



EFFECTS OF POINT OF SALES IN BUSINESS CASH TRANSACTION MANAGEMENT IN ENUGU, NIGERIA.

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ABSTRACT

This study is based on the effects of point of sales in Business cash transaction in Enugu State, Nigeria. The study adopts the following objectives; to identify reasons for the effect of sales, to identify the constraints facing the effect and to ascertain customers' level of satisfaction on the effect of sales in Business Transaction method. The descriptive survey research design was adopted and a sample size of 133 (One hundred and thirty-three) was gotten using Taro Yamani formula. 133 questionnaires were administered to the respondents and 130 was returned, which was used for the data. The data for the study was gathered with a five point likert scale questionnaire. Analyses were made through Chi-Square, so that effective conclusion can be drawn. A way of making payments effective and reduces the stress of having to go to the bank to deposit money through this means are: $\chi^2 (133, 8) = 31s.43, P>0.05$. For the second hypothesis, the alternate was accepted which revealed the constraints facing the use of effective point which are poor connectivity due to network, delay in the reversal of money and high transaction charges $\chi^2 (133, 8) = 25.03, P>0.05$. For the third hypothesis, the alternate was accepted and, it revealed the level of customers' satisfaction with Point of Sales payment method which are reliability, convenience and secure $\chi^2 (133, 8) = 45.53, P>0.05$. Based on the results of the study, the researcher recommends amongst others that the systems reliability in handling transaction on point of sales is one of the strength of point of sales outlets that influenced customer satisfaction.

Introduction

A point-of-sale terminal is a piece of hardware that allows you to accept credit cards at a shopping store. The hardware includes software that reads magnetic strips from credit and debit cards. Point of Sales was one of the promising e-payment methods introduced by the monetary regulatory body Central Bank in Nigeria, following its capability of curbing many challenges of financial bodies and the economy. In order to reduce the volume of cash in circulation and reduce the risk of going about with cash, the CBN introduced electronic payment system such as payment cards and paper-based instrument to the country. This has encouraged e-payment initiatives such as the establishment of switching companies that facilitate interconnectivity, introduction of payment instruments such as point of sale terminal and automated teller machine which gave rise to significant growth in the use of electronic payment systems (Salmon, 2017).

Transactions, demands and purchase inarguably are daily and reoccurring phenomena in every society. The mode of payment can be traced back to the primitive system known as “barter system” where people pay for services and goods through exchange of goods and services possessed by each party and accepted for exchanged.

Statement of the problem

The effect of Point of Sales Terminal that supports in the availability of fund in Nigeria has much increased in recent years. Banks and other firms nowadays are much interested to use the new technologies to support their financial services and transactions. Problems that will be discussed in this research are the constraints facing the use of Point of Sales. Sometimes customers account are debited even without the completion of such transactions. At this point customers will have to go to their different banks to fill error form.

Objectives of the Study

The broad objective of the study is to determine the effect of Point of Sales and availability of fund in Nigeria. The specific objectives are:

To identify reasons for the use of Point of sales by debit card users.

To identify the constraints facing the use of Point of sales.

To ascertain customers' level of satisfaction with Point of Sales payment method

Research Questions

The following research questions guided the study:

What are the reasons for the use of Point of sales by debit card users?

What are the constraints facing the use of Point of Sales?

Are customers satisfied with Point of sales payment method?

Statement of Hypothesis

The following hypotheses are formulated in this research

Ho1: There are reasons for the use of Point of Sales by debit card users

Ho2: There are constraints facing the use of Point of Sales

Ho3: Customers are satisfied with Point of Sales payment method

Significance of the Study

The study will be beneficial to the staff and management of mobile banking agents in Nigeria, their customers and future researchers. To the staff and management of mobile banking agents, it will help them to identify effectiveness of POS in the availability of fund in Nigeria which would enable them to judiciously utilize it in a way that enables them position their offerings to their customers in such a way that they will be attracted. Also, this study will help them to identify the reasons for the use of POS by debit card users, identify the constraints facing the use of POS.

Scope of the Study

The study examined the effectiveness of POS and availability of fund in Nigeria. The research work is confined to Enugu Metropolis. Therefore, the data that were considered are those relating to influence of POS on fund availability in Nigeria. This study will basically cover a period of 5 years (2018-2023). This study is limited on reasons for the use of POS by debit card users, constraints facing the use of POS and customers' level of satisfaction with POS payment method.

Limitations of the Study

Lack of co-operation from respondents.

Lack of understanding to some contents of the survey Instrument.

Lack of finance.

Time limitation.

Review of Literature

Conceptual Point of Sale Terminal: The purpose of earlier inventors of cash register was to create a platform that would be used for recording cash based transactions to prevent employee from tampering with the profit of the organization. POS as defined by some notable researchers is that, such as Ming (2019), POS is a device deployed in a merchant locations where users swipes their electronic cards in order to make payment for purchases or services as against the use of cash. With the rapid growth of information and communication technology, electronic banking has played a central role in the field of electronic payments. Theoretical view has it that Gilaninia, Fattahi and Mousavian (2011) defined POS as a device that is installed in the center of the sale of goods and services, and instead of paying cash by physical transference of money, the purchase amount deducted from an account holder i.e. customer are charged electronically using an electronic card, while the card acceptor (seller) is paid. Rose and Hudgins (2008), stated that, current Point of sale's networks divided between online and offline POS systems.

Empirical Studies

This means wide bank branches networks play a vital role in the level of customers' satisfaction. KPMG (2016) conducted a Retail Bank Customers Satisfaction Survey based on interview of more than 33,000 retail banking customers spread across 18 different African countries. The survey used internally developed Customer Service Index (CSI) to measure the level of customer satisfaction. Accordingly, respondents in most of these countries (12 out of 18) rated excellent customer service as the most important reason for maintaining a banking relationship. Of the total respondents, 86.5% of them valued customer care (excellent customer service) as the most important factor that the bank should focus on and about 72.5% of them satisfied with the existing customer care.

Gaps in the Review of the Related Studies

From the literature reviewed therefore, the researcher identified major gaps from the studies that showed a few authors have had little studies in this area of effectiveness of POS and availability of fund in Nigeria. The fact that there is scanty literature in this area especially regarding the relationship between POS and availability of fund and particularly from a given organization, this shows a big gap in most of the studies reviewed.

Research Design

In this study, the survey research method used. Since this study involves the collection of views, perspectives or opinions of respondents regarding particular issue, the study employed a survey research method which involves questions, personal interview with respondents and perusal of past records and publications. A set of questionnaire was constructed to obtain data from mobile banking agents and customers.

The targeted area of the study is the effectiveness of POS and availability of fund in Nigeria using POS outlets in Enugu State.

The data used in this study were from two sources; primary and secondary sources

The population consists of all the mobile banking agents in Enugu State.

Sample Size Determination.

Taro Yamani was used for determining the sample size. The mathematical formula is stated below:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = Sample size to be determined

N = Population

1 = Fixed Numerical Factor

e = margin of error usually 5%

N

$$n = \frac{1 + N(e)^2}{200}$$

$$n = \frac{1 + 200(0.05)^2}{200}$$

$$n = \frac{1 + 200(0.0025)}{200}$$

$$n = \frac{1 + 0.5}{200}$$

$$n = \frac{1.5}{200}$$

$$n = 133$$

Therefore, this research will be using a population sample size of 133 which have been tested using the Taro Yamani formula

Sampling Techniques

The sampling technique refers to the specification of the method by which each of the mobile banking agents were selected for measurement and collection of information. The sampling technique adopted in this research was the simple random sampling technique. The technique was used because it gives every member of the population equal chance of being chosen in the sample size. The researcher cannot control the procedure rather it is under probability or chance.

In the study, all the relevant data were gathered through the use of questionnaire and observation as the research instruments for collecting data.

The researcher made and distributed the questionnaires to the respondents one by one. The respondents were encouraged to fill the questionnaires and return them on the spot.

Validations of Data Collection Instrument

The key data collection instrument was questionnaire, which was drawn for easy comprehension and to show factual as well as interpretative information. The questionnaire consists of two sections; section A captures the biography of the target respondent. While section B comprises of close ended questions derived from the various variables related to the objectives. The questionnaire was structured in line with the variable of the study already stated in the hypothesis. The likert scale was provided for ranking of responses of the respondent items of section B in the questionnaire. Thus, most of the questions simply

requires respondent to tick [✓] against the appropriate scoring scale of 1-5 with five equal to SA, A, UD, D, SD.

Method of Data Presentation and Analysis

The need to enhance easy comprehension and analysis prompted the use of the frequency distribution table to present the data gathered. The tools used in analyzing the data collected include tables and simple percentages. The chi-square test technique was used for testing the hypotheses. The statistical analysis involved converting the series of recorded observation collected during the research into descriptive statements. The formular is thus stated below:

$$X^2 = \frac{\sum(O - E)^2}{E}$$

Where X^2 = Chi-square O = Observed Frequency E = Expected Frequency \sum = Summation
Computation of Expected Frequencies

$$Fe = \frac{RT \times CT}{GT}$$

Where Fe = Expected Frequency RT = Row Total
 CT = Column Total GT = Grand Total

Determination the Critical Value

$$Df = (R - 1)(C - 1)$$

Where Df = Degree of freedom

R = Rows

C = Columns

Statistical Decision:

If the calculated chi-square X^2 is greater than the critical value X^2_t , the null hypothesis is rejected, giving room for the acceptability of the alternative hypothesis. If the calculated chi-square is less than the critical value, the null hypothesis will be accepted while the alternative hypothesis will be rejected.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**Distribution and Return of Questionnaire**

Questionnaire	Administered	Return	Not Returned	Return Rate (%)
P- Mobile POS	33	33	-	25.4
Xpress Mobile POS	33	33	-	25.4
Fast Cash Mobile POS	33	33	-	25.4
Kings Mobile POS	34	31	3	23.8
Total	133	130	3	100

Source: Field Survey, 2023

The above table shows the distribution and return of questionnaires to respondents (both the agent and the customers) in various POS outlets within Enugu State, 33 copies were distributed to P-Mobile POS and all were answered and returned, 33 copies were distributed to Xpress Mobile POS and all were answered and returned, 33 copies were distributed to Fast Cash Mobile POS and all were answered and returned while 34 copies were distributed to Kings Mobile POS but 31 copies were answered and returned while 3 copies were not returned. A total of 133 copies were distributed to four (4) POS outlets in Enugu State while 130 copies were filled and returned. The return rate is 97.7%.

Option	Respondents	Percentage (%)
Male	80	62
Female	50	38
Total	130	100

Source: Field Survey, 2023

The table above shows that 80(63%) of the respondents were male while 50(38%) were female.

Marital Status

Option	Respondents	Percentage (%)
Single	50	38
Married	40	31
Divorced	10	8
Widow / Widower	20	15
Separated	10	8
Total	130	100

Source: Field Survey, 2023

The table above shows that 50(38%) of the respondents were single, 40(31%) were married, 10(8%) were divorced, 20(15%) were widow/widower while 10(8%) were separated.

Age

Option	Respondents	Percentage (%)
21 - 30 years	40	31
31 - 40 years	50	38
41 - 50 years	30	23
51 years and above	10	8
Total	130	100

Source: Field Survey, 2023

The table above shows that 40(31%) of the respondents were within the age of 21-30 years, 50(38%) were within the age of 31-40 years, 30(23%) were within the age of 41-50 years while 10(8%) were within 51 years and above.

4.2.4 Educational Qualification

Option	Respondents	Percentage (%)
FSLC	5	4
SSCE	10	8
OND / NCE	25	19
HND / B.SC	60	46
Specify Others	30	23
Total	130	100

Source: Field Survey, 2023

The table above shows that 5(4%) of the respondents were First School Leaving Certificate holders, 10(8%) were Senior Secondary Certificate Examination holders, 25(19%) were OND/NCE holders, 60(36%) were HND/B.SC holders while 30(23%) specified other educational qualifications

How long have you been patronizing POS outlets/ been in the POS business?

Option	Respondents	Percentage (%)
Less than 1 year	40	31
1 year	30	23
2 years	30	23
3 years	20	15
4 years and above	10	8
Total	130	100

Source: Field Survey, 2023

The table above shows that 40(31%) of the respondents have been making use of POS for less than 1 year, 30(23%) were for 1 years, 30(23%) were for 2 years, 20(15%) were for 3 years while 10(8%) were for 4 years and above.

What are the reasons for the use of POS by debit card users?

S/N	Question	SA	A	UD	D	SD	Total
1	Reduces risks of theft and cash handling	40 (53.3)	60 (46.7)	5 (5)	15 (13.3)	10 (11.7)	130
2	Better and faster way of making	50 (53.3)	50 (46.7)	10 (5)	10 (13.3)	10 (11.7)	130
3	Reduces the stress of having to	70 (53.3)	30 (46.7)	0 (5)	15 (13.3)	15 (11.7)	130
	go to the bank to deposit money						
4	Total	160	140	15	40	35	390

Source: Field Survey, 2023

The table shows that: 40 of the respondents strongly agreed that the reason for the use of debt card is that it reduces risks of theft and cash handling, 60 agreed, 5 were undecided, 15 disagreed while 10 strongly disagreed.

50 of the respondents strongly agreed that the reason for the use of debt card is because it better and faster way of making payments, 50 also agreed, 10 were undecided, 10 disagreed while 10 strongly disagreed. 70 of the respondents strongly agreed that the reason for the use of debt card is that it reduces the stress of having to go to the bank to deposit money, 30 agreed, none were undecided, 15 disagreed while 15 strongly disagreed.

What are the constraints facing the use of POS?

S/N	Question	SA	A	UD	D	SD	Total
1	Poor connectivity due to network	60 (56.7)	50 (43.3)	10 (13.3)	5 (10)	5 (6.7)	130
2	Delay in the	60	40	20	5 (10)	5 (6.7)	130
	Reversal of Money	(56.7)	(43.3)	(13.3)			
3	High transaction charges	50 (56.7)	40 (43.3)	10 (13.3)	20 (10)	10 (6.7)	130
4	Total	170	130	40	30	20	390

Source: Field Survey, 2023

The table above shows:

60 of the respondents strongly agreed that the constraint facing the use of POS is poor connectivity due to network, 50 agreed, 10 were undecided, 5 disagreed while 5 strongly disagreed. 60 of the respondents strongly agreed that the constraint facing the use of POS is delay in the reversal of money, 40 agreed, 20 were undecided, 5 disagreed while 5 strongly disagreed. 50 of the respondents strongly agreed that the constraint facing the use of POS is high transaction charges, 40 agreed, 10 were undecided, 20 disagreed while 10 strongly disagreed.

Are customers satisfied with POS payment method?

S/N	Question	SA	A	UD	D	SD	Total
1	POS payment method is	60 (66.7)	50 (46.7)	0 (3.3)	10 (6.7)	10 (6.7)	130
2	POS payment method is convenient	80 (66.7)	50 (46.7)	0 (3.3)	0 (6.7)	0 (6.7)	130
3	POS payment method is secure	60 (66.7)	40 (46.7)	10 (3.3)	10 (6.7)	10 (6.7)	130
4	Total	200	140	10	20	20	390

Source: Field Survey, 2023

The table above shows: 60 of the respondents strongly agreed that their / customers' level of satisfaction is based on POS payment method is reliable, 50 agreed, none were undecided, 10 disagreed while 10 strongly disagreed. 80 of the respondents strongly agreed that their / customers' level of satisfaction is based on POS payment method is convenient, 40 agreed, none were undecided, none disagreed, none strongly disagreed. 60 of the respondents strongly agreed that their / customers' level of satisfaction is based on POS payment method is secure, 40 agreed, 10 were undecided, 10 disagreed while 10 strongly disagreed.

Test for Hypotheses

In this study, three hypotheses were empirically tested. This was aimed at verifying the validity of the proposition finding out the relationships that exist between the variables under study. Hence Chi-square, often denoted as X^2 , was used to test the research hypotheses.

Test of Hypothesis 1

H1: There are reasons for the use of POS by debit card users

In testing this hypothesis, responses from table below will be used. Computation of Expected Frequencies

$$Fe = \frac{RT \times CT}{GT}$$

Where:

Fe = Expected Frequency

RT = Row Total

CT = Column

Total GT = Grand Total.

Computation of chi- square distribution table

Cells	fo	fe	fo - fe	(fo - fe) ²	(fo - Fe) ² / fe
A1	40	53.3	- 13.3	176.89	3.32
A2	60	46.7	13.3	176.89	3.79
A3	5	5	0	0	0
A4	15	13.3	1.7	2.89	0.22
A5	10	11.7	- 1.7	2.89	0.25
B6	50	53.3	- 3.3	10.89	0.20

B7	50	46.7	3.3	10.89	0.23
B8	10	5	5	25	5
B9	10	13.3	- 3.3	10.89	0.82
B10	10	11.7	- 1.7	2.89	0.25
C11	70	53.3	16.7	278.89	5.23
C12	30	46.7	- 16.7	278.89	5.97
C13	0	5	- 5	25	5
C14	15	13.3	1.7	2.89	0.22
C15	15	11.7	3.3	10.89	0.93
Total					31.43

Therefore, chi-square calculated = 31.43 the Critical Value

$$Df = (R - 1)(C - 1)$$

$$Df = (3 - 1)(5 - 1)$$

$$Df = (2)(4)$$

$$Df = 8$$

$$\text{Level of Significance} = 5\% = 0.05$$

$$\text{Therefore the, Critical value } X^2 = 15.51$$

Decision

The decision rule states that null hypothesis should be rejected if the chi-square calculated (31.43) is greater than the critical value of chi-square (15.51), otherwise accept. Since the computed chi-square is greater than the critical value of chi-square is greater than critical value ($31.43 > 15.51$), we reject the null hypothesis and accept the alternate hypothesis which states that there are reasons for the use of POS by debit card users

Test of Hypothesis 2

H2: There are constraints facing the use of POS

In testing this hypothesis, responses from table 4.3.2 will be used. Computation of Expected Frequencies

$$Fe = \frac{RT \times CT}{GT}$$

Where:

Fe = Expected Frequency

RT = Row Total

CT = Column Total

GT = Grand Total

Computation of chi- square distribution table

Cells	fo	fe	fo - fe	(fo - fe) ²	(fo - Fe) ² / fe
A1	60	56.7	3.3	10.89	0.19
A2	50	43.3	6.7	44.89	1.04
A3	10	13.3	- 3.3	10.89	0.82
A4	5	10	- 5	25	2.5

A5	5	6.7	- 1.7	2.89	0.43
B6	60	56.7	3.3	10.89	0.19
B7	40	43.3	- 3.3	10.89	0.25
B8	20	13.3	6.7	44.89	3.38
B9	5	10	- 5	25	2.5
B10	5	6.7	- 1.7	2.89	0.43
C11	50	56.7	- 6.7	44.89	0.79
C12	40	43.3	- 3.3	10.89	0.25
C13	10	13.3	- 3.3	10.89	0.82
C14	20	10	10	100	10
C15	10	6.7	3.3	10.89	1.63
Total					25.03

Source: Author's Computation: 2023.

Therefore, chi-square calculated = 25.03

Determination the Critical Value

$$Df = (R - 1)(C - 1)$$

$$Df = (3 - 1)(5 - 1)$$

$$Df = (2)(4)$$

$$Df = 8$$

$$\text{Level of Significance} = 5\% = 0.05$$

Therefore the, Critical value $X^2 = 15.51$ Decision

The decision rule states that null hypothesis should be rejected if the chi-square calculated (25.03) is greater than the critical value of chi-square (15.51), otherwise accept. Since the computed chi-square is greater than the critical value of chi-square is greater than critical value (25.03 > 15.51), we reject the null hypothesis and accept the alternate hypothesis which states that there are constraints facing the use of POS

Test of Hypothesis 3

H3: Customers are satisfied with POS payment method

In testing this hypothesis, responses from table 4.3.3 will be used. Computation of

Expected Frequencies

$$Fe = \frac{RT \times CT}{GT}$$

GT

Where:

Fe = Expected Frequency

RT = Row Total

CT = Column Total

GT = Grand Total

Computation of chi- square distribution table

Cells	fo	fe	fo - fe	(fo - fe) ²	(fo - fe) ² / fe
A1	60	66.7	- 6.7	44.89	0.67
A2	50	46.7	3.3	10.89	0.23
A3	0	3.3	- 3.3	10.89	3.3
A4	10	6.7	3.3	10.89	1.63

A5	10	6.7	3.3	10.89	1.63
B6	80	66.7	13.3	176.89	2.65
B7	50	46.7	3.3	10.89	0.23
B8	0	3.3	- 3.3	10.89	3.3
B9	0	6.7	- 6.7	44.89	6.7
B10	0	6.7	- 6.7	44.89	6.7
C11	60	66.7	- 6.7	44.89	0.67
C12	40	46.7	- 6.7	44.89	0.96
C13	10	3.3	6.7	44.89	13.60
C14	10	6.7	3.3	10.89	1.63
C15	10	6.7	3.3	10.89	1.63
Total					45.53

Source: Author's Computation: 2023

Therefore, chi-square calculated = 45.53

Determination the Critical Value

$$Df = (R - 1)(C - 1)$$

$$Df = (3 - 1)(5 - 1)$$

$$Df = (2)(4)$$

$$Df = 8$$

$$\text{Level of Significance} = 5\% = 0.05$$

Therefore the, Critical value $X^2 = 15.51$

Decision

The decision rule states that null hypothesis should be rejected if the chi-square calculated (45.53) is greater than the critical value of chi-square (15.51), otherwise accept. Since the computed chi-square is greater than the critical value of chi-square is greater than critical value ($45.53 > 15.51$), we reject the null hypothesis and accept the alternate hypothesis which states that customers are satisfied with POS payment method

Discussions of Findings or Result

Based on the above analysis, the hypothesis which states that there are reasons for the use of POS by debit card users is accepted. This work conforms to the work of Mohammad Ipour (2013) posited reasons for the use of POS include; a decrease in customers visiting bank branches in order to withdraw cash and also deposit money into centralized accounts, less depreciation of banks'

Discussion of Hypothesis 2

Based on the above analysis, the hypothesis which states that there are constraints facing the use of POS is accepted. It also goes with the study carried

out by Guardian Newspaper (2018), some of the challenges of POS business are delay in the reversal money, connectivity, frauds and security concerns, transaction charges, frequent power outage.

Discussion of Hypothesis 3

Based on the above analysis, the hypothesis which states that customers are satisfied with POS payment method is accepted. The satisfactory level of the users was in agreement to the findings of Adeoti and Oshotimehin (2012) where they asserted that majority of the respondents were satisfied with the utilization of POS as a means of payment and transaction.

Findings

From the research study, the researcher found out the following:

There are reasons for the use of POS by debit card users and these reasons are it reduces risks of theft and cash handling, it's better and faster way of making payments and it reduces the stress of having to go to the bank to deposit. There are constraints facing the use of POS and these constraints are poor

connectivity due to network, delay in the reversal money and high transaction charges from agents.

Conclusion

The research examined effectiveness of POS in areas of reducing risks of theft and cash handling, the better and faster way of making payments and reducing the stress of having to go to the bank to deposit, etc. However, it could be observed that there are still constraints facing the use of POS such as poor connectivity due to network, delay in the reversal money, high transaction charges etc. Finally, customers were satisfied with POS payment method due to the level of reliability, convenience and security.

Recommendations

Based on the findings, the following recommendations are hereby made in order to solve the constraints facing the use of POS in Enugu State and they are as follow:

The systems reliability in handling transaction on POS is one of the strength of POS outlets that influenced customer satisfaction. POS agents need also adopt the latest technology practiced in the electronic banking service. In the time of problem occurrence such as debiting the customers without crediting the POS agent, the POS agent should assist the customers to resolve the problem as quickly as possible by providing the customers with suitable guidelines to use for the money reversal.

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