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AN APPRAISAL OF ELECTRONIC PAYMENT DEVICES AND CUSTOMER PATRONAGE OF SHOPPING MALLS IN NIGER DELTA, NIGERIA

Nwidua Lebia Patricia (Ph.D.)

Kenule Benson Saro-Wiwa Polytechnic, Department of Marketing,
School of Management Sciences, Bori, Rivers State, Nigeria.

Email: lebiapatricia8@gmail.com

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ABSTRACT: *This study was established to determine the extent to which Electronic Payment Device has improved customers' patronage of shopping malls in Niger Delta, Nigeria. Dimensions of Electronic Payment Device such as card payment system, electronic funds transfer and e-wallet payment system were employed alongside increase in repeat purchases to measure the extent of customers' patronage. A descriptive survey research device of co-relational research design was employed in this study to provide detail investigation of the procedure used to establish the relationship between Electronic Payment Device and improvement in customers' patronage of shopping malls in the Niger Delta, Nigeria. The population of the study consisting of 77 registered shopping malls in the Niger Delta, Nigeria from which target population 6890 managers and sale persons were drawn. The Taro Yamane's formula was used to determine a sample size of 378 managers and sales personnel for the study. A purposive sampling technique was adopted using considerable percentage of representation approach to ensure effective selection of the sample elements of the population. A structured instrument for data collection containing fifteen (15) items questions was used for the study. The face and content validation of the instrument was obtained through the judgment of experts. A test-retest device was used to determine the reliability of the instrument and a reliability index of .83 was obtained. The data collected were presented and analyzed using simple percentage and frequency analysis, mean and standard deviation, while the formulated hypotheses were tested using Pearson Product Moment Correlation of SPSS software program version 23.0 at .05 level of significance. The findings indicated that card payment system, electronic funds transfer and e-wallet payment system has a very strong positive or significant relationship with improvement in customer patronage of shopping malls in the Niger Delta. Based on these findings, it was concluded that Electronic Payment Device has significantly improves customer patronage, of shopping malls in the Niger Delta, Nigeria. Thus, it was recommended that shopping mall operators in the Niger Delta who are yet to introduce sustainable Electronic Payment Device should do so immediately to promote customers patronage and improve increase in repeat purchase.*

KEYWORDS: Electronic Payment Device, Customers Patronage, Shopping Malls.

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INTRODUCTION

Payment and device of payment has been part of our daily life for the purchase goods and services. In line with this, the world in the recent times has witnessed an increase in the use electronic payment devices. These tend to implies that, in the past ten decades, current electronic devices of payment were not in place. Thus, the effort to apply modern payment devices such as the use of card payment device, electronic funds transfer device and e- wallet payment device were not in use. In view of this reality, consumer, salesmen, marketers and businessmen still seems to lack technological knowledge in using electronic payment devices for payment of goods and services. On a large scale, this has resulted to low customer patronage and low sales growth which has led to poor sales performance.

On the other hand, many shopping malls also lack the technological knowledge of using these electronic payment devices while the growing status of e-payment encouragement has also resulted to increase in sales performance that boosts the shopping mall profits. However, many shopping malls experienced low customer patronage for being outdated in their marketing practices when they failed to adopt modern payment devices.

To some large extent, this attracts researcher's attention to investigate and question why some shopping mall seems to lack behind in the use of current Electronic Payment Device. This was traced to so many beliefs which hold that shopping malls still requires modern updated knowledge on current payment technology. To justify this truth, socialists, marketers, critics and societal marketers were compelled to ask whether the sales force of shopping malls actually understands the extent to which current Electronic Payment Device has improved sales performance. In an effort to answer this question Nwaolisa and Kazie (2012) & Hudson (2018) adds that many shopping malls in developing countries are not technologically orientated in making payment devices for payment of goods and services as done in developed countries. This was not out of context in the view that financial transaction security was necessary and it was observed that many shopping malls in Niger Delta in Nigeria appears to have consider the use of electronic payment device irrelevant to cash payment device for security reasons.

Subsequently, the drive to promote electronic payment device for goods and services bought, and sold, becomes an issue to many shopping malls. Several studies conducted justifies that little or no positive improvement were noticed by many shopping malls for failure to employ e-payment device. To determine the improvement in customer patronage, it becomes imperative to find out the extent to which Electronic Payment Device has actually improved the customers' patronage of shopping malls in Niger Delta Nigeria.

Statement of the Problem

The evolving trend of financial insecurity concerning the threats of carrying bulk cash for payment of goods and services has calls for the use of electronic payment device in shopping malls. This seems to have attracted more attention of customers that buy in bulk than those that buy in tads. The fear of buying with cash was traceable to the fast growing rate of financial insecurity noted in business transaction. The concern to make payment with the use of electronic device becomes the major focus of shopping malls managers as the level of financial fraud and its frustration increases that caused more harm than good. In line with this, managers of shopping malls began to embark on modern dimensions of accepting payment for goods and

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services in bulk form. This becomes necessary as considered a soft way of reducing financial risk of carrying huge amount of money or making payment with huge sum of money.

Undoubtedly, individuals who withdraw huge sum were also viewed to experience high financial risk of carrying bulk amount for payment of goods in the shopping malls. This adds meaning to the reality that, shopping malls operators also stand the risk of keeping huge sum of money successfully. Consequently, many shopping malls were faced with unwanted cases of financial fraud within the system as well as external attack by armed robbers within the locality. This calls for the rhetoric question, asking whether the electronic payment could improve patronage of shopping malls in Niger Delta, Nigeria. In an effort to answer this question, it becomes imperative for this study to find out the extent to which Electronic Payment Device actually improved customer patronage of shopping malls in Niger Delta in Nigeria.

Aim and Objectives of the Study

The aim of this study is to examine the extent to which Electronic Payment Device has improved customer patronage of shopping malls in Niger Delta, Nigeria. The following specific objectives were considered useful.

(i) To determine the extent to which card payment device has improved customer patronage of shopping malls in Niger Delta, Nigeria.

(ii) To ascertain the extent to which funds transfer has improves customer patronage of shopping malls in Niger Delta, Nigeria.

(iii) To examine extent to which e-wallet payment device has improves customer patronage of shopping malls in Niger Delta, Nigeria.

Research Questions

In order to adequately address the objectives of this study, the following research questions were raised.

(i) To what extent does Card payment device improves customer patronage of shopping malls in Niger Delta, Nigeria?

(ii) To what extent does Electronic funds transfer improves customer patronage of shopping malls in Niger Delta, Nigeria?

(iii) To what extent does e-wallet payment device improves customer patronage of shopping malls in Niger Delta, Nigeria?

Research Hypotheses

The following hypotheses were postulated to guide this study. However, they are stated in null form.

Ho_1 There is no significant relationship between card payment device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

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Ho_2: There is no significant relationship between electronic funds transfer device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

Ho_3: There is no significant relationship between e-wallet payment device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

Significance of the Study

The significance of this study cannot be over emphasized. Firstly, the findings in this study would shed more light on the importance of e-payment to the Nigerian retail industry and the benefits that can be derived from the businesses for adopting these technologies will be attained. This study would also be useful to shopping mall operators in Nigeria especially those in the South-South geopolitical zone. Secondly, this study would be of importance to the private sector and the general public as it would educate the public and potential investors on the growing potential of payment device, the users and the potential market can capture their businesses or potential markets with the e-payment devices.

Thirdly, with the growing level of insecurity in the country, the use of e-payment would enables or ease financial transaction without the need for cash, thereby preventing incidences of robbery and extortion by ill vices in Nigeria. Fourthly, this study's findings would also assist various stakeholders of the e-payment industry to fully understand and address the needs to adopting e-payment for retail transactions. Above all, students, researchers and academicians will benefit from this study as the findings would fill the existing gap in the empirical literature reviewed, which they can be used as reference for related studies.

REVIEW OF RELATED LITERATURE

The review of related literature on Electronic Payment Device and Customer Patronage of shopping malls covers the conceptual review, theoretical review and empirical review of this study. The concept of Electronic Payment Device and its dimensions (card payment system, electronic funds transfer system and e-wallet payment system) were examined under the conceptual review.

Conceptual Review

Electronic Payment Device

An Electronic Payment Device, also known as E-Payment System or Online Payment System allows processing any cashless payment through electronic devices. Generally, Electronic Payment Device (e-payment) refers to an electronic means of making payments for goods and services procured online (Adeoti and Osotimehin, 2012). E-payment provides means of transacting business and settling financial commitment electronically without necessarily touching cash in cashless society (Bagudu and Okolie ,2022). What makes this payment a "system" is that it employs cash substitutes with the use of electronic money and other ICT related equipment in its operations (Okifo and Igbunu, 2015). Thus, the traditional payment systems involving the use of cash, draft cheques, letter of credits and other documentary credits becomes a protracted process.

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With the advent of modern technology such as internet and computer technologies, Electronic Payment Devices add meaning to electronic payment device in the banking industry (Ovia ,2002). These mechanisms guarantee a fast, safe and convenient way of making payments for goods and services (Jumba and Weukhulu, 2019).

It is important for retailers to embrace the use of Electronic Payment Device in their business and financial transactions with their customers.

Conceptual Framework view of Electronic Payment Device and Customer Patronage

The conceptual framework on Electronic Payment Device and customer patronage of shopping malls considers the following.

Debit Cards

Debit cards are a new form of value-transfer where the card holder key in a PIN, with the use of terminal network to authorize the transfer of money from their account to that of a merchant. Debit card. Like the credit card is a small plastic card with a unique number mapped with the bank account number. A debit card is a plastic card which provides an alternative payment device to cash when making purchases. When a payment is made through a debit card, the funds are immediately withdrawn from the purchaser's bank account. The advantage is that the buyer has the funds to pay for the purchase. and to paid for right away, so there's no credit card shock when the statement (Okafor, 2017).

Electronic Funds Transfer

Electronic funds transfer is an electronic oriented payment mechanism which allows customers' accounts to be credited electronically within 24 hours of transaction (Ugwu, et al., in Ekwueme et al., 2013). According to Deitel and Deitel (2009) ,EFT has expanded to refer to any transfer of money initiated through and electronic terminal, including credit/ debit smart cards, automated teller machine (ATM), electronic funds transfer at point of sale (EFTPOS), electronic data interchange (EDI) and internet banking .Electronic fund transfer system has been classified into three types namely, clearing network characteristics, remote service or points of sales characteristics and pre authorized debit/credit characteristics (Ekwueme et al., 2013).

E-Wallet Payment Device / Digital Wallet

E-Wallet: a prepaid account that stores personal data online such as credit and debit card information in order to facilitate payments. E-wallets are a digital tool that allows you to include cards or bank accounts (and even crypto-currency) to make payments using another device, such as your smartphone or pc**.** There are global e-wallet devices, such as Apple Pay, Microsoft Wallet, Samsung Pay and Ali-pay. Electronic wallet (e-wallet) and Digital Wallet are close related payment devices. They are one form of development of technology in the field of financial systems. E-wallet or mobile wallet is the digital version of your physical wallet with more functionality. E-wallet is a software-based system that securely stores user's payment information and passwords for numerous payments devices and websites (Okafor, 2017). E-wallet is just like a prepaid account that keeps user's financial information like a credit or debit card information to make an online financial transaction much easier (Ogunlowore & Oladele, 2014).You can keep your money in an E-wallet and use it when needed. E-wallets is

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also use to recharge phone, make payment at various places and send money to friends. (Dhanya, 2019).

PayPal

Paypal is the most widely used online payment device worldwide and websites that include it at checkout have 82% higher conversion rate. PayPal is a type of e-wallet that enables an individual to securely purchase goods online and make many online merchants (Oyelami et al., 2020).PayPal is seen a more secure way of sending payment online (Bandi et al., 2016).PayPal requires customers to create an account on its platform which is connected to credit card or checking account of the user. Once a person has opened a PayPal account, he or she can deposit, withdraw and transfer funds to different merchants who accept PayPal online payments (Annon, 2003). Okello (2016) stated that a PayPal user cannot send or receive payments to and from other PayPal users online or through the company's app unless the identity and funds of a user has been confirmed. PayPal also offers a variety of services such as credit card readers for small merchants, debit cards for payment and lines of credit. Zika (2005) posited that PayPal offers a low-cost service to individuals and businesses for its online payment operation.

Customer Patronage

According to Kotni (2016), customer patronage is the extent to which a customer buys goods from a particular firm and repeated purchase the same goods without considering other similar brands in the market. Ladhari (2009) defined customer patronage as the degree to which a customer purchases a firm's products or services and makes repeat purchases despite the availability of other competing brands that can serve his or her needs. Increased customer patronage therefore refers to the growth in the number of customers who patronize or buy goods from a firm in a given period of time (McCain *et al*, 2005). Chen (2014) defined increased customer patronage as the rate at which customers who purchase goods from a particular store have grown for a specific period of time. Also, increased customer patronage is strong indicator of sales performance of a firm and a crucial determinant of business growth and survival (Kumar, 2016). It is the most significant factor that distinguishes successful firms from unsuccessful firms. A firm can be said to be successful if it enjoys an increased level of customer patronage. Kotni (2016) noted that increased level of customer patronage brings about massive sales and profitability growth. Increase in customer patronage gives a firm a competitive advantage over its rivals and sets the firm promising above others in the same industry.

Repeat Patronage

Repeat patronage is a behavior whereby a customer makes repeat purchase of a particular product or service from a company despite the fact that there are other competing brands in the market (Rahman, et al., 2014). Chen (2014) defined repeat patronage as a behavior in which a customer re-patronize a particular, product, service or organization irrespective of the fact that other competing brands exist in the marketplace. It increases a firm competitiveness in its industry. According to Kozak and Baloglu (2011), repeat patronage gives an organization an edge over its competitors in the same industry. It helps to sustain sales growth and increase profit margin.

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Empirical Review

A number of related empirical studies have been conducted on Electronic Payment Device and customer patronage of shopping malls. To justify this, Njenga and Ismail (2017) empirically examined the role of electronic POS in improving supply chain performance in retail sector in Kenya. Their study was carried out among some elected supermarket chains in Nairobi County. The study employed the descriptive survey research where data were collected from employees in various departments of the selected supermarkets using a structured questionnaire. The data collected were analyzed statistically using percentage and frequency tables, and mean, while the hypotheses were tested using the Pearson Product Moment Correlation Coefficient with the aid of the SPSS 21.0 version. The findings revealed that rapid scan systems, cloud based communication systems, mobile POS and electronic funds transfer system has a significant positive relationship with supply chain performance of retail outlets in Kenya.

Pepe and Pepe (2012) carried out a study on the role of Point of Sale (POS) data in delivering customer value in supermarkets via category management practices. Their study adopted the descriptive survey research design and used a structured questionnaire for data collection. The data collected were analyzed using frequency counts, mean, standard deviation, standard error mean and multiple regression analysis. The hypotheses were tested using the Spearman Rank Order Correlation Coefficient which was computed using the SPSS software program version 20.0. After analyzing the data collected, the researchers found that POS devices significantly deliver superior customer value and improve the sales performance of supermarket operators.

Plomp and Huiden (2011) investigated the determinants of adopting Point-of-Sale (POS) system in small retailers in Netherlands. Their data were collected from 54 small retailers in Netherlands using as a structured questionnaire. The data collected from the respondents were analyzed statistically using multiple regression analysis which w computed with the aid of SPSS software program version 21.0.The findings revealed that cashless system, increased customer demand for Electronic Payment Device and funds safety were the major motivating factors behind the adoption of POS in supermarkets. The study also found a positive correlation between POS adoption and sales performance of supermarkets.

METHODOLOGY

Methodology employed in this study focuses on the research design, population of the study, sample and sampling technique, instrumentation, validity of the instrument, reliability of the instrument, administration of the instrument and devices of data analysis. The research design constitutes the blueprint for data collection, measurement and data analysis. A correlational research design was employed in this study to determine the relationship between the hypothesized variables. Measurement of the operational hypothesized variables was used to determine a set questionnaire design for the study. A 4-point likert measurement scale format adopted for the measurement of data administered and collected was vital, while both descriptive and inferential statistics were also used to answer research questions and test the hypothesize variables for results analysis and interpretation. Constructive theoretical solutions deduced from the review of related literature was used to measure the relationship between the dependent and independent variables in the study for implied logical solutions. The population of this study comprised 6,890 managers and sales personnel drawn from the 77 the registered

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shopping malls in the south-south geopolitical zone made up of six (6) states namely: Akwa-Ibom State(1,245), Cross River State(708), Delta State(1,187), Edo State(880), Bayelsa State(1,198), and Rivers State(1,672); identified in which 562 Managers and 6,328 Sales Personnel were drawn from 77 shopping Malls to form a total of 6,890 respondents for the study.

In order to determine a valid sample size from the population of 6,890 persons, the "Taro Yamane's formula" for finite population cited in (Nwankwo and Eze, 2013, p.108), was employed. The purposive sampling technique was adopted in the study with equal percentage representation of 63 respondents each from Akwa-Ibom State, Cross River State, Delta State, Edo State, Bayelsa State and Rivers State – making a total of 378 to ensure fair distribution of the questionnaire. The primary or raw source of data was mainly obtained from managers and sales personnel who are core respondents in the study. However, the secondary data source employed was merely supportive to elicit secondary information obtained from books, magazines, journals, and newspapers among others. A set of structured questionnaire was administered to three hundred and ninety six (396) respondents via five research assistants. Out of the three hundred and ninety six (396) successful questionnaires administered, only three hundred and eighty three (383) copies being 97% of the questionnaire was returned successfully, while thirteen (13) copies being 3% was not returned. The validation of the research instrument was confirmed by three research experts from university of Port Harcourt (two from marketing department and one from the department of measurement and evaluation), whose observations, modifications, views, suggestions and recommendations of the instrument confirmed its face and content validities. The reliability of the instrument with the use of 185 copies of a structured questionnaire administered; shows the computed reliability test result of R=.83. This indicated considerable evident of reliability in the relationship between the first and second test of reliability of the instrument. A modified 4-point interval measurement approach on Likert scale format cited in (Uzuaguru, 2002), was used in the questionnaire design adopted to generate data needed for computation. Analysis of data obtained was done using the mean score statistics. Interpretation of the mean test result was done, using the following benchmarks: 1.00 - 1.99(10%-29%) stands for very low extent, 2.00 - 2.99(30%-49%) shows low extent, 3.99 - 3.99(50%-69%) stands for moderate extent, and 4.00 and above (70%-100%) indicates high extent; while hypotheses of the study were tested, using Pearson's Product Moment Correlation Co-efficient based on which if, t-computed is less than t - critical value, Ho, is retained or accepted and Ha is rejected.

RESULTS

This is concerned with data presentation, analysis and discussion of results obtained from the analyzed data. In line with this, Out of the 400 questionnaires served, only 368 copies were useful and successfully collected for analysis to determine the extent of which oil firms' environmental marketing practice in oil-bearing communities improves the economic wellbeing of the natives from oil pollution hazards in Niger Delta. The mean (X) score test approach, simple percentage test device, and the Z - score were used for the analysis of data obtained. Interpretation of results obtained as answers to the research questions was done with the use of the following benchmarks: 1.00 - 1.49(10%-29%) stands for **very *low extent***, 1.50-2.49(30%-49%) shows ***low extent,*** 2.50 - 3.49(50%-69%) stands for ***moderate extent,*** and 3.50

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and above (70%-100%) indicates ***high extent*** were employed in the study. The data generated for the study are therefore presented, analyzed and interpreted in the follows order: –

Table 4.1: Questionnaire Administered and Collected

Respondents	Questionnaires		Percentage
	No. Administered	**No. Collected**	
Managers	30	27	7.2%
Sales Personnel	348	347	92.8%
Total	378	374	100%

Source: *Field Work, 2024*

Table 4.1 above, shows the number of questionnaires administered to the respondents (managers and sales personnel) of shopping malls in the Niger Delta and their collection rate. From the table, it is observed that out of the 378 questionnaires administered to the respondents, 374 copies were collected and this represents 98.9% collection rate.

Table 4.2 Gender Characteristics of Respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Female	181	48.4	48.4	48.4
Male	193	51.6	51.6	100.0
Total	374	100.0	100.0	

Table 4.2 above, presented the gender characteristics of the respondents. It showed that 181 (48.4%) of the respondents were female while 193(51.6%) were male.

Table 4.3 Age Distribution of Respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
21-30 years	104	27.8	27.8	27.8
31-40 years	73	19.5	19.5	47.3
41-50 years	24	6.4	6.4	53.7
>50 years	173	46.3	46.3	100.0
Total	374	100.0	100.0	

Table 4.3 above shows the age brackets of the respondents to this study. It showed that 104(27.8%) of the respondents are within the age of 21-30 years, 73(19.5%) of the respondents are within the age of 31-40, 24(6.4%); while respondents within the age of 41-50 years are 173(45.8%) of the respondents.

Table 4.5: To what extent does card payment device improves customer patronage in shopping malls in Niger Delta, Nigeria?

S/N		VHE	HE	ME	LE		
	Construct	1	2	3	4	Mean	SD
1	We have a POS device that enables our customers to make payment for goods	0	60	205	109	3.13	.660

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	purchased with their Naira card.						
2	Some of our customers use their credit card to make payment for items purchased from our mall.	0	64	56	254	3.51	.771
3	Most of our customers use their Naira debit card to pay for goods purchased from our shopping mall.	0	120	89	165	3.12	.866
4	Some of our customers who do not have credit or debit card use prepaid card to make payment for goods purchased from our mall.	4	64	218	88	3.04	.670
5	Our card payment system has made it easier for our cashless customers to pay for goods purchased from our shopping mall. **Grand Mean**	36	36	165	137	3.08	.919 **3.18**

Source: *SPSS Output from Field Survey (2024)*

Table above shows that based on the benchmark employed in the study, the result obtained by the grand mean value of 3.18 therefore, shows that "card payment device has to a moderate extent, improved customer patronage of shopping malls in Niger Delta, Nigeria".

Table 4.6: To what extent does electronic funds transfer improves customer patronage in shopping malls in Niger Delta, Nigeria?

S/N		VHE	HE	ME	LE		
	Construct	1	2	3	4	Mean	SD
6	We accept payment through funds transfer.	0	104	84	186	3.22	.854
7	We have internet (online) facilities that enable customers to pay for their goods purchased directly to our bank account.	12	68	201	93	3.00	.749
8	Some customers use their mobile device like cell phone to transfer	0	68	206	100	3.09	.666

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	funds directly into our bank account.						
9	We use a POS device to receive payment from our customers who want to transfer funds to our bank account.	8	144	32	190	3.08	.987
10	With our electronic funds transfer system, our customers can conveniently pay for the goods purchased from our mall. **Grand Mean**	40	109	109	116	2.80	.997 **3.04**

Source: *SPSS Output from Field Survey (2024)*

Based on the benchmark employed in the study, the result obtained by the grand mean value of 3.04 therefore, shows that the total mean values $\bar{x}$= 3.04, indicated that electronic funds transfer has to a moderate extent improves customer patronage in shopping malls in Niger Delta, Nigeria.

Table 4.7: To what extent does e-wallet payment device improves customer patronage in shopping malls in Niger Delta, Nigeria?

S/N		VHE	HE	ME	LE		
	Construct	1	2	3	4	Mean	SD
11	We have a system that enables our customers to pay for their goods purchased using the E-wallet.	0	185	24	165	2.95	.967
12	Some customers use Apple Pay and Android Pay to make payment for the items purchased from our mall.	4	238	44	88	2.58	.859
13	e accept master pass as a means of payment for goods purchased from our mall.	36	36	165	137	3.08	.919
14	We accept Visa Checkout & PayPal as a means of payment for goods purchased from our mall.	0	76	201	97	3.06	.679
15	Our e-wallet payment system has made it easier	20	165	24	165	2.89	1.043

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	and convenient for our customers to make payment for goods purchased from our mall. **Grand Mean**						**2.3**

Source: *SPSS Output from Field Survey (2024)*

Based on the benchmark employed in the study, the result obtained by the grand mean value of 2.30, a moderate extent was obtained showing the total mean values $\bar{x}$= 2.30, to confirm that e-wallet payment device has to a moderate extent improves customer patronage in shopping malls in Niger Delta, Nigeria.

Test of Hypotheses

Decision Rule

Reject Ho if, the computed t value is greater than the critical (table) value of 3.182, otherwise accept the null hypothesis

Hypothesis 1

Ho_1: There is no significant relationship between card payment device and increased repeat purchase of shopping malls in Niger Delta, Nigeria.

Ha_1: There is significant relationship between card payment device and increased repeat purchase of shopping malls in the Niger Delta, Nigeria.

Table 4.8: Result of correlation analysis between card payment device and customer patronage of shopping malls

			Card Payment System	Increased Repeat Purchase
Spearman's rho	Card Payment Device	Correlation Coefficient	1.000	.352**
		Sig. (2-tailed)	.	.000
		N	374	374
	Increased Repeat Purchase	Correlation Coefficient	.352**	1.000
		Sig. (2-tailed)	.000	.
		N	374	374
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: *SPSS-generated Output*

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \quad \frac{.352\sqrt{374-2}}{\sqrt{1-.352^2}} \quad \frac{6.789}{0.936} = 7.253$$

Based on the result obtained in 4.10, the null hypothesis (Ho) is rejected since the calculated t value is greater than the critical value of 3.182. This shows that the alternate hypothesis is

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accepted to confirm that there is a significant relationship between card payment device and the improvement in Repeat Purchase in shopping malls in Niger Delta, Nigeria.

Hypothesis 2

Ho_2: There is no significant relationship between electronic funds transfer and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

Ha_2: There is significant relationship between electronic funds transfer and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

Table 4.9: Result of correlation analysis between electronic funds transfer device and Customer patronage of shopping malls

			Electronic Fund Transfer	Increased Customer Patronage
Spearman's rho	Electronic Fund Transfer	Correlation Coefficients	1.000	.313**
		Sig. (2-tailed)	.	.000
		N	374	374
	Increased Customer Patronage	Correlation Coefficient	.313**	1.000
		Sig. (2-tailed)	.000	.
		N	374	374
**. Correlation is significant at the 0.01 level (2-tailed).				

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \quad \frac{.313\sqrt{374-2}}{\sqrt{1-.313^2}} \quad \frac{6.036}{0.950} = 6.353$$

Based on the result in table 4.12 above, the null hypothesis I rejected since t-calculated is greater than the critical value of 3.182. Thus, there is a significant relationship between electronic fund transfer device and improvement in customer patronage of shopping malls in Niger Deltas.

Hypothesis 3

Ho_3: There is no significant relationship between e-wallet payment device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria.

Ho_3: There is significant relationship between e-wallet payment device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria

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Table 4.10: Result of correlation analysis between e-wallet payment device and increased customer Patronage of shopping malls

			E-wallet Payment System	Increased Customer Patronage
Spearman's rho	E-wallet Payment System	Correlation Coefficient	1.000	.455**
		Sig. (2-tailed)	.	.000
		N	374	374
	Increased Customer Patronage	Correlation Coefficient	.455**	1.000
		Sig. (2-tailed)	.000	.
		N	374	374
**. Correlation is significant at the 0.01 level (2-tailed).				

Source*: SPSS-generated Output*

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \quad \frac{.455\sqrt{374-2}}{\sqrt{1-.455^2}} \quad \frac{8.775}{0.890} = 9.859$$

Based on the above result, the null hypothesis (Ho) is rejected and the alternate hypothesis is accepted since the computed t-value of 9.859 is greater than critical of 3.182. This means that there is a significant relationship e-wallet payment device and increased customer patronage of shopping malls in South-South, Nigeria.

DISCUSSION OF FINDINGS

This study found a strong positive or significant relationship between card payment system and customer patronage in shopping malls in Niger Delta, Nigeria. This finding emerged from the result of the correlation analysis carried out on the first hypothesized variables. This has bearing with the result obtained from the descriptive mean result on research question 1, supporting that card payment device has to a moderate extent improved customer patronage in shopping malls in Niger Delta, Nigeria. In confirmation of this result, the null hypothesis (Ho_1) was rejected while the alternate hypothesis was accepted. This means that there is a significant relationship between card payment device and customer patronage of shopping malls in Niger Delta, Nigeria. On a large scale, this actually imply that the relationship does not only improve customer patronage to a moderate extent but it was significant enough to justify that the relationship between card payment device and customer patronage of shopping malls in Niger Delta, Nigeria was proactive. This finding is supported by Mugambi et al. (2014) who noted that introduction of card payment system has significantly increase the level of customer patronage of retail outlets. Ovia (2002) also agreed with this finding that card payment system has enabled supermarket and shopping mall operators to increase their level of customer patronage.

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CONCLUSION

This study focused on examining the extent to which Electronic Payment Device has improved customer patronage of shopping malls in south-south Nigeria. Findings obtained revealed that "to a moderate extent, card payment system, electronic funds transfer, and e-wallet payment system has improved customer patronage of shopping malls in Niger Delta, Nigeria".

Significantly, there is no significant relationship between card payment devices; electronic funds transfer device, e-wallet payment device and improvement in customer patronage of shopping malls in Niger Delta, Nigeria. It is therefore, concluded that shopping malls operators in south-south Nigeria ought to ensure more proactive improvement measures in customer patronage by encouraging card payment devices, electronic funds transfer device, e-wallet payment device. The effort to make more sales and make huge profits will be successful.

RECOMMENDATIONS

Based on the findings and conclusion in this study, the following recommendations were deduced:

1. Shopping malls operators in Niger Delta, Nigeria should employ "Easy Card Payment Device (ECPM)" for customers by making three functional reliable banks POS machine available in their shops. This will not only reduce the cash security risk but will encourage bulk purchases, patronage and boost sales growth for sustainable profits.

2. Also, shopping malls operators in Niger Delta, Nigeria should encourage "Electronic Funds Transfer Device (EFTM)" for customers by making free network Wi-Fi available for customers with three functional reliable banks POS machine to assist customers for fast transfer of funds when need be in the shops. This will not only reduce the cash security risk but will encourage bulk purchases, patronage, and boost sales growth for sustainable profits.

3. Significantly, shopping malls operators in shopping malls should also encourage and accept "e-wallet Payment Device (EPM)" for customers by promoting e-wallet payment for purchases made to enhance fast electronic payment of funds in the shops. This will not only reduce the cash security risk but will encourage bulk purchases, patronage, and boost repeat purchases for sustainable profits.

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