

THE EFFECT OF ELECTRONIC PAYMENT ON CUSTOMER SERVICE DELIVERY IN NIGERIAN BANKS

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ABSTRACT

This study investigated the effect of electronic payment on customer service delivery, as brought about by problem of satisfying customers need in Nigerian banks. To achieve this, four commercial banks (United Bank for Africa, First bank, Zenith bank and Intercontinental bank) in Nigeria were studied. The study design is a survey, which focused on the population of the four selected commercial banks in Nigeria. One hundred respondents were stratified proportionately amongst customers of the selected banks with the aid of questionnaire randomly administered. Chi-square and regression analysis were employed in testing whether there is significant relationship between the level of automation banking services and improvement in delivery of services to their numerous customers in Nigeria. The study concludes that electronic payment has significant impact on the services render by the banking industry in Nigeria thereby improves customer service delivery, better management efficiency, increased profit, customer satisfaction and sustainability in Nigeria.

Keywords: *Electronic payment, electronic banking, Service delivery, information technology.*

INTRODUCTION

The application of electronic payment (concepts, techniques, policies) and implementation of electronic devices in banking industry has become a subject of fundamental importance and concerns to all banks operating within Nigeria territory and indeed a prerequisite for local and global competitiveness. The recent consolidation exercise in Nigerian banking sector has drawn the attentions of many banks to application of various technological devices in promoting/achieving better customer service delivery that guaranteed continuous increase in profitability and higher return on investment. However, the rapid growth in the global banking services has increased the pressure on the Nigerian banks for improved productivity. The new age of banking allows customers to walk into any computerized bank and conclude their transaction within a twinkle of an eye. In order to enhance banking services, majority of banks especially the new generation banks have adopted the electronic banking services to enhance their customer service delivery through the advancement in the information technology.

Payment systems have passed through a lot of ages. Prior to 700 BC when cowries were introduced in Asia Minor, barter remained the only medium of exchange with the introduction of coins and notes, the era of cash and payment system emerge. In AD 1000, the first bank note appeared in China. This was later followed by the use of cheque as written instructions to transfer precious metal coins from one holder to another. Other written instructions such as credit transfer, postal orders, money orders and travelers' cheques have also been introduced. The next age of payment system that followed paper instruction is electronic payment, some payments are now being automated and absolute volumes of cash transactions have declined about the adoption of ICT to the payment system especially in the developed countries.

David (1982) confirms that there has been a very modest move away from cash. Patrick (1985) also contends that the advantage of cash charismatic as the value of transactions increases. Consequently the use of non-cash payment rises with increasing value. All these have been brought about by the advancement in Information and Communication Technology (ICT). ICT

has streamlined the processes for cash lodgments (deposits) and withdrawals locally and internationally. Tellers are today equipped to issue receipts (deposits slips) for cash deposits. The service of ordering bank drafts or certified cheques made payable to third parties has also been increasingly automated (Ikechukwu, 2000).

Writing on new technologies and performance enhancement in the banking industry, Ovia (1997) states that the new technologies have created from point A to point B has resulted in turning the central money into bits and bytes through satellite transponders, fibre optic cables or regular telephone lines. Bill (1996) contends that for banks, the new technologies present not only a challenge to adapt but also many opportunities to utilize. Stan (1997) also defined electronic payment as a system of payment whereby transaction takes place electronically without the use of cash. According to Steve (1996) electronic payment is a system that is automated through the use of information technology where bank transactions are done within and without banking halls and not necessarily the customer's branch. Information technology is the major driver that helps in the enhancement of the electronic system to enhance customer service delivery.

It is information technology that brought about electronic banking that is banking services that are conducted on the platform of mobile devices and wireless networks, also provision of banking and financial services with the help of mobile telecommunication devices. Consequently, electronic payment system deals with clearing network characteristics which is automated clearing service which manifest in the use of magnetic ink character reader in Nigeria. The remote services or point of sales characteristics addresses the units of banking activities that transfer fund from one bank's account to another. The transfer is always authorized and the record is kept on file of that authorization. Also deals with pre-authorized debit and credit characteristics of electronic payment which manifests in the use of cards.

Plastic cards are used to identify customers and pass same to machine to initiate a paper or electronic payment. Steve (1996) said it is a mechanisms by which personal customer could interface with electronic banking industry. Financial institutions issue credit/debit cards designed as a system in order to provide credit or debit facilities to their customers. Debit cards are card

designed as a convenient method of payment in place of cash while credit cards are used as means of borrowing or as a convenient method of payment. In order to enhance the customer service delivery in Nigeria banks, banks are expected to adopt latest technologies available for electronic payment system brought about by the advancement in the information technology. The increase in emerging Information Technology has made banking services become more and more automated and less paper work than in the past as averred in the Central Bank Nigeria reports and statistical bulletins, annual reports of most Nigerian banks and other literature of banking and finance (Keramati, 2007). Banks in Nigeria have realized that they would soon go out of corporate existence unless they keep with the pace at which Information Technology (IT) has redefined the creation of value and worth for their customers.

Although waiting for service is a fact of life, excessive waiting can impair significant satisfaction and economic impacts. Bank professionals also experience adverse effects of long queues and waiting time, including a growing frustration associated with the inability to provide timely and appropriate service delivery. This situation calls for informed method(s) of effecting banking transaction, one of which is IT-based method of E-banking as an upsurge in the modern banking system. Evidences from the literature as shown by Zhu, Jr, and Chen, 2002; Waite & Harrison, 2002; Garcia, Hahn and Layne-Farrar, 2006 reveal that E-banking system is expected to serve the purpose of decongesting banking hall, reducing waiting time for bank services, maintaining one branch bank, making customers more liquid and ensuring cashless economy.

Bickersteth (2005) attributed the slow pace of development of e-payment to lack of adequate infrastructure, low Internet penetration, absence of open standards/trust among banks and providers as well as absence of adequate legislation or national policy on IT development. According to Olesin (2006) and Ezeoha (2006), image problem was another issue. The Advance Fee Fraud code-named 419, is one of the most popular Internet frauds in Nigeria. Generally, Denny (1998) attributed e-payment problems to the issues of customer identification and account verification of online purchasers. Another issue is lack of security. There is need to put in place effective

security measures to safeguard the client, server as well as the media of transmission (Ghosh, 1997). Electronic banking is a feature that ensures that customer's transaction updates are done online real time. This way customer is assured of the most current transaction and balances in their account at any point in time. Electronic banking is an IT based banking that makes all transaction in an account of a customer done within a short term at any branch of this bank.

Such branches are linked together through online real time. Full online; real time capabilities have revolutionalized electronic payment system. Electronic payment system is an electronic oriented payment mechanism that allows customers accounts to be credited electronically within 24 hours (Ugwu, Oyebisi, Non and Adagunodo, 2000) without going to the customer's initial bank branch. Electronic payment system has been variously designed to ease international money transfer through payment system like SWIFT (Society for World Inter Bank Financial Telecommunication). Western Union Money Gram amongst others which enable user banks to use electronic mode to transfer international payment, statement and other banking messages. The advent of electronic banking in Nigeria brought in some products to make bank transaction easy and more efficient. These products are Efficient Quick Service (EQS), Electronic Payment System (e-PS), Telephone Banking (TeB), Electronic Purse Service (EPS), Smart Cards (SC), Automated Teller Machine (ATM), and Wire Transfer (WT).

Efficient Quick Service is the package that enables the banks offices to view customers' signature at any of the banks branches such that cashier do not spend valuable man hours searching for mandate cards. All other enquiries like ascertaining current account positions are done in a minute. Electronic Payment System is a system that makes payment easy, where you no longer need to ask your branch to send drafts to the head office from their local account now open remittance accounts for up country branches with banks that operate online real-time transaction processing and balance swept to the main account automatically by the computer daily. Telephone Banking is when a customer is given a personal identification number (PIN) or access number which is known to him personally with which he could issue any instruction to his bankers over the phone. Though more banks have

introduced electronic purse service where by customers can go about with a card where large sums of money are loaded, yet Smart Cards are meant to eliminate the use of cash for transaction with a card. These are debit cards which are a payment method in place of cash or cheque and credit cards used as means of borrowing or as a method of payment. Automated Teller Machine (ATM) is the machine where cash withdrawal can be made over the machine without going into the banking hall. It also sells recharge cards transfer funds; it can be accessed 24hours/7days with account balance enquiry, while Wire Transfer is the method of transferring money from one entity to another. A wire transfer can be made from one entity's bank account to another entity's banks account and by transfer of cash at a cash office.

In view of the above, the paper opts to examine the impact of E-banking on customer service delivery as well as the challenges of e-banking in the post consolidated banks in Nigeria. The study restricted itself to the application of e-payment in the banking system. In the course of this study, two research propositions were formulated in null forms that will be tested to achieve the objectives of the study.

Rp₁: There is no significant relationship between electronic payment and banking services delivery in Nigeria

Rp₂: Electronic payment has no significant benefit in customer service delivery in Nigerian banks.

RESEARCH METHODOLOGY

The study design is mainly of field survey. The survey focused on the customers of the four selected banks (United Bank for Africa, First bank, Zenith bank and Intercontinental bank) in Nigeria. Necessary data were collected to ascertain the extent of the benefits and the problems of the effects of electronic payment system on the delivery of services to customers in Nigerian banks. To achieve the objectives of the study, primary source of data was employed. The primary source of data was based on the use of questionnaire distributed and collected from the selected banks' customers. The target population of study was all the customers of consolidated banks in Nigeria taking into consideration banking activities before and after the

2005 bank consolidation exercise. Since it is not possible to study the entire population, a sample of 100 respondents was randomly selected and administered questionnaire from the banks studied. The sampling technique used for this study was stratified random sampling technique in selecting the sample for empirical examination. The questionnaire was designed in such a way that alternatives were provided for the respondents to choose from and opinions were expected to be expressed. In the questionnaire, the Likert scale measurement of variables was used; this requires the respondents to indicate a degree of agreement or disagreement.

Special statistical packages called SPSS was used to obtained the result given. A non-parametric statistics (Chi-square) was employed in testing the hypothesis set, equally, regression and ANOVA was used to test whether their exists a linear relationship and the level of linearity between high level of automation of banking services and improvement in delivery of services in Nigeria. The non-parametric statistical test Chi-square was used to test the formulated hypothesis symbolically.

RESULTS AND DISCUSSION

Table 1: Chi-square Test for Research proposition 1

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-square	7.737	2	.021
Likelihood Ratio	7.313	2	.026
Linear-by-linear Association	2.068	1	.085
No of valid cases	98		

Source: Computed from survey, 2009

Based on analysis on table 1 the null proposition is rejected, since the calculated chi-square (7.737) is greater than the critical value at 0.05% level of significance (5.99), therefore it is concluded that there is a significant relationship between electronic payment and banking services in Nigeria.

Table 2: Chi-square Test for Research proposition 2

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-square	18.218	6	.006
Likelihood Ratio	21.703	6	.001
Linear-by-linear Association	2.200	1	.138
No of valid cases	96		

Source: Computed from survey, 2009

The calculated chi-square value as indicated on table 2 is 18.218, while the critical value of 12.59 was obtained at 0.05% level of significance. Therefore, the null proposition that electronic payment has no significant impact on customer service delivery is rejected, since the calculated chi-square is greater than table value. However, it is concluded that electronic payment has significant impact on customer service delivery in Nigerian Banks.

Table 3: Model Summary

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.383	.147	.138	1.42423

Source: Computed from survey, 2009

On the table 3 above R = .383 indicated that there exist a positive relationship between high level automation of banking firm services and improvement of services delivery of Nigerian banks. Also, R² of .147 implies that 14.7% improvement in services delivery of the selected banks accounted for by high level of automation of banking services.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.474	1	33.474	16.502	.000
	Residual	194.730	96	2.028		
	Total	228.204	97			

Source: Computed from survey, 2009

Since P(sig) value $0.00 < 0.05$ at 0.05% level of significant, the null proposition that there is no significant relationship between level of automation and banks services delivery in Nigeria is rejected and concluded that there is significant relationship between high level automation of banks services and improvement in service delivery in Nigeria.

Findings revealed that there has been a modest move away from cash. Some payments are now being automated and absolute volumes of cash transactions have declined. Connectivity via the use of Local Area Network (LAN) and Wide Area Network (WAN) has facilitated electronic banking. All banks after the consolidation of banks in Nigeria have ruddy networked their system to ease communication of account information. The use of Smart Cards, Point of sales system and computerized credit ratings are very popular and adopted now by banks. Electronic banking has brought about a revolution in banking through advanced technology where ATM Electronic Home and office banking, telephone banking, Internet banking and point of sales system have been incorporated in the country.

Bankers' and customers' perceptions of the benefits of electronic banking have attracted the attention of many researchers, especially in recent years. Berry (1984) stressed that employees must be viewed by the management as 'internal customers'. Maintenance of high level of employee satisfaction and retention is important if banks are to achieve high levels of customer satisfaction and retention. Bowen et al. (1999) concluded that when front-line employees feel they have been treated fairly, they are more likely to treat the customers fairly. In a subsequent study of the relationship between bank employees and customers, Bowen et al., (2000) found that employee morale is strongly related to customer satisfaction; that is, when bank customers perceive front-line employees are happy with their work, bank customers are more likely to be satisfied with the service they receive.

Banks normally assign their managers responsibility for the promotion of the use of electronic channels to customers (Lymperopoulos and Chaniotakis, 2004). Their input as delivery staff is important. It is also the manager's responsibility to ensure that branch staff is professional, well-trained and knowledgeable about the range of services provided by the bank (Moutinho, 1997). Moutinho and Phillips (2002) found that Scottish bank

managers considered efficiency and enhancement of customer service to be two perceived advantages of Internet banking. Similarly, Aladwani (2001) highlighted faster, easier, and more reliable service for customers, and improvement of the bank's competitive position to be the most important drivers of online banking among bank and IT managers in Kuwait.

Electronic banking has improved the satellite communication, digital transaction and high speed customer's service tremendously. It improved every one's life, international bank capital compete the scene for the improvement of global bank value performance. Electronic banking has improved customer service delivery which has facilitated the improvement in other services. Electronic banking has improved the services of banks which made it flourish in the developed nations of the world. It is also making its impact in developing countries like Nigeria. Providing customers with steadily increasing electronic powered and functionally and further improving demand for more advanced improvement in banks services. It provides the customer easier access tools to transact efficiently and productively.

Despite the overwhelming benefits of electronic banking, it has some inherent problems which market players have to contend with. By nature, electronic payment system eliminates middle sameness. Intermediaries are of the risk of losing their job which is their source of income and livelihood. Electronic payment system offers level playing ground advantage of monopolies and size may fizzle out, thereby creating new challenges which may not be easy to cope with the poor level of technological development. Erratic and undependable electricity also cause problems for electronic payment system, which pose poor implementation of computerization. In other words, computer usage has not led to significance productivity improvement, poor and obsolete communication facilities as caused by low level of technological development have also hindered electronic payment system.

CONCLUSION AND RECOMMENDATIONS

This study concludes that electronic payment has improved customer service delivery in Nigerian banks, that there is a significant relationship between electronic payment and banking services in Nigeria and also that

electronic payment has significant impact on customer service delivery. The principal impact being better management efficiency and service delivery, increased profit for shareholders, customer satisfaction and sustainability in financial institutions in Nigeria.

From the findings of this study, it was deduced that electronic payments have affected an average increased in the customer service delivery and customer satisfaction. Though some disadvantages were encountered in course of the study such as high cost of installing electronic payment system as well as security problem because it makes use of some codes and if tampered with will affect the operations. In conclusion it was also agreed upon that banks must of a necessity invest in electronic payment system before it can compete effectively in the new age as well as increase customer satisfaction.

In summary, after a thorough analysis of the data obtained for the study, it was recommended that:

- (a) Useful recommendations based on the findings of the research are deemed necessary having undergone a thorough study of the industry and effect of electronic payment. On the banking success, the economic benefits of using electronic payment system in the banking sector were exhaustively emanated in the literature reviewed. It is highly recommended that all banks in Nigeria should as a matter of urgency adopt the use of information technology in their operations so as to enhance efficiently and effectiveness and to achieve overall objective of the bank.
- (b) It will also be recommended that all staff being sent on training on how to effectively use the electronic payment in banks.
- (c) There is a general believe by many that banking is essential and crucial to the economic development. To be able to fulfill their role, the industry must not be found wanting in its capacity in terms of capital, products mix, innovation, technology and well motivated and skilled manpower in order to propel the economy particularly now as we are in 21st century.
- (d) Moreover commercial banks should not just be concerned with making profit in a particular period but should ensure that their operation continue to be profitable over the foreseeable future.

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