

## Impact of Electronic Banking on Customer Satisfaction

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### ABSTRACT

The rapid changes in business operations in contemporary times in the form of technological improvement require banks in Nigeria to serve their customers electronically. Traditionally, banks have been in the forefront of harnessing technology to improve their products and services. The banking industry and its environment in the 21st century is highly complex and competitive and therefore the need for information and communication technology to take center stage in the operations of banks. Electronic banking is critical in the transformation drive of banks in areas such as products and services and how they are delivered to customers. Thus, it is seen as a valuable and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks. Given the significant role of electronic banking in the developmental drive of banks, information technology has been found to lead to improvement in business efficiency and service quality and hence attract customers as well as retain them.

Keywords: Banking, customer, impact, business and industry

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### INTRODUCTION

The rapid changes in business operations in contemporary times in the form of technological improvement require banks in Nigeria to serve their customers electronically. Traditionally, banks have been in the forefront of harnessing technology to improve their products and services. The banking industry and its environment in the 21st century is highly complex and competitive and therefore the need for information and communication technology to take center stage in the operations of banks [1].

Electronic banking is critical in the transformation drive of banks in areas such as products and services and how they are delivered to customers. Thus, it is seen as a valuable and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks [2]; [3]. Given the significant role of electronic banking in the developmental drive of banks, information technology has been found to

lead to improvement in business efficiency and service quality and hence attract customers as well as retain them [4].

According to [5], Electronic banking contributes significantly to the distribution channels of banks such as automated teller machine (ATM), Phone - banking, Tele-banking, PC-banking and now internet banking [6]. In addition, transfer of funds, viewing and checking savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved significantly as a result of internet banking [7]. This implies that, Electronic banking has resulted in efficiency in service delivery in the banking sector because customers can transact business from one side of the country to another and from both long and short distance.

Other scholars argued that, electronic banking has transformed traditional

banking practices to the extent that it has been found to create a paradigm shift in marketing practices resulting in positive performance in the banking sector [8]; [9]. This shows that the delivery of efficient and quality service is facilitated by information technology. Similarly, [10] indicated that electronic banking provides an important channel to sell products and services of banks and is perceived to be a necessity for banks to be successful.

#### LITERATURE REVIEW

This chapter gives an insight into various studies conducted by outstanding researchers, as well as explained terminologies with regards to impact of electronic banking on customer satisfaction.

The chapter also gives a resume of the history and present status of the problem delineated by a concise review of previous studies into closely related problems.

#### Theoretical Framework

There are a number of theories surrounding the satisfaction and service paradigm.

Many theories have been used to understand the process through which customers form satisfaction judgments. The theories can be broadly classified under three groups: Expectancy disconfirmation, Equity, and Attribution. The expectancy disconfirmation theory suggests that consumers form satisfaction judgments by evaluating actual product/service. Four psychological theories were identified by Anderson that can be used to explain the impact of expectancy or satisfaction: Assimilation, Contrast, Generalized Negativity, and Assimilation-Contrast. Some of the theories are discussed in this chapter.

#### Assimilation Theory

Assimilation theory is based on [11] dissonance theory. Dissonance theory posits that consumers make some kind of cognitive comparison between expectations about the product and the perceived product performance. This view of the consumer post-usage evaluation was introduced into the satisfaction

Therefore, service quality and efficiency in the banking industry has increased tremendously worldwide in the world due to the integration of information technology into banking operation. The present study seeks to investigate the extent to which the electronic banking concept has impacted on customer satisfaction in Commercial Banks.

literature in the form of assimilation theory.

According to [12], consumers seek to avoid dissonance by adjusting perceptions about a given product to bring it more in line with expectations. Consumers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced.

#### Contrast Theory

Contrast theory was first introduced by [13]; [14] define contrast theory as the tendency to magnify the discrepancy between one's own attitudes and the attitudes represented by opinion statements. Contrast theory presents an alternative view of the consumer post-usage evaluation process than was presented in assimilation theory in that post-usage evaluations lead to results in opposite predictions for the effects of expectations on satisfaction. While assimilation theory posits that consumers will seek to minimize the discrepancy between expectation and performance, contrast theory holds that a surprise effect occurs leading to the discrepancy being magnified or exaggerated.

According to the contrast theory, any discrepancy of experience from expectations will be exaggerated in the direction of discrepancy. If the firm raises expectations in his advertising, and then a customer's experience is only slightly less than that promised, the

product/service would be rejected as totally un-satisfactory. Conversely, under-promising in advertising and over-delivering will cause positive disconfirmation also to be exaggerated.

### **Negativity Theory**

This theory developed by [15] suggests that any discrepancy of performance from expectations will disrupt the individual, producing 'negative energy'. Negative theory has its foundations in the disconfirmation process. Negative theory states that when expectations are strongly held, consumers will respond negatively to any disconfirmation. "Accordingly dissatisfaction will occur if perceived performance is less than expectations or if perceived performance exceeds expectations.

This theory developed by [16] suggests that any discrepancy of performance from expectations will disrupt the individual, producing "negative energy." Affective feelings toward a product or service will be inversely related to the magnitude of the discrepancy.

### **Disconfirmation Theory**

Disconfirmation theory argues that 'satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations'.<sup>42</sup> Szymanski and Henard found in the meta-analysis that the disconfirmation paradigm is the best predictor of customer satisfaction.<sup>43</sup> [17] cites Oliver's updated definition on the disconfirmation theory, which states "Satisfaction is the guest's fulfilment response. It is a judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfilment".

### **The Concept Of Electronic Banking**

The concept of electronic banking has been defined in many ways; [18] defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different

terminal devices such as personal computers and mobile phone with browser or desktop software, telephone or digital television.

According to [19] electronic banking defined as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders.

[20] also defined electronic payment as a system of payment whereby transaction takes place electronically without the use of cash. [21] defined electronic banking (e-banking) is nothing but e-business in banking industry. E-banking is a generic term for delivery of banking services and products through electronic channels, such as the telephone, the internet, the cell phone, etc. The concept and scope of e-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably [22]. [23] argues that electronic banking is a product of e-commerce in the field of banking and financial services. In what can be describe as business to consumer domain for balance enquiry request for cheque books recording stop payment instruction balance transfer instruction account opening and other forms of traditional banking service. Banks are also offering payment services on behalf of their customer who shop indifferent e-shops.

In simple words, e-banking implies provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the internet - a new delivery channel that has facilitated banking transactions for both customers and banks [24].

### **Types Of E-Banking**

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.

### **ATM**

Automated Teller Machine (ATM) 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 can be accessed 24 hours/7 days with account balance enquiry [19].

### **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 able 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 [17].

### **POS**

Point of sale (POS) 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. Because of the expense involved with a POS system, the eBay guide recommends that if annual revenue exceeds the threshold of \$700,000, investment in a POS system will be advantageous. POS systems record sales for business and tax purposes. Illegal software dubbed "zappers" is increasingly used on them to falsify these records with a view to evading the payment of taxes [15].

### **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. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information [13].

### **CUSTOMER SATISFACTION**

According to [11], satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire. [9] defined satisfaction as a judgment following a consumption experience - it is the consumers judgment that a product provided (or is providing) a pleasurable level of consumption-related fulfillment. [7] defined satisfaction as a person's feelings of pleasure or disappointment resulting from comparing a products perceived performance (or outcome) in relation to his or her expectations. Satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight. Most research confirms that the confirmation or disconfirmation of pre-consumption expectations is the essential determinant of satisfaction. This means that customers have a certain predicted product performance in mind prior to consumption. During consumption, customers experience the product performance and compare it to their expected product performance level. Satisfaction judgments are then formed based on this comparison. The resulting judgment is labeled positive disconfirmation if the performance is better than expected, negative

disconfirmation if it is worse than expected and simple confirmation if it is as expected. In short, customers evaluate product performance by comparing what they expected with what they believe they received.

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

During the recent years, the development of e-channels has dramatically changed the rules and operation in the banking industry [4]. [6] mentioned that while the industry has moved instantly to deploy and offer new banking services via e-channels for customers and in consequence the e-banking services have boomed promptly. Today, several financial institutions are endeavoring to emphasize customer-oriented services. For this sake, it is crucial to implement new banking services in order to develop and keep better relationships with customers. Hence building up competitive predominance almost depends on customers' satisfaction with banking service. It is recognized that banks gaining higher customer satisfaction will have a conspicuous marketing ascendancy because the higher customer satisfaction is associated with greater revenues, increased cross-sell ratios, higher customer retention and bigger market share [14].

A study conducted by [12] examined the impact of customer satisfaction on customers' behavioral responses. The findings of the study indicated that when customers assessed customer satisfaction to be high, they either decided to stay with the existing service provider or subdue their negative behavioral intentions. Customer satisfaction is also found to have strong positive association with word-of mouth communication. The research results confirm prior research and indicate that the customer satisfaction dimensions are not industry specific, but also country specific. The authors suggest developing strategies to enhance behavioral responses to customer satisfaction and prohibit negative ones. Such strategies can include meeting customers desired service levels, preventing service problems from occurring, dealing effectively with

dissatisfied customers, solving service problems effectively when they occur and dealing with customer complaints positively.

### **Challenges and Opportunities of E-Banking**

The changing financial landscape has brought with it new challenges for bank management and regulatory and supervisory authorities. The major ones stem from increased cross-border transactions resulting from drastically lower transaction costs and the greater ease of banking activities, and from the reliance on technology to provide banking services with the necessary security [20]. While electronic banking can provide a number of benefits for customers and new business opportunities for banks, it exacerbates traditional banking risks. Even though considerable work has been done in some countries in adapting banking and supervision regulations, continuous vigilance and revisions will be essential as the scope of e-banking increases. In particular, there is still a need to establish greater harmonization and coordination at the international level. Moreover, the ease with which capital can potentially be moved between banks and across borders in an electronic environment creates a greater sensitivity to economic policy management. To understand the impact of e-banking on the conduct of economic policy, policymakers need a solid analytical foundation. Without one, the markets will provide the answer, possibly at a high economic cost. Further research on policy-related issues in the period ahead is therefore critical [5]. The primary challenge for banks is to provide consistent service to customers irrespective of the kind of channel they use. The more a bank relies on electronic delivery channels, the greater the potential for reputation risks. There are some serious implications of international e-banking. It is a common argument that low transaction costs potentially make it much easier to conduct cross-border banking electronically. For many banks, cross-border operations offer an opportunity to reap economies of scale.

But cross-border finance also needs a higher degree of cross-border supervision. Such cooperation may need to extend to similar supervisory rules and disclosure requirements (for efficiency and to avoid regulatory arbitrage) and some harmonizing of legal, accounting and taxation arrangements [8].

Major concerns of electronic transactions are the issues of security and privacy. In the developed countries like France, 3 out of 40 purchases on line and the remaining 37 are reluctant to use on line services and the reason is security and privacy which is the major threats to perform online business. It is not only the duty of industry but also the duty of government assuring people to perform secure electronic transactions [17].

When we see the challenges and opportunities of e-banking in Nigeria only 20% of the Nigerian households are connected to IT network and a large number of people are served by one bank branch even compared to other African countries. Un-served market, stable and secure political environment, rapidly growing mobile infrastructure, availability of delivery channels (outlets), safe and sound financial sector are the most important opportunities in Nigeria.

Low level of financial literacy of the public, level of readiness and capacity of financial institutions to provide service, infrastructure, insufficient cash flow in rural areas limited potential agents, and presence of a few branches in rural areas are some of the challenges facing the country. Legal and related issues, the importance of looking in to the role of newly emerging third party technical providers, reconsidering pre-paid balance requirements and widening the scope of mobile banking service are also critical [13].

[4] described in Nigerian, among the known common problems which are related to electronic banking few of them are listed below.

1. Lack of banking services through the web or other electronic means such as using mobile phone.
2. Data and network security and privacy.

3. Lack and limitation of government policies, regulations and e-commerce laws, as well as legislation to protect workers and to make the Internet secure.
4. Weak telecommunications.
5. Broken and slow Internet connections.
6. Lack of Internet awareness.

But in recent years the Nigerian government has a grand plan for the improvement of ICT infrastructures hoping for Nigeria to leapfrog into the information age.

### Research Questions/Hypothesis

Based on the research objectives, the study will test the following questions:

1. What are the electronic banking products of Guaranty Trust Bank Nig Plc?
2. Has the introduction of e-banking significantly affected service delivery of Guaranty Trust Bank Nig Plc?
3. Has e-banking positively affected service delivery in Guaranty Trust Bank Nig Plc?
4. What are the possible solutions to e-banking challenges in Nigeria?
5. Given the usage of Electronic banking services, how satisfied are customers of the bank?

Based on the study problem, this study aims to test the following hypotheses:

**H<sub>0</sub>:** Electronic banking products and services have not significantly improved customers satisfaction

**H<sub>A</sub>:** Electronic banking products and services have significantly improved customers satisfaction

### Sources of Data

Primary data was obtain through questionnaire while secondary data was obtained through source documents from the internet.

The researcher uses both the primary and secondary data in the study. The primary data are collected by the researcher through the use of questionnaire while the secondary data are data collected from CBN electronic banking guideline,

annual report of GTBPlc, and CBN annual report etc.

**Method of Data Analysis**

The statistical mean scores was used to analyze the Livert’s five-point questionnaire while the frequency 10 unit and simple percentage was used to analyze respondents characteristics. The criteria for calculating the mean is:-  
 Mean (x) -  $\frac{\sum fx}{n}$

The chi-square test was employed by the researcher to test the significance of the responses from the credit officers of GTBPlc (respondent). The chi square test is performed by defining the numbers

categories and observing the number of case falling into each category and knowing the expected number of cases fully in each category, the formulae for the chi-square is: $Z^2 = \frac{\sum (o_i - e_i)^2}{e_i}$

Where  $Z^2 =$  Chi-square

$O_i =$  Number of observed case in category  $i$

$E_i =$  Number of expected cases in category  $i$

$K =$  Number of category, summation runs from  $i=1$  to  $i=K$

**DATA**

**Data Presentation and Analysis**

The data presented below were gathered during field work

**Bio data of respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	25	46.3	46.3	46.3
	female	29	53.7	53.7	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table1 above shows the gender distribution of the respondents used for this study.

Out of the total number of 54 respondents, 25respondents which

represent 46.3percent of the population are male.

29 which represent 53.7 percent of the population are female.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-20years	4	7.4	7.4	7.4
	21-30years	10	18.5	18.5	25.9
	31-40years	15	27.8	27.8	53.7
	41-50years	20	37.0	37.0	90.7
	above 50years	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 2 above shows the age distribution of the respondents used for this study.

4 respondents which represent 7.4percent of the population are between 15-20years. 10 respondents which represent 18.5 percent of the population are between 21-30years.15respondents which represent 27.8percent of the population are between 31-40years.20 respondents

which represent 37.0percent of the population are between 41-50years.5respondents which represent 9.3percent of the population are above 50 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FSLC	8	14.8	14.8	14.8
	WASSCE/NECO/GCE	10	18.5	18.5	33.3
	OND/HND/BSC	18	33.3	33.3	66.7
	MSC/PGD/PHD	18	33.3	33.3	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 3 above shows the educational qualification of the respondents used for this study.

8 respondents which represent 14.8 percent of the population are FSLC holders.

10 respondents which represent 18.5 percent of the population are WASSCE/NECO/GCE holders.

18 which represent 33.3 percent of the population are OND/HND/BSC holders.

18 which represent 33.3 percent of the population are MSC/PGD/PHD holders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	24	44.4	44.4	44.4
	married	24	44.4	44.4	88.9
	divorced	4	7.4	7.4	96.3
	widowed	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 4 above shows the marital status of the respondents used for this study.

24 respondents which represent 44.4 percent of the population are single.

24 respondents which represent 44.4 percent of the population are married.

4 respondents which represent 7.4 percent of the population are divorced.

2 respondents which represent 3.7 percent of the population are widowed.

### Tables based on research questions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	27.8	27.8	27.8
	agree	20	37.0	37.0	64.8
	undecided	10	18.5	18.5	83.3
	disagree	5	9.3	9.3	92.6
	strongly disagree	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 5 shows the responses of respondents that electronic banking is the safest and fastest means of banking

15 of the respondents representing 27.8 percent strongly agree that electronic

banking is the safest and fastest means of banking

20 of the respondents representing 37.0 percent agree that electronic banking is the safest and fastest means of banking.

10 of the respondents representing 18.5 percent were undecided.

5 of the respondents representing 9.3 percent disagree that electronic banking is the safest and fastest means of banking.

4 of the respondents representing 7.4 percent strongly disagree that electronic banking is the safest and fastest means of banking.

**Table 6 level of customers satisfaction with e banking**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied	18	33.3	33.3	33.3
	Satisfied	12	22.2	22.2	55.6
	Undecided	5	9.3	9.3	64.8
	Dissatisfied	10	18.5	18.5	83.3
	very dissatisfied	9	16.7	16.7	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 6 shows the responses of respondents on the level of their satisfaction with electronic banking.

18 of the respondents representing 33.3 percent are very satisfied with electronic banking.

12 of the respondents representing 22.2 percent are satisfied with electronic banking.

5 of the respondents representing 9.3 percent are undecided.

10 of the respondents representing 18.5 percent are dissatisfied with electronic banking.

9 of the respondents representing 16.7 percent are very dissatisfied with electronic banking.

**Table 7 customers generally prefer e banking**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	27.8	27.8	27.8
	Agree	14	25.9	25.9	53.7
	Undecided	9	16.7	16.7	70.4
	Disagree	8	14.8	14.8	85.2
	strongly disagree	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 7 shows the responses of respondents whether they prefer electronic banking.

15 of the respondents representing 27.8 percent strongly agree that they prefer electronic banking.

14 of the respondents representing 25.9 percent agree that they prefer electronic banking.

9 of the respondents representing 16.7 percent were undecided.

8 of the respondents representing 14.8 percent disagree that they prefer electronic banking.

8 of the respondents representing 14.8 percent strongly disagree that they prefer electronic banking.

**Table 8 E banking products and services have significantly improved customer satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	27.8	27.8	27.8
	Agree	18	33.3	33.3	61.1
	Undecided	5	9.3	9.3	70.4
	Disagree	10	18.5	18.5	88.9
	strongly disagree	6	11.1	11.1	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 8 shows the responses of respondents that electronic banking products and services have significantly improved customer satisfaction

15 of the respondents representing 27.8 percent strongly agree electronic banking products and services have significantly improved customer satisfaction.

18 of the respondents representing 33.3 percent agree electronic banking products and services have significantly improved customer satisfaction.

5 of the respondents representing 9.3 percent were undecided.

10 of the respondents representing 18.5 percent disagree electronic banking products and services have significantly improved customer satisfaction.

6 of the respondents representing 11.5 percent strongly disagree electronic banking products and services have significantly improved customer satisfaction.

**Table 9 customers are very satisfied with the level of service delivery of e banking**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	22.2	22.2	22.2
	agree	18	33.3	33.3	55.6
	undecided	10	18.5	18.5	74.1
	disagree	14	25.9	25.9	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 9 shows the responses of respondents if they are satisfied with the level of service delivery of electronic banking.

12 of the respondents representing 22.2 percent strongly agree that they are satisfied with the level of service delivery of electronic banking.

18 of the respondents representing 33.3 percent agree that they are satisfied with the level of service delivery of electronic banking.

10 of the respondents representing 18.5 percent were undecided.

10 of the respondents representing 18.5 percent disagree that they are satisfied with the level of service delivery of electronic banking.

14 of the respondents representing 25.9 percent strongly disagree that they are satisfied with the level of service delivery of electronic banking.

**Table 10 e banking has a lot of disadvantages**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	14.8	14.8	14.8
	Agree	7	13.0	13.0	27.8
	Undecided	8	14.8	14.8	42.6
	disagree	15	27.8	27.8	70.4
	strongly disagree	16	29.6	29.6	100.0
	Total	54	100.0	100.0	

Source: field survey, August, 2019.

Table 8 shows the responses of respondents that electronic banking has a lot of disadvantages  
 8 of the respondents representing 14.8 percent strongly agree electronic banking has a lot of disadvantages.  
 7 of the respondents representing 13.0 percent agree electronic banking has a lot of disadvantages  
 8 of the respondents representing 14.8 percent were undecided  
 15 of the respondents representing 27.8 percent disagree electronic banking has a lot of disadvantages.  
 16 of the respondents representing 29.6 percent strongly disagree electronic banking has a lot of disadvantages.

#### Hypothesis to be tested.

$H_0$ : electronic banking products and services have not significantly improved.

$H_1$ : electronic banking products and services have significantly improved.

**Level of significance:** 0.05

**Decision rule:** Reject the null hypothesis if the p value is less than the level of significance. Accept the null hypothesis if otherwise.

**Table 11 Test Statistics**

E banking products and services have significantly improved customer satisfaction	
Chi-Square	11.741 <sup>a</sup>
Df	4
Asymp. Sig.	.019

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.8.

#### Conclusion based on the decision rule:

Since the p-value (0.019) is less than the level of significance (0.05). We reject the null hypothesis and accept the alternative

The objective of the study was to know if electronic banking products and services have significantly improved customer satisfaction. Finding from the study

which says that electronic banking products and services have significantly improved.

#### CONCLUSION

revealed that electronic banking products and services have significantly improved customer satisfaction (See table 8, 9 and 10 above).

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