesis was therefore rejected, and alternative hypotheses are hereby accepted and conclude that POS security has a positive and significant relationship on adoption of POS of selected business organizations in Lagos. This shows that for the adoption of POS in an organization to be enhanced there must be adequate security of its operations and this security operation had been defined to include but not limited to items listed in Table 5. Since the correlation coefficient is positive, it indicates that there is a positive linear relationship between the independent variable and the dependent variable, any increase in the value of POS security will correspondingly affect the adoption of POS in selected organizations in Lagos state.

Findings in this study revealed that there is a considerable and positive but weak relationship between customer trust and POS adoption of selected business organizations in Lagos state. Trust is an influential factor on consumers’ activities and hence success of adoption of any technology, this is as Ganesan suggests that trust creates consumers activity, in this wise the activity is the adoption of POS and the device is used for generating financial transactions which is critical in every business activities. Adopters must trust that transactions made from POS are secured without giving a chance to suspect any form of fraudulent activities so that users can be encouraged to embrace and adopt the technology. All the participated respondents agreed that POS usage is highly trusted which agreed with researches done in the past.

In a research conducted there has not been adequate information on the effect of trust on technology adoption globally [42]. Similarly, a study was conducted and shown that winning the trust of potential customers of online banking by the adoption of POS poses a lot of challenges and would therefore require a reinsurance of its well secure network [43]. When trust has been properly established prospective users are likely to be encouraged to adopt the new technology (POS) which may eventually lead to efficiency in the operations of the organization. This agreed with the respondent responses from statement 3 and statement 4, where majority view point is that POS implementations will enhance data security and user identification and confirmation are required to make trust which is an independent variable for measuring customer trust and adoption of POS in an organization.

Furthermore, trust has effect on users’ willingness to engage in technology adoption such as POS which involves exchange of money and sensitive personal information (Muniruddenn). Known theory earlier described in chapter two the Theory of technology acceptance model which posits a user’s adoption of new information system is determined by that user’s intention to use the system which in turn is determined by the user’s belief about the system arising from trust the users has on its ability to perform its intended operations with less doubt about its capability. In the work of (Ayo, Adewole and Oni), Technology Acceptance Model (TAM) was said to be suitable for determining e-commerce but may not fully determine the users’ intention to adopt the technology, a modification to TAM was suggested and refer to it as extended TAM with integration of task-technology fit model with the construct ‘trust’ to better predict consumers’ adoption of e-commerce. This suggests that ‘trust’ is statistically significant and positive in the adoption of technology such as POS in an organization.

The findings also indicate that high level of confidentialities, integrity of POS, data security, transactions performance without denial by users, identification and confirmation of users before acceptance of the transactions are all significantly positive to adoption of POS in an organization in Lagos. The positive and statistically significant relationships between customer trust and adoption of POS in an organization especially as an important tool in Lagos current economic system of cashless economy, operators must strive to ensure everything that needs be done to attract the trust of the citizenry in embracing POS is done.

Similarly, other previous studies have also revealed that online trust and prior online purchase experience are factors that
influence behavioral intention and subsequent adoption of technology in an organization (Lu, Cao and Yang) which in essence support the effect of trust in operation of POS and its adoption in an organization.

In the work of Lewicki and Binkin, trust, develops over time. Trust is a precursor of attitude and plan to act. Trust in the bank offering the POS or ATM service is an important behavioural belief that directly affects customer’s attitude towards the adoption behavior. As cost-benefit paradigm greatly influences peoples’ attitudinal beliefs and outcome judgements, trust can be a direct determinant of attitude and behavior [5]. Again, trust increases the confidentiality of business relationship and determines the quality of transaction between buyers and sellers, technology and its adoption which explains the majority positive response to statement 2, statement 5 and statement 6.

A review of the academic literature showed that trust building attributes have emerged from antecedents of trust (Bhattacherjee, Landesberg and Zeisser). Mayer, Davis and Schoorman found that in a dyadic relationship, there are three critical attributes that the trustee must possess to engender trust; these are ability, integrity and benevolence. However, these independent factors together with the trustor’s inherent propensity to trust form an environment in which trust is developed. The trust variable in this study has attributes which includes confidentiality, undeniable transactions made, ability to identify and confirm transactions before they are done and along with the attributes stated by the above researcher confirms the significance and positivity of the variable trust in adoption of POS in an organization.

The empirical findings of this study are also in consonance with some theories [44]. In the theory of diffusion of innovation, a component of it involves payment system security for which lack of consumer perceived security and trust are one of the main barriers to electronic and mobile commerce transactions [45]. The key requirements for secure financial transactions in electronic environment include confidentiality, data integrity, authentication, and non-repudiation [23] all of which can be linked with details of Table 5 with majority of respondents falling in line with the assertion by their response. Other security factors important for consumer adoption are anonymity and privacy, which relate to use policies of customers’ personal information and purchase records [22,23]. Sufficient to say therefore that the adoption of POS in an organization in Lagos state should take into consideration the provision of adequate security of all components involving the implementation of POS in an organization end-to-end.

In a newspaper report of September 2015 on Cyber Act: Making it work for e-payments, the lack of recourse for consumers encourages the perpetration of cybercrimes for financial gains, securities and privacy concerns are also contributive factor, especially for the less aware customers of banks [46], in the first half of year 2015, analysis of NIBSS revealed that 1,544 fraud cases were reported with an attempted value of ₦134 b and actual loss value of ₦654.4 m, specifically, looking at the electronic frauds (ATM, POS, internet banking, e-commerce) a total of ₦926 m was attempted. It was pointed out therefore that, to encourage widespread use and acceptance of electronic channels like POS, the perceived and actual levels of confidence must be high, while security should not be compromised [46].

Table 6 shows the significant relationship between POS security and adoption of POS in an organization. The correlation coefficient (r) of security of POS to adoption of POS in an organization is 0.437 and the significance level is 0.01 (p<0.01). The Table shows that the p-value is 0.000, which is less than 0.01. The null hypothesis was therefore rejected, and alternative hypotheses are hereby accepted and conclude that POS security has a positive and significant relationship on adoption of POS of selected business organizations in Lagos. This shows that for the adoption of POS in an organization to be enhanced there must be adequate security of its operations and this security operation had been defined to include but not limited to items listed in Table 5. Since the correlation coefficient is positive, it indicates that there is a positive linear relationship between the independent variable and the dependent variable, any increase in the value of POS security will correspondingly affect the adoption of POS in selected organizations in Lagos state.

Looking at the responses by respondents as contained in the Table 5, findings revealed that there is an agreement with a study that the efficient use of POS terminals in Nigeria will reduce the security challenges arising from fraud, and armed robbery occasioned by withdrawal of cash by unsuspecting customers from the bank [15]; they also harped on the importance of security of communication over the network as the network becomes available to the public [36] that explained about 97% respondents view on the agreement that security across communications network will necessarily leads to adoption of POS in Lagos state. Similar research work done by Ebietomere and Ekuobase [17] also agreed that security has become an important issue in adopting technology, security by these authors involved access to the network resources since unauthorized access could spell doom to the enterprise and therefore discourage its adoption, the technology should ensure well secure systems to encourage its use and contributing to its adoption in Lagos state this is in agreement with the result of statement 4 and 9 in Table 5 and statement 10 in Table 3.

Security on smart card a device used in POS terminal has become a critical issue because any application involving data sharing and transactions through the internet must be well secured, the security of smart card which is available to users and are amenable to fraudsters, hackers, clever outsiders, malicious insiders or even dedicated and well funded enemies must be well secured to encourage the adoption of POS in an organization [21].

Pandy enumerated some of the security challenges that could pose or slow down the adoption of POS in an organization. The major one is the use of mobile device to make payments at the POS, this presents a complex security challenge, fortunately, there are several tools and technologies available to overcome these challenges to fortify mobile payments at the POS, this include smart cards (chips), encryption and end-to-end security,
tokenization, and authentication and identity management. This explained majority respondents’ views in this study; hence in order to encourage the adoption of POS in an organization security challenges must be highly tackled. Historically, POS terminals providers focused on encrypting PINs at the POS, but not the actual card account data, today, more POS terminal providers are focused on end-to-end security and overall database security [17]. Looking at the statement 6 on the Table 5, close to 52% of the participated respondents strongly agreed that the availabilities of different layers of security in POS will encourage its adoption, this correspond with end-to-end security capability stated by the study.

Amedu stated that the concept of electronic banking which includes the use of POS will assure a more compelling business for better efficiencies, speed, conveniences and security. These are said to be the trends in more advanced economies of Europe and America and can as well be implemented in Nigeria if adequate enabling environment such as perceived adequate security of the device is assured as can be seen in the responses in Table 5 above, this is supported by the extrinsic motivation in motivational theory where users adopted a system because of its inherent benefits, if security is not assured, users may unlikely adopt such system, this underscore the importance of security in adoption of POS in selected business organization in Lagos state.

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### Conclusion and Recommendation

Based on the research analysis, hypotheses testing and interpretation of results it was observed that customer trust and POS security has positive relationship with the adoption of POS of selected business organizations in Lagos.

### Conclusion

The result of the analysis of this study shows the importance of the adoption of POS of selected business organizations in Lagos. Aside stressing the importance of customer trust which was identified as an important element of the requirements for adoption of POS of selected business organizations in Lagos state, there is the need to ensure the provision of adequate security of the device and the transactions made. It has been identified that the adoption of POS in an organization was prompted by the quest for the use of an alternative mode of payments to the use of cash, as it is the main medium of exchange for goods and services in Lagos state. The choice of POS which is a device for electronic payments systems was also to reduce the risk involved in carrying cash and the attendant consequence having known that this device is used basically for processing payments which does not involved the use of cash and therefore should be seen to be well secure and trusted. The adoption of POS in Lagos state will also reduce the volume of cash to be printed by the agency responsible for the printing; this will reduce the amount of money spent in cash management which can be channeled to other uses.

Literature reviewed indicated that though customers embraced the adoption of POS but relative to other e-payments devices such as ATM its adoption rate is low, and reasons have been given to include lack of customer trust and security issues. Therefore, it is important to ensure these areas are adequately addressed by various stakeholders including the government. Though challenges to the adoption of POS were identified to

### Table 6  Pearson product correlation for POS security.

| Adoption of POS in Organization | Pearson Correlation | Sig. (2-tailed) | POS security | Pearson Correlation | Sig. (2-tailed) | N   | 1587 | 1587 |
|---------------------------------|---------------------|----------------|--------------|---------------------|----------------|-----|------|------|
|                                 |                     |                |              |                     |                |     |      |      |
| Adoption of POS in Organization |                     |                |              |                     |                |     |      |      |
|                                 |                     |                |              |                     |                |     |      |      |
| POS security                    |                     |                |              |                     |                |     |      |      |
|                                 |                     |                |              |                     |                |     |      |      |
|                                 |                     |                |              |                     |                |     |      |      |

Correlation is significant at the 0.01 level (2-tailed). Source: Field survey, 2016.
include unauthorized charges to payment cards, cards related frauds, failure to properly execute funds transfer instructions, unauthorized use of stolen cards among others but these challenges are seen not able to negate its adoption, however low in its adoption rate. This study has shown that one important determinants of adoption of POS is customer trust and the analysis in data presentation confirms the importance of this variable, so to encourage would be adopter of POS and the transactions to be generated must be well trusted and secured.

It is pertinent to state that the adoption of POS in an organization can increase its operational effectiveness which could also aid the attainment of major organizational objectives in the organization. Such objectives include its profitability, increase in customer base, expansion in the operation of organization, new product discoveries, reduction in cost of doing business, etc.

Prior knowledge of similar products such as ATM with its failure rate which include cash dispensing error, fraud etc., has the potential of discouraging the adoption of POS, this underpin the importance of customer trust and security, as it would encourage the adoption of POS in Lagos state.

Recommendations

The result of the analysis of this study shows the importance of the adoption of POS of selected business organizations in Lagos state. The importance of customer trust as a panacea for adoption of POS cannot be overemphasized and therefore the following recommendations are made based on findings in this study.

Operators are encouraged based on the findings in this study to ensure the security of POS as this is found to have a positive and significant relationship with adoption of POS by ensuring that POS security from logging into the device to actual transactions are good, they are also to ensure data generation and reports are free of doubts that is trusted, as customer trust also have significant relationship with adoption of POS in this study.

It is recommended to government based on the findings in this study where POS security was found to be positive and significantly related to the adoption of POS, that securing the entire setup with layers of security applications at different levels, securing the data transactions, software and hardware security, provision of anti-hackers software to protect the entire network should be implemented, this will improve the issue of trust by consumer and encourage the adoption of POS in Lagos state.

Trust is an influential factor on consumers’ activities and hence success of adoption of any technology, this is as Ganesan suggested that trust creates consumers activity, in this wise the activity is the adoption of POS and the device is used for generating financial transactions which is critical in every business activities. It is recommended that for adopters to trust transactions generated from the device, it must secure without giving a chance to suspect of any form, especially fraudulent activities so that users can be encouraged to embrace and adopt the technology which is POS.

The telecommunications industries have been deregulated therefore based on the findings in this study, it is recommended to operators in this sector to ensure that communications device is well secure to encourage its adoption in Lagos state, for example provision of security on the network connectivity, hardware and software that drives it, and internet connectivity.

It is recommended to stakeholders that from time to time it updates its application, especially the operating systems as new upgrade could have facility to yank off or prevent attack on its transactions in order to reduce vulnerability. Collaborations among players in the industry are recommended to widen the gap between attempted fraud and actual loss to fraud that is reduction of success rate of fraud attempt.

References

1 Indjikian, Rouben, Siegel, Donald S (2005) The impact of investment in it on economic performance: Implications for developing countries. World Dev 33: 681-700.
2 http://www.internetretailing.net/news/3-d-secure-schemes-put-sales-at-risk.> Retrieved
3 Okpaku, Joseph O (2003) Information and communications technologies for African development. An assessment of progress and the challenges ahead New York. United Nations ICT Task Force.
4 Paltridge S (2008) Global Opportunities for Internet Access Developments.
5 Zhen-Wei Q, Christine Pitt, Alexander, Ayers (2004) Contribution of information and communication technologies to growth. World Bank Working Paper. Washington DC: World Bank.
6 Davis FD (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology. Manag Inf Syst Q 13: 319-340.
7 Davis FD, Bagozzi PR, Warshaw (1993) User acceptance of computer technology: A comparison of two theoretical models. Manag Sci 35: 982-1003.
8 Park J, Yang S, Lehto X (2007) Adoption of mobile technologies for Chinese consumers. J Elec Comm Res 8: 196-206.
9 Shih H (2004) An empirical study on predicting user acceptance of e-shopping on the web. Inf Manag 41: 351-368.
10 Venkatesh V, Davis FD (2000) A theoretical extension of the technology acceptance model: Four longitudinal field studies. Manag Sci 46: 186-204.
11 Venkatesh V, Thong JYL, Xin X (2012) Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. Manag Inf Syst Q 36: 157-178.
12 Zhou T, Lu Y, Wang B (2010) Integrating TTF and UTAUT to explain mobile banking user adoption. Compu Hum Behav 26: 760-767.
13 Dillon A, Morris C (2001) User acceptance of information technology. Encyclopedia of Human Factors and Ergonomics. London: Taylor and Francis.
Adeoti OO, Oshotimehin KO (2011) Factors influencing adoption of point of sale terminals in Nigeria. JETEMS 2: 388-392.

CBN (2011) Central Bank of Nigeria Annual Economic Report.

Adeoti OO (2013) Challenges to the efficient use of point of sales terminals in Nigeria. Africa Journal of Business Management 7: 2801-2806.

Ebiotu EM, Ekuoase GA (2014) Issues on mobile agent technology adoption. Afr J Comput Inf 7: 21-32.

Mohammed AI, Mohammed AY (2012) Factors influencing the adoption of e-banking in Sudan: Perceptions of retail banking clients. J Int Bank Com 17.

Adeoti O, Oshotimehin K (2012) Adoption of point of sale terminals in Nigeria, assessment of consumer’s level of satisfaction. Res J Fin Acct 3.

Omotayo F, Dahunsi O (2015) Factors affecting adoption of point of sales terminals by business organisation in Nigeria. U-ARBSS 5: 115-136.

Adeoti O, Oshotimehin K (2012) Adoption of point of sale terminals in Nigeria, assessment of consumer’s level of satisfaction. Res J Fin Acct 3.

CBN (2016) Central Bank of Nigeria Financial Systems Stability Report.

Adeoti O, Oshotimehin K (2012) Adoption of point of sale terminals in Nigeria, assessment of consumer’s level of satisfaction. Res J Fin Acct 3.

Gilaninia Sh, Fattahi A, Mousavian S (2011) Behavioral factors tend to use the internet banking services case study: System (Saba), the Mellli Bank, Iran, Ardabil. Int J Bus Admin 2: 173-179.

Oyetade L, Ofoelue O (2012) Res Meth Soc Sci. Edward Arnold Publishers Ltd London.

Kohli AK, Jaworski BJ (1990) Market orientation: The construct, research propositions and managerial implications. J Market 54: 1-8.

Day GS (1991) Learning about markets. Marketing Science Institute Report. Cambridge, MA: Marketing Science Institute, pp: 91-117.

Glazer R (1991) Marketing in an information-intensive environment: Strategic implications of knowledge as an asset. J Market 55: 1-19.

Porter ME, Millar VE (1985) How information gives you competitive advantage. Harvard Business Review 85: 49-160.

McKnight DH, Chervany NL (1996) The meanings of trust. University of Minnesota mis Research Center Working Paper Series.

Hart K, Kinship (1988) Contract and trust: The economic organization of migrants in an African city slum. Trust: Making and Breaking Cooperative Relations 176-193.

Lewis J, Weigert A (1984) Trust as a social reality. Social Forces 963-967.

Kalakota R, Whinston A (1997) Electronic commerce: A manager’s guide. Addison-Wesley.

Milind S (1999) Adoption of internet banking by Australian consumers: An empirical investigation. Int J Bank Market 17: 324-335.

The Nation (2017) Cashless Policy: Nigerian Count Losses in Billions.

Azeez (2011) Fresh hurdles for CBN Cashless Economy plan. National Mirror.

Mann CJ (2003) Observational research methods. Research design II: cohort, cross sectional and case-control studies. Emerging Med J 20: 54-60.

Osuagwu (2004) Relationship marketing strategies in Nigerian companies. Market Manag J 14: 114-128.

Ramayah T, Yan LC, Sulaiman M (2005) SME e-readiness is it unidimensional or multidimensional? J Manag.

Bestavros A (2000) Banking industry walks tightrope in personalization of web services. Bank SysTechnol 37: 54-56.

Teo TSH, Pok SH (2003) Adoption of wap-enabled mobile phones among internet users. Int J Manag Sci 31: 483-498.

Siau K, Sheng H, Nah F, Davis S (2004) A qualitative investigation on consumer trust in mobile commerce. Int J Elec Bus 2: 283-300.

Guardian (2015) Cyber Act: Making it Work for e-payments.