

A Study on Customers' Perception of Information Technology in the Nigerian Banking Industry

¹Dr. Aremu, Mukaila Ayanda, ²Dr. Mejabi, Omenogo Veronica, ³Dr. Gbadeyan, Rotimi Ayodele

¹Dept. of Business Administration, Faculty of Business and Social Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria

²Dept. of Information and Communication Science, Faculty of Communication and Information Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria

³Institute of Public Administration and Management (IPAM), Dept. of Business Administration, University of Sierra Leone, Tower Hill, Freetown, Sierra Leone

Abstract

The Nigerian banking industry is facing increasing demand from customers. One major breakthrough in the service delivery system, most especially the Banking industry is the use of information technology. The paper examines the perception of customers about information technology in the Nigerian banking industry. In order to achieve the study objective, a total number of 250 questionnaires were administered to the sampled respondents out of which 200 questionnaires were returned. This represents 80% response rate; the factor analysis was used to identify the perception of the customers with regards to Information Technology in Nigerian Banking Industry. The findings revealed that, customers perceived Information Technology enhanced the effectiveness and efficiency of banking service and also create accessibility, smooth and mutual relationship between customers and bank. The study concludes that Information Technology has brought a fundamental positive change in the service delivery and qualitative banking practices in Nigeria. It therefore become a 'need to have' and a 'nice to have' facility in the Nigerian banking industry.

Keywords

Information technology, Banking industry, Perception, Customers, Nigeria

I. Introduction

The recent management support approaches link intellectual capital, particularly the balanced score card aim at providing a broader view of organizational performance. It combines both financial and non-financial aspects and comprise activities not only to monitor but also to plan and influence organizational performance (Hofmann 1995).

Information technology (IT) is at the centre of this global change. Laudon and Laudon (2001) contend that managers cannot ignore information systems because they play a critical role in contemporary organizations. The authors pointed out that the entire cash flow of most Fortune 500 companies is linked to information complex systems.

The application of information technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concern to all banks and indeed a prerequisite for local and global competitiveness. The role of technology in the "information age" is well recognized by business, industry and government structures and strategic planning processes. The technology's role limits the quality of strategic planning by the quality of information available to decision makers and the executive information systems are critical in furnishing the necessary data which produce information (Aremu and Saka 2006).

Nigerian banks today are faced with turbulent business

environment that is characterized by constant changes. To survive, companies must alter the way they are conducting business with customers, and must offer superior services in order to retain and satisfy them, because customers satisfaction yield successful business and also customer's loyalty. The strategic importance of information technology links between customers and suppliers has given rise to an interest in inter-organizational information systems specifically, with the recent advances in Electronic Commerce (EC), information systems, which support customers and their transaction with organization. There is revolution in the Nigerian banking system with increase in the paid up capital of banks from N2 billion to N25 billion effective from 1st of January 2006. This led to liquidation of weak banks that could not find merger partners. The revolution brought about sweeping changes to banking operations in Nigeria with aggressive competition among the banks. Each of the resultants 'mega' banks came up with new products, repackaged old ones and came up with more efficient service delivery strategies. This more efficient service delivery was made possible through investment in information and communication technology (Sanni, 2009).

Academic researchers have conducted much research works in order to stress the importance of such applications by proposing models to identify such application and methodologies. However, there have been a few researches on the investigation of the current situation and future potential of information technology within the financial business sector in Nigeria (Singhal and Padhmanabhan, 2008; Laudon and Laudon, 2001).

There have been fewer researches on the role of information technology on the performance of banking services and this is the main thrust of this research work. Business organizations, especially the banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate

Information technology system affects and influences the decisions made in an organization, how work is organized and how employees feel about work. The essential element of management is Information technology and processing. Thus, Information technology is expected to influence management, services rendered and customers' satisfaction in an organization. This paper examines the influence and role information technology plays on the performance of banking sectors in Nigeria. It also focused on the perception of customers on information technology in Nigeria banking system.

II. Literature Review

Information technology (IT) is a strategic resource that facilitates major changes in competitive behaviour, marketing and customer service (Aremu and Saka 2006). In other word, it is the automation of processes, controls, and information

production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards. It is a term that generally covers the harnessing of electronic technology for the Information needs of a business at all levels. Irechukwu (2000) lists some banking services that had been revolutionized through the use of information technology as including account opening, customer account mandate, and transaction processing and recording.

The financial service industry had been subjected to various major transformations due to advancement in computers and telecommunications. Information technology (IT) infrastructures are rapidly emerging as a vital factor in socioeconomic development and hence, have a crucial role to play in addressing development challenges.

Aragba-Akpore (1998) wrote on the appreciation of information technology in Nigeria banks and pointed out that information technology is becoming the backbone of banks' services regeneration in Nigeria. He cited the Diamond Integrated Banking Services (DIBS) of Diamond Bank Limited and Electronic Smart Card Account (ESCA) of all States Bank Limited as efforts geared towards creating sophistication in the banking sector. Ovia (2000) discovered that banking in Nigeria has increasingly depended on deployment of information technology and that IT budget for banking is by far longer than that of any other industry in Nigeria. He contended that on-line system has facilitated internet banking in Nigeria as evidenced in some of them launching websites.

Woherem (2000) discovered that Nigeria banks since 1980s have performed better in their investment profile and the use of IT systems, than the rest of industrial sector of the economy. An analysis of the study carried out by African Development Consulting Group Ltd (ADCG) on IT diffusion in Nigeria shows that bank have invested more on IT, have more IT personnel, more installed based for PCs, LANs, and WANs, and a better linkage to the internet than other sectors of the Nigerian economy. The study however pointed out that whilst most of the banks in the West and other part of the World have at least one PC per staff, Nigerian banks are lagging seriously behind, with only a PC per capital ratio of 0.18 (Woherem, 2000). In general, existing studies have concluded two positive effects regarding the relationship between information technology and banks' performance. Firstly, information technology can reduce bank's operational cost. For example, internet help banks to conduct standardized, Low Value-added transactions through the on-line channel, while focusing their resources into specialized, high value-added transactions through branches (Irechukwu 2000).

Second, information technology can facilitate transactions among customers within the same network. In case of Automated Teller Machine (ATM), if available over geographical dispersed areas, the benefits will increase since customers will be able to access their account from any geographical location they want. This imply that the value of an ATM network increases with the number of available ATM locations, and the value of banks network to a customer will be determined in parts by the final network size of the bank (Ekemezie and Ezeorah 2005).

Nigerian bank must be information technology compliance and install modern systems for it not to be left behind in the competitive financial market. These include the banking software, computers with high-speed processors and large memories and the right personnel. The right mix has not been achieved by most of the Nigerian banks, and that it is the reason why return on investment has not been as high as many

expected (Ekemezie and Ezeorah 2005).

According to Odubele (2003), Oracle FLEXCUBE, is gradually penetrating banking applications, owing to the need to have different delivery channels for the customers and also making banking business convenient to them. With Oracle FLEXCUBE, one can have different delivery channels such as ATMs, Point of Sale (POS), Tele-banking, internet banking, etc. Oracle FLEXCUBE enables helps financial institutions simplify their Microfinance related back office infrastructure to reduce transaction costs, expand their operations swiftly and extend their reach to their numerous customers. Arise (2004) revealed in his statistics of cash dispensers worldwide that there are about 900,000 ATM locations, 32.8 million merchants' acceptance locations in over 30,000 financial institutions across six continents. This is also in line with Namchul (2002) who posited that recent applications of IT such as electronic data interchange provide a better means of inter-organisational coordination in the banking system.

Information technology has played a major role in enhancing productivity and efficiency in the banking sector. However, much of the digitization of the banking sector in the developing and under-developed countries is at infant stage. Further, due to low information technology adoption rate among the general population in developing and under-developed economies, financial institutions are unable to realize higher return on investment on their infrastructure. Financial service providers are linked nationally and globally through information technology, most especially the internet. Information technology has provided self-services facilities from where prospective customers can complete their account numbers and receive instruction on when and how to receive their cheque books, credit and debit cards. Communication technology deals with the physical devices and software that link various computer hardware components and transfer data from one physical location to another (Laudon and Laudon, 2001).

III. Methodology

Aderinto (2007) posited that there are number of stages involved in the production of research document. He argued that there are also various issues that need to be considered before preparing a formal research. The study's objective was accomplished through the collection and analysis of primary data obtained from a purposive sampling technique. A 5 – point Likert scale questionnaire was used to measure the perception of customers on information technology. Out of 250 administered questionnaires only 200 were retrieved and used for the analysis. This represents 80% response rate. The analytical methods used for this study included frequency distribution analysis (FDA) and factor analysis.

IV. Data Presentation and Discussions

The sample frame for this study covers two hundred (200) customers of Intercontinental Bank Plc within Ilorin Metropolis. The respondents profile revealed that 113 customers are males which represent 57% and 97 are females, which represent 43 % of the sampled population. It is also shown that 42% of the respondents are between the age of 18 – 30 years, 23% of the respondents are between the age group of 31 – 40 years, 26% of the respondents sampled are also of the age bracket 41 – 50 years, and 9% of the respondents are 51 years and above.

The frequency distribution analysis (FDA) indicates that most of the customers selected for the study are married (70%),

25% are single and few of these customers are divorced (5%). The study indicated that greater proportion of respondents (80%) strongly agreed that the adoption of Information Technology facilitates convenient business transaction, 5% of the respondents also agreed with this position while 15% of the respondents disagreed. There are 85% of the customers representing 170 respondents who agreed that IT helps to access account at any location and at any point in time while 15% disagreed. The study revealed that 36.6% of the sampled respondents strongly agreed that information technology (IT) enhanced funds transfer while 53.5% of the sampled respondents agreed that IT enhanced funds transfer. 2% of the respondents disagreed and 8% of the respondents make no decision on the subject. The implication of the above analysis is that about 90% of the sample respondents make favourable submission that IT hastens funds transfer. There are 50% customers as revealed by the result who agreed that the adoption of Information Technology (IT) enhance fair and prompt attention, 40% of the respondents strongly agreed while 10% disagreed.

Table 1: Result of Factor Analysis

Component	Total Variance Explained					
	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.138	71.380	71.380	2.956	29.565	29.565
2	.708	7.080	79.000	2.069	20.691	50.256
3	.475	4.750	83.810	1.911	19.113	69.369
4	.389	3.892	87.702	1.833	18.333	87.702
5	.307	3.074	90.775			
6	.254	2.538	93.313			
7	.225	2.245	95.558			
8	.194	1.937	97.495			
9	.153	1.529	99.024			
10	.098	.976	100.000			

Extraction Method: Principal Component Analysis.

Source : SPSS Computer Print Out

Factor analysis was performed with 10 variables related to information technology issues as shown in Table 1. The variables are convenient business transaction, ability to access account at any location, fund transfer, quick service, increase productivity, customer satisfaction, quality service, low cost to customer, increase in number of customers and easy operation for customers. The Kaiser-Mayer-Olkin (KMO) was 0.80 and significant Barlett's test of sphericity supported the use of factor analysis in order to extract independent variable associated with information technology. An exploratory principal component factor analysis was done using SPSS 15.0; the varimax rotation identified the underlying factors for information technology characteristics. Items with eigen values greater than one were extracted and all factors loading greater than 0.5 were retained. Ten items yielded four factors explaining 87.702 percent of variance as shown in table 2.

Table 2: Extraction of factors loadings from Rotated component matrix

Factor	Total	% of variance	Cumulative %
1. Convenient business transaction	2.96	29.565	29.565
2. Ability to access account at any location	2.069	20.691	50.256
3. Fund transfer	1.911	19.113	69.369
4. Quick service	1.833	18.333	87.702

Source: SPSS Computer printout, 2011.

The dominant four independent set of factors that relate to information technology as perceived by the customers are extracted from the result of factor analysis and briefly explained below.

Convenient business transaction: this indicate the importance of information technology to customer. The respondents perceived that adoption of information technology by Nigeria banks has greatly enhanced business transaction within Nigeria and outside Nigeria. The items loading on this factor relate to the convenience of business transaction. The factor account for 29.57% of the variance explained.

Ability to access account at any location: the total variance explained for this factor is 20.69%. The perception of consumer about this factor revealed that 85% and 10% of the respondents strongly agreed and agreed respectively that information technology adopted by Nigeria banks has made it easy for the customer to have 24 hours access to their various accounts. Besides, this access is not only limited to the branch where they have opened accounts, but at any other branches.

Funds transfer: one of the greatest challenges for Nigeria banks particularly before the adoption of information technology is how to transfer money from one location to the other. when this is possible the customers usually worried about the security of such transfer. However, the adoption of information technology has not only made possible the transfer of funds from any location locally but also internationally. The safety of such transfer is guaranteed. The result of rotated component matrix shows that factor 3 has total variance explained of 19.11%.

Quick service: Quick service is the most important issue of information technology. The items loading in this factor relate to quick service as a result of information technology. The study revealed that 90% of the respondents perceived that information technology enhanced quick service delivery by the Nigerian banks. Gone are the days when customers have to queue up for several hours before withdrawing money from the banks. Availability of Automatic Teller Machines (ATM) has reduced such stress to zero. This factor accounts for 18.33% of total variance explained.

V. Discussion of Research Findings

The primary objective of this investigation is to examine the perception of customer on information technology in Nigerian banks with reference to Intercontinental Bank of Nigeria Plc. The study critically focuses on the various issues about information technology activities as it is been implemented and practiced in the Intercontinental Bank of Nigeria Plc.

The study findings show that customers were happy with great improvement on statement generation and accounts reconciliation. The study also revealed that manual recording system through the use of ledger and cash books have been replaced by computerized information system.

This paper has been able to establish the fact that Information technology is an indispensable tool that organizations, in particular Nigerian banks, can use to improve their services and satisfy their customers.

The major findings of the paper are summarized as follows:

1. Nigerian banks should intensify the use of Information Technology devices to enhance prompt and fair attention to customers and to make enquires on accounts faster.
2. Nigerian banks should improve the use of Information Technology to facilitate accurate records.
3. Nigerian banks' customers perceived that Information Technology is more effective than direct Service of old

system like Ledger, Cash Book, and also helps in recording faster services.

4. Nigerian banks' customers perceived that Information Technology had helped to access International market smoothly and has also hastens fund transfer both locally and internationally.

VI. Conclusions and Recommendations

Based on these research findings, it had been establish that Information Technology plays a crucial role in Nigerian banking industry. Information technology is therefore an effective device that can be used in any industry in order to speed up its services, particularly in the banking industry. Adoption of Information technology has influenced the content and quality of banking operations in Nigeria. It is therefore, recommended that:

1. Information technology should be used as a great potential for business process re-engineering in Nigerian Banks.
2. Investment in Information technology should form an important component on the overall strategy of banking operations so as to ensure continue patronage by customers and guarantee banks performance.
3. It is also imperative for bank's management to intensify investment in Information technology products to facilitate speed, convenience and accurate services, or otherwise they may lose out customers to other competitors.

The banking Industry in Nigeria must intensify their effort on Information Technology (IT) since it provides great opportunity to market their innovations. Success in this area however depends on how they can customize their services to appeal to the ready minds of various customers in the Industry.

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