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The Effect of Information Technology on the Growth of the Banking Industry in Nigeria

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ABSTRACT

The advent of Information Technology (IT) is rapidly changing the banking industry. In this study, the impact of IT on the banking industry in Nigeria is described. A questionnaire was employed to collect data from customers at five major banks in Nigeria on the extent to which customers believe that IT exerts an impact on banking services. The results of the study clearly indicate that IT has contributed immensely to the growth of the banking industry in Nigeria.

Keywords: Information Technology, Banking, Nigeria.

1. INTRODUCTION

A powerful force drives the world towards a converging commonality, and that force is technology (Levitt, 1992). From the beginning of the human era, technology has been one of the most essential and most important factors for the development of mankind (Coombs et al., 1987). During the last two hundred years, technological changes have often been related to economic growth in the form of new types of goods and services. Smith (1776) first wrote about technical changes in the form of new machines as one of the three important causes of increasing incomes more than 200 years ago.

Information Technology (IT) can be defined as the modern handling of information by electronic means, which involves its access, storage, processing, transportation or transfer and delivery (Ige 1995). Research shows that IT affects financial institutions by easing enquiry, saving time, and improving service delivery (Alu, 2002). IT also provides solutions to the needs of modern societies in health care delivery, library services, education, and communication networks within organizations, etc.

Some available telecommunication and information technologies which are presently being used in the banking industry in Nigeria are telephone, facsimile, wireless radiophone, very small aperture terminal satellite (VSAT), telegraphy, and computer systems (Ugwu, 1999). According to Alu (2002), some banks in Nigeria have LANs (Local Area Network) in most of their branches but none of the banks have deployed home banking applications.

2. BANKING IN NIGERIA

As a result of the increased demand for customer deposits, Nigerian banks, especially the new generation banks, have realized the imperative of good and prompt customer service. Also, due to the fact that some customers lost their deposits in the erstwhile technically-insolvent or distressed banks, customers have now become wiser, more discerning, alert and sophisticated with regards to

choosing where it is safe to put their money, and where they would be served promptly, preferably in a pleasant, courteous and friendly environment. Thus, they have started looking at the level of service and professionalism of the banks before depositing their funds. Proximity to the bank is no longer the issue: safety and the level of service, with regard to quality, speed and efficiency has become the major imperative. On the part of the banks, they have realized that one way in which they can provide quality service is through the use of technology. Hence, there is a growing rate of adopting new technologies in Nigerian banking operations. Moreover, there is growing evidence that customers have started associating quality of service in a bank with the bank's possession of an online, real-time system. In fact, possession of such a system is now judged to be the sine qua non of a high quality banking service in Nigeria. So, for a bank to be perceived as providing high quality service, that bank has to have an IT system, which it uses to deliver services to customers in a more timely, friendly and considerate manner, at no extra cost to the customers.

Despite the fact that many of the new generation banks base their marketing strategy on the possession of supposedly on line, real-time systems, they find that their systems' links are down for about 50 percent of the time. Many customers feel cheated by this reality and complain about the incessant 'downtimes'. They were promised an online, real-time system, only to find out that the banks' systems are down at least half the time, and that the national carrier, NITEL (Nigeria Telecommunication), is to blame. Whilst the responsibility of NITEL cannot be denied, many customers still feel that it is the responsibility of the affected banks to take care of these problems, and that they should be given the nationwide, online, real-time banking service they were promised. Faced with this dilemma, many banks in the country are resorting to alternative personal solutions by using the Very Small Aperture Terminal (VSAT) satellite systems, for long distance electronic communication. For short distances, the MDS (Metropolitan Digital Services) system is often used. The problem here is that all the banks are trying to procure appropriate VSATs independent of one another. In other words, there is no collaboration between the banks in sourcing this very expensive technology and thereby providing a cost-effective solution to the problem. It would also be fair to say that Nigerian banks are generally imbued with an overly competitive mind-set, which tends to foreclose the benefits of synergy or collaboration in solving most of their common problems.

3. RESEARCH METHODOLOGY

In order to assess the perceptions of banking customers in Nigeria with respect to the quality of banking services, a questionnaire survey was conducted. A 'grab sampling' technique was used to select the customers from the banks. Five commercial banks in Nigeria - Wema Bank Plc, Union Bank of Nigeria Plc, Omega Bank Plc, Cooperative Bank Plc, and Access Bank Plc. – were selected for this sampling on the basis that they have branches in almost all the states in Nigeria and they make use of computers in almost all their branches. The researchers visited the banks during working hours and the questionnaires were given to the customers as they visited the banks. A total of 500 questionnaires were distributed in this way. 260 questionnaires were returned to the researchers, a response rate of 52%. The survey instrument can be found in the Appendix. In addition, the researchers conducted personal interviews with five bank managers and fifteen IT staff in order to gain an appreciation of what types of IT systems and electronic application services

were available in the selected banks. The responses were measured with a five-point Likert-type rating scale, where Strongly Agree (SA) = 4; Agree (A) = 3; Strongly Disagree (SD) = 2; Disagree (D) = 1; and Neutral (N) = 0, while the scores for negative items were reversed.

4. RESULTS AND DISCUSSION

Table 1 shows the IT systems that are being used in the selected banks. Telephone, Facsimile, Local Area Network, computer system, MICR (Magnetic Ink Character Recognition), were used in all the banks. Also Wema, Omega and Access banks used Very Small Aperture Terminal (VSAT), Electronic Funds Transfer (EFT), and wireless radiophone. The researchers were able to identify IT devices available in the selected banks from personal interview conducted with the 5 branch managers and 15 IT staff in the banks.

Table 1: IT systems and electronic application service in the selected banks

Types of IT systems	Wema	Omega	Union	Co-op	Access
Telephone	X	X	X	X	X
Wireless radiophone	X	X	-	-	X
Facsimile	X	X	X	X	X
Computer	X	X	X	X	X
Electronic Mail	-	-	-	-	-
VSAT	X	X	-	-	X
Local Area Network	X	X	X	X	X
MICR	X	X	X	X	X
EFT	X	X	-	-	X

4.1 Effect of IT on Banking Services

The effect of IT on an enquiry on a customer's state of account, and services enjoyed by the customers from the banks as perceived by the banks' customers, are shown in Table 2. Out of the 260 respondents, 86.2% agreed that IT was really helping the bank they patronized, while 90.8% agreed that IT made the enquiry about the state of their accounts faster. Also, 83.1% agreed that IT had a great positive impact on the services rendered by the banks. The means of 3.12, 3.29 and 3.07 respectively for the selected banks' respondents confirmed that IT has a positive effect on the enquiry of customers' state of account and services enjoyed by the customers from the selected banks.

Generally, the effects of IT on the enquiry of the customer's state of account and services enjoyed by the customers from the banks have an appreciable influence on any bank. The use of a LAN and computer systems have ensured quick and improved services delivery to customers by the banks. But it may be important to state that the use and application of these electronic devices are hampered by the inadequacy of infrastructural facilities like power supply.

4.2 Effects of IT on Customer Services

Table 3 shows the response of customers from the banks with respect to the effect of IT on customer services provision. About 66.5% disagreed that IT had no effect on services rendered by the banks. Also 82.7% agreed that there is a need to improve on the services rendered by these banks. The means of 2.77 and 2.94 respectively confirmed that IT has effects on services rendered by these banks to their customers and about 83% of the respondents agreed that the banks need to improve on the

services rendered to the customers. This shows that the services the banks are offering now are not the best they can offer to their customers and that the banks should improve on these services to their customers.

Table 2: Effects of IT on Banking Services

Question	SD	D	N	A	SA	Mean
IT/computer is really helping this bank	2.3	4.6	6.9	43.9	42.3	3.12
IT makes enquiry about the state of my account faster	2.3	0	6.9	36.6	54.2	3.29
IT/computer has a great positive impact on the services rendered by this bank	2.3	4.6	10	37.3	45.8	3.07

Table 3: Effects of IT on Customer Services

Question	SD	D	N	A	SA	Mean
I don't think IT has any effect on services rendered	34.6	31.9	9.7	18.8	5.0	2.77
There is a need to improve the services rendered by this bank	0	6.9	10.4	50.4	32.3	2.94

Table 4: Promptness and efficiency of services as perceived by the customers

Question	SD	D	N	A	SA	Mean
I enjoy prompt and efficient service delivery	0	16.2	9.2	37.7	36.9	2.93
I was once delayed in the bank because the computer was down	16.5	31.5	6.9	32.7	12.4	2.38
IT does not increase prompt and efficient service delivery	43.1	42.7	4.6	7.3	2.3	3.17

4.3 Promptness and efficiency of services as perceived by the customers

From Table 4, about 75% of the respondents agreed that they enjoyed prompt and efficient service delivery from the banks. The mean of 2.93 shows that IT enables the banks to provide prompt and efficient services to their customers. *Questions 3 and 7* (see *Appendix*) are similar, but the reaction of the respondents confirmed the conclusion above because about 85% of the respondents agreed that IT has increased prompt and efficient service delivery by the banks. Also, on the issue of delay due to computer down times, only 44.9% of the respondents agreed that they were once delayed in the bank because the computer was down, though this might be due to the epileptic power supply and inefficient telecommunication infrastructure in Nigeria. The mean of 2.93 confirmed that most of the time, customers go to the bank when computers are not down.

4.4 Influence of IT on patronage as perceived by the customers

Table 5 gives responses on the influence of IT on patronage as perceived by the customers. 70% of respondents agreed that based on the efficiency and effectiveness of services rendered, they could encourage their colleagues to patronize the banks they used. Also, 65.8% of the customers agreed that the banks' use of IT encouraged them to patronize the banks they use. The means of 2.47 and 2.52 respectively show that IT encourages customers to patronize the banks. The

use of computers, telephone, VSAT, and EFT has contributed immensely to the growth of banking industry. In Nigeria presently, some banks are not making use of IT and those banks are being patronized by few customers, the majority of whom are illiterate and poor. This makes the turnover of these banks low.

Table 5: Influence of IT on patronage as perceived by the customers

Question	SD	D	N	A	SA	Mean
I can encourage my colleagues to patronize this bank	4.6	5.0	20.4	47.3	22.7	2.47
IT/Computer encourages customers to patronize this bank	2.3	9.6	22.3	32.7	33.1	2.52

Table 6: Perception of customers on the ease of conducting banking transactions

Question	SD	D	N	A	SA	Mean
Saving or withdrawing money is time consuming	21.9	36.9	7.3	31.2	2.7	2.63
IT eases banking transactions	2.3	2.3	9.6	50.0	35.8	3.10

4.5 Perception of customers on the ease of banking transactions

Table 6 above shows that 58.8% of customers disagreed that saving and withdrawal of money is time consuming. Also, 85.5% agreed that IT eases banking transactions. The means for questions 6 and 13 (see Appendix) are 2.63 and 3.00 respectively. The mean of 2.63 for question 6 (see Appendix) shows that some respondents agreed that saving and withdrawal of money is time consuming despite the use of IT in those banks.

Table 7: Effects of IT on the interaction between cashiers and customers

Question	SD	D	N	A	SA	Mean
IT has reduced the interaction between cashiers and customers	15.0	30.4	17.7	27.3	9.6	2.15

4.6 Effects of IT on the interaction between cashiers and customers

Table 7 shows that 36.9% agreed with the view that IT has reduced the interaction between customers and cashiers, 17.7% are indifferent to the question and 45.4% disagreed with the view with a mean of 2.15.

4.7 Effects of IT on cashiers' work

The rates at which cashiers in the banks attend to their customers depend on the equipment available for the cashiers to work with. From Table 8, 83.1% agreed that computer speeds up cashiers' work, while 10% disagree and 6.9% are indifferent. The mean of 3.12 confirmed that IT/Computer really affect the rates at which cashiers' attend to their customers. Generally, the use of electronic devices like computer telephone, facsimile, etc. will go a long way to increase the speed of the cashiers' work.

Table 8: Effects of IT on cashiers' work

Question	SD	D	N	A	SA	Mean
Computers really speed up cashiers' work	2.7	7.3	6.9	37.3	45.8	3.12

4.8 IT and bank's productivity

From Table 9, 81.5% agreed that the use of IT increases bank productivity in that with the use of IT, the bank can attend to a lot of customers since IT speeds up cashiers' work. The mean of 2.98 shows that IT has a positive effect on the growth and productivity of the banks. There is no bank that can make use of one or combination of two or more of the IT systems listed in Table 1, which will not have effects on the productivity of the bank.

Table 9: IT and the productivity of the bank

Question	SD	D	N	A	SA	Mean
IT increases the bank's productivity	0	4.6	13.8	37.3	44.2	2.98

5. CONCLUSION

The study has dealt with the effects of IT as perceived by customers on selected commercial banks in Nigeria, which make use of IT in their operation. The study revealed that IT has appreciable positive effects on the bank productivity, cashiers' work, banking transaction, bank patronage, bank services delivery, customers services, and bank services. These affect the growth of the banking industry in Nigeria positively because customers can now collect money from any branches of their bank. Also customers do not need to move about with large sums of money, and customers are being attended to within a short period of time.

The study also revealed that telephones, computer systems, LANs, and Facsimile services are available in nearly all the banks making use of IT in Nigeria while WANs (Wide Area Network), Electronic File Transfer, and wireless phones are available in some of the banks. This finding confirms Alu's (2002) claims on the IT devices available in Nigerian banks. Research has shown also that IT is really helping these banks, so other banks in Nigeria that are not making use of the IT are encouraged to do so.

From the study, the major hindrance to the use of IT in the banking industry in Nigeria is inadequate electric power supply. Electricity supply is not regular because of the limitation of the machine that is supplying electricity to Nigeria. Furthermore, the Nigerian government is finding it difficult to equip the NEPA (National Electric Power Authority) while the demand for electricity is increasing daily. Therefore, the situation will continue to worsen until the Nigerian government funds NEPA appropriately. So, for this nation to be effective in the use of IT in the banking industry and to make the banking industry grow in an appropriate way, there is a need for the Nigerian government to find a solution to the epileptic supply of electricity throughout the country, since NEPA is owned by Nigerian government and there is no private company in Nigeria that provides electricity.

6. REFERENCES

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APPENDIX

Dear Respondent,

This questionnaire is designed for a research work from the department of Management & Accounting, OAU, Ife. Please, FILL IN correct information, all the information will be treated confidentially and the information will be used for this research work only. Thanks.

Please tick [] or fill where appropriate.

SECTION A

1. Sex : A. MALE [] B. FEMALE []
2. Age: A. 18-25 () B. 26-35 () C. 36- 45 () D. 46 & above ()
3. Educational qualification: A. WASCE() B. OND/NCE() C. Bsc/BA() D. Msc/PhD() E. Others Specify
4. For how long have you been using this bank? A. 0- 2yrs () B. 3-5yrs () C. 6- 8 () D. 9 & above()
5. What type of account do you operate? A. Current() B. Savings() C. Others specify
6. My Account here is mainly for A. Business() B. Salary() C . Others specify
7. For how many hours do you spend on queue ?A. Less than1 () B. 1-2 () C. 3-4 () D. 5 & above().

SECTION B

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	IT/Computer is really helping this bank					
2.	I don't think IT has effect on the bank's operation					
3.	I enjoy prompt and efficient service delivery					
4.	I will encourage my colleagues to patronize this bank					
5.	IT does not increase prompt and efficient service delivery					
6.	To save or withdraw money is time consuming					
7.	I was once delayed in the bank because the computer was down					
8.	IT makes enquiry about the state of my account faster					
9.	IT/computer has a great positive impact on the growth of this bank					
10.	IT/Computer has reduced the interaction of the Cashiers with customers					
11.	IT/Computer encourages customers to patronize this bank					
12.	Computer really speed up cashiers' work					
13.	IT improves transactions					
14.	IT increases bank productivity					
15.	There is a need to improve the services rendered by this bank					