Received: September 2024
Accepted: December 2024
DOI: 10.7862/rz.2024.mmr.21

Olusola Enitan OLOWOFELA[1]
Benjamin Oludotun LISOYI[2]
Kehinde Isaiq OLAIYA[3]

THE DIMENSIONS OF ELECTRONIC (E)-BANKING SERVICE QUALITY ON CUSTOMER SATISFACTION: EVIDENCE FROM NIGERIA

This study investigates the dimensions of electronic (e)-banking service quality on customer satisfaction. The data were collected among bank customers within Lagos State, Nigeria vis a vis a validated closed-ended questionnaire from a sample of three hundred and eighty-three (383) questionnaires were returned. Descriptive analysis and regression analysis were used to analyse the data collected and test the study hypothesis. The results of this study revealed that ease to use, reliability and security have a positive significant impact on customer satisfaction. This shows that customers will be satisfied and be willing to use e-banking platform if it is easy to use, reliable and there is privacy for the financial transactions. The findings of this study has significantly contributed to academics and practitioners in the area of behavioral finance and likewise understand the need of different segment of customers of financial institutions.

Keywords: electronic (e)-banking, customers, customer satisfaction, service quality.

1. INTRODUCTION

The 21st-century banking sector operates within intricate and competitive environments as evidenced by evolving circumstances and a vast financial market. The pivotal role played by banks in the economic progress of any nation is undeniable due to their financial intermediation role and other services that are delivered electronically. This shows that banking of the 21st-century are encountering swift transformations due to the ingenuity and continually evolving electronic services in the financial market (Alkhowaiter, 2020; Ogare, 2013). Interestingly, the accessibility to technological progress has heightened individuals' awareness of global occurrences at their fingertips (Alkhowaiter 2020; Amin 2016). The electronic mechanism like electronic funds transfer

[1] Olusola Enitan Olowofela, Olabisi Onabanjo University, Ago-Iwoye, Nigeria; e-mail: olowofelaolusola@gmail.com (corresponding author). ORCID: 0000-0003-2611-7736.
[2] Benjamin Oludotun Lisoyi, Wesley University, Ondo, Nigeria; e-mail: oludotun.lisoyi@wesleyuni.edu.ng. ORCID: 0000-0001-6217-9999.
[3] Kehinde Isaiq Olaiya, Olabisi Onabanjo University, Ago-Iwoye, Nigeria; e-mail: kenkenolaiya@gmail.com. ORCID: 0000-0003-4793-8525.

(EFT), point of sale (POS) systems, mobile wallets, agency banking, automated teller machines (ATMs), mobile banking, internet banking etc. assumes a crucial function in this context, serving as a medium for connectivity, knowledge dissemination, shopping, entertainment and most importantly, accessing online financial services delivery (Tseng, Wei, 2020; Zheng et al., 2019).

Interestingly, one of the benefits banks derive from electronic banking products and services delivery is improved efficiency and effectiveness of their operations so that more transactions can be processed faster and most conveniently, which will undoubtedly impact significantly on the overall returns (Isa-Olatinwo, Uwaleke, Ibrahim, 2022; Dong, Yin, Liu, Hu, Li, Liu, 2020; Asiyanbi, Ishola, 2018). Whereas on the other hand, the customers enjoy several benefits but not limited to quick convenience, service delivery, enhanced security, reduced frequency of going to banks physically and reduced cash handling, minimization of transaction cost, timesaving, instant notifications and alerts etc. (Raji, Zamani, 2021; Haadi, Ajibola, 2018; Jenevive, Anyanwaokoro 2017). However, this technological advancement has also unveiled a "dark side" that has negatively impacted many users. A significant issue is the increased vulnerability to cyber fraud and identity theft. Cybercriminals exploit weaknesses in security systems, leading to unauthorized access to customers' accounts and personal information. According to the Nigerian Inter-Bank Settlement System (NIBSS), there was a reported increase in e-fraud cases, with over 46,000 incidents in 2020 alone, resulting in substantial financial losses for customers (NIBSS, 2020). These incidents have not only led to direct financial losses but have also eroded trust in electronic banking systems, making customers wary of utilizing these services despite their convenience (Islam, 2021). The study of Nwarize (2023) further buttress trust deficit as submitted that about 70% of bank customer's express concerns over the safety of their personal data when using electronic banking services.

Another major concern is the frequent technical glitches and downtimes experienced by electronic banking platforms. Customers often face difficulties in accessing their accounts, completing transactions, or resolving issues promptly due to system failures or maintenance activities. A study by Bamidele (2021) revealed that over 30% of electronic banking users in Nigeria reported experiencing service interruptions at least once a month, which significantly disrupted their financial activities (Bamidele, 2021). The Central Bank of Nigeria (CBN) also acknowledged in its 2020 annual report that frequent downtimes in banking systems are a critical issue affecting service delivery (CBN, 2020). Moreover, the lack of responsive customer service exacerbates these frustrations, leaving customers feeling helpless and dissatisfied. Mathew., Jose and Chacko (2020) found that poor customer service response times were a common complaint among electronic banking users, with many customers reporting delayed resolutions to their issues.

Consequently, while electronic banking offers numerous advantages, these dark side experiences highlight the need for banks to enhance their cybersecurity measures and improve the reliability and user support of their digital platforms to maintain customer trust and satisfaction (Al-Khalaf, Choe, 2020; Choudhury, 2013). Therefore, this study tends to examine dimensions of electronic (e)-banking service quality in terms of ease of use, reliability and security on customer satisfaction. The remaining part of the paper is organized as follows. Section two includes a literature review. Section three describes the methodology proposed for this empirical research. section four discussion of findings and finally, Section five discusses the main conclusions and recommendation

2. THEORETICAL AND LITERATURE REVIEW

This study was hinged on technology acceptance model (TAM) propounded by Fred Davis in 1989. The model submitted that individuals accept and use new technologies is subjected to two major factors i.e. perceived usefulness and perceived ease of use. Perceived usefulness enhance productivity and enhance performance as a result of application of technology and whereas perceived ease of use is of the opinion that technology will be convenient and easy to use. Nevertheless, this theory seems to be oversimplified Venkatesh, Morris, Davis, and Davis (2003). The electronic payment system and customer satisfaction in the Nigerian banking system was assessed by Chukwu, Chimarume and Ezeaku in 2021. In order to gather primary data, questionnaires were distributed to 70 bank customers in Akwa, Anambra State. The data were evaluated using the paired sample t-test and the descriptive methodology. The selected electronic payments included point-of-sale and ATM technologies. The findings showed that customers' actual experiences significantly fell short of expectations in all e-payment systems. However, as the study only looked at two of the many various types of electronic payment systems, this finding cannot be accepted.

The relationship between electronic payment methods and customer retention in banks was examined by Odusina, and Onakoya (2017). Using this study technique, a few Nigerian banks were selected and contrasted based on their track records in the industry, degree of competition, and ICT compliance. A questionnaire was also developed to collect data on the EPS grey area, customer retention, and bank entrepreneurial growth. In total, 200 persons responded to the survey. The relationship between the electronic payment system and customer retention was demonstrated to be favorable and significant after the findings were evaluated using SPSS. In addition to the lack of sufficient detail in the methodology, the study's conclusions may not be applicable to the overall population due to the study's small sample size.

Haadi, and Ajibola (2018) investigated the effects of E-banking services on customer satisfaction at a few chosen bank branches in Oyo State's capital city of Ibadan. The study's methodology included cross-sectional survey design and sample methods. The study used Pearson correlation as its analysis approach. The findings showed that electronic banking products, such as internet banking (85%), ATMs (98%), and electronic transfers (97%), were widely used. Constraints include things like faulty internet networks, bank fraud, and financial losses brought on by failed electronic transactions. Customers prefer e-banking due to its cashless nature, accessibility of cash, time savings from bank trips, and simple transactions. This result, however, cannot be accepted because a sample size of 100 does not adequately represent the study's population. Grace, and Oyinlola (2017) conducted research on the effect of financial technology services on bank customers' happiness in Nigeria. The study included 243 college students who correctly answered a standardized questionnaire. The statistical package for social science (SPSS) was used for data analysis and presentation. The report claims that the availability of financial technology services, how those services are run, and business processes all have an impact on client satisfaction with banks. But additional research is required, and it should not only rely on data collected from college students but also from other bank clients.

Simon, and Thomas (2016) investigated how electronic banking affected customer satisfaction in a few Kenyan commercial banks. The study made use of a structural questionnaire, sampling techniques, and a descriptive research design. Simple regression is the mode of analysis used. The final product showed how user-friendly and customer-

satisfying online banking, automated teller machines, and mobile banking were. Despite the fact that this study did not compare its results to any earlier research. Raji, and Zamani (2021) also examined into how electronic banking affected consumer satisfaction in Nigeria's Kwara state. Primary survey-based data were employed in the study, and correlation and regression analysis were performed to further analyze them. The correlation study revealed a positive relationship between each independent variable and customer satisfaction. The results of the regression analysis showed that security, transactional speed, usability, reliability, and responsiveness had a significant and positive impact on customer satisfaction. The study, however, ought to have treated e-payment services, such as ATMs, Internet banking, mobile banking, and POS, as independent variables.

Additionally, Muhammad, Yusuf, and Shuaibu (2022) investigated how financial technology affected deposit money banks in Nigeria's delivery of financial services. The study uses secondary data obtained from annual reports and accounts of listed deposit money banks on the Nigerian Stock Exchange. The study's method of analysis used descriptive statistics for correlation and regression. The findings showed that the financial services offered by Nigeria's listed deposit money banks are strongly impacted by POS and mobile banking. Isibor, Omankhanlen, Okoye, Achugamonu, Adebayo, Afolabi, and Ayodeji (2018) also studied how electronic banking technology affects consumer satisfaction and economic growth in Nigeria. The study used questionnaires to gather primary data from 100 participants. Following data analysis with the SPSS Statistical Package, the pair sample t-test was used to evaluate the acquired data. E-banking has improved customer satisfaction and strengthened Nigeria's economy, claims the poll.

Nnamani, and Makwe (2019) evaluated how customer satisfaction was affected by electronic payments. Both primary and secondary data sources were employed in this investigation. The CBN electronic banking guideline, GTB plc.'s annual report, and the CBN annual report were utilized to obtain secondary data, while questionnaires were employed to collect the main data. The statistical mean scores from the surveys were used to evaluate the data, and the chi-square test was used to determine the significance of the responses. The results of the survey revealed that the adoption of electronic banking products and services has significantly increased consumer satisfaction. Similar research was conducted by Nwekpa, Djobissie, Chukwuma, and Ezezue (2020) using the case study of Nigeria's Fidelity Bank PLC to examine how electronic banking affects customer satisfaction. The study used a survey research approach with a sample size of 41 individuals. The Pearson product moment correlation analysis was used to test the theory. The findings demonstrated that customer satisfaction is significantly impacted by Fidelity Bank PLC's online credit card payment systems. However, the study's sample size was too small for the results to be accepted.

Offei, and Nuamah-Gyambrah (2016) assessed how electronic banking affects customer satisfaction using a case study of GCB bank limited Koforidua. Data was gathered by questionnaires, and descriptive analysis was utilized to examine it. It was found that, despite the bank's use of the service, customers weren't completely utilizing internet banking because it was quite pricey to use. Despite this, no theory was applied in this study's research. Hamid, Alabsy, and Mukhtar (2018) examined the impact of electronic banking services on customer satisfaction in the Sudanese banking sector. The primary data for the study were gathered via a questionnaire. The data that was gathered was also examined using descriptive analysis. The analysis finds that there are statistically significant differences in consumer satisfaction levels with the electronic services provided by Sudanese banks. It also showed how internet banking services have a favorable impact

on consumer satisfaction. Although there is a theoretical gap in this research, no theory was criticized in this investigation.

Junejo, Asif Ali Shah, and Bachani evaluated the effect of fintech on client satisfaction, an empirical data from the Allied Bank of Pakistan (2019). The primary research tool used was a questionnaire. The data was examined using factor analysis, regression analysis, and multiple regression analysis. The analysis's results showed that customer satisfaction was positively and significantly impacted by safety, dependability, and service security. Ijeoma, Akujor, and Mbah (2020) studied how customer satisfaction in commercial banks in Imo State was impacted by electronic banking. A questionnaire served as the main data gathering technique and provided the study's core data. The statistical method of choice for the investigation was the Pearson Product Moment Correlation Techniques. The results demonstrated a strong correlation between electronic banking and customer satisfaction for United Bank for Africa Plc, Access Bank Ltd, and Keystone Bank Ltd. It also shown a strong correlation between the use of mobile banking and automated teller machines at United Bank for Africa Plc, Access Bank Ltd, and Keystone Bank Ltd. Additionally, the student demonstrates a bad correlation between point of sale and customer satisfaction in certain banks.

Hindu, Onyeukwu, and Osuagwu (2018) examined E-banking, client satisfaction, and service quality. A total of 66895 clients were present, and 398 replies were picked at random. Both formal surveys and interviews were used to collect the data. The data that was gathered was analyzed using descriptive statistics. The research showed a strong correlation between excellent customer service and customer satisfaction. There was not enough literature review in this investigation. Jenevive, and Anyanwaokoro (2017) conducted research on the effect of electronic payment methods (EPM) on the profitability of commercial banks in Nigeria. The data source was secondary data. Data were acquired from the five banks included in the study's Annual Reports and Statements of Accounts, as well as the Central Bank of Nigeria's (CBN) Statistical Bulletin. This study has found that automated teller machines (ATMs) and mobile phone payments have a significant impact on the profitability of Nigeria's commercial banks. On the other hand, point of sale (POS) seems to have little to no effect on the banks' profitability.

3. METHODOLOGY

This study used descriptive survey research on other to understand and describe the existing conditions or variables that is being investigated and likewise assist the researcher to have contact relationship with the respondents to accurate information. Sekaran, and Bougie (2016) submitted that descriptive survey design allows the collection of data through the distribution of questionnaire to some selected respondent and also assist to give a lucid explanation of the variable of enquiry in the research process (Saunders, Lewis, and Thornhill, 2018). The study used purposive and convenience sampling technique and therefore selected Ikeja local government are of Lagos State. The study area was chosen because it is the state capital and commercial hub of Lagos state, and it enabled the researcher to have a proper coverage and gathering of information needed from the respondents of study. Hence, the population of this study included three- hundred and thirteen thousand, three hundred and thirty-three (313,333). The sample was drawn from the population of the study using Taro Yamane formula technique. However, the total number of respondents for the purpose of this study was three hundred and ninety-nine (399) questionnaires distributed to respondents in the selected local government area in

Lagos State. The size was considered sufficiently large enough to carry adequate estimation of the study. Three hundred and ninety-nine (399) copies of questionnaires were administered out to the respondents but only three hundred and eighty-three (383) questionnaires were returned.

Therefore, a total number of three hundred and eighty-three (383) returned questionnaires were valid instruments for this study. The research instrument used for this study is a questionnaire designed by the researcher. The questionnaire is divided into two sections. The first section seeks to obtain the demographic information of the respondents while the second section contains items relating to the objectives set out from the chapter one of this study. In addition, to assess the validity of the questionnaire, this study conducted a face and content test before administering the questionnaire to respondents, whereas reliability was achieved through a split halve method. Cronbach Alpha was used to ascertain the questionnaire reliability which revealed a coefficient alpha of 0.8765 suggesting that the study used a strong reliable instrument.

4. RESULT AND DISCUSSION

This study used analytical techniques to analyze data collected from different respondent with simple percentage analysis.

Table 1. Descriptive Statistics of the Data

Demographic	Frequency	Percentage
Age		
18–24 years	202	52.7
25–34 yrs	71	18.5
35–44 yrs	12	3.1
46 and above	8	2.1
Total	383	100
Marital Status		
Single	223	58.2
Married	87	22.7
Divorced	73	19.1
Total	383	100
Educational Qualification		
Primary Education	110	28.7
Secondary Education	71	18.5
Technical Education	40	10.4
First Degree	127	33.2
Postgraduate	35	9.1
Total	383	100

Sources: (Field Survey, 2024).

Table 1 shows demographic characteristics of respondent in terms of age, educational qualification and marital status. The age respondent indicated that 18–24 yrs has a frequency of 202 with a percentage of 52.7%. 25–34 yrs has a frequency of 155 with

a percentage of 40.5%. 35–44 yrs has a frequency of 12 with a percentage of 3.7%. The age section indicated that age bracket of 18–24 filled the questionnaire the most among other age group.

The educational qualification shows that primary education has a frequency of 71 with a percentage of 18.5%. Secondary education has a frequency of 110 with a percentage of 28.7%. Technical education has a frequency of 40 with a percentage of 10.4%. Postgraduate has a frequency of 35 with a percentage of 9.1%. First degree has a frequency of 127 with a percentage of 33.2%. The educational qualification that have embraced the electronic banking is the first-degree holders.

The marital status shows that single has a frequency of 223 with a percentage of 58.2%. Married has a frequency of 87 with a percentage of 22.7%. Divorced has a frequency of 73 with a percentage of 19.1. The single respondent are the bracket that have embraced the electronic banking in Nigeria.

Table 2. Ease of Use in Electronic (E)-Banking Service Quality

S/N	Research Statements	Mean	SD	SA	A	D	SD	UD	Total
1	Does the navigation on the e-banking platform allow users to easily find the services and information they need without extensive searching or multiple clicks	1.82	0.78	185 (48.3)	190 (49.6)	4 (1.0)	4 (1.0)	0 (0.0)	383 (100)
2	Do the instructions and prompts clear and easy to understand?	2.28	1.37	154 (40.7)	138 (36.0)	89 (23.2)	00 (00)	00 (0.0)	383 (100)
3	Do customers find the process efficient and free of unnecessary steps or delays?	2.67	1.50	127 (33.2)	155 (40.5)	21 (5.5)	23 (6.0)	57 (14.9)	383 (100)
4	Do customers experience a seamless user experience regardless of the device they are using?	1.88	1.20	111 (29.0)	107 (27.9)	35 (9.1)	54 (14.1)	76 (19.8)	383 (100)
5	Do customers encounter any difficulties in creating an account, setting up security features, or logging in to their accounts?	1.86	1.10	239 (62.4)	2 (5)	101 (26.4)	29 (7.9)	12 (3.1)	383 (100)

Sources: (Field Survey, 2024).

A total of 185 participants, constituting 48.3%, strongly concur with the assertion in Q1. Similarly, 190 respondents, representing 49.6%, agree with the statement in Q1. On the other hand, 4 participants, making up 1.0%, express disagreement with the statement in Q1. Furthermore, 4 respondents, accounting for 1.0%, strongly disagree with the statement in Q1, while none of the participants remain undecided on the matter. In the case

of Q2, 154 participants, equivalent to 40.7%, strongly agree with the statement. Additionally, 138 respondents, comprising 36.0%, agree with the assertion in Q2. Conversely, 89 participants, representing 23.2%, disagree with the statement in Q2. Moreover, none of the respondents strongly disagree with the statement in Q2, and none are undecided on the issue.

Regarding Q3, 127 participants, amounting to 33.2%, strongly agree with the statement. Likewise, 155 respondents, making up 40.5%, agree with the statement in Q3. Meanwhile, 21 participants, accounting for 5.5%, express disagreement with the statement in Q3. Furthermore, 23 respondents, representing 6.0%, strongly disagree with the statement in Q3, while 57 participants, constituting 14.9%, remain undecided on the matter. In the context of Q4, 111 participants, equivalent to 29.0%, strongly agree with the statement. Additionally, 107 respondents, comprising 27.9%, agree with the assertion in Q4. On the other hand, 35 participants, representing 9.1%, disagree with the statement in Q4. Moreover, 54 respondents, accounting for 14.1%, strongly disagree with the statement in Q4, while 76 participants, making up 19.8%, remain undecided on the issue.

Furthermore, 239 participants, constituting 62.4%, strongly agree with the statement in Q5. Moreover, 2 respondents, representing 5%, agree with the assertion in Q5. Conversely, 101 participants, making up 26.4%, express disagreement with the statement in Q5. Additionally, 29 respondents, comprising 7.9%, strongly disagree with the statement in Q5, while 12 participants, accounting for 3.1%, remain undecided on the matter.

Table 3. Reliability of Electronic (E)-Banking Service Quality

S/N	Research Statements	Mean	SD	SA	A	D	SD	UD	Total
1	Do customers experience frequent errors or inaccuracies when conducting transactions?	1.46	1.05	13 (3.4)	60 (15.7)	18 (4.7)	278 (72.6)	14 (3.7)	383 (100)
2	Does the e-banking service provide uninterrupted access to account information and transaction capabilities?	1.59	0.78	311 (81.2)	19 (5.0)	11 (2.9)	32 (8.4)	10 (2.6)	383 (100)
3	Are transactions completed within the expected time frames consistently?	2.99	1.66	202 (52.7)	155 (40.5)	12 (3.1)	8 (2.1)	6 (1.6)	383 (100)
4	Are transaction confirmations and receipts provided promptly and accurately after each transaction?	1.86	1.10	110 (28.7)	71 (18.5)	40 (10.4)	35 (9.1)	127 (33.2)	383 (100)
5	Do customers find that their account balances and transaction histories are updated in real-time without delays or discrepancies?	1.59	0.78	169 (44.1)	38 (9.9)	117 (30.4)	58 (15.1)	0 (0)	383 (100)

Sources: (Field Survey, 2024).

278 respondents, constituting 3.4%, strongly concur with the assertion presented in Q6. Moreover, 60 respondents, representing 15.7%, express agreement with the statement in Q6. On the contrary, 18 respondents, amounting to 4.7%, hold a dissenting view regarding the statement in Q6. In addition, 13 respondents, comprising 72.6%, strongly oppose the statement in Q6, while 14 respondents, accounting for 3.7%, remain undecided on the matter. 311 respondents, equivalent to 81.2%, firmly agree with the statement provided in Q7. Similarly, 19 respondents, making up 5.0%, support the statement in Q7. Conversely, 11 respondents, totaling 2.9%, express disagreement with the statement in Q7. Furthermore, 32 respondents, representing 8.4%, strongly disagree with the statement in Q7, whereas 10 respondents, constituting 2.6%, remain indecisive about the matter.

202 respondents, amounting to 52.7%, strongly agree with the assertion outlined in Q8. Additionally, 155 respondents, making up 40.5%, concur with the statement in Q8. Conversely, 12 respondents, accounting for 3.1%, disagree with the statement in Q8. Moreover, 8 respondents, comprising 2.1%, strongly oppose the statement in Q8, while 6 respondents, representing 1.6%, are undecided on the issue. 110 respondents, representing 28.7%, strongly agree with the statement articulated in Q9. Furthermore, 71 respondents, constituting 18.5%, express agreement with the statement in Q9. On the other hand, 40 respondents, making up 10.4%, disagree with the statement in Q9. Moreover, 35 respondents, amounting to 9.1%, strongly disagree with the statement in Q9, while 127 respondents, accounting for 33.2%, remain undecided on the matter.

169 respondents, equivalent to 44.1%, strongly agree with the assertion made in Q10. Similarly, 38 respondents, totaling 9.9%, agree with the statement in Q10. Conversely, 117 respondents, comprising 30.4%, disagree with the statement in Q10. Additionally, 58 respondents, making up 15.1%, strongly oppose the statement in Q10, while 0 respondents, representing 0%, are undecided on the matter.

202 participants, constituting 52.7%, express strong agreement with the assertion made in Q11. Furthermore, 155 participants, representing 40.5%, concur with the statement in Q11. A total of 12 participants, equivalent to 3.1%, hold a contrary opinion to the statement in Q11. Moreover, 8 participants, amounting to 2.1%, express strong disagreement with the statement in Q11, whereas 6 participants, making up 2.0%, remain undecided regarding the statement in Q11. 272 respondents, making up 71.0%, strongly agree with the statement presented in Q12. Additionally, 96 respondents, representing 25.1%, express agreement with the statement in Q12. A minority of 4 respondents, accounting for 1.0%, disagree with the statement in Q12. Furthermore, 6 respondents, constituting 1.6%, strongly disagree with the assertion in Q12, while 5 respondents, amounting to 1.3%, are undecided about the statement in Q12.

In the case of Q13, 278 respondents, comprising 72.6%, strongly agree with the statement. Similarly, 60 respondents, making up 15.7%, express agreement with the statement in Q13. On the contrary, 18 respondents, accounting for 4.7%, disagree with the assertion in Q13. Moreover, 13 respondents, representing 3.4%, strongly disagree with the statement in Q13, while 14 respondents, equivalent to 3.7%, are undecided regarding the statement in Q13. Regarding Q14, 311 respondents, constituting 81.2%, strongly agree with the statement. Conversely, 19 respondents, representing 5.0%, express agreement with the statement in Q14. A total of 11 respondents, making up 2.9%, disagree with the assertion in Q14. Additionally, 32 respondents, amounting to 8.4%, strongly disagree with the statement in Q14, while 10 respondents, comprising 2.6%, remain undecided about the statement in Q14.

Table 4. Security of Electronic (E)-Banking Service Quality

S/N	Research Statements	Mean	SD	SA	A	D	SD	UD	Total
1	Does the implementation of advanced encryption technologies impact the perceived security of electronic banking services among customers?	1.49	0.99	202 (52.7)	155 (40.5)	12 (3.1)	8 (2.1)	6 (2.0)	383 (100)
2	Does customer trust in the security of E-banking services influence their overall satisfaction with service quality?	1.46	1.05	272 (71.0)	96 (25.1)	4 (1.0)	6 (1.6)	5 (1.3)	383 (100)
3	Does the use of two-factor authentication effectively prevent unauthorized access to E-banking accounts?	1.59	0.78	278 (72.6)	60 (15.7)	18 (4.7)	13 (3.4)	14 (3.7)	383 (100)
4	Does the presence of robust security measures in E-banking platforms mitigate common security challenges faced by banks?	2.99	1.66	311 (81.2)	19 (5.0)	11 (2.9)	32 (8.4)	10 (2.6)	383 (100)
5	Does regulatory compliance and adherence to security standards enhance the perceived quality and security of electronic banking services among users?	1.45	2.34	202 (52.7)	155 (40.5)	12 (3.1)	8 (2.1)	6 (1.6)	383 (100)

Sources: (Field Survey, 2024).

202 respondents, representing 52.7%, strongly agree with the statement in Q15. Furthermore, 155 respondents, constituting 40.5%, express agreement with the statement in Q15. A total of 12 respondents, making up 3.1%, disagree with the assertion in Q15. Moreover, 8 respondents, equivalent to 2.1%, strongly disagree with the statement in Q15, while 6 respondents, accounting for 1.6%, remain undecided regarding the statement in Q15.

4.1. Hypotheses Testing

H01: Ease of use in electronic (e)-banking has no significant effect on service quality

Table 5. Hypothesis Testing Results on Impact of Ease of Use in E-Banking on Service Quality

Variable	Co-efficient	Std-Error	t-stat	P-value
Constant	5.361	0.587	9.138	0.000
Ease of use	0.545	0.047	11.644	0.000
R^2	0.563	**F.cal**		135.575
Adj. R^2	0.561	**Sig.F**		0.000

Source: (Researcher's Survey Field, 2024).

The table 5 demonstrates that ease of use has a significantly positive impact on service quality, with a coefficient of $\beta 1 = 0.545$ and a p-value less than 0.05. The table also shows that the overall model is statistically significant at the 5% level, as indicated by an F-calculated value of 135.965 with a p-value less than 0.05. The R-squared value, which measures the goodness of fit for the regression model, indicates that the independent variable (ease of use) accounts for 56.3% ($R^2 = 0.563$) of the variation in the dependent variable (service quality). If another variable were added, the model would still explain 56.1% ($R^2 = 0.561$) of the variation.

H02: Reliability in electronic (e)-banking has no significant effect on service quality

Table 6. Hypothesis Testing Results: Effect of Reliability in E-Banking on Service Quality

Variable	Co-efficient	Std-Error	t-stat	P-value
Constant	8.841	0.321	27.562	0.000
Reliability	0.480	0.026	10.668	0.000
R^2	0.530	**F.cal**		418.138
Adj. R^2	0.528	**Sig.F**		113.813

Source: (Researcher's Survey Field, 2023).

Table 6 shows that reliability has a significantly positive impact on service quality, with a coefficient of $\beta 1 = 0.480$ and a p-value less than 0.05. However, the overall model is statistically insignificant at the 5% level, as indicated by an F-calculated value of 418.138 with a p-value greater than 0.05. The R-squared value, which measures the goodness of fit for the regression model, indicates that the independent variable (reliability) accounts for 53.0% ($R^2 = 0.530$) of the variation in the dependent variable (service quality). If another variable were added, the model would still explain 52.8% ($R^2 = 0.528$) of the variation.

H03: Security of electronic (e)-banking has no significant effect on service quality

Table 7. Hypothesis Testing Results: Effect of Security in E-Banking on Service Quality

Variable	Co-efficient	Std-Error	t-stat	P-value
Constant	10.458	0.386	27.097	0.000
Security	0.156	0.035	4.423	0.000
R^2	0.549	**F.cal**		19.567
Adj. R^2	0.546	**Sig.F**		0.000

Source: (Researcher's Survey Field, 2024).

Table 7 indicates that security has a significantly positive effect on service quality, with a coefficient of $\beta 1 = 0.156$ and a p-value less than 0.05. The table also shows that the overall model is statistically insignificant at the 5% level, as evidenced by an F-calculated value of 19.567 and a p-value less than 0.05. The R-squared value, which measures the goodness of fit for the regression model, reveals that the independent variable (security) accounts for 54.9% ($R^2 = 0.549$) of the variation in the dependent variable (service quality). If another variable were added, the model would still explain 54.9% ($R^2 = 0.549$) of the variation.

4.2. Discussion of Findings

Findings from hypothesis one, it was revealed that ease of use has positive significant effect on service quality of electronic banking. This suggested that ease to use of electronic banking platform by bank customers enhance service quality provided by the bank. This finding align with technology acceptance model and the study of (Ahmad, Bhatti, and Hwang, 2020; Khrais, 2018; Firdous, and Farooqi, 2017) who have earlier argued that ease to use are major factors that determine attitude of customer towards using e-banking and likewise behavioral intentions to use e-banking. The second hypothesis further revealed that customer reliability on e-banking has positive significant effect on service quality. This suggested that reliable e-banking services platform enhance customer satisfaction and service quality perceptions. Therefore, this shows that banks should continue to provide high quality service to their customers which will assist them to build stronger customer relationships. This finding align with the study of Beshir and Zelalem, 2020; Hammoud, and Bizri, El Baba, 2018) and contrarily to the findings of Sharma, Singh, J., and Singh, A., 2020).

In addition, the third hypothesis revealed that adequate security of e-banking platform has positive significant effect on service quality. This suggest that safeguarding customer's financial transactions and other financial data enhance customer confidence and the overall positive experience with the service providers. This finding align with the study of Sharma, Singh, J., Singh, A., 2020; Ali and Omar, 2016).

5. CONCLUSIONS AND RECOMMENDATIONS

This study aimed to examine the impact of E-Banking service quality on customer satisfaction in the Nigeria banking sector. Interestingly, previous studies had been done in developed and developing markets based on the literature reviewed. The study used qualitative approach by administering questionnaire among the customers of different banks. Findings shows that the three hypotheses in this study were supported by the data, and the main contribution of this study was that ease to use, reliability and security as a service quality variable, was the main predictor of customer satisfaction in this E-Banking services in Nigeria. The findings of this study will contribute to a better understanding of what and how Nigerian banks may leverage advancements in information technologies to develop financial innovational services that would meet the expectations of Nigerian customers.

Based on the findings of this study, following recommendations are made in order to enhance quality service delivery of e-banking in Nigeria deposit money banks: firstly, the management of the financial institutions should adopt more seamless technological innovation as a means of making electronic banking platform more user friendly especially when designing new product and regular usability testing. Secondly, Nigeria deposit money banks should design robust customer feedback machineries that can help banks to

understand the need and address the challenges of customers in other to continuously improve their e-banking services.

Thirdly, Nigeria deposit money banks should prioritize and implement strong security measures. Through the adoption of stringent security protocols, financial institutions have the ability to instill confidence in clients and safeguard monetary transactions, consequently enhancing the general level of service. The presence of a secure platform serves to reassure customers regarding the safety of their confidential data, thereby cultivating a sense of trust in the utilization of electronic banking services. Lastly, Nigeria deposit money banks should engage in continuous training of bank employees regarding the most up-to-date e-banking advancements and strategies for customer service is identified as another crucial suggestion. Employees who are well-versed in these areas are able to provide enhanced assistance and direction to clients, thereby upholding superior service benchmarks and managing concerns efficiently. Therefore, these recommendations would assist Nigerian deposit money banks enhance the quality of e-banking services that can increased customer satisfaction and loyalty and also maximize shareholder wealth.

Suggestion for Further Studies

How gender and cultural differences influence perceptions of e-banking service quality and their impact on customer satisfaction.

Analyze how e-banking service quality contributes to customer satisfaction during crises, such as economic downturns, pandemics or cybersecurity breaches.

Acknowledgements

We acknowledge how our universities for providing enabling environment.

Author Contributions: Introduction: O.E., B.O.; Literature Review: O.E, B.O.; Gaps in Literature: O.E., B.O., K.I; writing-review and editing: O.E., K.I.; References: B.O., K.I.; Collation of inputs from the Co-authors: B.O., K.I.

Funding: Author declares that there were no sources of funding or supporting agencies.

Data Availability Statement: Author declares that the data to empirically examine the objectives of this article was obtained through own research.

Conflicts of Interest: The authors declare no conflicts of interest.

All authors have read and agreed to the published version of the manuscript.

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