

PERCEIVED LEGISLATION AND E-COMMERCE ADOPTION: EVIDENCE FROM SOUTHWEST NIGERIA

¹Taiwo, Akeem A. ²Omojaro, Anthony O. & ³Ademola, Emmanuel A

^{1&2}Department of Business Administration and Management,
Federal Polytechnic, Ilaro, Ogun State, Nigeria

³Department of Accountancy,
Federal Polytechnic, Ilaro, Ogun State, Nigeria



Abstract

Business organizations are now moving from the traditional and limiting way of transacting to the modernized and unlimited way of exchanging goods and service without much physical contact between both parties which is the underlying principle behind e-commerce. However, one of the major and prolonged concern that restricts its adoption by customers and organizations is perceived legislation which regulates activities on the internet. The study explored the resultant effect of perceived legislation on e-commerce adoption by customers in South West Nigeria. The study adopted mixed methods using structured questionnaire and in-depth interview. Six hundred and sixty-six (666) copies of questionnaire were administered on the customers of four top e-commerce organization in Southwest Nigeria. Six-hundred and twenty-one (621) were retrieved while six-hundred and ten (610) were used for analysis. Quantitative data analysis was carried out through descriptive statistics, Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) using (STATA 12) and the hypothesis was tested with the use of regression analysis. The findings revealed that the implementation of proper legal and regulatory issues as regards internet will have great effects on the adoption of e-commerce in Southwest Nigeria. Based on the findings, the study recommends that government should take the role of leadership by giving priority to consumer protection, enacting and implementing regulatory guidelines for e-commerce transactions that will keep cyber-crime in check.

Keywords: *Internet Security, Perceived Legislation, E-commerce; E-commerce adoption, E-commerce acceptance, E-commerce use*

Introduction

It is generally conceded that it is critical for organizations to accept e-commerce and adopt internet innovations by creating a framework that will support the practice of e-commerce (Kaur and Kaur, 2015). There is development in the quantity of internet clients around the

globe and this development has given the power and the odds for worldwide e-commerce (Lawrence and Tar, 2010). The innovations in e-commerce include items, services and data seeking, publicizing, purchasing, offering and making payments for items and additional benefits (Allen, Bresnahan, Childers, Foster, Kandaswamy, Kettimuthu, Kordas, Link, Martin, Pickett and Tuecke, 2012). Haseeb, Arshad, Ali and Yasin (2011) characterize e-commerce as an extensive variety of online business exercises for items and services.

Lawrence and Tar (2010) stresses that it has been anticipated that online business will be another driver of monetary development for developing nations. The difficulties poised by internet advancement which is basic for e-commerce have driven a lot of people to recognize that e-commerce will grow rapidly and help developing countries to beat their reality of economy dismissal issues and change in their participation terms (Odedra-Straub, 2003). Jebur, Gheysari and Roghanian (2012) portrays internet and e-commerce as a basic piece of the procedure of improvement of business transactions. In any case, legislations have made a huge difference in the adoption, use, development and clients' loyalty to e-commerce in developing nations (Agwu, 2015).

Agwu and Murray (2014) opined that customers recognize what dangers are present and challenges which are outcomes that are common such as identity theft or information, accordingly, they have a sentiment towards doubt and dread. In this situation, organizations are relied upon to protect the information and almost all the clients need more confirmation that data is safe and secure (Rawabdeh Zeglat and Atzawahreh 2012). Nonetheless, e-commerce is still in its young stage in various developing economies around the world. Numerous researchers like Agwu (2015), Chemeke, Elowekpaefe, Okpo and Irhebhude (2014), Ahmed and Hasan (2016), contended that this is because of numerous components that still stand up to and challenge e-commerce adoption especially legislation guiding the conduct of business transactions online. Satisfactory enactments and legislations regulating the use of internet by clients and organizations is one of the many factors that mitigates against the successful adoption of e-commerce.

Ackerman and Davis (2008), learned that government in developed economies like United State of America (USA) and United Kingdom (UK) have made different attempts whether by law or by declaration keeping in mind the end goal to manage e-commerce exercises in the interest of their residents. This include rising legitimate points of reference and case law to oversee protection on the internet. In any case, control attempts have been restricting and befuddling. For example, the European Commission (EC) chose to blend information security control spreading over European Union members and proposed the rule on the protection of people as regard to the handling of individual information and on the free use of such

information. All individuals from the European Union join this enactment with their domestic law in 1998.

Smith and Shao (2007) found that in light of this enactment, individual information can be exchanged with non EU nations, if satisfactory level of security can be ensured. Nonetheless, numerous developing economies like Nigeria has not set up satisfactory legislation so as to secure individual information of clients which has decreased sufficient ease of use and adoption of e-commerce business by customers in the country. It is for this reason that this research set out to examine the impact of perceived legislation on the use of e-commerce in Southwest Nigeria.

Literature Review

Perceived Legislation

Legislations and regulations incorporate the different endeavors by government either by law or pronouncement, keeping in mind the end goal to give appropriate controls to the e-commerce business condition for their citizens (Ackerman and Davis, 2008). This is essential because of the way that the foundation and adoption of a dependable approach and administrative structure would energize quick advancement of e-commerce with the related advantages for the economies and residents (Maaruf and Abdulkadir, 2012). Kinuthia and Akinnusi (2014) opine that legislature must set up clear laws, principles and control, make arrangements of important specialized training to the administrative expert to allow them to uphold the laws satisfactorily. The enactment should likewise include the rising lawful points of reference and case law that oversee security in the internet.

Rehman and Alam (2016) explain that a current study conducted among Brazilian shoppers found that the low level of e-commerce adoption was because of government controls like tension about privacy and security, absence of business laws for e-commerce, insufficient lawful insurance for internet buys and internet tax assessment concern. Similarly in china, noteworthy obstructions to e-commerce acceptance are absence of 'value-based and institutional trust which is the result of frail tenets and laws' (Efendioglu and Yip, 2004).

Be that as it may, there is requirement for parties at the core of e-commerce to shape substantial and legitimately restricting contracts on the internet. Basic inquiry is the means by which contracts on internet can be framed, performed and implemented as paper records by parties included. Another worry about enactment is the means by which digital debate between e-commerce accomplices are unravelled and as indicated by which laws and where. Laws of different nations ought to be examined and there ought to be adoption of worldwide standard approaches (Kraft and Kakar, 2009). The non-accessibility of lawful online business enactment in the developing economies give a chance to governments to kick-start the procedure by setting up model for e-commerce legislation that can be executed without a wide

harmonization battles that will be required if legislation is required in other developing economies (Maaruf and Abdulkadir, 2012).

Moreover, Kaur (2005) states that security help and draft laws on e-computerized mark can endeavor to handle violations in computer data zone. Clients and organization will be forestalled in the selection of internet business by nations that are not worried on the computer wrongdoing or online exchange's security.

E-Commerce

E-commerce or internet business is viewed as an extensive variety of e-commerce exercises for products and enterprises. It can likewise be alluded to as any type of business movement in which the interaction between parties is electronically as opposed to physical trade or direct physical contact (Adewale, Ayo-Oyebiyi and Adebayo, 2013). Turban, Lee, King, McKay, Lee and Viehland (2008) consider e-commerce as the methodology which incorporates acquiring, offering, trading or exchanging items, services and furthermore information through computer frameworks, including the web. E-commerce has been touted as a road to achieve worldwide clients by picking up pieces of the overall industry with brings down cost (Agwu, 2012). This is anyway accomplished by streamlining a vast scope of business procedures and innovation for upper hand utilizing media transmission and relationship change systems (Agwu and Murray, 2014). Turban *et al.* (2008), distinguish between internet and non-internet e-commerce. The non-internet e-commerce includes for example to purchase and pay services on merchandise with smart cards by utilizing candy machines or potentially exchanges undertaking through system like Local Area Network (LAN), by the utilization of intranets or even single automated machines.

Different authors categorized e-commerce diversely in various settings (Agwu and Murray, 2014). Chaffey, Ellis-Chadwic, Mayer and Johnson (2009) sorted internet business into:

- 1) **Customer to Customer (C2C):** Where buyers execute specifically with different shoppers on the internet. Additionally, Hoffman and Novak (1996) portrayed C2C communications as an imperative model in internet based exchanges and proposed the requirement for organizations to put that advancement into thought in their endeavors towards advertise arrangement. This insistence is shown by the improvement of online networking system sites as of late, for example, Instagram, Twitter, Facebook and so on. Illustration incorporates individual to person.
- 2) **Business to Customer (B2C):** Where the clients find out about merchandise or services by means of electronic publishing, and buy them by the utilization of electronic money and secure payment frameworks and have the products conveyed electronically or through physical channel (Vaithianathan, 2010). Illustration includes Konga and individual.

- 3) **Business to Business (B2B):** is an electronic market trade in which business, governments and distinctive organizations depend upon PC to PC correspondences as a fast, proficient and a trustworthy technique to coordinate business trades. Example includes Konga and Union Bank.
- 4) **Customer to Business (C2B):** is the sort of online transactions where shoppers start exchanging with organizations—these are generally providers. Example includes Individual and Nigeria Breweries.
- 5) **Customer to Government (C2G):** is a sort of online connection where feedback is given to government through pressure group or individual webpage. Illustration includes Civil Society of Nigeria (CSN) and Ogun state government.
- 6) **Business to Government (B2G):** is a sort of online transaction where feedback is given to government and non-government organizations from businesses. Illustration includes Cadbury Nigeria Plc. also, Lagos State Government.
- 7) **Government to Citizen (G2C):** is a kind of online transaction through which government offer national exchanges, for example, local government services, national government data, and tax data. Illustration includes First Inland Revenue Service (FIRS) and Nigeria nationals.

By and large, the main dynamic type of e-commerce in Nigeria are (B2B) Business to Business and (B2C) Business to Customer. Different models, for example, G2C, C2G and B2G have not been very much developed. In light of this, the investigation will center around the effect of perceived legislation on B2B and B2C adoption of internet business by clients in Nigeria.

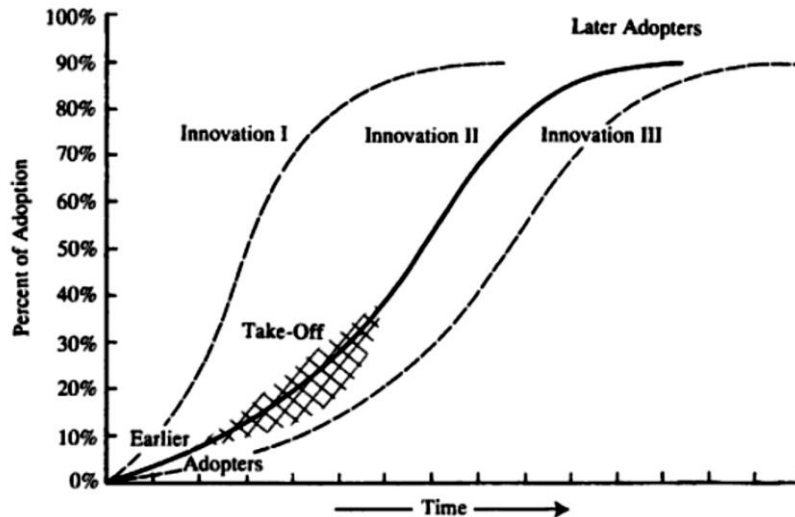
Theoretical Review

Diffusion of Innovation Theory

The Diffusion of Innovation (DOI) theory was selected as a directing hypothetical framework for this research which is striking in the innovation adoption writing and used to get understanding into the level of e-commerce diffusion and adoption by customers. DOI was created by Rogers (1995) to depict the procedure by which an innovation is imparted through specific passages over time in the midst of individuals from a social framework.

In accordance with different past scientists, Rogers (1995) has found that people in a social framework do not at a similar period receive an innovation. Rogers (1995), distinguishes profound attributes of innovations as perceived by people. These are critical as they are presented such that potential adopters may see the advancement.

Fig. 1: Diffusion of Innovation



Source: Rogers, (1995)

The features that creates the base for what is regarded as perceived attributes of Innovation Diffusion according to Oluyinka, Shamsuddin, Wahab, Ajagba and Enegbuna (2013) includes:

- i. **Relative Advantage:** This is delineated as how much good position of adopting e-commerce is viewed as better than not embracing it. Relative advantage position requests the buyers to survey the favorable circumstances and obstructions of using the e-commerce innovation, which can be imparted in a social, financial and other ways.
- ii. **Compatibility:** This is how much an advancement apparently is unsurprising with the esteem that has been in existence, past encounters and necessities for potential adopters. The social estimations of potential e-commerce adopters are assessed in connection with the characteristics and trust system, formal displayed considerations and necessities of buyer for the innovation.
- iii. **Complexity:** This is the degree to which an innovation is viewed as difficult in comprehension and utilization. Multifaceted nature considers the level of physical or mental undertakings required to use an e-commerce innovation for day by day business exercises.
- iv. **Trialability:** This is the level to which a development can be placed in try inside restricted base. It allows the adopter to have preparatory appraisal of an innovation in order to offer importance to the adopter.
- v. **Observability:** This is the level at which the results of an innovation are reasonable to others. The earlier it is to see the result of innovation by potential adopters, the more

likely for them to receive it. The more the advancement can be noticeable and be conveyed by others, the more prominent the observability (Rogers, 1995).

Another essential thought in the adoption of an innovation are the attributes of the potential adopters. Rogers (1995) certifies that this characteristic includes societal position, educational level, level of cosmopolitanism and measure of ingenuity. Abrahamson and Rosenkopf (1993) offers a slight diverse position on adoption which they alluded to as 'bandwagon effect'. They demonstrate that occasionally when innovation is adopted by individuals or organizations, it is not a direct result of specialized properties but because of the sheer number of others that have effectively embraced it. The band wagon impact would appear to be identified with 'perceptibility' qualities of an innovation talked about previously. A portion of the qualities of DOI are reasonable for this study. It has been utilized as a part of different past investigations at the levels of individual and firm. Moreover, its elements help with understanding the bearing of the decision makers towards executing the new systems in working environment, particularly the information technology components like e-commerce (Oluyinka *et al.* 2013). For instance, countless undertakings in Nigeria operate in the informal sector of the nation, and relatively noteworthy number of abroad based firms were detached from whatever is left of the economy (Abdel-Nasser, 2012).

Researchers on innovation diffusion are limited in developing nations and all-inclusive frameworks are not all around associated with neighborhood substances, particularly to the requirements and chances of labour market. This study considers a brighter comprehension of what is implied by innovation in developing nations as a vital factor that advance e-commerce adoption. Laws and regulations are affected by innovation diffusion theory and therefore are pivotal in deciding adoption and acceptance level of e-commerce in developing nations.

Empirical Review

Chimeke, Elowekpaefe, Okpo and Irhebhude (2014) take note of that perceived legislation is a basic hindrance to the adoption of e-commerce by clients. They went further to state that if legitimate enactments and directions are set up, clients will complete e-commerce exchanges. However, Mittal (2013) contends that media transmission and computer network headway are fundamental parts of the economic infrastructure. The study noticed that a few factors, for example, financial, social, political, legal and supernatural foundations are the worldwide powers that influence the adoption of e-commerce and its structures in developing nations.

Dan (2014) turned out with different factors about adoption of E-commerce by SMEs all around. One of this is individual variables which has to do with the executives of the firm staff and clients that transacts business with the firm. These are the group that are affected

broadly by e-commerce adoption. He went further to express that mindfulness and training of people are amazingly critical previously, in the midst of and after the execution of E-commerce. Another factor mitigating the adoption of e-commerce by SMEs as affirmed by Dan (2014) is organizational.

This clarifies the nature and highlights of the organization, this continually influence the organization to have an upper hand. These elements include security, trust, privacy concerns, financial ability and cost implications, size of business, perceived ICT benefits and organizational culture. Other factors noted are environmental, that identifies with competitiveness pressure, government rules and regulations among others. The technical factors as noted include the absence of internet security which is viewed as a noteworthy barrier to the adoption of E-commerce by the SMEs. The study presume that absence of fundamental financial, legal and physical infrastructure for e-commerce in developing nations affects e-commerce adoption in the developing nations. The study however is limited as it fails to identify other major determinants of e-commerce adoption regarding trust, risk concerns amongst others.

The adoption and dispersion of e-commerce in developing economies is impacted by political and legal issues which includes government policies and support lawful condition and practices (Efendioglu *et al.*, 2003). The legal and political atmosphere of a nation can significantly affect the development of e-commerce where there is no sufficient cooperation from the government (Mbarika, Okoli, Byrd and Datta, 2005). The study is limited in its findings as it did not identify other security factors as determining factors of e-commerce use.

Oluyinka *et al.*, (2013) considered e-commerce adoption factors in Nigeria using Nigerian post graduate students in Malaysia as case study. The population targeted was chosen since e-commerce exchanges requires high internet education and that section of populace knows about online exchanges particularly online banking. The study analyzed different obstructions upsetting the adoption of e-commerce in Nigeria.

The first recognized is infrastructural barrier that needs to do with media transmission interfacing with the internet which is not accessible in view of poor phone organizations and epileptic power supply. Others are social components which include absence of trust between parties associated with the exchange, financial barriers like economic state of a nation is additionally a thwarting element and political and legislative obstructions, for example, government policies on information technology and other communication pose noteworthy difficulties to the adoption of e-commerce in Nigeria. The investigation gave a standard to imperative thought to enhance e-commerce selection focused on innovation framework and answer for inconsistent power supply. As revealing as the study is, it didn't highlight the

relevance of other security factors such as perceived trust, risk, privacy concerns as well as internet experience as determinants of e-commerce adoption.

Ma'aruf and Abdulkadir (2012) considered the execution of e-commerce in developed and developing nation using United States (US) and Nigeria. The study recognized a different component that contributes to e-commerce implementation success. The research went further to compare the adoption of e-commerce in both US and Nigeria. The research uncovered that there is fast development of e-commerce in developed nations because of the accessibility of e-commerce infrastructure when contrasted with developing countries. Likewise, there is increasing awareness with the benefits and opportunities presented by e-commerce among developed nations. There is also constant development of e-commerce because of high level of improvement in telecommunication services.

The developing nations on the other hand do not have the required financial, legal and physical facilities to develop e-commerce. In addition, countries as a rule have distinctive cultures and business methods of insight that put a limit to the relevance and transferability of the e-commerce models structured by western countries. The study noted that absence of overall policy framework that covers technical, economic and political policy consideration are the reasons behind slow development of e-commerce in developing countries. The study recommended that for e-commerce to succeed with regards to developing nations, there ought to be a legal framework conducive to e-commerce and the high cost of equipment, integration and connectivity should be addressed.

Methodology

To pursue the objective of this study, the following was synthesized:

H₀₁: Perceived Legislation does not significantly affect the use of e-commerce by customers in Nigeria.

For the purpose of this study, the researcher employed concurrent research design to suit the study mixed methods research approach. Concurrent research design is characterized by the collection and analysis of quantitative data in a first phase of research followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results (Creswell, 2009).

The population for this study comprises of total population of e-commerce users of the e-service provider in South-West, Nigeria. These people have shopped at one time or the other. This is made by the researcher given the difficulty in determination of total e-commerce users in the study area. In other words, the population figure stands at 27,722,522 people as revealed by National Population Commission (NPC, 2010). However, the study population is

considered to be infinite as figure exceeds 50,000. With regard to the targeted population, the study focus on the four main pillars of e-commerce service providers in Nigeria which are Jumia, Konga, Payporte, and Yudala; as identified by Central Bank of Nigeria (CBN) Bulletin, (2017). The targeted population are e-commerce customers in South-West Nigeria that utilized the services of these e-services providers. Given the fact that literacy level of 69.1% in the geopolitical zone is higher than the National level of 57.9% (National Bureau of Statistics, 2010), the outcome of this study would not draw a total and comprehensive picture about e-commerce services in the South-West if the targeted population is not completely considered.

Sample and sampling technique

The study utilized a sample determination formula by Cochran (1977) for infinite population to determine a representative sample for the study. Accordingly, the formula is given as thus;

$$n_0 = \frac{z^2 pq}{e^2}$$

Where, n_0 is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute that is present in the population, $q = 1 - p$ and e is the desired level of precision (Cochran, 1977).

The study assumes the maximum variability to be 50% ($p = 0.5$) and taking 99% confidence level with $\pm 5\%$ precision, the calculation for required sample size will be as follows;

$p = 0.5$ and hence $q = 1 - 0.5 = 0.5$; $e = 0.05$; $z = 2.58$

So,

$$n_0 = \frac{(2.58)^2(0.5)(0.5)}{(0.05)^2}$$

$$n_0 = 665.64 = 666$$

Given the fact that n_0 derived is less than 5% of the population size. This, however, brings no need to use correction formula as suggested by Cochran (1977) and as such the figure (666) represents final sample size.

Table 1 below reveals the sample frame chosen for this study.

Table 1: List of Monthly come-to-claim Customers of selected e-Commerce Providers in South-West, Nigeria for 11 months (January – November, 2017)

S/N	South-West States	State Capital	Number of come-to-claim customers of selected e-commerce Providers in South-West, Nigeria				Total
			<i>Jumia</i>	<i>Konga</i>	<i>Payporte</i>	<i>Yudala</i>	
1	Lagos	Ikeja	4,860	4,658	3,340	2,447	15,305
2	Ogun	Abeokuta	2,320	1,985	996	552	5,853
3	Oyo	Ibadan	3,680	3,064	1,638	998	9,330
4	Osun	Osogbo	1,800	1,710	715	519	4,744
5	Ondo	Akure	1,886	1,520	607	328	4,341
6	Ekiti	Ado-Ekiti	1,795	1,415	184	265	3,659
	Total		16,341	14,352	7,430	5,109	43,232

In selecting e-commerce samples from each e-commerce provider and from each state upon which copies of questionnaire were administered to explore required responses, the study adopted multi-stage sampling techniques. This comprises of purposive, stratified and accidental sampling techniques.

The study utilized a well-developed structured questionnaire and semi-structured interview to obtain data from e-commerce users on the perception of internet security and e-commerce adoption in South-West Nigeria.

The quantitative data analysis of the study was done using STATA version 12. Descriptive statistics was conducted on the demographics variables as a means of describing the respondents' characteristics using percentages and frequency distribution. The qualitative data was analyzed to support the quantitative findings using procedures such as transcribing all interviewee's initial discussions.

Table 2 below reveals the ultimate sample size selected for the study.

Table 2: Sample Size Distribution

S/ N	South -West States	State Capital	State Population (million)	Sample selecte d for each State	Sample Size Distribution among e- commerce Providers based on proportion to Sample Frame				Total
					Jumia	Konga	Payport	Yudala	
1	Lagos	Ikeja	9,113,605	219	70	66	48	35	219
2	Ogun	Abeokuta	3,751,140	90	36	31	15	8	90
3	Oyo	Ibadan	5,580,984	134	53	44	23	14	134
4	Osun	Osogbo	3,416,959	82	31	30	12	9	82
5	Ondo	Akure	3,460,877	83	36	29	12	6	83
6	Ekiti	Ado-Ekiti	2,398,957	58	29	22	3	4	58
	Total		27,722,522	666	252	222	113	76	666

Validity and Reliability test

The research utilized content validity, internal validity and constructs validity techniques to validate the instruments and the information. Content validity was done through non-statistical specialists' judgments where research instruments and the information were evaluated by the specialists in the field of research, including researcher's supervisors. Internal validity was accomplished through triangulation where information were gathered by means in excess of one source: questionnaire and interview and field observations. Construct validity was analyzed and assessed through a progression of strategies by applying the exploratory factor (EFA) and confirmatory (CFA) techniques of Factor Analysis.

Table 3 below reveals the result of the validity test for the research instruments used.

Table 3: Convergent Validity for the Constructs

Construct	Composite Reliability	Average Variance Extracted
Perceived Legislation	0.79	0.84
e-Commerce Use	0.84	0.79

As regards reliability, Cronbach's alpha coefficient was employed to examine constructs internal consistency reliabilities.

Table 4 below reveals the result of the reliability test conducted on the research instruments used.

Table 4: Cronbach’s Alpha Reliability Test

Constructs	No. of Items	Cronbach’s Alpha (α)	Comments
Perceived Legislation (PELE)	8	0.83	High Reliability
e-Commerce Use (EUSE)	6	0.85	High Reliability

Data presentation and results

Table 5: Breakdown Aggregate of Questionnaire Distribution and Retrieval

S/ N	South- West States, Nigeria	Total Distributed	Number of Retrieved Questionnaire				Total Retrieved	% Total Retrieved
			Jumia	Konga	Payport	Yudala		
1	Lagos	219	68	64	42	32	206	94.0
2	Ogun	90	33	28	14	8	83	92.2
3	Oyo	134	49	40	21	12	122	91.0
4	Osun	82	28	29	12	7	76	92.6
5	Ondo	83	35	26	11	6	78	93.9
6	Ekiti	58	28	21	3	4	56	96.5
	Total	666	241	208	103	69	621	93.2

All the data obtained from the six states were harmonized and subsequently analyzed for the purpose of the current research study.

Table 6 below reveals the descriptive statistics of the responses on perceived legislation.

Table 6: Descriptive Statistics of Responses on Perceived Legislation

S/N	ITEMS	Mean(Standard Deviation)
1.	Absence of legal and regulatory systems will affect e-commerce adoption	4.318 (.4660)
2.	Change in regulations with each government will affect e-commerce adoption	5.000 (.4270)
3.	Economic and political instability will affect E-commerce adoption	4.763 (.4250)
4.	Lack of government leadership will affect e-commerce adoption	3.100 (.4564)
5.	Insufficient procedures to ensure compliance with applicable laws and regulations will affect e-commerce adoption	4.459 (.4987)
6.	Lack of policy that adequately address the collection and use of customer personal information as it relates to privacy	4.239 (.4270)
7.	Non provision of comprehensive privacy disclosure to all on-line users will affect e-commerce adoption	4.078 (.2694)
8.	Lack of policies and procedures to describe methods utilized to validate transactions, e-mails and other contractual obligations relating to e-commerce will affect e-commerce adoption	4.378 (.4854)

It is revealed from the table above that the respondents agreed that; absence of legal and regulatory systems will affect e-commerce adoption; economic and political instability will affect e-commerce adoption.

Table 7: Descriptive Statistics of Responses on Ecommerce Use

S/N	ITEMS	Mean (Standard Deviation)
1.	There will be continuous use of ecommerce if the organization provides better way of completing ecommerce transaction.	4.442 (.4971)
2.	Current habits of people in Nigeria do not suit online transaction.	2.140 (1.0330)
3.	Ecommerce will be used for transaction if there is adequate protection of customers' information.	4.842 (.3644)
4.	Ecommerce will be used for transactions if the website provides relevant products/services information	5.000 (.4384)
5.	Ecommerce will be used if information is used for the original purpose.	5.000 (.4260)
6.	Ecommerce will be used if there is full knowledge of party that can have access to customers' personal information on the website.	5.000 (.9004)

From the above table, respondents strongly agreed on average with most of the items measuring e-commerce use among the users.

Test of Hypothesis

H₀₁: Perceived legislation does not significantly affect the use of e-commerce by customers in Nigeria.

Table 8: Hierarchical Regression Result (PELE)

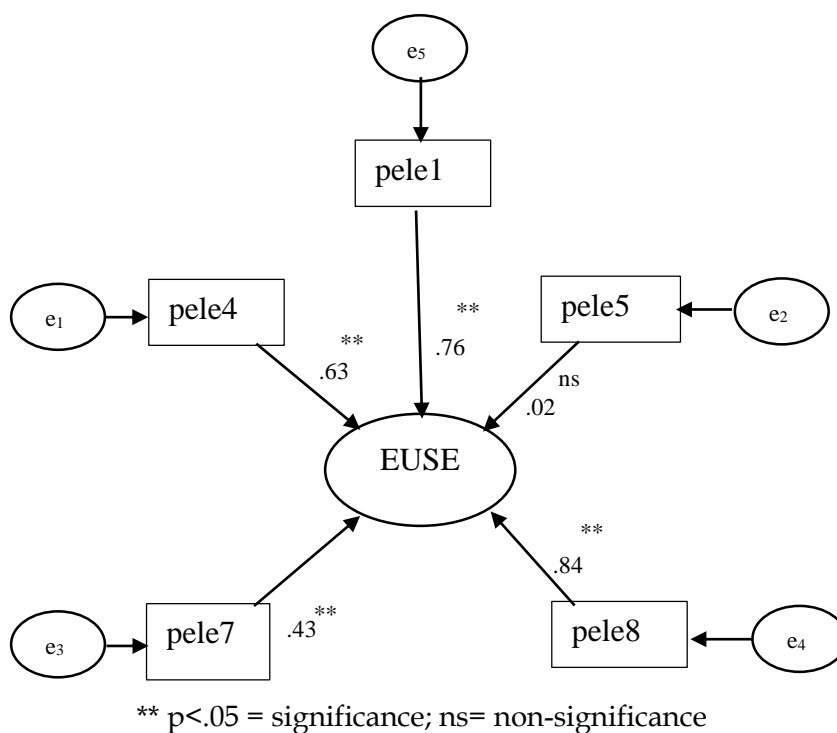
Model	Predictor	Coefficient	Std. Error	P> t	P-value	R ²
1 - Item Level	<i>F- Stat</i>				0.0000	0.69
	Pele1	.4982818	.0388395	0.000		
	Pele4	.600907	.0463036	0.000		
	Pele5	.7000958	.0758787	0.000		
	Pele7	1.682522	.065464	0.000		
	Pele8	1.099189	.0652403	0.000		
	_cons	3.662132	.1696141	0.000		
	AIC	104.0663				
	BIC	130.547				
	Breusch-Pagan	230.58			0.1930	
2 - Aggregate Level	<i>F- Stat</i>				0.0000	0.20
	Pelemean	.6042745	.0498776	0.000		
	_cons	6.796403	.2135136	0.000		
	AIC	686.7133				
	BIC	695.5403				
	Breusch-Pagan	112.21			0.3108	

The result in table above revealed that at aggregate level, users' perceived legislation of e-commerce significantly increase the adoption of e-commerce in South-West Nigeria. The R-square of the aggregate model shows less variation (20%) compared to item data level model, however, the aggregate data significantly fit the overall model and as such considered good and adequate. In other words, the result confirms the rejection of the null hypothesis. Lastly, the principle of parsimony suggests that model one is preferred given its better estimates compared to model two although the outcomes of the two models exhibit better fits.

Moreover, SEM was further conducted to be more accurate about impact of user' perceived legislation on acceptance of e-commerce platforms in the study area. SEM has been adjudged

to provide more reliable statistical estimate in measuring cause-effect analysis between two or more complex variables (Hair, Black, Babin, Anderson and Tatham 2006). In other words, the information in Figure 2 reveals the outcome of SEM conducted through STATA to this effect. Contrary to result obtained from regression analysis. Figure 2 reveals that items pele1, pele4, pele7 and pele8 as legislation variables were found significant in explaining e-commerce use in the study area. This may be due to SEM power of estimation characteristics over regression technique.

Figure 2: Standardized Coefficients for LEGISLATION Items



Conclusion

The main objective of this study was to determine the role of perceived legislation on the adoption of e-commerce in the South West Nigeria with focus on e-commerce customers in the six states of the South West geo-political zone of Nigeria. From the result of the findings, it is evident that perceived legislation has an important role to play in the adoption and use of e-commerce by customers in Southwest Nigeria.

Lack of government policies and support are major obstacle to the adoption of e-commerce by customers. Government therefore should provide policies and procedures to describe the

techniques utilized to validate transactions, e-mails and other contractual obligations with the view to improving the acceptance and the use of e-commerce.

Recommendation

Based on the findings of the study, the following recommendations are put forward:

- i] There is need for government to formulate friendly policies and maintain stable political environment that will foster e-commerce adoption.
- ii] Similarly, Government should take the role of leadership by helping to create a rather enabling environment in order to develop e-commerce by making the adoption of information and communication technology (ICT) a national priority.

References

- Abdel-Nasser, H. Z. (2012). Barriers to e-commerce adoption in Egyptian SMEs, *International Journal of Information Engineering and Electronic Business* 3 (1) 9-18.
- Abrahamson, E., & Rosenkopf, L. (1993). Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion, *Academy of Management Review*. 18 (1) 487-517.
- Ackerman, M. S., & Davis, D. T. (2008). *Privacy and Security Issues in e-commerce*. In Jones (ed.) Reviewed Chapter for the New Economy Handbook.
- Adewale, G., Ayo-Oyebiyi, G. T., & Adebayo, S. A. (2013). An Empirical Study of Factors That Influence the Adoption of e-Commerce in Nigerian Business Organizations. *International Journal of Business and Management Invention*, 2 (9) 28-33.
- Agwu, M. E. (2015). Analysis of Obstacles to Uptake of Internet Banking Services in Nigeria, *Research Journal of Business Management*, 2 (1) 99-114.
- Agwu, M. E., & Murray, J. P. (2014). Drivers and Inhibitors to e-Commerce Adoption among SMEs in Nigeria, *Journal of Emerging Trends in Computing and Information Sciences*, 5 (3) 192-198.
- Agwu, M. E. (2012). Generations X and Y's adoption of internet and internet banking in Nigeria: a qualitative study, *International Journal of Online Marketing*. 2 (4) 68-81.
- Ahmed, J. U., & Hasan, H. (2016). Barriers to e-commerce adoption in Syria: An empirical Detection, *World Journal of Business and Management*. 2 (1) 41-56.

- Allen, B., Bresnahan, J., Childers, L., Foster, I., Kandaswamy, G., Kettimuthu, R., Kordas, J., Link, M., Martin, S., Pickett, K., & Tuecke, S. (2012). Software as a service for data scientists, *Communications of the ACM*, 55, 81-88.
- Chaffey, D., Ellis-Chadwick, F., Mayer, R. & Johnston, K. (2009). *Internet marketing, strategy, implementation and practice*, 4th ed. Essex: Pearson Education.
- Chemeke, S.C., Elowekpaefe, A.E., Okpo, J.A. & Irhebhude, M.E. (2014). A framework for electronic commerce adoption: A study in Kaduna State, Nigeria. *Science World Journal*, 9 (3) 23-29.
- Cochran, W.G., (1977). *Sampling techniques*, New York, Wiley: 428.
- Creswell, J. (2009). Editorial: Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3 (2) 95-108.
- Dan, O. (2014) Influence of School Feeding Program on Academic Performance of Pre-School Children in Kayole Zone in Nairobi County (Undergraduate Project, University of Nairobi). Retrieved from https://cees.uonbi.ac.ke/danproject_0/2018/1/30.
- Efendioglu, A. M., & Yip, V. F. (2004). Chinese Culture and E-commerce: An exploratory study. *Interacting with Computers*, 16(1): 45-62.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Haseeb, K., Arshad, M., Ali, S., & Yasin, S. (2011). Secure E-commerce protocol. *International Journal of Computer Science and Security*. 5(1): 742-751.
- Hoffman, D. & Novak, T. (1998). *A New Marketing Paradigm for Electronic Commerce*. The Information Society. 13.
- Jebur, H., Gheysari, H., & Roghanian, P. (2012). E-commerce Reality and Controversial Issue. *International Journal of Fundamental Psychology and Social Sciences*, 2(4): 74-79.
- Kaur, K. (2005). Consumer protection in e-commerce in Malaysia: an overview. *Journal of the UNE Asia Centre*. 10(1): 1-14.

- Kaur, H. & Kaur, D. (2015). E-commerce in India- Challenges and Prospects. *International Journal of Engineering and Techniques*, 1(2): 1-5.
- Kinuthia, J. N., & Akinnusi, D. M. (2014). The magnitude of barriers facing e-commerce businesses in Kenya. *Journal of Internet and Information Systems*, 4(1): 12-27.
- Kraft, T.A., & Kakar, R. (2009). E-commerce security. EDSIG. Washington DC. 1-11.
- Lawrence, J. E. & Tar, U. A. (2010). Barriers to e-commerce in developing countries. *Information Society and Justice*, 3(1): 23-35.
- Maaruf, L. M., & Abdulkadir, K. (2012). An Overview of e-Commerce Implementation in Developed and Developing Country: A Case Study of United States and Nigeria. *International Journal of Modern Engineering Research*, 2(5): 3068-3080.
- Mbarika, V. W., Okoli, C., Byrd, T. A., & Datta, P. (2005). The Neglected Continent of IS Research: A Research Agenda for Sub-Saharan Africa. *Journal of the Association for Information Systems*, 6(5): 130-170.
- Mittal, A. (2013) E-commerce: It's Impact on Consumer Behaviour. *Global Journal of Management and Business Studies*, 3(2): 131-138.
- Odedra-Straub, M. (2003). E-commerce and development: Whose development? *Electronic Journal on Information Systems in Developing Countries*. 11(2): 1-5.
- Oluyinka, S., Shamsuddin, A., Wahab, E., Ajagbe, M. A. & Enegbuna, W. I. (2013). A study of Electronic Commerce Adoption Factors in Nigeria. *International Journal of Information Systems and Change Management*, 6(4): 293-315.
- Rawabdeh, W., Zeglat, D., and Alzawahreh, A. (2012). The importance of trust and security issues in e-commerce adoption in the Arab world. *European Journal of Economics, Finance and Administrative Sciences*. 1(52): 1-7.
- Rehman, S. U., and Alam, R. (2016). A Study of Barriers to e-Commerce Adoption among SMEs in Malaysia. *Modern Science Journal*, 1(1): 45-58.
- Rogers, E. M. (1995). *Diffusion of Innovation*. Free press, New York, NY.
- Smith, R. and Shao, J. (2007). Privacy and E-commerce: a consumer-centric perspective. *Electron Commerce Res.* 7(1): 89-116.

Turban, E., King, D., McKay, J., Lee, J. and Viehland, D. (2008). *Electronic commerce: A managerial perspective*. Prentice Hall. (5th edition).

Vaithanathan, S. (2010). A review of e-commerce literature on India and research agenda for the future. *Electronic Commerce Research*. 10(1):83-97.