

Determinant Factors of Customer Satisfaction in Banking Industry: A Study of Selected Banks in Agbor, Delta State

Peter Abude¹ and Okeke Titus C².

¹Department of Port management, Nigerian maritime University, Okerenkoko

²Department of marketing, Nnamdi Azikiwe University, Awka

Mail: abudepeter@yahoo.com; tc.okeke@unizik.edu.ng

Abstract

The study examined the extent better service charges, service quality, advance technology and good service recovery will have any effect on customer satisfaction. Specifically, the study sought to ascertain the relationship between service charge, service quality, technology, service recovery and customer satisfaction. Survey design was adopted for the study. The population of study includes customers of zenith bank, Ecobank and UBA in Agbor, Delta state. Since is not easy to study the population of three banks customers, the researcher interviewed 10 customers, of the banks using YES or NO question. Of the 10 interviewed, 8 responded positively, while 2 gave a negative respond towards the interview. Data for the study were gotten from primary sources via questionnaire distributed to the respondents. Data collected was presented in percentage and also analyzed by taking average of the items. From the hypotheses tested, the null hypotheses were rejected in case of service quality, service recovery and technology but accepted in service charges. This implies that service quality, service recovery and technology have positive significant relationship with customer satisfaction and service charges have negative effect on customer satisfaction in banking industry. Base on the findings and conclusion above, the following recommendations were made that bank staff should continue to offer prompt and reliable service to their customers, since is one of the bases of satisfaction.

Keywords: Service charge, service quality, technology, service recovery and customer satisfaction

Introduction

In Nigeria today customer satisfaction is the basic dream of every bank, which usually influences customers to switch from one bank to the other in other to get the best services from them. The success or failure of any bank will be positively influences by the level of satisfaction customer derive from their services. It is one of the basic key in the banking industries that enable the bank to retain its customers and even attract competitors' customers as a result of positive words of mouth of the present customers of the bank. Customer satisfaction can be achieved by offering personalized, flexible and adjustable services to suit the needs of customer (Ndubisi 2006). Olaleke, (2010) noted that service quality has a significant effect on customer satisfaction, together with other researchers that considered factors like knowledgeable employers, friendly employers, staff efficiency, bill clarity and adequate security as the factors that lead to customer satisfaction.

Jamal and Naser, (2002) defined Customer satisfaction as the consumer feeling or attitude towards a service or product recently used. Customer satisfaction therefore is a person's feelings of pleasure or excitement that result from comparing the services received and the one expected from the bank. Provision of better techniques and technology has really contributed significantly

in customer satisfaction in banking services. Despite all the facilities available, customers still complaint of services charges they receive from those facilities and the level of insecurity attributed as a result of those technologies. However, the researcher intended to study why customer complaint about chargers and other negative attributes like unfriendly staff, network failures etc. and also to determine if better service charges, service quality, advance technology and service recovery will have any positive effect on customer satisfaction.

The banking industry today is very dynamic, vibrant and competitive. Customers are smarter, more informed and have greater access to basic information they derived from modern banks which usually lead them to switch to other bank that offer better services at lower price in case of charges in other to seek for satisfaction.

Kish (2000) noted that some customers stop patronizing the services of some banks as a result of spending more hours in queues, complaints are not handled with urgency, not giving prior notice to provide their identification card when going for their deliverables (cheque books, withdrawals forms, regular SMS alerts) and they are not informed of any of increase in service charges and rates which have cause them a lot of displeasure.

However, the study seek to address the extent better service charges, service quality, advance technology and good service recovery will have any effect on customer satisfaction.

Research Objective

- i. To find out the relationship between service charge and customer satisfaction.
- ii. To find out the relationship between service quality and customer satisfaction.
- iii. To determine the relationship between technology and customer satisfaction
- iv. To find out the relationship between service recovery and customer satisfaction

Research question

- i. What is the relationship between service charge and customer satisfaction?
- ii. What is the relationship between service quality and customer satisfaction?
- iii. What is the relationship between technology and customer satisfaction?
- vi. What is the relationship between service recovery and customer satisfaction?

Research Hypotheses

- i. There is no relationship between service charge and customer satisfaction.
- ii. There is no relationship between service quality and customer satisfaction.
- iii. There is no relationship between technology and customer satisfaction
- iv. There is no relationship between service recovery and customer satisfaction

Literature Review

Customer satisfaction

Customer satisfaction is the consumer feelings or attitude towards a service or product recently used (Jamal and Naser, 2002). Oliver, (1997) opined that customer satisfaction as judgment that a product or service feature, or the product or service itself, provided a pleasurable level of consumption –related fulfillment, including levels of under or over fulfillment. It is the overall psychological evaluation that is based on the customer’s lifetime of product and service experience. A Customers get satisfy when experience service is greater than expectation. Dadkhad (2009) reported that a feeling of excitement or dissatisfaction is seen when the customer expectation and received services are at the same level, or the services is higher or lower than customer expectation.

However, a satisfied customer will continue to patronize the services of the bank and even help to attract the competitors' customers as a result of positive words of mouth, while unsatisfied customer will chase customers out of the bank. Most previous studies concluded that customer satisfaction leads to customer loyalty (Ehigie, 2006; Khan and Fasih, 2014; Shed and Ode, 2013 and Ojo, 2010. etc)

Customer feel high level of dissatisfaction when banks impose unnecessarily charges on them. Uddin and Akhter, (2012) said service charge as well as price is determined by several factors such as willingness of the buyer to pay, willingness to accept, costs, markup, legal environment, intensity of competition price substitute etc. A customer that have about 2000 naira in his bank account may notice the account is empty or zero naira at the end of the year where as he made no withdrawal, which is as result of bank charges. Some Banks charges high interest on loan given to customers and unnecessary management fees, were as they give no or little interest to customers that patronize their bank on deposit.

Parasurama, Zeithaml and Berry, (1985) defined service quality as a function of the difference between expected and performance along the quality dimension. Esmaeih, Manesh and Goldshan, (2013) defined service quality as a function of the correlation between customers' basic expectation and their experience and impression before and after receiving the service. Gefen, (2002) defined service quality as a subjective comparison that customers make between the quality of the service they want to receive and what they actually get. It may be seen as the actual gap between what is expected and experience.

However, the better the service render by bank staff to their customers the more their customers get satisfaction and loyalty.

Advance technology has made transaction easier in the banking industry. Customers instead of queuing in the banking hall to pay in or withdraw money can easy do that with the help of ATM for withdrawal and even do mobile transfer to pay money to someone in need. Customers now have opportunity of transferring money during weekend. At this level of technology, customers feel very satisfy and switch to those banks that have actually adopted the system. A study carried out by Dawar, (2013) noted that technology has significant relationship on customer satisfaction. Service recovery refers to the actions an organization takes in response to a service failure (Gronroos, 1988). Any organization that discover the area of failure and respond speedily to ratify such failure will on the long runs retain its customers. Customer that complaint today about network failure in the bank may get more disappoint if experience same thing the following day. Michel and Meuter, (2008) said service failure can lead to negative disconfirmation and ultimately dissatisfaction, though appropriate service recovery effort may restore a dissatisfied customer to the state of satisfaction.

Empirical Review

A study carried out Kombo, (2015) on customer satisfaction in the Kenyan baking industry. The study investigated the current pattern of customer satisfaction in the Kenyan banking industry. A questionnaire survey was administered to 403 bank customers of the top five banks in Kenya. Software SPSS 22.0 were used to analyze the data gathered from the survey. The results of the analysis demonstrate that the overall level of customer satisfaction is more than 60%, which shows that the most important factor for customer satisfaction is the wide availability of bank branches, and the factor associated with customer dissatisfaction is the high price of products and services.

A study carried out by Mburu, Zly & Cullen (2013) on determinants of customer satisfaction in the Kenyan banking industry. The study intends to examine the antecedents of customer satisfaction from the banking customer's perspective. In order to achieve this aim, structured questionnaire were issued to 520 customers spread across the 43 banks in Kenya. The studied variables include profitability, retention and share of wallet. The findings from the study established a positive relationship between bank-related factors and customer satisfaction in Kenyan banks. Data were analysed using descriptive statistics, SPSS, correlation and chi-square. The conclusion from this study is that customer satisfaction can lead to higher rates of retention of the Kenyan bank customers.

A study carried out by Narteh & Kuada (2014) on customer satisfaction with retail banking services in Ghana. An extensive review of the extant literature was used to identify the theoretical determinants of customer satisfaction in retail banking and their measurement scales. Data were collected using questionnaire administered through personal interviewed 650 customers of retail banks and the results were factor analyzed and regressed. The result indicated that rational, core and tangible dimensions of services were positively associated with customer satisfaction in retail banking in Ghana.

A study carried out by Uddin & Akhter (2012) on determinants of customer satisfaction of banking industry in Bangladesh. The study aims to investigate through the development and operationalised constructs of service quality, service charge, perceived value and customer satisfaction. An exploratory factor analysis and structural equation modeling were used to analyze data. Measurement model and structural model indicate that service quality and fair service charge both have positive direct impact on customer satisfaction in banking industry. It was further observed that they also have indirect influence on customer satisfaction through perceived value.

A study carried by Loh, (2013) on determinants of customer satisfaction in domestic retail banking sector. The main purpose of this study is to identify determinants of customer satisfaction in domestic retail banking sector. The variables include service quality, corporate image, perceived value, price of services and relationship marketing. 250 questionnaires were distributed physically among customer. Pearson correlation were used to run the analyses and the result indicate that service quality, corporate image, perceived value and relationship marketing have significant relationship with customer satisfaction in domestic retail banking sector.

A study carried out by Dawar, (2013) on factors affecting customer satisfaction in present highly competitive banking industry. The main objective of the paper is to identify all the main factors that influence the customer satisfaction in banking at the present contemporary global and highly competitive economy. A comparative research design has been chosen to explicate the determinants of customer satisfaction. 100 customers were used for the study. Factor analysis was used to analyses data. All the variables reliability, technology, commitment, empathy and privacy have significant value on customer satisfaction.

A study carried out by Shode, (2017) on determinants and outcome of customer satisfaction at the commercial bank of Ethiopia; Evidence from Addis Ababa. Seven branches were selected randomly. 178 questionnaires were distributed and data was analysed using version 16.00 SPSS. Correlation and regression were used to examine statistical significance of the relationship between the variables, service quality, service features and customer complaints

handling system were found as major determinants of customer satisfaction in commercial bank of Ethiopia.

A study carried out by Ozatac, Saner & Sen, (2016) on customer satisfaction in the banking sector. A case of North Cyprus. The aim of the study is to evaluate the determinants of customer satisfaction on higher service quality in North Cyril Banking sector. SERVQUAL model were used as determinants factors and a total of 207 customers were used for the study. Empirical analyses were carried out by SPSS 18. The results reveal that customer satisfaction in the banking sector depends on good and firm relations, building trust between customers and bank employees. And also positive words of mouth play a major role in customer satisfaction.

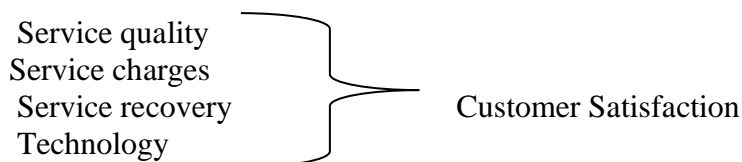
A study carried out by Adams, Bashiru& Abdulai, (2016) on customer satisfaction in the banking industry in Ghana; A study of GCB Bank limited in Wa Municipality. The study employed the cross-sectional research design and the mixed research approach so that the research findings could be generalized. Primary data were collected from 155 customers of GCB bank using questionnaire. Data were analyzed using descriptive statistics. The study revealed that current account, savings account and ATM services were at least of high quality to majority of the respondents. And over 40% of the respondents were not satisfied with the quality of the bank products and services.

A Study carried out by Uddin & Akhter, (2012), the purpose of the research is determinant of customer satisfaction on mobile phone services in Bangladesh, a study survey research. The study seeks to explore customer satisfaction and its influencing factors of mobile phone. Empirical results shows that service quality and fair price have indirect influence on customer satisfaction. Sabir, Ghafoor, Hafeez, Akhtar & Rehman, (2014) examine customer satisfaction in restaurants industry in Pakistan. The study variables are quality service, price and environment. 100 questionnaire where distributed and data were analyzed through correlation and multiple regression

Methodology

Conceptual framework

The proposed conceptual framework is given below.



The study model

Population of Study

The population of study includes customers of zenith bank, Ecobank and UBA in Agbor, Delta state.

Sample size determination

Since is not easy to study the population of this three banks customers, the researcher interviewed 10 customers, of the banks using YES or NO question. Of the 10 interviewed, 8 responded positively, while 2 gave a negative respond towards the interview.

However, in order to achieve result or know the number of customers to distribute questionnaire to, the researcher adopted Topman formula, that is unknown population formula as expressed below.

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

Where n = sample size

z = standard deviation given at a corresponding confidence level. (at 95% confidence level is 1.96)

P = assumed percentage of success rate (8/10 = 0.8)

q = (1-P) or percentage of failure rate (2/10 = 0.2)

e = % of level of significance (0.05)

$$n = \frac{Z^2 pq}{e^2}$$

$$n = \frac{1.96^2 \times 0.8 \times 0.2}{0.05^2}$$

$$n = \frac{3.8416 \times 0.8 \times 0.2}{0.0025}$$

$$n = \frac{0.307328}{0.0025}$$

$$n = 122.9$$

$$n = 123 \text{ Customers}$$

Sampling procedure

The researcher adopted quota sampling for the study, by using those customers the study interest on and access to. That is those that will be able to provide good answers to the questions.

Sources of Data

Data for the study were gotten from primary sources via questionnaire distributed to the respondents.

Questionnaire Design and Administration

A self structured questionnaire was constructed and distributed to the respondents. The questionnaire was divided into two sections A and B. Section A contain questions on demographic information of respondents and section B contain core questions that gave information or responses to answer research questions and meet the purpose of the study.

The likert scale which anchors ranging from strongly agree to strongly disagree was used for the study. This is expressed as follows:

5 = strongly agree (SA)

4 = Agree (A)

3 = Undecided (U)

2 = Disagree (D)

1 = Strongly Disagree (SD)

For the purpose of the research work, 123 copies of questionnaire were personally administered to customers by hand and retrieved from the respondent by the researcher that is Zenith bank, Ecobank and UBA customers in Agbor, Delta State in order to ascertain the determinants of customer satisfaction in the banking industry.

Method of Data Analysis:

Received: 24 May 2023

Revised: 2 June 2023

Final Accepted: 11 June 2023

Copyright © authors 2023

DOI: <https://doi.org/10.5281/zenodo.8024184>

Data collected was presented in percentage and also analyzed by taking average of the items.

Formula

Simple percentage $X \times 100/Y$

Where:

X Frequency of response

Y Total number of respondents

Presentation and Analysis of Data

123 questionnaires were issued and retrieved 100, which represent 81 percent of the sample population for the purpose of the study. The questionnaire was designed in two parts, part (A) is the demographic factors of the respondents and part (B) is the study variables obtained from the independent and dependent variables.

Part A

Table 1: Demographic characteristics of Respondents

		Frequency	Percentage	Valid percent	Cumulative percent
Gender	Male	44	44	44	44
	Female	56	56	56	100
	Total	100	100	100	
Age bracket	18-25	27	27	27	27
	26-35	43	43	43	70
	Above 36	30	30	30	100
	Total	100	100	100	
Educational qualification	SSCE	11	11	11	11
	OND/NCE	31	31	31	42
	BSc/HND	35	35	35	77
	Postgraduate	33	33	33	100
	total	100	100	100	
Marital Status	Single	42	42	42	42
	Married	45	45	45	87
	Divorced	13	13	13	100
	Total	100	100	100	
Occupation	Students	33	33	33	33
	Self- employed				
	Civil servants	27	27	27	60
	Total	40	40	40	100
		100	100	100	

Field survey, 2022

Analysis of the data collected above shows that 44% of the respondents are male and 56% female. Customers within the ages of 18-25 are 27%, 26-35 are 43% and above 36 years old are 30%. On the area of education, 11% of the respondents are with SSCE, OND/NCE is 31%, BSc/HND holders are 35% and post graduate holders are 33%. The analysis equally said 42% of the respondents are single, married 45% and divorce 13%. The occupation(s) of the respondents are, civil servant 40%, self employed 27%, and students are 33 %

PART B (Study Variables)

Received: 24 May 2023

Revised: 2 June 2023

Final Accepted: 11 June 2023

Copyright © authors 2023

DOI: <https://doi.org/10.5281/zenodo.8024184>

The independent variables for the study are represented with Y in test for hypothesis, they include (service charge, service quality, technology and service recovery), while the dependent variable is customer satisfaction which is represented with X in hypothesis testing.

Table 2: Customers view on the level of service charges offer by banks

	Items/Variables	SA	A	U	D	SD
	Service charge	5	4	3	2	1
1.	I am satisfy with the monthly charges fixed by my bank	10 (10)	22 (22)	2 (2)	35 (35)	31 (31)
2.	My bank charge too much on loan facility.	5 (5)	12 (12)	7 (7)	39 (39)	37 (37)
3.	I am satisfy with the charges impose on mobile banking by my bank.	15 (15)	20 (20)	3 (3)	34 (34)	28 (28)
	AVERAGE	10 (10)	18 (18)	4 (4)	36 (36)	32 (32)

Field survey, 2022

On the area of average, the result above shows that 10(10) of respondents strongly agreed on the level of service charge of their bank, 18(18) agreed, 4(4) undecided, 36(36) disagreed and 32(32) strongly disagreed. This implies that charges levels on customers are not favourable to them.

Table 3: Customers view of the level of service quality offer by their banks

	Items/Variables	SA	A	U	D	SD
	Service quality	5	4	3	2	1
4.	I love my bank because they treat their customers like king.	38 (38)	42 (42)	3 (3)	5 (5)	12 (12)
5.	My bank staff shows care to its customers by listening to their complains,	43 (43)	51 (51)	3 (3)	2 (2)	1 (1)
6.	My Banks staff keep their transaction record accurately	33 (33)	48 (48)	6 (6)	8 (8)	5 (5)
	AVERAGE	38 (38)	47 (47)	4 (4)	5 (5)	6 (6)

Field survey, 2022

On the area of average the analysis shows that 38(38) of the respondents strongly agreed on the level of service quality offer by their banks, 47(47) agreed, 4(4) undecided, 5 (5) disagreed and 6(6) strongly disagreed. This implies that banks staff offer quality service to their customers.

Table 4; Customers view on level of modern technology of their banks

	Items/Variables	SA	A	U	D	SD
	Technology	5	4	3	2	1
7.	My bank current technology made it possible for one to send money from phone with going to bank.	36 (36)	44 (44)	5 (5)	7 (7)	8 (8)
8	I can easily received and send money abroad with the help of money transfer in my bank with limited charges.	40 (40)	47 (47)	3 (3)	6 (6)	4 (4)
9.	My bank provided many ATM machine which help to reduce the crowd in the banking hall.	47 (47)	35 (35)	4 (4)	8 (8)	6 (6)
	Average	41 (41)	42 (42)	4 (4)	7 (7)	6 (6)

Field survey, 2022

On the area of average, the table above shows that 41(41) of the customers strongly agreed on high level of technology my bank is using, 42(42) agreed, 4(4) undecided, 7(7) disagreed and

6(6) Of the customers strongly disagreed with the level of technology. This implies that the technology use to render services to customers is firm.

Table 5, Customers view on the level of service recovery by banks

Items/Variables	SA	A	U	D	SD
Service recovery	5	4	3	2	1
10. My bank staff can easily apologize to customers when they make mistake.	34 (34)	51 (51)	5 (5)	6 (6)	4 (4)
11. I am fully impressed with the way my bank staff compensate their customers when they discover error in their transaction.	33 (33)	47 (47)	7 (7)	6 (6)	7 (7)
12. Management of my bank resolve customer problems quickly and effectively	44 (44)	43 (43)	3 (3)	6 (6)	4 (4)
Average	37 (37)	47 (47)	5 (5)	6 (6)	5 (5)

Field survey, 2022

The average of the analysis above shows that 37(37) of the customers of bank strongly agreed on the level of service recovery practice by the bank, 47(47) agreed, 5(5) undecided, 6(6) disagreed and 5(5) Of the customers strongly disagreed with the level of service recovery. This implies the level of service recovery practiced by my bank is high.

Table 6, Customers view on the satisfaction they derived from their banks

Items/Variables	SA	A	U	D	SD
Customer satisfaction	5	4	3	2	1
13. I am satisfied with the way my bank handle customers request	34 (34)	51 (51)	4 (4)	7 (7)	4 (4)
14. I intended to continue with my bank because am always satisfy with their services	31 (31)	49 (49)	7 (7)	7 (7)	6 (6)
15. I will recommend my bank to my friends.	47 (47)	40 (40)	3 (3)	6 (6)	4 (4)
16. I speak positively about my bank to other people	32 (32)	52 (52)	2 (2)	8 (8)	6 (6)
Average	36 (36)	48 (48)	4 (4)	7 (7)	5 (5)

Field survey, 2022

The average of the analysis above shows that 36(36) of the customers of bank strongly agreed on the level of satisfaction they get from their bank services, 48(48) agreed, 4(4) undecided, 7(7) disagreed and 5(5) Of the customers strongly disagreed with the level of satisfaction. This implies that bank customers are satisfy with the services they get.

Data Analyses

In analyzing the data, we first run the descriptive statistics of the variables in the model after which we employed the Pearson’s correlation coefficient and ordinary least square regression to measure the strength and degree of relationship between dependent and independent variables and to identify the most effective and significant tool for attaining customer satisfaction in Nigeria banking industry. This is done with the aid of the Econometric views version 12.

Descriptive Statistics of the Variables in the Model

The sample descriptive statistics is presented in this section. This is where the minimum, maximum, mean, median, variance and standard deviation of the data for the variables used in the study is described.

Table 7. Descriptive Statistics

STATS	C.S	S.C	S.Q	S.R	TEC
-------	-----	-----	-----	-----	-----

Maximum	48	36	47	47	42
Minimum	4	4	4	5	4
Mean	20	20	20	20	20
Median	7	18	6	6	7
Variance	422.6	189.89	432.52	416.00	386.91
Standard deviation	20.557	13.78	20.797	20.396	19.67

E-views 12 computations

Table above depicts the descriptive statistics of the variables in the model. From the table we observe that the maximum value of customer satisfaction is 48, service charge is 36, service quality is 47, service recovery is 47 and technology is 42. Coming to minimum value, customer satisfaction, service charge, service quality and technology are 4 while service recovery is 5. Their mean are all the same at 20 and their median is 7 for customer satisfaction and technology; service quality and service recovery is 6 and service charges is 18. The variance of the values is 422.6 for customer satisfaction, 189.89 for service charges, 432.52 for service quality, 416 for service recovery and 386.91 for technology.

However, their standard deviations are 20.557, 13.78, 20.797, 20.396 and 19.67 for customer satisfaction, service charges, service quality, service recovery and technology respectively.

Test for Hypotheses

The hypotheses of our study was evaluated with the aid of Pearson’s correlation coefficient and ordinary least square regression, because they are used to measure the strength and degree of relationship between two variables. The values are obtained from Pearson correlation of 2-tailed significance. It shows the correlation matrix with the top values containing the Pearson correlation coefficient between all pairs of variables and the bottom values containing two-tail significance of these coefficients.

Hypothesis one

H₀: There is no significant relationship between service charge and Customer satisfaction.

Correlation matrix between service charge and customer satisfaction

Explained variable: Customer Satisfaction

Explanatory variable	Correlation coefficient (r)	T-stat	Probability value
Service charge	-0.3071	-0.5589	0.6153
R ² = 0.0943			

E-views computation

From the table above, we saw that the correlation coefficient between service and customer satisfaction is -0.3071. This means that there is a negative correlation between them which implies that the more service charges impose by the bank will help to reduce the level of satisfaction feel by customers. This variable (service charge) is not significant because the t – value is very low (-0.5589) and the probability value is higher than 0.05 (0.05<0.6153). This means that the role of service charge has no positive role to play in customer satisfaction. R² from the table depicts 0.0943 which shows that 9.43% of something that happens in customer satisfaction is explained by service charge. From this, we conclude that service has no significant relationship with customer satisfaction, this lead to the rejection of alternative hypothesis.

Hypothesis two

H₀: There is no significant relationship between service quality and customer satisfaction.

Correlation matrix between service quality and customer satisfaction

Explained variable: Customer satisfaction

Explanatory variable	Correlation coefficient (r)	T-stat	Probability value
Customer satisfaction	0.9971	22.8693	0.0002
R ² = 0.9943			

E-views computation

From the table above, we notice that the correlation coefficient between service quality and customer satisfaction is 0.9971. This means that there is a strong positive correlation between them. Which implies that an increase in level of service quality from bank staff will increase the customer satisfaction of customers of the bank. This variable (service quality) is very significant because the t – value is very high (22.8693) and the probability value is less than 0.05 (0.05<0.0002). This means that the role of service quality cannot be ignored in explanations of customer satisfaction. R² from the table depicts 0.9943 which shows that 99.43% of something that happens in customer satisfaction is explained by the service quality. We can safely say that service quality has a significant relationship with customer satisfaction, which led to the acceptance of our alternative hypothesis.

Hypothesis three

H₀: There is no significant relationship between technology and customer satisfaction of bank customers

Correlation matrix between technology and customer satisfaction

Explained variable: Customer satisfaction

Explanatory variable	Correlation coefficient (r)	T-stat	Probability value
Technology	0.9818	8.9573	0.0029
R ² = 0.9640			

E-views computation

From the table above, we notice that the correlation coefficient between technology and customer satisfaction is 0.9818. This means that there is a strong positive correlation between them which implies that if banks continue to improve the level of technology in their services, it will on average increase the customer satisfaction. This variable (technology) is very significant because the t – value is high (8.9573) and the probability value is less than 0.05 (0.05<0.0029). This means that the role of improved technology play cannot be ignored in explanations of customer satisfaction. R² from the table depicts 0.9640 which shows that 96.4% of something that happens in customer satisfaction is explained by improve technology. We can safely say that technology has a significant relationship with customer satisfaction. Which led to the acceptance of alternative hypothesis?

Hypothesis four

H₀: There is no significant relationship between service recovery and customer satisfaction of bank customers.

Correlation matrix between service recovery and customer satisfaction

Explained variable: Customer satisfaction

Explanatory variable	Correlation coefficient (r)	T	Probability value
Service recovery	0.9988	35.8883	0.0000
R ² = 0.9977			

E-views computation

From the table above, we saw that the correlation coefficient between service recovery and customer satisfaction is 0.9988. This means that there is a strong positive correlation between them, which implies that willingness of the bank staff to help customers and correct service

failure, will on average increase the customer satisfaction to the bank. This variable (service recovery) is significant because the t – value is high (35.8883) and the probability value is less than 0.05 ($0.05 < 0.0000$). This means that the role of service recovery cannot be ignored in explanations of customer satisfaction. R^2 from the table depicts 0.9977 which shows that 99.77% of alterations that occur in customer satisfaction are explained by service recovery. From the foregoing analyses, we can safely say that service recovery has a significant relationship with customer satisfaction, which lead to the acceptance of our alternative hypothesis.

Discussion of the Findings

The result of the Pearson product moment correlation coefficient (r) and ordinary least square analysis tools signal that there is variation in determinant of customer satisfaction. Empirical evidence in this research suggests that service quality, service recovery and technology have a significant degree of influence on customer satisfaction measures. While service charge has no significant influence.

Hypothesis 1. Service charge has negative significant influence on customer satisfaction in the bank. The correlation coefficient (r) = -0.3071 for two-tailed test at 0.05 level of significance with t value = -0.5589 and probability is 0.6153. The null hypothesis is accepted, which is not in line with the findings of Uddin & Akhter, 2012.

Hypothesis 2. Service quality has positive significant influence on customer satisfaction. The t value is 22.8693, probability 0.0002 and the correlation coefficient (r) is 0.9971, for two-tailed test at 0.05 level of significance. The null hypothesis (H_02) was rejected. Other researchers have empirically found positive relationship between service quality and customer satisfaction. Is also in line with the studies of (Uddin & Akhter, 2012 ; Loh, 2013; Shode., 2017 and Ozatzc, Saner & sen, 2016

Hypothesis 3, technology has positive significant influence on customer satisfaction. The t value is 8.9573, probability of 0.0029 and the correlation coefficient (r) is 0.9818, and the null hypothesis was rejected. This is also consistence with the research findings of Dawar, 2013.

Hypothesis 4, service recovery has positive significant influence on customer loyalty in zenith bank. The t value is 35.8883, probability is 0.0000 and the correlation coefficient (r) 0.9988, the null hypothesis (H_0) was rejected.

Summary of the Findings

From the hypotheses tested above, the null hypothesis wer rejected in case of service quality, service recovery and technology but accepted in service charges. This implies that service quality, service recovery and technology have positive significant relationship with customer satisfaction and service charges have negative effect on customer satisfaction in banking industry.

Conclusion

The researcher concluded that service quality, service recovery and technology have significant influence on customer satisfaction, and service charges has negative significant on customer satisfaction.

Recommendation

Base on the findings and conclusion above, the following recommendations were made that:

1. Bank staff should continue to offer prompt and reliable service to their customers, since is one of the bases of satisfaction.

2. Regular training of staff which will make them to be updated about current information in the banking sectors.
3. The need of providing more internet services to customers, such as mobile banking, workable ATM machines in order to ensure that customers are well satisfy with the level of technology.
4. In case of service failure, they should quickly respond to that by responding positively towards it by correcting the mistake immediately.

References

- Adams, A., Bashiru, M & Abdulai, I.A., (2016). Customer satisfaction in the banking industry in Ghana. A case of GCB Bank Limited in Wa Municipality. *Journal of social science studies*. Vol 3, No. 2
- Dadkhah ,M.R. (2009). Customer Oriented Concepts and Principles.1st Ed. Shahr Ashobo. Tehran.
- Dawar, P. (2013). A study of factors affecting customer satisfaction in present highly competitive banking industry. Asia pacific. *Journal of marketing & management review*. Vol 2(2)
- Ehigie, B.O. (2006). Correlates of customer loyalty to their bank; a case study in Nigeria. *Int. journal of bank marketing*, 24(7), 494-508.
- Esmaeila, Manesh and Golshan (2013). Service quality, customer satisfaction and customer loyalty in Raja Rail transportation company. *International research journal of applied and basic science*. Vol, 5 (3, 347-352.
- Gefen, D. (2002). Customer loyalty in e-commerce. *Journal of Association for information system*. 3. 27-51.
- Gronroos, C. (1988). A Service Quality. The six criteria of good perceived service quality. *Review of business* , Winter , Vol. 9, pp 10-13
- Jamal A, Naser K. (2002). Customer Satisfaction and retail banking: An Assessment of some of the key antecedents of customer satisfaction in retail banking. *International Journal of Bank Marketing*. 20(4): 146-160.
- Khan, M. M. and Fasih M. (2014). Impact of service quality on customer satisfaction and customer loyalty. Evidence from banking sector in Pakistan. *Pakistan Journal of commerce and social science*. Vol. 8(2), 331-354.
- Kish, J. (2000). Before your customer leave. *Banking marketing*. 32(2). 30
- Kombo, F., (2015). Customer satisfaction in the Kenyan banking industry. *Journal of international studies*. Vol 8. No 2, pp 174-186.
- Loh, C.W.(2013). Determinants of customer satisfaction in domestic retail banking sector. MBA research work.
- Mburu, P. Zyl, H.V. & Cullen, M.(2013). Determinants of customer satisfaction in kenyan banking industry. *European journal of business and management*. vol. 5, no . 2
- Michel, S. and Meuter, M. (2008). The service recovery paradox. True but overrated. *International journal of service industry management* , vol. 19. No. 4,pp. 441-457.
- Ndubuisi, N.O. (2006). A Structural equation modeling of the antecedent of relationship quality in the Malaysia banking sector. *Journal of financial services marketing*, 11(12), 131-141.

- Narteh, B.& Kuada, J. E. (2014). Customer satisfaction with retail banking services in Ghana. *Thunderbird international business review*.
- Ojo, O., (2010). The relationship between service quality and customer satisfaction in Telecommunication industry. Evidence from Nigeria. *Journal of Brand Broad Research in Accounting, Negotiation, and Distribution*. 1(1) 88-100.
- Oliver, R. L. (1999). Whence Consumer Loyalty. *Journal of Marketing* 63 (Special edition) 33-34
- Ozatac, N., Saner, T. & Sen, Z.S.(2016). Customer satisfaction in the banking sector. The case of north Cyprus. *Procedia economics and finance* 39. 870-878.
- Parasuraman, A. Zeithaml, V. and Berry, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing* Vol. 49, Pp.41-50.
- Sabir, R.I., Ghafoor, O., Hafeez, I., Akhtar, N. & Rehman, A.U.(2014). Factors affecting customer satisfaction in restaurants industry in Pakistan. *International review of management and business research*. vol 3. Issue 2
- Shed, M. C., and Ode, E. (2013). Evaluating customer –perceived service quality and customer satisfaction in the Nigerian banking industry. *Far East journal of Psychology and business*, vol. 11, issue 3.
- Shode, K.T., (2017). Determinants and outcome of customer satisfaction at the commercial bank of Ethiopia. Evidence from Addis Ababa. *African journal of marketing management*. Vol 9(7).pp 107-119
- Uddin, M.B., & Akhter, B. (2012). Determinants of customer satisfaction of banking industry in Bangladesh. *Pak. J. comer. Soc. Sci.* vol. 6(2), 242-256
- Uddin, M.B., & Akhter, B. (2012). Determinants of customer satisfaction in mobile phone service in Bangladesh. *Management & marketing* , vol. X, Issue 1

Appendix 1

Service charge and customer satisfaction

	X	Y
Mean	20.00000	20.00000
Median	18.00000	7.000000
Maximum	36.00000	48.00000
Minimum	4.000000	4.000000
Std. Dev.	13.78405	20.55480
Skewness	0.076842	0.527192
Kurtosis	1.400831	1.444127
Jarque-Bera	0.537700	0.735931
Probability	0.764258	0.692141
Sum	100.0000	100.0000
Sum Sq. Dev.	760.0000	1690.000
Observations	5	5

Dependent Variable: X
Method: Least Squares

Received: 24 May 2023

Revised: 2 June 2023

Final Accepted: 11 June 2023

Copyright © authors 2023

DOI: <https://doi.org/10.5281/zenodo.8024184>

Date: 08/05/22 Time: 19:49

Sample: 1 5

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.11834	10.00981	2.409470	0.0951
Y	-0.205917	0.368466	-0.558849	0.6153
R-squared	0.094288	Mean dependent var		20.00000
Adjusted R-squared	-0.207615	S.D. dependent var		13.78405
S.E. of regression	15.14751	Akaike info criterion		8.562723
Sum squared resid	688.3408	Schwarz criterion		8.406498
Log likelihood	-19.40681	F-statistic		0.312313
Durbin-Watson stat	2.505741	Prob(F-statistic)		0.615268

Service quality and customer satisfaction

	X	Y
Mean	20.00000	20.00000
Median	6.000000	7.000000
Maximum	47.00000	48.00000
Minimum	4.000000	4.000000
Std. Dev.	20.79663	20.55480
Skewness	0.475453	0.527192
Kurtosis	1.321451	1.444127
Jarque-Bera	0.775364	0.735931
Probability	0.678628	0.692141
Sum	100.0000	100.0000
Sum Sq. Dev.	1730.000	1690.000
Observations	5	5

Dependent Variable: X

Method: Least Squares

Date: 08/05/22 Time: 19:45

Sample: 1 5

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.177515	1.198433	-0.148122	0.8916
Y	1.008876	0.044115	22.86926	0.0002
R-squared	0.994297	Mean dependent var		20.00000
Adjusted R-squared	0.992395	S.D. dependent var		20.79663
S.E. of regression	1.813548	Akaike info criterion		4.317621
Sum squared resid	9.866864	Schwarz criterion		4.161396
Log likelihood	-8.794053	F-statistic		523.0030
Durbin-Watson stat	2.513263	Prob(F-statistic)		0.000183

Technology and customer satisfaction

	X	Y
Mean	20.00000	20.00000
Median	7.000000	7.000000
Maximum	42.00000	48.00000
Minimum	4.000000	4.000000
Std. Dev.	19.65960	20.55480
Skewness	0.399927	0.527192
Kurtosis	1.174106	1.444127
Jarque-Bera	0.827844	0.735931
Probability	0.661052	0.692141
Sum	100.0000	100.0000

Received: 24 May 2023

Revised: 2 June 2023

Final Accepted: 11 June 2023

Copyright © authors 2023

DOI: <https://doi.org/10.5281/zenodo.8024184>

Sum Sq. Dev. 1546.000 1690.000

Technology and customer satisfaction

Dependent Variable: X
Method: Least Squares
Date: 08/05/22 Time: 19:38
Sample: 1 5
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.218935	2.847996	0.427997	0.6975
Y	0.939053	0.104836	8.957338	0.0029
R-squared	0.963957	Mean dependent var		20.00000
Adjusted R-squared	0.951943	S.D. dependent var		19.65960
S.E. of regression	4.309775	Akaike info criterion		6.048823
Sum squared resid	55.72249	Schwarz criterion		5.892598
Log likelihood	-13.12206	F-statistic		80.23390
Durbin-Watson stat	2.104372	Prob(F-statistic)		0.002936

Service recover
and customer
satisfaction

	X	Y
Mean	20.00000	20.00000
Median	6.000000	7.000000
Maximum	47.00000	48.00000
Minimum	5.000000	4.000000
Std. Dev.	20.39608	20.55480
Skewness	0.497496	0.527192
Kurtosis	1.362688	1.444127
Jarque-Bera	0.764750	0.735931
Probability	0.682239	0.692141
Sum	100.0000	100.0000
Sum Sq. Dev.	1664.000	1690.000

Service recovery and customer satisfaction

Dependent Variable: X
Method: Least Squares
Date: 08/05/22 Time: 19:59
Sample: 1 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.177515	0.750246	0.236609	0.8282
Y	0.991124	0.027617	35.88828	0.0000
R-squared	0.997676	Mean dependent var		20.00000
Adjusted R-squared	Included observations: 5	S.D. dependent var		20.39608
S.E. of regression	1.135321	Akaike info criterion		3.380883
Sum squared resid	3.866864	Schwarz criterion		3.224658
Log likelihood	-6.452207	F-statistic		1287.969
Durbin-Watson stat	2.853658	Prob(F-statistic)		0.000048