INFRASTRUCTURES AND SECURITY AS A CORONATE OF DETERMINANTS AND ADOPTION OF POS OF SELECTED BUSINESS ORGANISATIONS IN LAGOS, LAGOS STATE.

OWOLABI, T. J PhD.

DEPARTMENT OF BUSINESS ADMINISTRATION, BABCOCK UNIVERSITY,

ILISHA OGUN STATE NIGERIA

AND

OLANIYAN, T. S., PhD.

DEPARTMENT OF HUMAN RESOURCE DEVELOPMENT, OSUN STATE UNIVERSITY,

OSOGBO OSUN STATE

Abstract

It is observed that following the 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. The main objective of the research is infrastructures and security as a coronate of determinants and adoption of pos of selected business organizations in Lagos, Lagos state. This study employed a cross-sectional survey research design, 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. The findings revealed that 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 availability of infrastructure will correspondingly leads to an increase in the adoption of POS of selected business organizations in Lagos, also findings in this study indicated that there is positive relationship between availability of infrastructure & security and adoption of POS in selected business organization's in Lagos state. It is recommended that based on the findings in this study, individual should avail itself of awareness creation programs as customer education was found to have a positive and significant relationship with adoption of POS, from this program, benefits and the uses of POS will be stated and this will then be beneficial to individuals in particular and the nation in general.

Keywords: POS, POS Security, POS Adoption, Lagos state, Availability of Infrastructure

Introduction

It is observed that following the 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 (Indjikian, Rouben, Donald & Siegel, 2018; Okpaku, 2016; Paltridge, 2018; Zhen-wei, Pitt, & Ayers, 2017). 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 (Davis, 2018; 2015; Park, Yang, & Lehto, 2019; Shih, 2017; Venkatesh, 2015; Venkatesh, Thong, & Xin, 2017; Zhou, Lu, & Wang, 2015).

This development had encouraged further research on the utilisation and benefits of ICT to several nations in order to improve their economic development (Indjikian, & Siegel, 2018; Venkatesh et al. 2017; Venkatesh, 2015). In the work of Louho, Kallioja, and Oittinen (2018), 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 (Dillion, & Morris, 2015). The problems arising from the use of several payments instruments have received the global attention and so also is the close monitoring of efficient payments instrument by various monetary authorities of the world (Adeoti, 2018). Omotayo and Dahunsi (2015) asserted that many nations of the world have developed an effective and efficient

payments system whose transactions are required to guarantee and sustained their economic development.

Several countries of the world have adopted policies to accelerate the use of electronic channels and reduce the use of cash. The motivations for these policies vary from country to country but typically reducing the cost of banking, encouraging financial inclusion, increasing the amount of capital available for investments within the banking system, driving real economic growth and possibly reducing tax evasion (NIBSS, 2015).

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 (Odior & Banuso, 2017). 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 (Odior & Banuso, 2017). 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 (Humphery, 2017).

According to Laudon and Laudon (2015), business organisations in similar industries especially the banking industry attempts to competitively outdo one another, this is done by embracing Information and Communications Technology (ICT), hence ICT becomes the absorber to provide the cooling effect of the competition, this also means that any banking industry who aspired to remain competitively relevant and continue in business in local or global arena must embraced ICT.Similarly, studies have also 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 (Adeoti & Oshotimehin, 2016).

In Nigeria, to reduce the volume of cash in the economy and subsequently reduce the hazard associated with cash carrying, the Federal Government through the regulatory agency introduced several electronic payments systems which include payments cards and other paper-based monetary instruments. This then necessitates the establishment of companies involved in manufacturing of switches to facilitate interconnectivities of the various devices such as ATM, POS etc with financial transactions (Salimon, 2018). As part of the National issues relating to the use of POS, Central Bank of Nigeria (CBN) recently came up with a new policy of cashless economy, focusing on the deployment of point of sales terminals in order to achieve among other things the reduction in the use of cash as a means of business transactions in preference to the use of other electronic payment system (e-Payment) and hence reducing the cost of managing cash. This policy is to address some of the challenges that accompanied over dependent on the use of cash to transact business in Nigeria, and particularly the cost of managing cash in Nigeria.

In the CBN (2016) reports cited in Adeoti and Oshotimehin (2016), the cost of cash management was huge and are as follow: in 2019, CBN was said to have spent the sum of ₦114.6b, this rose to ₦135b in 2015, and ₦166b in 2016, and an estimated sum of ₦196b was projected for 2017, 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.

Statement of the Problem

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. Adeoti and Oshotimehin (2017), the general increase in the adoption rate of electronic payments instruments and the rate of growth of adoption of POS are still low, among the factors identified as responsible for this low adoption of POS in Lagos state is low level of consumer education stating the benefits of using POS, lack of adequate infrastructure required to run POS, low level internet penetration, intermittent failure of network connectivity, absence of open standards or trust among banks and providers, frequent power outage, insufficient number of POS available per merchant store and security of network communications (Ayo & Babajide, 2018).

Infrastructural challenges militating against new technology adoption are classified into inadequate personal computer, poor internet access, inadequate electronic payment systems and erratic electricity (Aminu, 2017). Similarly, Zulu (2018) noted that the low internet bandwidth, unavailability of dedicated data service networks, and frequent power interruption are other challenges of e-payments adoption. Aminu noted that access to the internet is largely dependent on telecommunations infrastructures which serve as the bedrock of technology adoption.

However, telecommunication infrastructure in Nigeria is poor and thus may slow the rate of adoption of POS payment system in the country. Also there is inadequate infrastructure which constitutes some impediments to e-business (Heeks, 2016 as cited in Aminu, 2017). In a research conducted majority of the respondents strongly agreed that poor or lack of IT infrastructure in rural areas affects ICT adoption having a mean value of 4.4848 and a standard deviation of 0.9603, this means that banks and government need to invest more resources to enhance ICT infrastructure to increase productivity of banks. Network communications error slow down its operations and inadequate bandwidth are among the infrastructural challenges which discourages repeat patronage by banks customers and therefore loosing revenue (Basweti, Masese & Martin, 2018). Gefen

(2015) reported that studies conducted on cellular phones revealed large number of cellular phone frauds, thus giving the users concerns about usage. Therefore, lack of security of POS and other electronic payment systems may be a barrier to their adoption by customers in a number of industries in Nigeria. Security is also a major challenge even in the transportation of cash between banks, therefore the adoption of an e-payment systems will reduce this challenges and encourage the use of alternative platform (POS) (Adeoti & Oshotimehin, 2016).

In addition, lack of trust arising from the security challenges associated with the use of POS and other electronic systems also poses a problem to the adoption of POS in many countries (Ganesan, 2015; Currall & Judge, 2016; Friedman, Kahn, & Howe, 2015; Gefen, 2015). Currall and Judge (2016) described trust as reliance on another party by individual under conditions of dependence and risk. Ganesan (2015) showed that trust is necessary for long term orientation because the outcome is futuristic.

Objective of the Study

The main objective of the research is to examine the determinants and adoption of POS of selected business organisations in Lagos, Lagos State. The specific objectives are to:

1. Evaluate the relationship between availability of infrastructure and the adoption of POS of selected business organizations in Lagos
2. Determine the relationship between POS security and adoption of POS of selected business organizations in Lagos;

Hypotheses

In an attempt to come up with acceptable conclusions the research tested the following null hypothesis from the stated research questions:

H_{01}: There is no significant relationship between availability of infrastructure and adoption of POS of selected business organizations in Lagos.

H_{02}: POS security does not have significant relationship with adoption of POS of selected business organizations in Lagos.

Review of Literature

Point of Sales (POS)

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 organisation (Ritty, 1879), 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.

cumbersomeness 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 (Adeoti & Oshotimehin, 2016), 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, 2017). Gilaninia, Fattahi and Mousavian (2016) 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 are deducted from their account electronically using an electronic card, while the card acceptor (seller) is paid. Similarly in the work of Krawetz (2019), Point-of-Sale (POS) system is comprised of components that perform credit card transactions. The following were identified as the main components of POS:

Card reader, a device for reading credit cards. This device is either a stand-alone unit, such as the Verifone TRANZ system, or integrated into a cash register. It is most recognisable by the magnetic strip reader (MSR), numeric keypad, and receipt printer. Transaction unit, this device sends the credit card information to an authenticating source (e.g. Visa) and receives a transaction confirmation number for VeriFone, the card reader and transaction unit are integrated into an embedded device (although VeriFone does sell individual components as well). The VeriFone units consist of a digital display and a numeric keypad. For other devices, such as IBM SurePOS or Panasonic's POS workstations, Ingenico the card reader and transaction unit may be integrated into a cash register system.

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. If a world body like World Bank says so one should know it is true and the following benefits are expected to be derived from the use of this platform (Ashike, 2016). 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 utilisation 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; organisations; 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 (Oyetade & Ofoelue, 2017). 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.

The Central Bank of Nigeria (CBN) CBN (2015) have stated that in spite of huge collaboration among banks, financial service operators and key stakeholders to improve e-payment system in the country, infrastructure challenges: such as power failure, connectivity issues and the likes were largely responsible for Point of Sale (POS) and mobile banking hitches in the country.

In the CBN guidelines on POS, it stipulates that terminals must be up and running at all times. But

it is well known however that infrastructure challenges as stated i.e. power failure, connectivity issues and other communications devices, disrupt the operations of all technology based terminals, including phone calls etc. Analysts believe fixing these hitches remain crucial to the nation's drive towards timely compliance with best payment standards globally, this will encouraged the deployment or adoption of POS in Lagos state and Lagos in general. Apart from enhancing their technological assets, the financial institutions have also been partnering with the Lagos Inter-bank Settlement System, NIBSS, in working out modalities that will improve service delivery and ensure improved security of the nation's payment system. For instance, encouraging the use e-payment cards to pay for goods and services on PoS terminals and web platforms incentives are given.

Availability of infrastructure

Infrastructure has been variously defined by many authors in the field of Information Technology which includes that infrastructure is a connection of devices which are put together in order to run an application, it includes network connectivity, Hardware and software, telecommunications and its devices and peripherals (Fulmer, 2019) and this play a major role in the adoption of POS in an organisation (Adeoti & Oshotimehin, 2016). This definition is in reality a reflection in the rapid growth that telecommunications has been experiencing in recent years especially in Lagos.

The increase in ICT penetration means nations needs to increase its ICT infrastructure development in order to be part of these global trends else will be left behind in the drive of ICT development, Lagos is recognised as a major market in the telecommunications equipments and services industries a component of which is required for infrastructural availability for adoption of POS and with a population of over 150m, investors stand motivated and moved into this sector, which has also spur the world movement into this sector thereby investing over $18b as at December, 2019. Nigerian people has demonstrated the importance attached to ICT services culminating into massive deployment of digital mobile services across the country and are being speedily subscribed. Therefore, the importance of telecommunications infrastructures in deployment of POS cannot be over emphasised.

Salhieh, Loay, Adu-Doleh, Jamal, Hijazi, Nada, (2016), defined IT infrastructure as consists of personnel, network connectivity, well-desighed and compatibility. Accordingly, adoption of e-payment platform depends mainly on a modern, seamless, global telecom network connection and the computers and information appliances that connect to it, as well as on a properly deployed infrastructure and human capacity building. The IT personnel possesses human and organisational skills, expertise, competencies, knowledge and commitments, whereas the connectivity dimension refers to the ability of any technology component to attach to any of the other components inside and outside the organisational environment.

The functionality consists of ability of application to perform functions such as add, modify, and remove modules of software application with little or no widespread effect on the applications collectively. Compatibility relates with the ability of the applications to share any type of information across any technology component. All these facets of IT infrastructure were given a high rating in Salhieh et al. (2016) study apart from the IT personnel who were found to be moderate. This is an indicator for the fact "that IT employees have only the basic adequate IT and skills needed to operate e-banking services

Duncan (2016) in a study noted that IT infrastructure consists of the alignment of IT plans to business objectives, the IT architecture, and the skills of IT personnel. Broadbent and Weill (2017) also stated that IT infrastructure capabilities enable the various types of IT applications required to support current and future business objectives, and this increases the competitive positions of business initiatives.

McKay and Brockway (2018) in their study stated that IT infrastructure is the enabling foundation of sharing IT capabilities upon which the entire business depends. This foundation is standardized and shared by business functions within the organisation, and typically used by different organisational applications.

POS Security

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 (Kalakota & Whinston, 2017). 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 (2019), 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 nation-wide electronic pursue 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 businesses.

Security as defined by Taherdoost, Sahibuddin, and Jalaliyoon (2016) include the following five constructs: Privacy, Non-repudiation, Authentication, Integrity and verification. Privacy mean there must be an assurance of non-disclosure of data and other information by a user to a third party. Furthermore, Non-repudiation means transaction performed on the system can never be denied e.g. message sent cannot be denied by the receiver. Integrity implies that only authorized user can access or modify the content of the system. Similarly, verification will confirm the identity of the cardholder before transaction can be done and concluded and authorization will ensure that data or information remains intact and allow only by person with authority to do so.

Theoretical Review

The Theory of Reasoned Action (TRA)

This theory was propounded by Martin Fishbein and Icek Ajzen in the field of Social Psychology in the year 1967 and was done to improve the already existed information integration theory which explores how attitude are formed and changed (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), model contained in Figure 2.2. The Theory states that the actual behaviour of an individual is preceded by the behavioural intention of the individual and which is further a reflection of attitude towards the behavior and subjective norms which is concerned with whether the behavior will receive the approval and support of people of substance.

As part of attitude formation on whether to behave in a particular direction, belief and evaluation of the behaviour should be considered, similarly, normative belief and motivation links with normative norms. In summary, this theory can be used to explain the relationship between beliefs, attitudes, norms, behavioural intention and Actual behavior. There are two main assumptions of this theory which are; that human beings behave rationally and therefore evaluate systematically information available to them before taking a decision and also that before an action is taken, the implication of that action is properly examined. From the foregoing, the extent to which a nation such as Lagos can achieve considerable development technologically will largely depends upon the willingness of its citizens to embrace government actions and policies in advancing the course of technology such as introduction of the use of POS in achieving set objectives.

Whilst these models have been widely used to evaluate a range of consumer behaviors, there is an argument that they are not very suiTable for evaluating decisions in an organisational context because of the dynamic and multi-dimensional phases and nature of the decision processes required in an organisation (Thompson & Panayiotopoulos, 1999; Johnston & Lewin, 1996). Though, this argument can be debated when it involves small businesses because since in small businesses decisions rest squarely on a single individual who decides the direction of the business.

This is a gap that can be identified in these theories. Consequently, the prediction capability embedded in the theory of reasoned action and the theory of planned behavior may use in evaluating decision making within the small business enterprise. The main drawback of the Theory of Reasoned Action stems from the assumption that behaviour is under volitional control. That is, the theory applies only to behaviour that is consciously thought out beforehand. It then means that irrational decision makers, habitual actions or any behaviour that is not consciously considered cannot be explained by this theory (Ajzen, 1985; Sheppard et al., 1988).

The Theory of Planned Behaviour

The Theory of Planned Behavior was propounded by Icek Ajzen (Ajzen, 1988, 1991). The theory is an extension of Theory of Reasoned Action done by adding a new construct which is the perceived behavioral control, this new contruct was defined as the perceived ease or difficulty in performing the behavior (Ajzen, 1991). However, in Information Systems, Perceived behavioral control is defined as the behavior put up as a result of external and internal constraints (Taylor & Todd, 1995).

It helps in understanding the changing pattern of people's behaviour, and this behavior can either be deliberate or planned. It is propounded to overcome the absence of the volitional control of Theory of Reasoned Action for example the adoption of POS in an organisation is not volitional as certain conditions must be fulfilled such as security of its operations, availability of infrastructures, enough motivation to adopt. The TRA discussed above suggests that a person's behaviour is determined by its intention to perform the behaviour and that this intention is, in turn, a function of its attitude towards the behaviour and his/her subjective norm (Ajzen and Fisbein, 1980) which identified intention as the best predictor of behaviour. However, Ajzen (1991) added a new construct, perceived behavioural control (PBC) in order to explain situations in which an individual does not have absolute control over its intended behaviour.

According to Ajzen (1991), a main factor in the TPB is the individual's intention to display a given behaviour. The author stated that intentions precede and motivate a behaviour, indicating how hard individual are willing to try, and how much of efforts they are willing to exert in order to perform the behaviour. The author strongly believed that the stronger the intention to engage in behaviour, the more likely should be its performance.

However, the author cautioned that behavioural intention should be done only under volitional control, i.e., ability to decide on whether or not perform the behavior; this is the main assumption in this theory. While the author acknowledged that some behaviour may in fact meet this requirement quite well, it was noted that the performance of most depends to some extent on such non-motivational factors such as availability of requisite opportunities and resources (for example, time, money, skills, and cooperation of others. The author concluded that taken together, these factors represent people's actual control over the behaviour, claiming that to the extent that a person has the required opportunities and resources, and intends to perform the behaviour, the behavior should be successful.

The TPB was perceived by scholars as a widely applied expectancy-value model of attitude-behaviour relationships which is useful in explaining and predicting a variety of behaviours, including tourist behaviour (Conner & Armitage, 1998; Hsu & Huang, 2012), online behavior which include the use of e-payment platform (Pavlou & Fygenson, 2006), behaviour towards climate change (Tikir & Lehman, 2011), transit behaviour (Chen & Chao, 2011; Heath & Gifford, 2002; Zhao et al., 2011) and travel mode choice (Bamberg & Schmidt, 2000).

Empirical Review

Many authors have been involved regularly in doing analysis of the use of electronic payments in banking and merchants institutions, doing it in both advanced and developing economies of the world. For instance, in the work of Taylor and Todd (2016), Geffen and Straub (2017), gender was found to have a direct influence on technology usage and also on the adoption of POS. With these, in Putrevu (2016) work in order to ascertain the origin of technology and information difference between man and woman, it was found out that there are differences in information processing between man and woman;

therefore, there was a disparity in technology adoption capabilities or use. If the evidence by Taylor and Todd, Geffen and Straub are taken, then it does imply that for acceptance of POS in an organisation, gender will play an important role in the type of decision that will be taken when considering whether or not to adopt POS in the organisation.

Bandura (2019) similarly examined the two constructs in predicting behaviour along the thinking of previous researchers and concluded that behavior will be best predicted by the two constructs, since perceived ease of use is predicted by judgments of how well one can execute course of action, while perceived usefulness predicts the benefits derivable when the action is executed. Similar other researchers have also examined the importance of these two constructs to discuss the benefits in determining the behaviour of a technology adopter, in Swanson (2018), it was concluded that a potential user will use an information if such information is seen to be of high quality and low cost in the choice of technology, while the high quality is akin to perceived usefulness, low cost is similar to perceived ease of use.

In the work of Masrom (2019), ICT adoption and diffusion has been studied in great detail lately by researchers in the information systems area. This researcher believes it can be studied in two levels: first organisation level and secondly individual level. If the unit of analysis is an individual, then the emphasis is on the acceptance of technology (Dasgupta, Granger and Mcgarry, 2016). Pyramid a global research outfit studied the impact of mobile services which is an infrastructure on ICT deployment in Lagos, it is established that ICT networks (infrastructure) are now making it possible for developing nations like Lagos to participate in the global business transactions which was not possible in the past (Vanguard, 2015). This reality is reflected in the rapid growth telecommunications has been experiencing in recent years especially in Lagos.

Increase ICT penetration implies nations needs to increase its ICT infrastructure development in order to be part of these global trends else might be left behind, Lagos is recognised as a major market in the telecommunications equipments and services industries an infrastructure required for adoption of POS with a population of over 150m, investors stand motivated and therefore moved into this sector, which has also spur the world movement into the sector by investing over $18b as at December, 2019. People of Lagos has demonstrated the importance attached to ICT services culminating into massive deployment of digital mobile services across the country and are being speedily subscribed to.

Methodology

This study employed a cross-sectional survey research design, employing questionnaires as the main research instrument. 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. The SMEs are divided into sectors which are manufacturing, mining & 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, 2018).

The sample size of this study was determined by the formula expressed by Taro Yamane (1967). The study used questionnaire as the main instrument for data collection. The data for this research were subjected to analysis to enable the researcher draw a scientific and acceptable conclusion. The analysis included descriptive statistics and inferential statistics, while frequency distribution reports the number of responses attributable to each question on the demographic characteristics, descriptive allow the researcher to describe and compare data (Saunders et al., 2019). The inferential statistics were used to test the hypotheses, discuss the findings and draw a logical conclusion.

Results
Research Hypotheses I (H$_{01}$):

There is no significant relationship between availability of infrastructure and adoption of POS of selected business organizations in Lagos.

Table 4.1: Pearson Product Correlation for availability of infrastructure and adoption of POS of selected business organisations in Lagos

		Availability of infrastructure of POS	Adoption of POS
Availability of Infrastructure of POS	Pearson Correlation	1	.349**
	Sig. (2-tailed)		.000
	N	1587	1587
Adoption of POS in an Organisation	Pearson Correlation	.349**	1
	Sig. (2-tailed)	.000	
	N	1587	1587

Table 4.1 shows the significant relationship between availability of infrastructure and adoption of POS of selected business organisations in Lagos. The correlation coefficient (r) Availability of Infrastructure to adoption of POS in an organisation is .349 and the significance level is 0.01 (p<.01). The Table 4.1 shows that the p-value is 0.000, which is less than 0.01. The null hypothesis is therefore rejected while the alternative hypothesis is accepted. This result indicates that availability of infrastructure has a significant relationship with adoption of POS of selected business organisations 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 availability of infrastructure will correspondingly leads to an increase in the adoption of POS of selected business organisations in Lagos.

Restatement of Research Hypothesis II.
Research Hypothesis II (H$_{02}$):
POS security does not have significant relationship with adoption of POS of selected business organisations in Lagos.

Table 4.2: Pearson Product Correlation for POS security

		Adoption of POS in an Organisation	POS security
Adoption of POS in Organisation	Pearson Correlation	1	.437**
	Sig. (2-tailed)		.000
	N	1587	1587
POS security	Pearson Correlation	.437**	1
	Sig. (2-tailed)	.000	
	N	1587	1587

Correlation is significant at the 0.01 level (2-tailed). Source: Field survey, 2021

Table 4.2 shows the significant relationship between POS security and adoption of POS in an organisation. The correlation coefficient (r) of security of POS to adoption of POS in an organisation is .437 and the significance level is 0.01 (p<.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 organisations in Lagos.

This shows that for the adoption of POS in an organisation to be enhanced there must be adequate security of its operations. 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 organisations in Lagos state.

Conclusion and Recommendations
Conclusion

The result of the analysis of this thesis shows the importance of the adoption of POS of selected business organizations in Lagos. Aside stressing the importance of adequacy in infrastructure which was identified to be required for adoption of POS of selected business organizations in Lagos state, there are other known variables that contributed positively to the adoption of POS in Lagos state; this includes POS security, customer trust, customer education, and customer motivation.

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. 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.

Recommendation

Based on the findings of this study, the following recommendations, categorised into four, are pertinent. It is recommended to various stakeholders in Lagos State in particular and in other States in the country in general that:

There is need for all and sundry to support measures to be put in place for adoption of POS in Lagos state in particular and Nigeria in general, this measure was discussed in this thesis as factors required for the adoption, this is to ensure the use of POS which is alternative to the use of cash in business transactions and saving the individual the hazards involved in carrying cash.

Findings in this study indicated that there is positive relationship between availability of infrastructure and adoption of POS in selected business organizations in Lagos state, individuals are to ensure the sustenance of these infrastructures when in place, especially the supply of power, adequate bandwidth, network connectivity, hardware and software required to drive the device. It is recommended that based on the findings in this study, individual should avail itself of awareness creation programs as customer education was found to have a positive and significant relationship with adoption of POS, from this program, benefits and the uses of POS will be stated and this will then be beneficial to individuals in particular and the nation in general.

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12

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