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#### Does Electronic Banking Service Quality affect Customers' Satisfaction in Nigeria?

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#### Abstract (en anglais)

The study investigated the effect of Electronic Banking (E-Banking) service quality on customers' satisfaction in Oyo state, Nigeria. In particular, the study examined the effect of E-Banking service auality (reliability. responsiveness, assurance. tangibility and empathy) on customers' satisfaction Findings revealed that reliability, responsiveness and assurance are strong predictors of customer satisfaction in Nigeria. However, tangibility and empathy produced positive but insignificant results. Therefore, it is recommended that all Nigerian banks should continuously improve the quality of Ebanking services so as to attract more customers tthereby, promoting financial inclusion.

#### Mots clés:

Mot clé.1: Assurance Mot clé.2: Empathie Mot clé.3: Tangibilité Mot clé.4: Réactivité Mot clé.5: Fiabilité Codes de classification JEL G21, L25, O31

#### Abstract (en français)

L'étude a examiné l'effet de la qualité du service bancaire électronique (E-Banking) sur la satisfaction des clients dans l'État d'Oyo, au Nigeria. En particulier, l'étude a examiné l'effet de la qualité du service E-Banking (fiabilité, réactivité, assurance, tangibilité et empathie) sur la satisfaction des clients. Les résultats ont révélé que la fiabilité, la réactivité et l'assurance sont de solides prédicteurs de la satisfaction des clients au Nigeria. Cependant, la tangibilité et l'empathie ont produit des résultats positifs mais insignifiants. Par conséquent, il est recommandé à toutes les banques nigérianes d'améliorer en permanence la qualité des services bancaires en ligne afin d'attirer davantage de clients, favorisant ainsi l'inclusion financière.

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## 1. The introduction

In an effort to meet with global development, improve service delivery, and reduce transaction cost, Nigerian banks have invested heavily in technology, and have broadly embraced electronic and telecommunication networks for delivering a wide range of value-added products and services. Consequently, most of them have moved from the traditional arm chair banking to Electronic Banking (E-Banking) systems, where customers are now able to use self service channels such as Automated Teller Machines (ATM), Point of Sales (POS) and internet to meet their needs. Ovia (2005) stated that E-Banking is the delivery of services to customers online or through mobile technology such as mobile phones, computers and Automated Teller (ATM) equipment, etc. These services enable customers of financial institutions, individuals or businesses to access accounts, business activity, or obtain financial product data through online communication networks. Aliyu et al., (2012) asserted that Nigerian banks have invested heavily in enriching E-Banking services with the aim of improving customer satisfaction

Customer satisfaction is the measure of how a product or service meets or exceeds customer expectations. In a competitive market like the banking industry, it contains a variety of strategies targeted at keeping, meeting or exceeding customer expectations. Saha and Zhao (2005) see customer satisfaction as a collection of the result of perception, evaluation and psychological response to the consumption experience with a product or service. Thus, if the perceived performance is less than expected, customers will be dissatisfied, and when it exceeds expectations, customers will be satisfied and this can lead to better behavior or outcome (Saha and Zhao, 2005). Also, when customers are satisfied they are bound to continue their patronage, thereby strengthening the relationship which generates unbroken loyalty.

Tomark and Ponsonnealt (2001) found that consumer loyalty is significantly affected by E-Banking services especially among the users; while it had a negative effect on non-users. They concluded that convenience, ease of use and fast banking services are associated with human and technology based service delivery process. Alhawar and Ward (2005) also indicated that E-Banking services are positively related to customer satisfaction and retention. Appraisal of e-banking adoption and customer satisfaction with the services have shown that E-Banking usage increased with the perception that it is flexible, convenient, very easy to use and reduces transaction time (Adesina & Ayo, 2010). Nevertheless, scholars proposed that the extent to which Nigerians accept the services is far below expectation (Suleimon, 2007).

In Ibadan metropolis, an urban area in Nigeria, Bello (2005) reported that despite the fact that banking institutions are promoting E-Banking for use among their customers, the level of utilization seems low which was evident with long queues at bank branches, low deployment of POS at supermarkets and most government and private organizations still paying cash at revenue points. This suggests that E-Banking services are possibly ignored and underutilized despite its availability. Furthermore, Abdullahi, Usman, Salisu and Mohammad (2018) pointed out that the advancements in the Nigerian banking industry appear not to have accomplished their point as far as consumer satisfaction are concerned simply because long queues are still found in the banking halls, bank clients still handle excessive money, and individuals barely discuss the improvement of E-Banking in Nigeria. The issues here are: Are bank customers truly deriving satisfaction from E-banking services in Nigeria? What is customers' perception towards E-Banking services? and what is the relationship between E-Banking service quality and customers' satisfaction in Nigeria? It is

in view of these that the current study seeks to examine the effect of E-Banking service quality on customers' satisfaction in Ibadan, Oyo State, Nigeria.

#### Statement of the Problem

A review of E-Banking studies shows that a large portion of the published research was conducted in developed and industrialized countries (Chan and Lu, 2004; Jayawardhena and Foley, 2000; Kolodinsky, Hogarth, and Hilgert, 2004). Contrastingly, very few researches are carried out in developing countries (Al-Somali, Gholami, and Clegg, 2009; Jabnoun and Al-Tamimi, 2003). This gap is particularly apparent in Nigeria. One of the reasons for the limited empirical studies in Nigeria is that the introduction of E-Banking is relatively new. In addition, despite its growing use and adoption by many banks attempting to be technologically driven, very few researches have been conducted to understand whether the customers are satisfied or not (Gao and Owolabi, 2008) and to identify the factors influencing their satisfaction, despite its growing use and adoption by many banks in an effort to be technologically driven. Thus creating a gap, consequently, the purpose of this study is to fill this gap by examining the perception of respondents towards usage of E-banking services, determining the relationship between quality of E-Banking services and customers' satisfaction and investigating the effect of E- Banking service quality on customers' satisfaction.

#### Literature Review Conceptual Review Electronic Banking

Significant changes in global business ethics have increased customer demand for banking services. Due to this development, the banking industry is now well-positioned to offer a payment system that meets the requirements of the electronic market (Balachandher, Vaithilingam, Norhazlin, & Rajendra, 2001). Attitudes and customers' needs change as the day goes by and banks continue to improve their products and services in accordance with their needs. Through E-Banking, banks reach out to and meet the demands of non-bank customers. According to Abid and Noreen (2006), electronic banking is defined as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders .Over the past 20 years, e-banking has developed into a significant way of growing financial organizations. (Karjaluoto, Mattila, & Pento, 2002). Lustsik (2004) sees E-Banking services as a variety of e-channels for online banking, telephone, TV, mobile, and computer banking.

As technology develops, banking customers have higher expectations for the service. nowadays, the customer wants to be able to work and conduct their banking business without having to physically visit a bank, at any time without restriction due to the bank's operating hours, and making payments quickly and efficiently. In order to fulfill these desires, the quality of financial services must be defined by independence, freedom, and flexibility (Khalfan & Alshawaf, 2004).E-banking has long existed with ATMs and phone transactions, but more lately, it has undergone a transformation by the Internet - a new delivery system that has helped bank and customer transactions (Nitsure, 2003)

## **Types of E-banking channels**

There are many electronic banking delivery channels to provide banking service to customers. Among them ATM, POS, mobile banking and internet banking are the most widely used and discussed below.

#### **Automated Teller Machine (ATM)**

This is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it is very accessible with account balance enquiry (Fenuga, 2010).

#### Internet banking

Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or society. It may include of any transactions related to online usage. Banks increasingly operate websites through which customers are not only to inquire about account balances, interest and exchange rates but also to conduct a range of transactions. Unfortunately, data on Internet banking are scarce, and differences in definitions make cross-country comparisons difficult (Timothy, 2012).

#### Point of Sale (POS)

This is also sometimes referred to as point of purchase (POP) or checkout is the location where a transaction occurs. A 'checkout' refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a salesperson accessible interface. The same system allows the creation and printing of the receipt (Olorunsegun, 2010)

#### Mobile banking

Mobile banking (also known as M-banking, mbanking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where most of their population is un-banked. In most of these places, banks can only be found in big cities, and customers have to travel hundreds of miles to the nearest bank. Services offered may include facilities to conduct bank and stock market transactions, administering accounts and accessing customized information (Tiwari and Buse, 2007)

## **Customer Satisfaction in E-Banking**

The development of E-Banking in recent years has significantly changed the laws and regulations in the banking sector. According to Aladwani (2001), the number of customers using new E- banking services has increased dramatically. E-banking services contribute significantly to the growth of the banking sector by increasing customers' satisfaction and dependability (Al-Zadjali et al., 2015). Customer satisfaction is crucial in all industries, but particularly in the service industry (Pooya et al., 2020) customer satisfaction is closely associated with the people who purchase the goods or services and those who utilize them (Ling et al., 2016). Customer satisfaction enables firms to increase their sales revenue and achieve a competitive edge over competitors (Lewin, 2009), as well as it leads to long-term profits by gaining customer loyalty (Wirtz, 2003). Therefore, customer satisfaction originates from the recognition that firms have to interact with changing environments consistent with customer behavior to sustain their longevity and stability in the competitive market

Customers' satisfaction is related to business operations, high-tech electronic banking, and customer objectives. It improves corporate performance, which enable firms to succeed. Service quality and customer satisfaction are closely related. Because the advantages of competing services can be clearly quantified, online banks should be more concerned with how customers perceive their services (Santos, 2003). Customers' satisfaction, is the foundation for the overall success of the transformation process, which relies heavily on customer awareness of service quality (Husnain & Akhtar, 2016)

#### **Theoretical Model**

#### **Technology Acceptance Model (TAM)**

The theory stated that the user's attitude towards accepting a new information system is critical to the successful adoption of the information system (Davis et al., 1989). TAM asserted that the attitude to a particular system relies on two fundamental principles: perceived usefulness and perceived ease of use. The quality, efficiency and effectiveness of a program can only be determined by its level of acceptance by users through its ability to meet their needs (Pikkarainen et al., 2004). According to TAM, the perceived usefulness and the perceived ease of use of an information system will have a positive impact on the attitude towards the system. Attitude, however, leads to a greater goal of system utilization, which positively affects the actual human use of the system.

TAM stressed that, other things being equal, perceived usefulness is influenced by perceived ease of use because when technology is easy to use, it can be very useful. Perceived usefulness (PU) is defined as the extent to which a person believes that using a particular program can improve his or her performance. The perceived ease of use (PEU) refers to the degree to which one believes that using the system will be stress free. Attitude (ATT) explains a person's favorable or unfavorable appraisal with regards to the behavior in question. Intention (INT) is a measure of the strength of a person's inclination to exert sufficient effort while performing a certain behavior. The external variables in the model refer to a set of variables that can affect information system adoption indirectly through perceived ease of use and perceived usefulness (Davis et al., 1989).

#### **Empirical Review**

Parasuraman, Zeithaml, and Berry (1988) affirmed that the relationship between service quality and customer satisfaction is very strong and long lasting. Jain & Gupta, (2004) also found that high customer satisfaction depends largely on getting a better and quality service. Tomark and Ponsonnealt (2001) in their study found that the use of E-Banking had a significant impact on consumer loyalty among users of E-Banking, while it has had a negative impact on non-users. They concluded that simple, easy and fast banking services are associated with the the human and technology based service delivery process. Alhawar and Ward (2005) also pointed out that online banking is closely related to customer satisfaction and retention.

Singhal and Padhmanabhan (2008) also found that customers switched from conventional bank to web-based banks due to the security and privacy provided by their banks. In this way, the protection and confidentiality of the website, its ease of use, and the reputation of the bank make customers happier, and they decide to use web-based banking channels (Alsajjan et al., 2006). Lee and Lin (2005) asserted that website design, reliability, responsiveness, and trust often affect service quality and customer satisfaction, which have a significant effect on customers' willingness to purchase. Khurana (2009) argued that a variety of service methods, such as efficiency, responsiveness, implementation, privacy of employees, and ease of use, are online banking metrics that influence customer satisfaction.

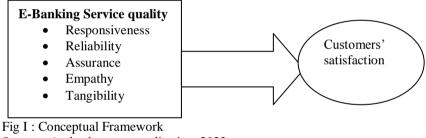
It has been noted that the importance, response, and level of empathy play an important role in predicting customer behavior expectations (Ravichandran et al. 2010). Nupur (2010) suggested that reliability, responsiveness, compliance, empathy, and tangibility of service quality metrics are fundamental to customer satisfaction in E-banking. Casaló et al. (2008) asserted that higher levels of E-Banking services' usability might lead to higher levels of consumer's affective commitment and satisfaction

In Nigeria, researchers like Ojokuku and Sajuyigbe, 2012; Alabar, 2012; Gbadeyan and Akinyosoye, 2011; Oladejo and Akanbi, 2012 also agree that E-Banking services have significant effect on customer satisfaction.

	Table 1. Dimensions of Service Quanty				
Reliability	Capability to deliver service as promised				
Responsiveness	Prompt delivery of services to customers				
Assurance	Knowledge and civility of employees, ensuring safety & delivering trust				
Tangibles	Outlook of physical equipments and communication resources				
Empathy	Providing customer care with individualistic approach				

Table I: Dimensions	of Service	Quality
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Considering the increasing importance of e-banking and then quality of service in e-Banking, this research article focuses on five service quality dimensions identified by (Parasuraman, Zeithaml, & Berry, 1985) and presented as comprehensive model, SERVQUAL model and its effect on customer satisfaction in Nigeria.



Source : Author's conceptualisation, 2022

## The Conceptual Framework

In the light of the above literature review, this study conceptualized that E-banking services responsiveness, reliability, assurance, empathy and tangibility positively affects customer satisfaction (Loureiro & Sarmento, 2017; Ayo et al, 2016; Raza et al, 2015). The conceptual framework is presented in the conceptual framework (Figure 2)

# 2. Research Methods, tools and measures

The research was conducted in Ibadan, Oyo state, Nigeria. The state is made up of three senatorial districts and thirty three local Government areas with Ibadan as its capital. The choice of Oyo State was predicated upon its large population and strategic location. Specifically, the research design is a cross-sectional survey since it sought to ascertain respondents' current perception of the subject matter. The population of the study consist of all the customers of Zenith, Wema ,Polaris and First Banks in Ibadan, Oyo State, Nigeria,

Adapted from (Parasuraman, Zeithaml, & Berry 1985)

since the customers are the focus of interest. Random sampling technique was used to select a sample of 120 respondents.

The study used primary data which were collected with the aid of questionnaires. The question response format of the questionnaire was a 5-point Likert scale. Out of the 150 questionnaires distributed, 120 were retrieved. The data collected was analyzed using the statistical package for social sciences (SPSS) version 15.0. The reliability of data collected was 0.78 using Cronbach alpha. The data was also analyzed using descriptive statistics such as frequency, percentages, tables, and inferential statistics like Regression and Karl Pearson correlation techniques

#### **Model Specification**

The basic Regression equation for the model will be:  $CS_{EB} = \alpha + \beta_1 X_{RES} + \beta_2 X_{REL} + \beta_3 X_{ASS} + \beta_4 X_{EMP} + \beta_5 X_{TAN} + e_o$ Where,  $CS_{EB} = Customer Satisfaction in E-Banking$   $X_{RES} = Responsiveness$   $X_{REL} = Reliability$   $X_{ASS} = Assurance,$   $X_{EMP} = Empathy$   $X_{TAN} = Tangibles$   $\alpha = constant,$   $\beta = Coefficients to estimate and$   $e_o = error term$ 

## 3. Résultats

 Table 2 : Demographic Profiles of Respondents

	Freq	%		Freq	%
Gender			Education		
Male	52	43.3	None	3	2.5
Female	68	56.7	Primary school	2	1.7
Total	120	100	Secondary School	28	23.3
Age			NCE/OND	29	24.2
Less than 18 years	4	3.3	B.Sc/HND	53	44.2
18 - 29 years	41	34.2	Postgraduate	4	3.3
30 - 39 years	51	42.5	Others	1	0.8
40 - 50 years	12	10.0	Total	120	100
Above 50 years	12	10.0	Marital status		
Total	120	100	Single	40	33.4
Type of Account			Married	76	63.3
Savings	95	79.2	Divorced	3	2.5
Current	25	20.8	Widowed	1	0.8
Total	120	100	Total	120	100

Source: Author's computation 2022

The demographic profiles of respondents are highlighted in Table 2 and results showed that 43.3% are males while 56.7% are females. This indicates that both gender are well represented in the survey. Only 3.3% of the respondents fall below 18 years, 34.2% were within the age range of 18-29 years. 42.5% of the respondents fall within the range of 30-39 years while 20% of the respondents were 40 years and above. Moreover, more than 95% of the respondents have basic education i.e they can read and write. Majority (63.3%) of the

respondents are married, 33.4 % were single while the other respondents were either divorced or widowed.

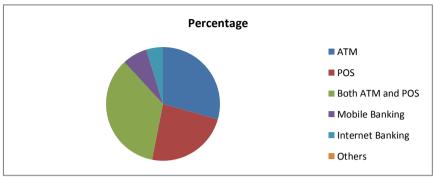


Fig 2: Types of E-Banking Channels used by the Respondents Source: Author's Computation, 2022

Various types of banking channels used by bank customers are highlighted in Fig 2 Results indicate that 62 percent of the respondents make use of ATMs, 50 percent of the respondents utilize POS, while 74 percent make use of both ATM and POS. Findings also showed that mobile and internet banking are rarely used by the respondents.

Items	Stongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
I understand what E-banking is	29.17	50.00	12.50	5.83	2.50	100
E- banking is performing to expectation	12.50	45.83	20.80	12.50	8.33	100
Satisfaction derived from E-banking is higher than conventional banks	25.00	37.50	27.50	6.670	3.33	100
Electronic banking can do everything for me as employees do	8.33	23.40	20.50	29.50	18.27	100
Controlling of my bank account has improved after using electronic banking	12.50	45.84	20.80	15.00	5.83	100
I do get the service of electronic banking 24 hours per day and 7 days a week	12.50	25.00	25.00	20.80	16.70	100
E-banking has aided the Implementation of Cashless Policy	16.70	37.50	20.80	16.70	8.33	100
E-banking save time, cost and other resources that could have been wasted by the conventional banking system	29.17	50.00	12.50	5.83	2.50	100
E-banking can be useless without the availability of internet connection which can serve as an extra cost	29.17	51.67	12.50	4.16	2.50	100
E-banking satisfy my immediate financial needs	20.80	22.50	2500	25.00	6.67	100

Table 3: Pe	rception of resp	ondents towards	usage of E-Banking	g services
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Source: Author's Computation, 2022

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The perception of respondents towards usage of E-Banking services is indicated in Table 3. Majority of the respondents (79.17%) are familiar with E-Banking, some of the respondents (58.33%) asserted that E-Banking is performing up to expectation, 62.50% opined that the satisfaction derived from E-banking services is higher than conventional banking, 79.17% of the respondents asserted that E-Banking saves time, cost and other resources that could

have been wasted by conventional banking systems. However, only 31.73% of the respondents affirmed that E-Banking is as efficient as employees in the conventional banks. Also, only 37.50% agreed that they enjoy E-Banking services all the time. The respondents further asserted that E-Banking services are useless without the availability of internet services which serves as extra cost. Conclusively, only 43.30% of the respondents agreed that E-banking services satisfy their immediate needs ; this implies that E-Banking services have not been fully explored by the respondents

-	CUST	RESP.	RELIAB	ASSUR.	EMPAT	TANG.
	SATISF					
CUST. SATISF	1					
Pearson Correlation						
Sig (2- tailed) N	120					
RESP.	.676**	1				
Pearson Correlation	0.00					
Sig (2- tailed) N	120	120				
RELIAB.	.655**	.512	1			
Pearson Correlation	0.12	.000				
Sig (2- tailed) N	120	120	120			
ASSUR.	.524**	.404	.123	1		
Pearson Correlation	0.00	0.00	.179			
Sig (2- tailed) N	120	120	120	120		
EMPAT.	.355	.149	.264	.066	1	
Pearson Correlation	0.00	.109	.004	.472		
Sig (2- tailed) N	120	120	120	120	120	
TANG.	.404	.265	.072	.561	.331	1
Pearson Correlation	0.10	.003	.434	.000	.000	
Sig (2-tailed) N	120	120	120	120	120	120

#### Table 4: Relationship between E- banking Service Quality and Customers satisfaction

\*\*. Correlation is significant at the 0.01 level (2-tailed)

Source: Author's computation, 2022

The relationship between E-Banking service quality and customers' satisfaction is diplayed in Table 4. Results showed that responsiveness, reliability and assurance correlated positively and significantly with customers' satisfaction. However, empathy and tangibily exhibited positive but insignificant correlation with customers' satisfaction.

# Table 5: Regression analysis showing effect of E-banking service quality on customers' satisfaction

Model	R square	Adjusted R square	Standard Error	Durbin- Watson	F	Sig
1	0.6724	0.5087	0.07851	1.3021	4.1064	0.0002

a. Predictors: (Constant), E-banking

Variables	Coefficients	Std. Error	t-statistics	Prob
Constant	2.5562	0.2260	0.1483	0.2677
Responsiveness	0.5044	0.1835	2.7486	0.0143*
Reliability	0.7573	0.0060	4.4884	0.0004*
Assurance	0.6479	0.1784	1.9497	0.0490*
Empathy	0.2523	0.1140	0.6753	0.5091
Tangibility	0.1344	0.1240	0.8313	0.4180

Dependent Variable: customers satisfaction Source: Author's Computation, 2022 The result of E-banking service quality on customers' satisfaction as indicated in Table 5 is stated as :

 $CS_{EB} = 2.5562 + 0.5044 X_{RES} + 0.7573 X_{REL} + 0.6479 X_{ASS} + 0.3523 X_{EMP} + 0.4344 X_{TAN} + 0.0000 X_{ASS} + 0.$ 

Here,

 $X_{RES}$  = One unit change in responsiveness will affect the customers' satisfaction by 0.5044 units.

 $X_{REL}$  = One unit change in reliability will change customers' satisfaction by 0.7573 unit

 $X_{ASS}$  = One unit change in assurance will change customers' satisfaction by 0.6479 unit

 $X_{EMP}$  = One unit change in empathy will change customers' satisfaction by 0.2523 unit

 $X_{TAN}$  = One unit change in tangibility will change customers' satisfaction by 0.1344 unit

Five (5) predicting variables incuding responsiveness, reliability, assurance, empathy and tangibility were examined to see their effect on customer satisfaction. Adjusted  $R^2$  was 0.508 and this implied that 50.8 percent of changes in customers' satisfaction were explained by the five variables considered in the model. The significance of this value was tested with the analysis of variance (ANOVA) and the calculated F- value was 4.106 which was significant at (P< 0.05). However, the three predictors which are responsiveness, reliability and assurance were found to positively and significantly influence customer's satisfaction, empathy and tangibility on the other hand though positive, have no significant effect on customers' satisfaction.

# 4. Discussion

Findings from Table 2 which showed the demographic profiles of respondents indicated that 56.7% were female and the rest 43.4% were male. The distribution revealed that both males and females make use of E- banking in Nigeria In terms of age, results showed that 76.7% of the respondents fall between 18 and 39 years respectively. This revealed that the majority of the users are younger. This may be due to the fact that youths are energetic, innovative and technologically driven. This result is in line with the findings of Poon (2008) Azouzi (2009) and Adewoye et al. (2013) who asserted that young and computer literate respondents are always willing to use E- banking services. Marital status of the respondents showed that 63.3% are single, 33.4% are married and 2.5% of the respondents are divorced. Additionally, the result of the educational background of the respondents indicated that majority 71.7% of the respondents have post secondary school qualification. This suggests that educated people have better e-banking usage experience. This finding corroborates the work of Edwin et al. (2014) who found that consumers' level of education and information communication technology knowledge impacts their acceptance of e-banking services.

Moreover, Fig 2 revealed that that Point of sales (POS) and Automated Teller Machine (ATM) are frequently used by bank customers in Nigeria. However, Mobile and Internet banking are rarely used by the respondents. The respondents asserted that poor connectivity, high cost of internet access, computer illiteracy and fraud among many others discourage them from using mobile and internet banking. This indicates that E-Banking services have not been fully explored by bank customers in Nigeria. This is consistent with findings of Adesina & Ayo (2010) ; Adewoye et al. (2013).

Table 3 shows the perception of respondents towards E-Banking usage. Results revealed that 79.17% of the respondents understand what E-banking is all about. Also, about 58% of the respondents opined that E-banking is performing up to expectation. Majority of the respondents agreed that E-banking saves time, cost and other resources that could have

been wasted by conventional banking system. However, less than half of the respondents (41.73%) agreed that E- banking can do everything as employees in the bank. Also, very few of the respondents (37.5%) agreed that they can access E-banking services 24 hours in a day and 7 days in a week. Additionally, more than 80% of the respondents asserted that E-banking can be useless without the availability of internet connection which serves as extra cost. This implies that bank customers' are not fully utilizing E-banking services. In line with this, Folorunso et al. (2010) in their study also identified poor internet facility and network as well as high cost of internet as a significant factor that impact on customers' usage of E- banking services

Furthermore, Karl Pearson Correlation Coefficient was used to examine the relationship between E-banking variables and Customers satisfaction as highlighted in Table 5. Five factors were considered in the model as determinants, these are responsiveness, reliability, assurance, empathy and tangibles. The result of the study showed that responsiveness correlated positively and significantly (0.676, p<0.05) with customers' satisfaction. This indicates that the more responsive E- banking services are to customers, the more satisfied the customers. Prompt response and effective communication are essential for customers having issues with E-Banking services. Responsiveness builds customers' trust and create loyalty which enhances banks' performance. This finding is consistent with the report of Parasuraman, Zeithaml, & Berry, (2002).

Reliability also was positive and significant with a coefficient of (0.655, p<0.05). This implies that reliability of E- banking services is also a strong predictor of customer satisfaction and that the success of E- banking depends on service reliability .Ammar (2012) asserted that reliability is a key factor that most customers consider before and even during usage of E-Banking services. Thus, reliability (such as prompt responses, attentiveness, and error free E-banking platforms) have considerable impact on customer satisfaction. This confirms results found in previous research, as people need to be able to depend on a steady delivery of the E-Banking services (Kettinger & Lee, 2005; Tan & Teo, 2000). Moreover, findings showed that assurance demonstrated moderate and positive correlation (0.524, p<0.05) with customers' satisfaction. This showed that the more the assurance offered by E-banking services to the customers, the more satisfied the customers will be. Banking services that give assurance to customers tend to be more reliable and customers transact easily and freely with such banks.

On the other hand, tangibility (0.404, p<0.05) and empathy (0.355, p<0.05) demonstrated weak but positive correlation with E-Banking services in Nigeria. This may be due to the fact that E-banking services in Nigeria have not still attained the usability as in the developed countries. Most of the people utilize the services only for few basic operations like withdrawing cash from ATMs, account inquiries, POS (Point of sale) transactions, etc. Though there is awareness of E-banking products and services in Nigeria, however, more awareness should be created among the banking customers in order to ensure full espousal of E-banking services in Nigeria. Furthermore, the relative less significance of empathy in evaluating E-banking service quality by the users may be attributed to the virtual nature of E-banking services as cited by Rowley (2006) that the service rendered by is virtual, involving no face to face dealings. However, both tangibility and empathy are worth considering in enhancing customer service quality experience, with supreme importance of reliability, responsiveness and assurance as predictors of customer satisfaction in E-banking in Nigeria.

Conclusively, the effect of the quality of E-Banking services on customers' satisfaction was examined using regression analysis and the result is shown in Table 5. Adjusted  $R^2$  was

0.5087 and this implies that the level of E-Banking service quality accounts for 50.87 percent of variation in customer satisfaction .The significance of this value was tested with the analysis of variance (ANOVA) and the calculated F- value was 4.1064 which was significant at (P< 0.05). Findings revealed that responsiveness, reliability and assurance affects customer's satisfaction positively and significantly. This may be due to the fact that E-Banking services offer speed, efficiency, comfort and security compared to physical banking procedures. This finding is in line with the submission of Addai et al. (2015), Srivastav and Mittal, (2016); Ismail and Alawamleh (2017) who also found that E-banking service quality were associated with increased customers' satisfaction. However, empathy and tangibility, though positive have no significant effect on customers' satisfaction.

# 5. Conclusion

The study investigated the effect of E-Banking usage on customers' satisfaction in Oyo state, Nigeria. Specifically, the study examined the perception of respondents towards usage of E-banking services, assessed the relationship between dimensions of E-Banking services and customers' satisfaction and investigated the effect of E- Banking usage on customers' satisfaction. Based on the results discussed above, it is possible to conclude that E-banking usage have a significant and positive effect on customers' satisfaction. This is because E-Banking services have highly reduced the visits of respondents to banking halls, and also reduced waiting time for services.

Moreover, findings revealed that the importance of reliability, responsiveness and assurance as predictors of customer satisfaction in E-banking in Nigeria cannot be underestimated. However, tangibles and empathy produced positive but insignificant results. This may be due to the fact that E-banking in Nigeria has not still attained the usability as in the developed countries. Therefore, this study recommends that all banks in Nigeria should aggressively create continuous awareness to the society by using different media emphasizing the usage and benefits of e-banking services. Also, banks should intensify their efforts to keep customers satisfaction above the current level and conduct constant surveys to measure customers' satisfaction.

## Limitation and Suggestion for further Studies

The results of the study are limited to the south western part of Nigeria; studies from other parts of the country may reveal different results due to cultural differences. Also, cross-sectional research design was used in the study; another possible direction for future studies is to conduct a longitudinal study to see whether or not the variables and their relationships are consistent with time.

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