A RESEARCH ON CUSTOMER ADOPTION OF E-COMMERCE IN NIGERIA

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Abstract- E-commerce describes the process of buying, selling, transferring, or exchanging products, services and/or information via computer networks, including the internet. E-commerce has brought about a lot of benefits to organizations, customers and the society as a whole. With all the benefits that e-commerce offers its still facing challenges towards acceptance in some parts of the world. Nigeria is one of the developing countries in West Africa, which has provided e-commerce applications and services due to the benefits they offer. In the current situation in Nigeria, the customers are resistant and not actively interacting with the e-commerce services which are being provided. The majority of the Nigerian customers still prefer to visit a physical outlet than use the internet for their transaction. If this persist then all the effort made by the government and organizations to implement e-commerce will go to waste. The author will analyze the major barriers to e-commerce adoption in Nigeria, as different societies might be facing different challenges. The author will then rank the barriers effects based on the data analysis, and will conclude by suggesting better measures in improving customer acceptance towards e-commerce adoption.

Keywords- Adoption, E-commerce, Customer, Nigeria.

I. INTRODUCTION

E-Commerce has brought a lot of changes to economies around the world and also to the way businesses are carried out these days [1]. E-Commerce as a way of doing business has brought a lot of advantages, as organizations are accepting e-commerce as a way of expanding their markets, improving services to customers, cutting down cost and improving their productivity [15]. Customers have also benefited from e-commerce by enjoying broader selection, better information, lower prices, customization, global choice, and benefits from increasing competition among internet retailers.

In spite of the global reach of e-commerce, still a lot of countries have not been able to have the advantage and benefits of e-commerce. This has created a big gap between developed and developing countries towards internet and ecommerce adoption [9], as a result creating digital divide. Digital divide is referred to as the gap between those who have and those who don't have the ability to use the technology.

Ecommerce has brought about a lot of benefits to organizations, customers and the society as a whole. With all the benefits that e-commerce offers its still facing challenges towards acceptance in some parts of the world. Nigeria is one of the developing countries in West Africa, which has provided ecommerce applications and services due to the benefits they offer. In the current situation in Nigeria the customers are resistant and not actively interacting with the ecommerce services which are being provided. The majority of the Nigerian customers still prefer to visit a physical outlet than use the internet for their transaction, if this persist then all the effort made by the government and organizations to implement e-commerce will go to waste.

II. PROBLEM STATEMENT

Nigerian is one of the fast developing countries in the Africa, with the internet infrastructure being set up, it has given the Nigerians an ability bridge a lot of gap through its limitless opportunities. E-commerce was recently introduced in Nigeria with a few commercial sites setting up and the banks providing debit and credit cards in order to facilitate the e-transactions. Customers in Nigeria are still not into the idea of e-commerce with all the benefit it offers, they still prefer face to face transaction.

According to Michael Jordan [6], Nigeria has the largest market of internet users in Africa with over 5 million internet users which is 3.57% of the country's 140 million population. The above study shows that not even half of the population on Nigeria use internet which could be due to accessibility, meaning that only a few of the whole population could be able to get access to computer. This could become a barrier to adoption of ecommerce as access to the internet is limited to less than half of the population.

CyberSource which is an electronic payment provider has also conducted a survey where the result presented named Nigeria as the riskiest e-retailing country or the one more likely to produce orders with stolen or counterfeit credit cards [7]. Also, the threat to safety and security of online transactions, posed by internet scammers or 'yahoo boys' (a name for scammers in Nigeria), has been a major deterrent to potential online shoppers [12]. The research conducted by CyberSource was from several hundred e-commerce

companies, which means security might also be an issue towards e-commerce adoption by the Nigerian customers.

Considering the limited research in ecommerce activity in developing countries, one might ask whether the results from research conducted in developed countries are applicable to developing ones. Is conducting a separate research on Nigeria necessary?

III. SIGNIFICANCE OF STUDY

Research on ecommerce has not been sufficiently carried in developing countries especially the ones in Africa [10], most of the research carried out in this continent is concentrated towards South Africa. The implementation of Information systems depends on specific cultural, social, legal, political and economic context, which may vary significantly between countries [13]. Therefore the results from research findings in developed countries cannot be applicable to that of developing countries.

The fact that research from developed countries could not be applied to developing countries is not the only reason for the necessity of this study, but also due to inadequate understanding of what drives ecommerce adoption by customers in developing countries [10]. Therefore there is a need to conduct more research for the purpose of improving the understanding of ecommerce adoption by customers in Nigeria.

E-commerce is currently replacing a lot of traditional commercial transactions around the world. One of the most important criteria to ecommerce implementation is customer acceptance; acceptance simply means that the customers are willing and able to interact with the technology offered. In Nigeria currently, a lot of online commerce sites are starting up, but an issue arise where the users are not interacting with the sites. So, it is important to analyze the reasons that could hinder customer adoption, as sites existence or commercial e-commerce existence depends of customer's acceptance.

This makes it of high importance to investigate on the factors that could hinder or barriers to customer adoption of e-commerce. This study will give us a clear understanding of the barriers to ecommerce adoption by Nigerian customers. By understanding these barriers, then possible measures can be taken in order to improve or eliminate them, so as to make it easy for both the customers and clients to enjoy the benefits of the new age technology.

IV. RESEARCH MODEL AND HYPOTHESIS

This study is to consider and evaluate the factors that affect customer adoption of e-commerce in Nigeria. A lot of factors could be considered based on the disadvantages and barriers of e-commerce to customers, but the author has narrowed it down to what relates to the Nigerian society. Hence, it is important to evaluate those factors affecting the consumer adoption of e-commerce in order to provide solutions so as the consumers can benefit from the bounties it offers. Fig. 1.0 illustrates the proposed research model in this study, which hypothesized the main factors (awareness, accessibility, income, privacy, security and Internet reliability) affecting customer adoption of e-commerce in Nigeria.

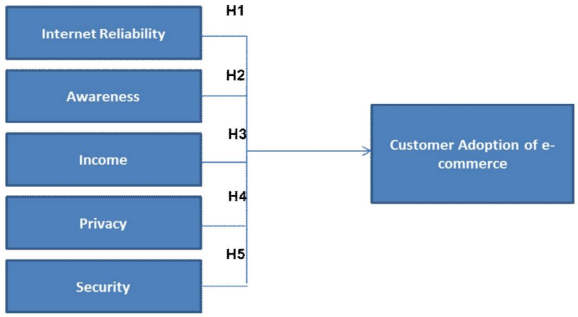


Fig. 1.0 Research Model by Author

4.1 Selection of Variables

A. Internet Reliability

As a developing country Nigeria is suffering from poor communication network. The Internet Service Provider's (ISP's) in the market are only few which offer poor services which are also at the same time costly. This result in people wasting an armful amount of time just to do simple things, such as checking their mail box. Sometimes, waste the whole day trying to browse through the internet without a signal. For this reason the author formulated this hypothesis:

H1: Internet reliability will positively affect customer adoption of e-commerce

B. Awareness

Awareness in e-commerce refers to the customers having the knowledge about technology and its benefits. Lack of awareness in developing countries could also bring a barrier to customer adoption of e-commerce especially in developing countries, where PC penetration is low.

H2: Awareness will positively affect customer adoption of e-commerce

C. Income

Nigeria being a developing country income plays a very important role as the variables added for customer adoption of e-commerce. The country is the world's 14th Oil exporter based on the ranking by the C.I.A World Fact Book [2], but still 70% of its population is living below poverty line. This statistics shows us that there is very low disposable income across more than half of the country's population.

Income is considered as the amount of money available to individuals or household after payment of all compulsory taxes. Due to these facts the author has created the following hypothesis:

H3: Income will positively affect customer adoption of e-commerce

D. Privacy

Privacy can be defined as a legal concept and also as the right to be let alone. Not only that, privacy can also mean "the claim of individuals, groups, or institutions to determine for themselves when, how and what extent information about them is communicated to others". In the e-commerce, trust can be viewed as the customer's expectation, because the customers believe that an online business will treat the customer's information fairly [8]. According to Gibb's T-Group Theory [5], one's inner state of trust affects and transforms one's behavior through information, influence and control. A lot of Nigerians are afraid of giving out their personal information based on the risk that their personal information, browsing habits can be captured online and potential opportunities for misusing the information. This raises a degree of privacy risk to an unacceptable level. In light of this, the following hypothesis is formulated:

H4: Privacy will positively affect consumer adoption of e-commerce.

E. Security

VeriSign (2000) said security is the important factor that affects the confidence of consumers doing transaction online. There is increasing fear among customers against identity fraud. Securing customers payment method in Nigeria poses a great thereat to e-commerce adoption. Nigeria has been rated the riskiest country in the world for online transaction (EIU, 2006). This has created a panic in the Nigerian customers as they don't believe anymore in the security of using their credit cards over the internet.

An online vendor needs to prevent risk and improve the security in e-commerce, it includes: use of up-to-date technology, detail payment procedures, data protection and security statement. (Clara Centeno, 2005), Therefore it is a need for online vendors to address consumer's concerns about the security. For this reason, the following hypothesis is formulated:

H5: Security will positively affect consumer adoption of e-commerce.

Table I Questionnaire Distribution

State	Number of questionnaires distributed	Number of questionnaires retrieved	Percentage of questionnaires received
Kano	50	37	74%
Abuja	50	33	66%
Lagos	50	31	62%

V. HYPOTHESIS TESTING

The author will be using multiple regression analysis in this study in order to test the hypothesis model for the research. Multiple regression analysis will help the author in determining whether the independent variable has influence on the dependent variable. If the independent influences the dependent, then the author can document it as supported if not then it's not supported. Hypotheses are considered supported if the beta coefficients are significant at level of less than 0.05 and t-value greater than 2.0. The result of the multiple regression analysis are displayed in Table II.

Table II Hypothesis Result

Hypothesis	Beta	t-value	Sig.
Hypothesis 1	0.246	3.869	0.000
Hypothesis 2	0.352	5.492	0.000
Hypothesis 3	-0.069	-1.132	0.260
Hypothesis 4	-0.194	2.833	0.006
Hypothesis 5	0.478	7.599	0.000

A. Internet Reliability

Hypothesis 1 proposes that internet reliability will have a positive impact on customer adoption of e-commerce in Nigeria. Table 4.6 illustrates that there is significant positive relationship between internet reliability and customer adoption of e-commerce. This is because beta value = 0.264, t = 3.869 and $p < 0.05$. Therefore hypothesis 1 is supported, then we can say increase in internet reliability will increase customer adoption of e-commerce.

B. Awareness

Hypothesis 2 proposes that awareness will positively affect customer adoption of e-commerce in Nigeria. The result of the hypothesis on table 4.6 shows us that there is significant positive relationship between awareness and customer adoption of e-commerce. This is due to the fact that beta value = 0.352, t = 5.492 and $p < 0.05$. Therefore, hypothesis 2 is supported and we can say that increase in awareness will increase customer adoption of e-commerce.

C. Income

Hypothesis 3 proposes that increase in income will positively affect customer adoption of e-commerce in Nigeria. According to table 4.6 , the result shows that

there is a negative relationship between income and customer adoption of e-commerce (beta = -0.069, t = -1.132) and the p value is greater than 0.05. Therefore, hypothesis 3 is not supported in this study.

D. Privacy

Hypothesis 4 proposes that privacy will positively affect customer adoption of e-commerce in Nigeria. Table 4.6 illustrates that there is a negative relationship between privacy and customer adoption of e-commerce, and this is because beta = -0.194, t = 2.833 and p > 0.5. Therefore, hypothesis 4 is not supported in this study.

E. Security

Hypothesis 5 proposes that security will positively affect customer adoption of e-commerce in Nigeria. According to table 4.6, there is a significant positive relationship between security and customer adoption of e-commerce. This is due to the fact that beta value = 0.478, t = 7.599 and p < 0.05. Therefore, hypothesis 5 is supported and we can say that security will increase customer adoption of e-commerce.

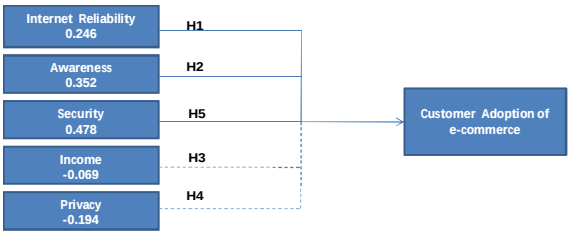


Fig. 1.0 Model Path Coefficient

The multiple regression has been able to provide us with statistics in helping us determine the hypothesis that supports our theory and the ones that do not. Multiple regression has also enabled us in identifying which variable will have the highest impact towards the theory. The beta value is a measure of how strongly each predictor variable influences the criterion variable. Thus, the higher the beta value the greater the impact of the predictor variable on the criterion variable [11]. This shows us that security is of the greatest importance when it comes to customer adoption of e-commerce because it has the highest beta value of 0.478, which is followed by awareness with beta value of 0.352 and lastly internet reliability with beta value of 0.246.

CONCLUSION

The author in his study only focused on the main barriers of customer adoption which he believes are related to Nigeria or developing countries. This means that there could be other limitations to customer adoption which the author did not include in his study. The author only chose the ones which based on the research and the environment are believed to be of greater importance. This study like any other has its limitations. The first limitation comes as a result of the sampling method used, which is the quota sampling. The author grouped three main states in the upper north the middle and the south, where the samples were taken. The author believes that there might be chances that these responses provided might not reflect the view of the entire Nigerian customers. So, any generalization of the findings might not be 100% accurate or reliable.

The second limitation is lack of exposure to e-commerce where 44.6% of the respondents never used e-commerce. So, the author believes that this could create biasness in answering the questions, as the respondents could not be 100% certain which of the factors could really influence their adoption of e-commerce.

Upon the completion of this research the author has identified a field for further research and also believes is very important for the future success of e-commerce in Nigeria. The result of the analysis has proven to the author that Nigerian customers lack awareness on implication of privacy when it comes to online transactions. At this new age where cybercrime is at its peak, and a lot of internet fraud is going on where Nigeria is even the center of it. But still the customers are ignorant of privacy. This could be due to the fact that majority do not use e-commerce. So, the author suggests a future research be carried on privacy and its relationship with internet fraud so as to get a clear idea about the level of ignorance or lack of awareness toward privacy by the Nigerian customers.

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