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### CONSUMER ATTITUDE, PERCEIVED RISK, TRUST AND E-BANKING IN KADUNA STATE

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#### **Abstract**

*The need to have an efficient as well as an effective financial system that will ensure easy monitoring and pave way for a cashless economy have made the central bank of Nigeria to come up with policies that will force customers to embrace e-banking products. The objective of this paper is to examine the influence of customer attitude, perceived risk and trust on internet banking adoption in Kaduna state of Nigeria. A cross sectional research design was adopted in carrying out the study. The study used a sample size of 384 out of which 294 questionnaires were filled and returned, representing 76.56 percent. A regression analysis was used with the help of SmartPLS statistical package. The study has revealed that customers' attitudes have significant influence on e-banking adoption among bank customers in Kaduna state. While all the three independent variables play important roles in influencing internet banking, perceived risk by customers play a greater influence in determining internet banking adoption in Kaduna state. The study recommends the need for Nigerian banks to improve on their capacity to provide efficient internet banking by establishing a robust security system that will allay the fears of electronic frauds in e-banking operations.*

**Keywords:** Consumer attitude, perceived risk, trust, e-banking adoption, Nigeria

#### **1. Introduction**

Banking industry is among the fastest industries that have subscribed to Internet as an important channel for efficient services delivery (Chaouali, Ben, & Souiden,

2016). The urge to have an effective financial system has made emerging economies to take the issue of e-banking seriously. This is because e-banking allows easy monitoring by regulators and help to entrench a cashless economy. Woherem (2000) asserted that the survival and prosperity of banks in the new millennium depends to a large extent on the ability of the banks to embrace technology in their payment and delivery systems and apply information technology to their operations. Electronic banking simply refers to the use of computer and electronic gadgets to carry out financial transactions. It is a “virtual channel” that allows customers to interact with a bank in a convenient manner by providing them an opportunity to acquire banking services anytime and anywhere without physically going to the bank. E-banking is initiated through devices like cards or codes that let authorizers access their account. Many financial institutions use ATM or debit cards and Personal Identification Numbers (PINs) for this purpose. E-business has to do with all electronically mediated information exchanges both within an organization and its external stakeholders. Internet banking (IB) have been acknowledged globally to be associated with convenience, real time availability, easier customer access to information and low transaction cost (Sharma, Govindaluri, & Balushi, 2015).

Despite the huge benefits provided by Internet banking (IB) services large number of bank clients have not used the online service as anticipated (Yap, Wong, Loh, & Bak, 2010). Several studies have been carried out in the area of e-banking with a view to examine the views of customers on risk associated with e-banking products (see, Bazgosha, Eizi, Nawaser & Parhizgar, 2012; Okechi, & Kepeghom, 2013). Most of these studies were carried out in Asia with fewer in Nigeria and other African countries. Despite the high level of enlightenment campaign conducted by both the Central Bank of Nigeria and the commercial banks in Nigeria, still there seem to be a lot of apprehensions among the bank customers on issues related to the security of their deposits. This fear is among both the educated and the less educated customers. Some of these problems have to do with complexity of e-banking operations, compatibility with the customers’ lifestyle; fear of deviant behaviour by bank employees, lack of trust, inefficient internet availability, fund security and privacy among others. These and many other issues have made customers to raise questions as to whether Nigeria is matured enough for e-banking operations.

The potential increase of e-banking worldwide is a growing phenomenon; the internet is becoming a means for both firms and customers to conduct business transactions. The wide spread of computer ownership and the continuous improvement of internet access have led to an increase use of the internet thereby

allowing businesses to use that medium to transact their business in a virtual market, thus it is expected that the e-business will become a universal medium for exchanging products and services (Choi & Lee, 2003). Currently, bank operations are highly dynamic and bankers try as much as possible to make adjustments in order not to be dominated by competitors. The questions therefore are what is the risk associated with e-banking? What are the security concerns for both the customer and the banks? To what extent can banks instill trust on their customer? How do customers perceive e-banking in Nigeria. These are the issues which are of concern to the banking institutions in Nigeria.

The study intends to investigate the influence of customer attitude, perceived risk and trust on internet banking adoption. For the purpose of this study, we adopted the definition of customer attitudes as is given by Fishbein and Ajzen (1975). They defined customer attitudes as those fundamental factors that influence one's buying behaviour toward internet banking usage. Also, we adopted the definition of Perceived risk as is given by Littler & Melanthiou (2006) who simply defined perceived risk as customer's perception of the uncertainty and adverse consequences of embracing internet banking services. Following the definition of trust given by Pavlou (2003) we see trust in the context of this study as the belief and confidence that consumers have about banks and the services they offer through the internet. Internet banking as used in the study simply refers to the ability to conduct banking transactions such as transfer money between accounts, pay bills, etc. The paper is structured as follows: Section 2 explains the theoretical postulations on the adaptation of e-banking. The methodology was reported in section 3. Results and discussion of the findings were presented in section 4 while section 5 carries the conclusion of the study.

## **2. Review of Related Literature**

E-banking simply refers to the provision of retail and small value banking products and services through electronic web (Bessel Committee Report on Banking Supervision, 1998). It is also defined as the automated delivery of new and traditional banking products and services directly to customers through electronic interactive communications channels. E-banking is also defined as a means whereby the business of banking is carried out using automated processes and electronic devices such as computers, telephones, card payments and other electronic channels (CBN, 2003). It is a situation where banking services are fully automated such that transactions are concluded in a moment. E-banking or internet banking is now seen as a convenient and technologically oriented procedure whereby customers can accomplish customary banking tasks more efficiently (Rogers, 1983). However, the high risk of the digital environment has

always been a concern for corporate organizations. As such the focus has been on how customers react to this digital environment, particularly in emerging economies. Quite a number of studies have examined the perception of customers on the risks associated with e-banking products.

Beikzad and Zamini (2011) conducted a comparative between customers' perception of risk in e-banking process and traditional banking process in the branches of the Tabriz Karafarin bank in Iran. The study utilized the dimension of risk perception based on a combination theory of Peter and Tarpey. Questionnaires were distributed to 360 customers that were the statistical sample of the study. The study revealed that there is a significant difference between customers' risk perception in the E - banking process and traditional banking process in the branches of the Tabriz Karafarin bank. However, the study revealed that there is no significant difference between customers' psycho-sociological perception of risk in e-banking process and traditional banking process. The study recommended that banks should try as much as possible to improve e-banking culture among customers and increase the efficiency of ATM machines.

Bazgosha, Eizi, Nawaser, and Parhizgar (2012) carried a research to explore the effect of consumers' perception of risk and uncertainty on internet banking usage in India. The study used 13 dimensions to examine the customer's perception of risk and uncertainty on internet usage. Multiple regression techniques were used for the analysis. The study revealed that risk and uncertainty components have a significant negative relationship with the rate of internet banking usage. Moradi, Ghomian, and Sarjanian (2012) investigated the effect of customers' perception of risk and uncertainty on the rate of using Internet Banking as a new product in the bank. They examined 13 dimensions of risk and uncertainty e as follows: Security, Financial, Performance, Time, Social and Psychological risks and Consequences, Information, Knowledge, Choice, Brand, Needs and Post-purchase uncertainties. Correlation analysis and multiple regression analysis were employed in analyzing the data. The results have indicated that the components of risk and uncertainty have negative, but significant relationship with the rate of Internet Banking usage.

Rogers (2010) carried out a study to examine the relationship between consumers' attitudes, perceived risk, trust and internet banking adoption in Uganda. A cross sectional, descriptive and analytical research design was used. Primary data were collected using a self-structured questionnaire from commercial bank customers. A regression analysis focusing on consumer attitudes, trust, and perceived risk was made to establish the extent to which they contribute to internet banking adoption. The findings indicate a positive relationship between Consumer attitudes, trust and internet banking adoption. This implies that if the customers have positive attitudes towards internet banking, they are bound to trust the transactions done in this fashion

and therefore changing consumer attitudes should be given more emphasis by commercial banks when planning a new internet service for customers. The study concluded that consumer attitudes, trust, perceived risk significantly affect internet banking adoption and therefore recommended that Consumer Attitudes, Trust and Perceived risk reduction should be emphasized in commercial banks to improve the internet banking adoption rate.

Shittu (2010) examined the impact of electronic banking on the Nigerian banking sector using Unity Bank as a case study. The study used 40 Unity Bank officers as sample size. The results of the study have shown electronic banking of Unity bank has improved its customer relationship and satisfaction. The study recommended the need for enhanced training program for the use of information and technology for the bank officials. The sample of the study may not be representative enough to enable valid conclusion. More so the study utilised a case approach and as such the findings cannot be generalised to other banks as claimed by the study. Okechi and Kepeghom (2013) carried out a study on empirical evaluation of customers' use of electronic banking systems in Nigeria. The study used survey approach and has distributed 240 questionnaires within an Omoku town in Rivers state out of which 220 were returned. The result of this research shows that among all e-Banking products, ATM has the highest level of usage. The study also revealed that most of the bank customers were not satisfied with ATM service Quality in terms of how banks handle their customer complaints, functionality of the ATM and long queues in using the ATM. The study also discovered low literacy on the part of majority of ATM users.

According to Wright (2001), the changing technology function-ability is advancing faster than the means to secure the information being stored or processed, this is risky for the organisation as such they have to move with the technology trend so as not to be vulnerable, He also argued that some technical threats to e-business content are viruses and other malware, but he pointed out that the most dangerous and damaging is the targeted malware which is written for and launched against a specific enemy. Gottshalk (2000) state that the key areas that need to be addressed in security concerns include, the security of information shared, also another important aspect is the security of the network in which runtime is deployed and finally the security of the programming model at a design time.

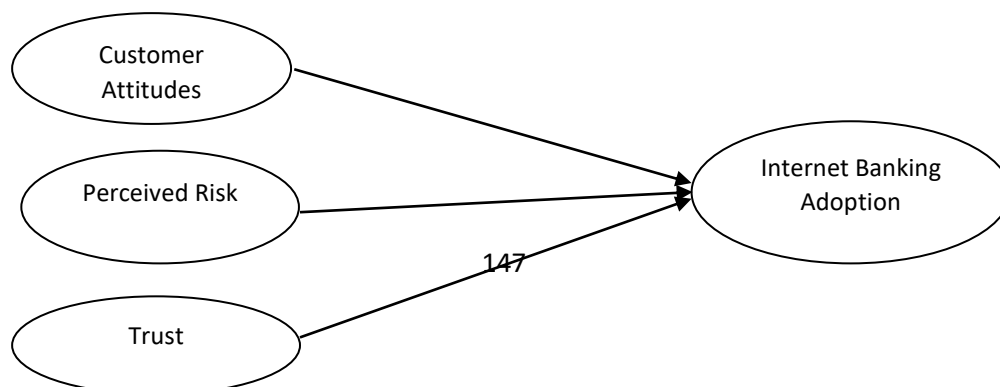


Figure 1: Conceptual Model with hypotheses

Bases on the above empirical argument, the following hypotheses have been formulated:

H<sub>1</sub>: There will be positive relationship between customer attitude and internet banking adoption

H<sub>2</sub>: There will be negative relationship between perceived risk and internet banking adoption

H<sub>3</sub>: There will be positive relationship between trust and internet banking adoption

### **3. Methodology**

The study adopts cross sectional research design to examine the influence of customer attitudes, perceived risk and trust on internet banking adoption in Kaduna State. The study used a population sample of 384 using five major banks as a case study (First Bank, GTB, Zenith, UBA, Diamond, and Access Banks). Since it is difficult to establish the number of customers of these banks we assume the population to be infinite. As such a sample size of 384 customers was taken (Krejcie & Morgan, 1970). Out of the 384 distributed questionnaires, 294 were filled and returned representing 76.56 percent. A regression analysis was used with the help of *SmartPLS statistical package*.

#### **3.1 Measurement of Variables**

*Customer Attitudes*: the customer attitude scale developed by Wu and Chen, 2005 was used to measure customer attitudes in the study. The customer attitude was rated on a 4 point Likert scale anchored by: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree* and 4 = *strongly disagree*. *Perceived Risk*: This was measured based on the five item scale adapted from Littler and Melanthiou (2006). The scale was modified to 4 Likert scale to suit our purpose. *Trust*: this was measured based on the scale adopted by Hewett and Bearden (2001). *Internet banking adoption*: This variable was measured using the adoption scale developed by Eastlick and Lotz, (1999) was used in this study.

### **4. Results**

#### **4.1 Measurement Model:**

Two major steps modelling approach were adopted to ascertain the validity of the constructs, namely convergent validity and reliability of the constructs (Anderson & Gerbing 1988). The assessment of the convergent validity and reliability of the construct are shown in Table 1 and 2 respectively. As indicated in Table 1 and 2, the construct validity is valid if the cross loadings are greater than 0.7. It is important to note that as a rule of thumb validity of the constructs is attained if the cross loadings are greater than 0.7, the composite reliability is greater than 0.7 and the average variance extracted is greater than 0.5. Again, the Cronbach alpha coefficient according to Hair, et al, (2010) need to exceed the limit of 0.7

**Table 1: Cross loadings**

Latent Variables	Items	CA	IBA	Perceived	
				Risk	Trust
	CA01	<b>0.77</b>	0.39	0.34	0.25
	CA02	<b>0.70</b>	0.18	0.26	0.13
	CA03	<b>0.72</b>	0.18	0.24	0.25
	CA04	<b>0.80</b>	0.34	0.29	0.28
	CA06	<b>0.72</b>	0.32	0.24	0.26
	CA13	<b>0.69</b>	0.35	0.25	0.32
	CA14	<b>0.75</b>	0.28	0.24	0.29
<b>Consumer Attitude</b>	IBA01	0.28	<b>0.69</b>	0.44	0.38
	IBA02	0.33	<b>0.75</b>	0.46	0.41
	IBA05	0.32	<b>0.78</b>	0.43	0.47
	IBA07	0.33	<b>0.78</b>	0.37	0.37
	IBA08	0.32	<b>0.75</b>	0.34	0.31
	IBA09	0.29	<b>0.73</b>	0.34	0.25
<b>Internet Banking adoption</b>	PR15	0.31	0.43	<b>0.75</b>	0.29
	PR16	0.27	0.46	<b>0.81</b>	0.42
	PR17	0.2	0.28	<b>0.72</b>	0.33
	PR18	0.28	0.37	<b>0.68</b>	0.28
<b>Trust</b>	TR10	0.22	0.34	0.34	<b>0.68</b>
	TR11	0.28	0.31	0.3	<b>0.72</b>
	TR12	0.21	0.38	0.31	<b>0.73</b>
	TR13 1	0.33	0.42	0.36	<b>0.78</b>

**Table 2: Reliability and validity of constructs**

Latent Variables	Indicators	CA	AVE
	Composite Reliability		

Consumer Attitude	7	0.54	0.89	0.86
Internet Banking Adoption	6	0.56	0.88	0.84
Perceived Risk	4	0.55	0.83	0.73
Trust	4	0.53	0.82	0.71

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**Table 4: Path coefficients and hypotheses**

Hypotheses	Relations	Beta	Std Error	T Statistics	Findings
H1	CA > IBA	0.20	0.08	2.56***	supported
H2	PR > IBA	0.34	0.08	4.23***	supported
H3	TR > IBA	0.28	0.07	3.90***	supported

**Table 3: Latent Variables Correlations**

Latent Variables	1	2	3	4
Consumer Attitude	<b>0.74</b>			
Internet Banking Adoption	0.42	<b>0.75</b>		
Perceived Risk	0.37	0.54	<b>0.74</b>	
Trust	0.36	0.5	0.45	<b>0.73</b>

Note: Diagonals (bold face) represent the square root of the average variance extracted while the other entries represent the correlations.

Secondly, we conducted discriminant validity test based on the recommendation of Fornel and Lacker (1981). Fornel and Lacker (1981) asserted that the average variance shared between each construct must exceed the variance shared between other constructs. As shown in table 3 above, the square root of the average variance is greater than the correlation for each construct. This suggests that there is adequate discriminant validity of the construct (Hair, *et al.* 2010).

Internet banking adoption ( $R^2$ ) =40 %

Note: The symbols \*\*\*, indicate statistical significance at the 1 percent level of significance

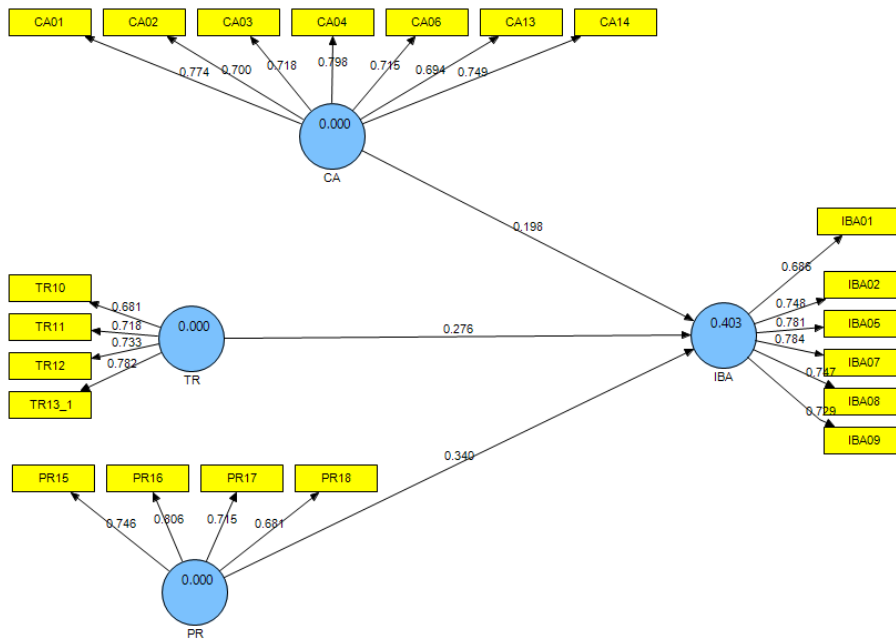


Fig. 2: Results of the structural model analysis

#### 4.2 Structural Model:

As shown in Fig 2 above, the R-square value is 0.40 suggesting that the modeled variables can explain 40% of the variation of the internet banking adoption among bank's customers. Hypothesis 1 stated that customer attitude is positively related to internet banking adoption. The result in Table 4 indicates that the hypothesis is supported at the 1 percent level of significance, indicating that customer attitude has significant influence on internet banking adoption. Similarly, Hypothesis 2 stated that there will be negative relationship between perceived and internet banking adoption. Again from table 4 it is clear that the perceived risk has negative relationship with internet banking adoption, hence the hypothesis is supported at the 1 percent level of significance. Finally, the third hypothesis stated that trust has significant positive relationship with internet banking adoption. Also, the result in Table 4 has shown that trust has significant influence on internet banking adoption as such; the hypothesis is supported at the 1 percent level of significance.

#### 4.3 Discussion

The result of this study have indicated that customer attitudes, perceived risk and trust have positive effects on internet banking adoption in Kaduna state. The result of the study is consistent with previous studies (Ndubisi & Sinti, 2006;

Rotchanakitumnui & Speece, 2003; Yu, Balaji, & Khong, 2015). The study has further indicated that out of the three independent variables, customers' perceived risk play a greater influence in determining internet banking adoption in Kaduna state. Again, the finding is consistent with the study conducted by Wong (2004). The finding is also in line with Yousafzai (2003) who found out that trust in electronic banking reduces the uncertainties associated with the e-banking.

## 5. Conclusion

The paper therefore conclude that trust and customer attitude are critical factors in electronic banking hence can affect any development associated with internet banking implementation. Hence, Nigerian banks ought to establish a robust security system that will allay the fears of electronic frauds in e-banking operations. One of the major limitations of this study relates to the study sample size as the study focuses on Kaduna state Nigeria as such, the findings cannot be generalized.

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