

E-Payment Systems, Competitive Advantage, and Customer Satisfaction in Nigerian Banking Industry

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.807119>

Received: 16 June 2024; Revised: 01 July 2024; Accepted: 04 July 2024; Published: 08 August 2024

ABSTRACT

The study examined the relationship between e-payment systems and competitive advantage in the Nigerian banking industry and how consumer satisfaction mediated the relationship. The population of the study is the listed banks in Nigeria. Five banks were selected from the 12 listed banks in Nigeria along with their customers. The study made use of the survey research design with the use of questionnaire and face to face interview. Data were analyzed using Excel and Statistical Packages for Social Sciences (SPSS). The Chi-square test was used to measure the strength of associations between variables. The findings from this study revealed that customers were satisfied with the current e-payment options offered by banks. The three hypotheses tested showed significant effect of independent variables on dependent variables which led to the rejection of null hypotheses hence alternate hypotheses were accepted (p -value <0.05). The researcher recommended among other things that; banks should improve their network services for the proper utilization of the bank apps. Also, security measures on e-payment services should be improved to reduce theft and online criminal activities, educate more customers and enhance swift transaction delivery and also, improve the fast services and less network downtime on the e-payment platforms.

Keywords: Competitive advantage, Customer satisfaction, Customer service, E-payment systems, Nigerian banks

INTRODUCTION

Customers are the bedrock of every organization as they constitute the source of income and contributory to its success. This calls for the reason why customer service should be accorded an important place in every organization to ensure business continuity. Customers should be treated in a way they should like to repeat their experience with the company which is customer satisfaction. Customer satisfaction has the potential of increasing the bottom line of a customer focused firm (Kilay et al. 2022) Customers feel satisfied when their expectations are met by the company offering the product or service. A popular saying has it that a satisfied customer is more likely to repeat his purchase of goods or services. Customer happiness is vital to business growth and continuity. Customer happiness is linked to customer loyalty, and both are the result of an organization's financial performance. It should be noted that without customers, there can be no revenue or income for the organization hence customer satisfaction plays a significant role in business continuity and going concern.

For service firms, customer satisfaction is a crucial component that is closely tied to service delivery. They are all connected by service quality; as it improves, customer satisfaction will rise. This will result in more stable connections between a bank and its customers, which will boost customer loyalty and profitability. However, it is nearly impossible to continuously inspire an entire business with something as fragile and imagined as customer delight. Rahayu et al. (2022) highlighted that customer satisfaction brings about competitive power and survival of a forward looking organization. They pointed to innovation as an important element in improving customer satisfaction of banks. It was claimed that customer satisfaction was subject to service standards, accessibility, and customer service staff satisfaction. Customer satisfaction leads to referrals of prospective

customers by existing customers (Rahayu et al. 2022).

Customer satisfaction is achieved from other indices aside the services offered by the organization. It is important to maintain good customer relationships to achieve sustainable results for the firm. Customer satisfaction is the degree to which an organization's customer service interaction or experience is able to satisfy customers through e-payment options (Mohammed et al. 2022). It could also be understood as the capacity of e-payment platforms to provide user-friendly services. Banks can use e-payment as a quick, easy, and contemporary way to conduct banking business to streamline payment processes and thereby raise consumer satisfaction (Nasr et al., 2020). Pre 1990 era when there was no e-payment system in Nigerian banking industry, the banking system was fraught with myriad of customers' complaints such as delays, longer service time, and poor staff attitude (Nnamani & Makwe, 2019). The advent of e-payment removed a lot of customers' disgruntlement. Customers can operate their account from the comfort of their homes without visiting a bank.

The term "e-payment" refers to a transaction process in which financial services are provided electronically or digitally without human intervention between two parties which leads to faster service delivery. The world payments system is gradually changing from coins and paper-based money to electronic forms that provide more convenient, fast and secured process of making payments among individual and organizations (Odia & Mamudu, 2017). Customers can use electronic payment systems to transfer money, pay bills, and make purchases without using actual currency or cheques (Odusina & Onakoya, 2017). Hence, they have changed the way customers interact with financial institutions and carry out transactions. Globally, banks have moved from manual ways of operation to adopt digital systems since the development of information, communication, and technology (Omodele & Onyeiwu, 2019).

Several digital channels had been developed to ease the e-payment operations that will ease customers' service burden (Oney et al. 2017). In Nigeria, banks have invested in various electronic payment systems to compete and remain relevant in the industry since 2000 to replace manual system. There is no bank in Nigeria today that is engaged in manual system of operation. They have leveraged on e-payment system to improve customer satisfaction and operational process.

Competitive advantage is a company's ability to produce goods or services faster, more efficiently, or for less money than its competitors. An organization gains a competitive advantage when it creates an attribute, or a set of related attributes, that set it apart from other players in the market (Zallaghi, 2018). Consistent provision of better and higher performance than the average industry player gives a company a competitive advantage ahead of its competitors. The competitive advantage is the winning edge for any organization that has it hence organizations are compelled to devise strategy and tactics that will provide competitive advantage over its industry competitors. Strategy is the game plan devised by the board of an organization to provide direction for the company and this differentiates the company from others in the industry.

Therefore, achieving a competitive advantage requires technological innovation and providing services to customers of the highest caliber. Competitive advantage is the single most crucial indicator of organizational success since it is extremely real, measurable, and evaluable (Omodele & Onyeiwu, 2019). Ability to predict clients' needs ahead of the competition helps to harness services that will lead to customers' satisfaction. Competitive edge seems very significant for banks' survival when competition between them brews up in looking for deposit and other services.

Banking is the medium through which financial transactions are carried out globally to meet business needs. It is pretty difficult to carry out trade and business seamlessly without banking serving as an intermediary between various sectors and regions. Banking is not only limited to Nigeria but a global phenomenon that connects people on financial transactions. Banking is the communication link that brings people together in commerce and production. The objective of the study is to examine the effect of e-payment and competitive advantage on customer satisfaction in Nigerian banking industry. There have been studies in this area in other countries (Zallagi, 2018; Worku & Tafa, 2016; Vinitha & Vasantha, 2018; Tindi & Bogonko, 2017; Rahayu et al., 2022) but there are not many studies in this area in Nigeria hence the reason for carrying out this study (Omodele & Onyeiwu, 2019; Nnamani & Makwe, 2019; Mustapha, 2018; Odusina & Onakoya, 2017; Obiekwe &

Anyawaokoro, 2017). This study will provide an empiric for other researchers who may be interested in this area in future.

The following hypotheses were formulated to answer the research questions:

H₀₁: -E-payment has no significant effect on competitive advantage.

H₀₂: -E-payment has no significant effect on customer satisfaction.

H₀₃: -There is no significant relationship between e-payment as a mediating factor on competitive advantage.

LITERATURE REVIEW

Conceptual Review

Competitive Advantage

In recent years, competitive advantage has been given a considerable attention which has led to companies having business strategy sessions to improve their services. Acceptance of a company's product or service in the market over other players gives it a competitive advantage ahead of its competitors. Product or service differentiation is achieved through innovative features offering, promotion launch, superior service offering, strong brand development, and others (Lemma & Biruk, 2017). It was found that customers are willing to pay any price for a service or product that meets or exceeds their expectations (Lemma & Biruk, 2017).

Competitive advantage is that which allows an organization to function better than its competitors which yields positive benefits to the organization (Khatoun et al. 2020). Commonly, core competencies are where competitive advantages come from. Anything that a firm can do better than its competitors is called its core expertise. Mutuku et al. (2019) describe competitive advantage as the result of differentiation. Differentiation, cost advantages, and focus advantages are the three basic categories of competitive advantage. The sources of competitive advantage are as follows: superior skills, superior resources, core competencies, value chain, and differential advantage Mutuku et al. (2019).

E-payment Systems (EPS)

E-payment systems are regarded as one of the key elements of economic development, especially in developing nations, and they significantly contribute to enhancing the capabilities and availability of financial services. Various authors have defined the electronic payment system in different ways. One of such authors, Lubanga et al. (2017) defined electronic payment as a platform used in making payments for goods/services purchased online through the use of internet. It is the use of automated processes or electronic devices such as telephone or the internet to perform financial transactions (Lemma & Biruk, 2017). E-payments, which comprise electronic payments for purchasing and selling goods and services made available online, are a subset of e-commerce transactions (Kilay et al. 2022).

Electronic Payment Methods

E-payment methods could be divided into two categories, Credit payment systems and Cash payment systems.

1. Credit Payment System

- **Credit card:** A form of electronic payment system that prohibits the use of cash and requires the card provided by a financial institution to the cardholder be used to make payments online or through an electronic device.
- **E-wallet:** A form of prepaid account that stores customer financial information, such as debit and credit card details, to facilitate online transactions.

- **Smart card:** Also known as a chip card, a plastic card has a microprocessor and may be loaded with money to make purchases.

2. Cash Payment System

- **Direct debit:** An exchange of money in which the account holder directs the bank to electronically deduct a certain sum from his account in order to pay for goods and services.
- **E-check:** E-check is a form of an electronic payment in which a sum of money is stirred in a customer's device and made available for online transactions.

Stored-value card: A card that may be used to make the purchase in the issuer store and has a certain amount of money on it. Gift cards are a common illustration of stored-value cards.

Types of E-payment

Today, there are many different forms of e-payments formed in the real world of e-business. Some of the most significant e-payments are discussed below.

Automated Teller Machine (ATM)

The automated teller machine (ATM) is a device that disburses cash, as its name suggests. It is an efficient and practical method of making withdrawals. It was created to satisfy clients' increased need for rapid withdrawals from their accounts. Lemma & Biruk (2017) describes ATM as a digital device that provides service access to bank customers 24/7. Customers can access a financial institution's system using any of the channels that has a Personal Identification Number (PIN) or a computer terminal that integrates a record keeping system, cash vault, and all three functions into one unit. At an ATM, you can frequently conduct a number of standard banking transactions.

Payment Card

Some forms of electronic payment are operated through cards. Some of these payment cards are credit cards, charge cards, and debit cards, they can be operated without visiting the bank physically (Kilay et al. 2022). Credit card appears to be the most used card for online transactions. One of the most popular credit cards used for online purchases is Visa or MasterCard. A credit card entitles a bank customer to enjoy credit facility up to a pre-approved credit limit. Customers enjoy this service to engage in purchase of goods and services. It is the bank that determines the credit card limit of the customer subject to some factors such as income, family, and credit history.

Point of Sale (POS)

A computerized system called a point-of-sale (POS) system is used to speed up the sale of goods and services. POS systems are frequently utilized in retail settings, but they are also present in other establishments like bars, restaurants, hotels, salons, spas and general markets. POS is a digital facility that allows customers pay for goods and services electronically, by deducting the cost of each purchase directly from the customer's account (CBN, 2003).

Internet Banking

Internet banking is a modern-day banking concept. (Nimako et al. 2013) described internet banking as the provision of traditional banking services through internet facility seamlessly. It is the process through which customers transact business with a bank with the help of internet network (Nadler et al. 2019). Internet banking or net banking is an online facility that allows you to operate your bank account 24 hours a day. With internet banking, you can transfer money, make term deposits, apply for bank cards, and obtain account statements. Customers are requested to choose these services at the point of opening a bank account. The key principles in the literature on customer satisfaction are quality, satisfaction, and value.

Theoretical Review

Unifying Theory of Electronic Money and Payment Systems

Unifying theory of electronic money and payment systems is a comprehensive framework that aims to explain the workings and interactions of various forms of digital payments in today's economy. This study is anchored on this theory.

The Unifying Theory of Electronic Money and Payment Systems does, however, make some common assumptions, such as the rising prevalence of digital transactions, the potential for technological innovation to change payment systems, and the significance of comprehending the effects of electronic money on monetary policy and financial inclusion.

The unifying theory seeks to bring together different theoretical models and perspectives to provide a complete understanding of electronic money and payment systems. It looks at the different types of digital payments, the reasons behind their adoption, the factors affecting their usage, and the impact they have on the economy. Additionally, the theory examines electronic money and payment systems as intermediaries between consumers and merchants, and how they influence traditional payment systems and financial intermediaries.

In today's digital economy, the study of electronic money and payment systems is very important. Understanding the mechanics and ramifications of electronic money and payment systems is essential for governments, corporations, and consumers as the world becomes more paperless and more transactions take place online. This sector is crucial for tackling problems with consumer protection, cybersecurity, monetary policy, and financial inclusion.

Furthermore, the theory explores the relationship between electronic money and payment systems and traditional monetary systems like central bank money and bank deposits, as well as how they interact and complement each other. The unifying theory of electronic money and payment systems is essential for policy makers, financial institutions, and regulators to understand the developments and trends in digital payments and to implement effective policies and regulations for their safe and efficient use.

Empirical Review

E-payment and Competitive Advantage

Rahyuni (2022) investigated on e-payment innovation in improving financial performance of Indonesia's banks with moderated bank size. The population in this study is 43 banking companies listed on the Indonesian Stock Exchange (IDX) in 2014 - 2016. Purposive sampling was used, and 10 banks were used as sample. The data obtained were analyzed using Moderated Regression Analysis (MRA). The results of this study indicated that e-payment had a positive significant effect on financial performance while bank size strengthened the relationship between e-payment and financial performance. The results further indicated that innovation can improve bank financial performance through adoption of e-payment system.

Rabiu et al. (2019) investigated the impact of e-banking on the operational efficiency of banks in Nigeria, a case of Diamond Bank Plc, Bauchi branch, Nigeria. The research used primary data sources. Questionnaires were used to obtain data. 138 questionnaires were distributed among bank customers and the data collected were analyzed using regression analysis. Moreover, IBM SPSS was used to analyze the data obtained. The findings showed that internet banking has statistical significant impact on operational efficiency of banks in Nigeria. On the other hand, mobile banking has statistical insignificant effect on operational efficiency of banks in Nigeria. The products of e-banking in use by the banks such as internet banking, mobile banking etc., should be improved so that, the expected service delivery time in the bank will reduce and customer will enjoy efficient service delivery. However, it is concluded that internet and mobile banking have statistical insignificant effect on operational efficiency of bank in Nigeria.

Amaduche et al. (2020) examined the impact of electronic banking on the operations and performance of deposit money banks in Nigeria. The study used primary research design with the adoption of questionnaire

administration to obtain responses from sampled employees of FBN, UBA, and GTB. Data were analyzed with the use of Statistical Package for Social Sciences (SPSS). The findings revealed that e-banking is crucial to improved performance of banks in Nigeria. The results revealed that the role of electronic banking on banking operations had a significant effect on performance of performance of Nigerian banks (p -value=0.000). It also showed that the viability of electronic banking on the operations had a significant effect on the performance of banks in Nigeria (p -value=0.000). The findings of the study were in line with the findings of Taiwo and Agwu (2017) who affirmed that introduction of e-channels into banking operations significantly improved banks' performances.

E-payment and Customer Satisfaction

Hadid et al. (2022) examined the effect of mediation between customer satisfaction and the relationship between digital banking service quality and customer loyalty. The objective of the study was to examine digital service quality factors that positively affect customer loyalty in commercial banking sector, determine digital service quality factors that positively affect customer satisfaction in commercial banking sector, and to investigate the customer satisfaction factors that positively affect customer loyalty in commercial banking sector. The descriptive and inferential statistical methods were used to analyze the data and SmartPLS 3.0 software was utilized. The findings revealed that digital banking service quality factors comprising reliability, tangibility, responsiveness, assurance, and empathy are all positively related to customer loyalty ($p < 0.05$), with the exception of empathy; and to customer satisfaction at $p < 0.05$ with the exception of responsiveness. Meanwhile, customer satisfaction shows a mediating effect on the relationship between reliability, tangibility, empathy, responsiveness assurance, and customer loyalty.

Mohammed et al. (2022) examined performance of e-banking and the mediating effect of customer satisfaction: A Structural Equation Model Approach. The primary data were gathered from 287 participants and stratified random sampling was used. Structure Equation Modelling (SEM), reliability, convergent, discriminate validity and model fitness were achieved through Smart PLS 3.0. The findings revealed that efficiency, reliability and service quality have a significant direct effect on customer satisfaction and customer retention.

Chukwu et al. (2021) investigated the effect of electronic payment system and customer satisfaction in Nigerian banking system. The study evaluated the level of customers' satisfaction in e-payment systems in Nigeria. The study was conducted among bank customers in Awka city. The selected electronic payment systems were made to encompass Automated Teller Machines (ATMs) and Point of Sale (POS). The study made use of the survey research design using questionnaire as research instrument. The sample of the study focused on 70 customers of banks in Nnamdi Azikiwe University, Awka, Anambra State. The data gathered were analyzed using SPSS version 22. The findings revealed that there is so much room for improvement.

Khatoun et al. (2020) examined the mediating effect of customer satisfaction on the relationship between electronic banking service quality and customer purchase intention: evidence from the Qatar banking sector. The study investigated the relationship between the dimensions of electronic (E)-banking service quality and customer purchasing intentions with the mediating role of customer satisfaction. Data were collected from employees and customers, working in different banks of Qatar through a validated closed-ended questionnaire from a sample of 235. Correlation analysis and regression analysis were employed to test the study hypothesis. The results of the study indicated that reliability, efficiency, responsiveness, communication, security, and privacy have a significant and positive impact on customer purchasing intentions.

Alhammadi and Tariq (2020) examined the impact of quality e-payment system on customer satisfaction in Abu Dhabi city in UAE. The study followed a quantitative approach. The population was selected among e-payment users in Abu Dhabi through a random sampling technique. Primary data was gathered from 233 respondents by using close-ended questionnaires based on the Likert scale. A descriptive statistical analysis was employed to analyze the data. The result of the research findings showed that the overall average of service quality dimension, which was 2.99, and this indicated the positive impact of six quality dimensions of the e-payment system on customer satisfaction. The findings illustrated that the service quality of e-payment had a positive impact on e-payment users' satisfaction.

Sharon et al. (2017) investigated the role of e-banking and e-payment facilities on customer satisfaction in private banks. The objective of the study was to find out whether e-payment tools have an effect on customer satisfaction in private banks, to analyze the reasons for customers' adoption of e-banking facilities and the challenges of its usage and to evaluate which e-banking services are enjoyed most by customers. Rank analysis was used to analyze the reasons for customers preferring to use e-payment facilities. Conclusively, e-banking is becoming more popular over conventional banking.

Mediating effect on E-payment and Competitive Advantage Relationship

Mutuku et al. (2019) investigated on Mediating Effect of Competitive Advantage on the Relationship between e-commerce capability and performance: Empirical evidence from commercial banks in Kenya. The study used explanatory research design. A census of 43 commercial banks was taken; data for the study were extracted for the financial year 2016/2017. Data analysis was done using descriptive and inferential statistics. The findings showed that competitive advantage partially mediated the relationship between e-commerce capability and performance of commercial banks in Kenya. It was further revealed that commercial banks' e-commerce capability had significant effect on their ROA. The study established that commercial banks that leveraged on information e-commerce capability, customization capability and back-end integration capability achieved flexibility, customer satisfaction and improved performance. The study further confirmed that commercial banks that leveraged on their competitive advantages achieved superior performance. Customer satisfaction emerged as a crucial strategy that commercial banks can use to obtain competitive advantage and that translated to improved overall performance.

Mustapha (2018) examined e-payment technology effect on bank performance in emerging economies – evidence from Nigeria. Descriptive and inferential statistics were used to analyze the data. The findings showed that bank performance contradicts autoregressive and random walk processes and thus implies that investors should not be disturbed about previous bank performances but concerned about current bank resources. The findings also showed that the performance of banks increased after the introduction of electronic payment systems into the financial sector. More so, the inferential results showed that performance of banks contradicted the autoregressive and distributional lag modelling frameworks.

METHODOLOGY

Research Design

Survey research design was adopted for this study. This type of design is a systematic gathering of information from participants to understand and predict some aspects of behaviour of the population interest. A survey involves the administration of questionnaires to extract data from participants. The survey focused on the customers of the five selected banks (Guaranty Trust Bank, United Bank for Africa, Stanbic IBTC, Access Bank and First Bank) in Nigeria. Necessary data were collected to ascertain the extent of the benefits and the problems of E-payment systems and competitive advantage on the mediating effect of customer satisfaction in the banking industry. To achieve the objectives of the study, primary source of data was employed. Questionnaire and oral interview were used for this research in collecting all necessary data from the staffs and customers of the chosen banks. The study area is Lagos State. Lagos State is a state in southwestern Nigeria, of the 36 states, it is both the most populous and smallest in area.

Population

The population for this study were commercial banks listed in Nigeria, Lagos State. The listed banks on Nigerian Exchange Group are Access bank, ETI, FCMB, Fidelity, First Bank, GTB, Jaiz, Stanbic IBTC, UBA, Union Bank, Wema Bank, and Zenith bank.

Sample Size and Sampling Technique

Purposive sampling was adopted to take sample from the population. This gave opportunity to every employee

and customer of these banks to be selected for the exercise. The employees chosen were those who were involved in e-payment transactions and same was applied to customers picked for the sample.

The study's population sample comprised the selected employees and individual customers in the following banks in Lagos state, Nigeria; Access Bank, First Bank of Nigeria, Guaranty Trust Bank, Stanbic IBTC Bank, and United Bank for Africa,

The researcher's reason for the choice of sampled banks was aimed at adequate focus and representation of the entire bank population irrespective of the size. Banks chosen were from old and new generation. In the banks used, 20 respondents were selected from each of the sampled banks who were involved in e-payment processing. 20 respondents were also selected from each bank's customers who have utilized e-payment processing service in their banks.

Research Instrument

The main instrument of data collection used for this study is questionnaire and face to face interview for primary data collection, which facilitated high response rate from the respondents. The usual questions found in the questionnaires were closed-ended. However, some questionnaires were open-ended questions to explore the answers of the respondents.

Pilot Study

A pilot study was conducted to pre-test the items in the questionnaire on the employees and individual customers of the five sampled listed Nigerian banks. 5 staff and 5 customers were randomly selected from the sampled banks that are not part of the selected sampled banks in this study. The pilot study's purpose was to adjust the questionnaire so that the respondents have no ambiguity problems when answering the questions and no difficulty recording the data. The pilot study was considered necessary to determine the respondents' willingness, have a foreknowledge of the respondents' reactions, and ascertain the reliability of the questionnaires when used in a research environment. The result of the pilot study was positive and it added value to the study carried out.

Validity of Research Instrument

Validity is the extent to which a research instrument actually measures the variables it claims to. This means it should measure the characteristics that it should measure. The research instrument that the study used was two questionnaires, which was meant to look at the mediating effect of E-payment systems and competitive advantage on customer satisfaction in the banking industry in Lagos State. The questionnaire was approved by my supervisor and also reviewed by two more lecturers before it was administered to the respondents to fill.

Test of Reliability of Research Instruments

Also, the reliability of an instrument is determined by obtaining information on the degree to which a measure yields similar results for the same subjects at different times or under different conditions in a consistent, stable and predictable and accurate way. The research instruments that will be used is expected to be reliable with regard to the information to be gathered from the employees.

Methods of Data Collection

The type of data sourced for this study was primary data because of the nature of the study. The primary data was collected using a questionnaire, which was administered to participants to elicit information from them. 50 copies of questionnaires were distributed to the employees and individual customers of Guaranty Trust Bank, United Bank for Africa, Stanbic IBTC Bank, Access Bank and Fist Bank Plc. The questionnaires were administered through a Microsoft Form survey, which serves as a tool that helps the researcher collect data from participants through emails, WhatsApp, and website.

Data were analyzed using Excel and SPSS. The Chi-square test was used to measure the strength of associations

between variables and a p-value of <0.05 was considered to be statistically significant.

Model specification

$$Y = f(X)$$

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + e$$

Where;

Y= Competitive Advantage

y₁ = Competitive advantage

y₂ = Customer satisfaction

y₃ = Mediating effect

X= E-payment Systems

x₁ = ATM

x₂ = Credit Card

x₃ = Internet Banking

B= Coefficient

e= Error term

The above model can be specifically applied to this study as;

$$y_1 = \beta_0 + \beta_1ATM + \beta_2Credit\ card + \beta_3POS + \beta_4Internet\ Banking + e \dots\dots\dots Model\ 1$$

$$y_2 = \beta_0 + \beta_1ATM + \beta_2Credit\ card + \beta_3POS + \beta_4Internet\ Banking + e \dots\dots\dots Model\ 2$$

$$y_3 = \beta_0 + \beta_1ATM + \beta_2Credit\ card + \beta_3POS + \beta_4Internet\ Banking + e \dots\dots\dots Model\ 3$$

ANALYSIS AND INTERPRETATION OF DATA

This section involves presentation of data, data analysis and hypothesis testing.

Presentation of Data

Table 4.1 Gender Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	108	50.0	50.0	50.0
	FEMALE	108	50.0	50.0	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table above revealed a gender balance between the male and female respondents used for the study.

Table 4.2 Age distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 25 years	71	32.9	32.9	32.9
	26-30	43	19.9	19.9	52.8
	31-35	38	17.6	17.6	70.4
	36-40	20	9.3	9.3	79.6
	41-45	4	1.9	1.9	81.5
	46-50	16	7.4	7.4	88.9
	51 and above	24	11.1	11.1	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table above revealed the age distribution involved in the research work; less than 25 years (71, 32.9%), 26-30 years (43, 19.9%), 31-35years (38, 17.6%), 36-40years (20, 9.3%), 41-45years (4, 1.9%). This revealed that the respondents involved in this research are mostly young adults while other ages are also significant in the work.

Table 4.3 Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	81	37.5	37.5	37.5
	Married	123	56.9	56.9	94.4
	Divorced	12	5.6	5.6	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table 4.3 revealed the marital status of respondents in the research; Single (81, 37.5%), Married 123, 56.9%, Divorced 12, 5.7%. This serves as an indication that most respondents are married.

Table 4.4 Level of education attained

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SSCE	86	39.8	39.8	39.8
	OND	36	16.7	16.7	56.5
	HND	40	18.5	18.5	75.0
	BSC	44	20.4	20.4	95.4
	MBA	2	.9	.9	96.3

	MSC	6	2.8	2.8	99.1
	PHD	2	.9	.9	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table shows the education status of the respondents; SSCE (86, 39.8 %.), OND (36, 16.7%), HND (40, 18.5%), BSC (44, 20.4%), MBA (2, 0.9%), MSC (6, 2.8%), PHD (2, 0.9%). This actually revealed that most respondents have SSCE qualification followed by degree holders.

Table 4.5 BANK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	GTB	24	11.1	11.1	11.1
	UBA	33	15.3	15.3	26.4
	STANBIC	41	19.0	19.0	45.4
	FIRST BANK	63	29.2	29.2	74.5
	ACCESS BANK	55	25.5	25.5	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table revealed that First Bank users are most in the research work with 63, (29.2%), while UBA 33, (15.3%), Stanbic 41, (19%), Access bank 55, (25.5%).

Table 4.6 Account Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-student bank customer	165	76.4	76.4	76.4
	Student bank customer	51	23.6	23.6	100.0
	Total	216	100.0	100.0	

Source: Author’s computation (2024)

Interpretation

The table revealed the account status of respondents; Non-student bank 165, (76.4%), while Student bank 51, (23.6%). This indicates that more respondents are Non-student bank customers.

Test of Hypothesis

This is the section of the analysis where the hypotheses were tested using chi-square test of independence to validate the statement whether null or a true statement in data collected from the field.

Hypothesis One

H₀₁: E-payment has no significant effect on competitive advantage.

I believe that customer satisfaction with the e-payment systems can lead to a greater competitive advantage over other banks * No other bank can compete successfully with my bank when it comes to e-payment

Count

		No other bank can compete successfully with my bank when it comes to e-payment							Total
		.00	Strongly Disagree	Disagree	Disagree to some extent	Agree to some extent	Agree	Strongly Agree	
I believe that customer satisfaction with the e-payment systems can lead to a greater competitive advantage over other banks	.00	0	0	0	1	0	0	0	1
	Strongly Disagree	0	5	0	0	0	1	0	6
	Disagree	0	1	0	0	1	1	0	3
	Disagree to some extent	0	0	0	3	1	0	0	4
	Agree to some extent	6	2	3	6	6	7	2	32
	Agree	13	1	4	4	1	35	18	76
	Strongly Agree	13	4	4	5	8	15	50	99
Total		32	13	11	19	17	59	70	221

Author’s computation 2024

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	214.883 ^a	30	.000
Likelihood Ratio	139.070	30	.000
Linear-by-Linear Association	34.234	1	.000
N of Valid Cases	221		

Author’s computation 2024

Decision: From the table above judged by the frequency table used and variable tested on the chi-square table, we can deduce that since p-value is less than the significant level of 0.05 ($0.000 < 0.05$), the null hypothesis was rejected while alternate hypothesis was accepted which states that there is relationship between E-payment and competitive advantage.

Hypothesis Two

H₀₂: -E-payment has no significant effect on customer satisfaction

Customers are satisfied with the current e-payment options offered by the banks * Customer satisfaction is important to the bank's success

Count

		Customer satisfaction is important to the bank's success						Total
		Strongly Disagree	Disagree	Disagree to some extent	Agree to some extent	Agree	Strongly Agree	
Customers are satisfied with the current e-payment options offered by the banks	Strongly Disagree	3	0	1	0	1	0	5
	Disagree	3	1	0	0	0	1	5
	Disagree to some extent	1	0	6	1	1	7	16
	Agree to some extent	0	0	2	6	13	36	57
	Agree	0	0	0	6	35	40	81
	Strongly Agree	0	0	0	0	5	52	57
Total		7	1	9	13	55	136	221

Author's computation 2024

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	247.004 ^a	25	.000
Likelihood Ratio	124.242	25	.000
Linear-by-Linear Association	76.657	1	.000
N of Valid Cases	221		

Author's computation 2024

Decision: From the table above judged by the frequency table used and variable tested on the chi-square table, the p-value is less than the significant level of 0.05 ($0.000 < 0.05$), hence the null hypothesis was rejected while alternate hypothesis was accepted which states that e-payment had significant effect on customers' satisfactions

Hypothesis Three

H₀₃: -There is no relationship between e-payment as a mediating factor on competitive advantage.

I will be willing to pay a higher transaction fee the bank with a superior e-payment system * I believe that customer satisfaction with the e-payment systems can lead to a greater competitive advantage over other bank Crosstabulation

		I believe that customer satisfaction with the e-payment systems can lead to a greater competitive advantage over other bank							Total
		.00	Strongly Disagree	Disagree	Disagree to some extent	Agree to some extent	Agree	Strongly Agree	
I will be willing to pay a higher transaction fee the bank with a superior e-payment system	Strongly Disagree	0	1	0	0	5	11	25	42
	Disagree	1	2	1	0	5	16	11	36
	Disagree to some extent	0	1	0	3	2	10	10	26
	Agree to some extent	0	1	0	1	12	11	16	41
	Agree	0	1	2	0	6	16	19	44
	Strongly Agree	0	0	0	0	2	12	18	32
Total		1	6	3	4	32	76	99	221

Author’s computation 2024

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.206 ^a	30	.030
Likelihood Ratio	40.231	30	.100
Linear-by-Linear Association	.457	1	.499
N of Valid Cases	221		

a. 26 cells (61.9%) have expected count less than 5. The minimum expected count is .12.

Author’s computation 2024

Decision: From the table above judged by the frequency table used and variable tested on the chi-square table, the p-value is less than the significant level of 0.05 ($0.030 < 0.05$), we therefore reject null hypothesis and accept alternate hypothesis which states that there is a relationship between e-payment as a mediating factor on competitive advantage.

DISCUSSION OF FINDINGS

The study revealed a gender balance among the respondents for the study hence no concern for gender discrimination. The study also revealed that the dominant age group of the bank customer that participated in the study are less than 25 years old which related to youth group. It shows acceptance of innovation and technology by Nigerian youths. Also, majority of the bank customers used for the study are married respondents.

Similarly, the study showed that more respondents attained secondary school level while others proceeded to

tertiary education level. In essence, the sample study are dominated by academic elites; the reason E-payment system innovation is easy for them to embrace in the Nigeria banking industry.

The study also affirmed that First bank customers dominated the study, perhaps due to its age-long existence being one of the largest banks in the industry and has attracted large number of customers over the years. The study established that majority of the bank customers operate non-student account; an indication that majority of them are in working class.

The results of hypothesis One revealed that there was a significant effect of e-payment on competitive advantage. This shows that e-payment is seen as an edge over any bank that does not adopt the technology. No such bank will attract customers in this technological era. The result of this study is in tandem with the results obtained in Rahyuni (2022) and Rabiou et al. (2019) which corroborated that adoption of e-payment innovation can improve a bank's financial performance. The results in Rahyuni (2020) showed a significant effect of e-payment on financial performance of banks in Indonesia. In another vein, the result in Rabiou et al. (2019) showed a contrary result with an insignificant effect of e-payment on operational efficiency of banks in Nigeria, a case of distressed Diamond Bank Plc in Bauchi branch.

The results of hypothesis Two revealed that e-payment had a significant effect on e-payment on customer satisfaction. This shows that customers' complaints on service delivery of banks dropped significantly. Customers enjoyed faster service than the period of manual system, they also enjoy some self-service from the comfort of their homes and offices. The results of Hadid et al. (2022), Mohammed et al. (2022), and Chukwu et al. (2021) were in support of this study. The findings of Hadid et al. (2022) showed that digital banking service quality factors comprising reliability, tangibility, responsiveness, assurance, and empathy are all positively related to customer loyalty. The result of Chukwu et al (2021) showed a contrary view as it conveyed that there is so much room for improvement in Nigerian banking system despite the introduction of e-payment platform. The studies of Khatoon et al. (2020), Alhammedi and Tariq (2020), and Ameena (2020) were in tandem with the results of this study which reported a significant effect of e-payment on customer satisfaction. The findings of Ameena (2020) revealed that the service quality of e-payment had a positive impact on e-payment users' satisfaction.

The results of hypothesis Three showed a significant relationship between e-payment factors and competitive advantage ($p < 0.05$). The result of this study is in tandem with the results of Mutuku et al. (2019) which established that commercial banks that leveraged on information, e-commerce capability, customization capability and back-end integration capability achieved flexibility, customer satisfaction and improved performance. The result of Mutuku et al. (2019) also confirmed that commercial banks' e-commerce capability had significant effect on their ROA.

Implications

The implication of the study is that e-payment platform is considered as a competitive advantage by some banks to attract customers from other banks that are yet to launch deeply into the technology. This has also created competition among banks in Nigeria because no customer wants to be serviced manually in this technological era. The e-payment system also showed in the performance of banks that have adopted it fully to its advantage which results in high profitability for the bank. A satisfied customer becomes a loyal customer hence the higher the number of satisfied customers a bank has the better is its performance.

SUMMARY, CONCLUSION, AND RECOMMENDATION

Summary of Findings

E-payment is a modern way of settling payments of trade in a recent time. Beyond just being convenient, electronic payment systems include benefits such as the ability to reduce transaction costs, enhance financial inclusion, and generate relevant transaction data.

The general objective of the study was to examine the effect of e-payment as a means for competitive advantage.

The major findings of the study revealed an adequate monitoring to secure e-payment systems as a means to have a competitive advantage in the market.

The sample of this research work consisted of employees and customers of Access Bank, Fist Bank of Nigeria, GTB, and Stanbic IBTC Bank, and United Bank for Africa as already mentioned. The total of 105 questionnaires were administered to each of the aforementioned bank staffs and customers. The research used Microsoft-form questionnaire and hard copy questionnaires. The research also used the Statistical Package for Social Sciences (SPSS) to analyze the data. However, the study was anchored on the Unifying Theory of Electronic Money and Payment System. The unifying theory of electronic money and payment systems is a thorough framework designed to describe the operation and interconnections of numerous digital payment types in the modern economy. The theory seeks to bring together different theoretical models and perspectives to provide a complete understanding of electronic money and payment systems.

The first objective of the research investigated the effect of E-payment as a means for competitive advantage. The major findings from the objective revealed an adequate monitoring system designed to secure e-payments as a means to have a competitive advantage in the market. The study also revealed that e-payment had a significant impact on competitive advantage.

The second objective of the study ascertained the effect of e-payment on customer satisfaction. The major findings of the objective revealed that the easiness, flexibility, reliability, accessibility, cost effectiveness, safety and security as well as personalization of e-payment in Nigeria with respect to ATM, POS, internet and mobile banking has a strong impact on customer satisfaction in Nigeria. The research concluded that e-payment impact customer satisfaction.

The third objective of the study evaluated the mediating effect on the relationship between e-payment and competitive advantage. The findings revealed that e-payment has a positive impact on the competitive advantage in the banking industry. However, e-payment can improve efficiency, reduce transaction cost and enhance customer experience which in-turn may lead to a competitive advantage in the banking industry. These findings were well established and affirmed by the inferential statistics done through the use of chi-square to test the hypothesis. The hypothesis testing eventually showed a significant relationship among E-payment system, competitive advantage and customer satisfaction.

5.2 Conclusion

This study concluded that e-payment has improved the capital base in the Nigerian banks as a result of customers' satisfaction. Also, there was a substantial connection between e-payment and banking services in Nigeria and lastly, e-payment had significant impact on competitive advantage and customer satisfaction in Nigeria. E-payment methods have genuinely improved the standard of banking operations. However, the state and functionality of the examined e-payment systems do not entirely satisfy the bank customers. Possibly owing to the huge charges associated with the use of the e-payment services, customers are dissatisfied with the service charge on money deposited or received through the POS (Point of sale) from the pre-COVID-19, during and post-COVID-19 era in Nigeria and subsequently, with the increment of charges after the introduction of the new naira notes introduced in Nigeria.

Also, the stamp duties is also a charge which customers displayed their dissatisfaction with. The deductions from both withdrawal and saving in the account should be reconsidered. ATM service in banking, good as it was claimed to be, has not actually helped much to reduce customers' anxieties. This is likely related to network issues and service fees related to using ATM service, incorrect debits and unreversed funds in error on internet banking. Customers are not also satisfied with the use of internet banking based on the service charge on transfers to another bank and network issues. Lastly, on the bank app, customers displayed satisfaction on the usage of the applications although about 50% of respondents displayed their displeasure with regards to the network issues restricting the applications from being accessed and service charges on transfers.

To match consumer expectations, all e-payment systems should generally improve and enhance their e-payment services. Banks must continuously maintain a competitive advantage to encourage new services and products by

lowering the costs on transactions for clients. The study also concluded that customer satisfaction mediates the linkage between e-payment systems and competitive advantage in the banking industry.

5.3 Recommendation

Based on the findings of the study, the following recommendation were proposed;

1. Implementation of new approaches to strengthen the bank with regards to e-payment services by reducing the service charged and transactions would improve customer satisfaction that will in-turn bring a competitive advantage to the market. There should be charges reduction bonus or referral points, seamless network provider to bring in more customers, Constant innovation and improvement on the existing technology for the e-payment services. The banks should create a weather friendly method of e-payment whereby transactions are not affected by the weather conditions.
2. The study recommended that banks should improve their network services for the proper utilization of the bank apps. Also, improve on the security measures on e-payment services to avoid theft and online criminals, educate more customers and enhance swift transaction delivery and also, improve the fast services and less network downtime on the e-payment platforms. Banks should improve on flexible transactions of other currencies and also improve on the counter services so that the work can be faster and prompt attention of bank customers.
3. There is a need to automate the reconciliation process across the banks so that failed transactions can be reversed automatically, Banks should put in more effort to serve the customers better. There should also be an inclusion of the blind and illiterate in the e-pa

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