

## The Significance of Information and Communication Technology (ICT) in the Development of the Banking Industry

Mosud Yinusa Olumoye

*Lagos State Polytechnic,*

*SPTSA, Mainland Annex,*

*&*

*Consultant: ICT, Projects & Safety*

*Fiatcom Nigeria Limited,*

*P.O. Box 2090,*

*Ikeja Post Office Box,*

*Lagos State, Nigeria.*

### Abstract

*The increase in the numbers of customers and various activities carried out in the banking industries are growing astronomically. This has consistently increased the amount of data processed by the banks, thereby making the conventional methods of data processing to be slow, prone to error, low productivity, insecurity, fraud and increase in resource personnel overhead. This paper is designed to examine the significance of Information and Communication Technology (ICT) in the development of the banking industry. Data was collected through questionnaires administered to both the staff of the bank and customers; and other sources of data were personal interview, textbooks and websites. The data is thereafter analyzed using percentage and chi-square methods. The espousal of ICT in the banking industry has improved the efficiencies of the bank, made global banking a reality and aids in making management decision timely and effective on the job. Hence, the successful implementation of ICT is a must for the development of any bank.*

### “1. Introduction”

Information and Communication Technology (ICT) has become a significant gizmo for many organizations and has created new strategic choices for them as well. The most obvious examples are perhaps the banking industry where through the introduction of ICT, related products such as Internet banking, Global System for Mobile Communication (GSM) banking, Automated Teller Machines (ATMs), Electronic Fund

Transfer (ETF), electronic payments, online banking, telephone banking, smart cards, electronic home and office banking have become a universal trend. The banking industry is one of the first organization to largely invest in ICT. These days' banks depend largely on information and communication technology for their daily operations. All the large numbers of customers attended to and book keeping being handled manually before are now tackled with the use of ICT which requires little human effort. It also provide the bank branches and their customers with latest financial information around the world which may not have been be possible under manual system; and allows the preparation and printing of customers' statement of accounts, calculations of interest charges, shares and trustees records.

Information and communication technology is a very powerful tool in today's business transactions especially the banking industry knowing fully well that banks are the backbones of any economy. The Nigerian banking industry is in the midst of the revolution of information and communication technology; without any overstatement virtually all the banks in Nigeria especially the commercial banks are adopting ICT based solution. A lot of banks in the country have been revolutionized through the use of ICT which include account opening, customer account mandate, transaction processing and recording. Also, the new information and communication technology tools and techniques are used by the banks to find out their customers' need and offer them customized made products and services. ICT has also provided self-service facilities such as automated customer service machines from where prospective customers can

complete their account numbers and receive instructions on when and how to receive their cheque books, credit and debit cards [1]. Information and communication technology (ICT) transforms the way people do things, increasing the amount of information available to economic agents, information intensity of processes, occupations, institutions, products and economics. It enhances workings of market, reduces transactions and co-ordinations costs within and across enterprises and institutions [12].

However, the use of ICT in banking sector covers computerization and telecommunication. This has given information and communication technology an edge over other tools as computers can be programmed to suit the requirements of many different types of jobs such as the ability to access, store and manipulate large quantities of data. On the other hand, the telecommunication links, such as those provided by the Internet enable data to be transmitted between computers and users in different locations. The application of ICT in the banking industry concepts, techniques, policies and implementation methodology has become a fundamental issue and concern to the Nigerian banks and has also alleviated the scope of conventional banking operations; although, one cannot jettison the fact that some challenges are encountered occasionally with the adoption of ICT.

## 1.2. Statement of the Problem

For the Nigerian banks to meet with the growing numbers of customers and various activities carried out in the industry, there is need to continuously find better and faster ways to adapt to the competitive and fast paced environment and to internationalize. The customers of today's banking are not all that keen about increase in returns on their investment alone but are seriously concerned with the efficiency, fast and convenient services rendered by the banks. These services include real time banking via the internet connoting a fast personal and company banking transaction. The customers want banks that will be transparent and promote tight security for safeguarding their money and other items in their custody. In order to render quality and acceptable services, virtually all Nigerian banks are investing huge amount of resources on information technology which invariably improves such banking operations.

## 1.3. Research Objectives

The focal point of this study is to analyze the significance of information and communication technology (ICT) on the Nigerian banking industries.

However, the objectives of the study are stated as follows:

- (i). To evaluate the impact of ICT on the operations of the banking systems
- (ii). To examine the customers' perceptions of the use of ICT on the banking industry.
- (iii). To appraise if investment in ICT has a great benefit on the banking industry.
- (iv). To evaluate how the application of ICT has enhanced development in the banking industry.

## 1.4. Research Questions

This research work shall be guided by the following research questions:

- (i). How does ICT impact on the efficiency of the banking operations?
- (ii). Does ICT impact on the banking-customer relationship?
- (iii). Does the investment in ICT has a great benefit on the banking industry?
- (iv). Does the application of ICT enhance development in the banking industry?

## 1.5. Research Hypotheses

The following hypotheses are formulated and tested to guide the research work:

i.  $H_0$ : The application of ICT has a negative impact on services rendered to customers'

$H_1$ : The application of ICT has a positive impact on services rendered to customers'

ii.  $H_0$ : The benefits of implementing ICT does not outweigh its cost on the long run

$H_1$ : The benefits of implementing ICT outweighs its cost on the long run

iii.  $H_0$ : The effective application of ICT does not enhance development in the banking industry

$H_1$ : The effective application of ICT enhances development in the banking industry

## “2. Review of Literature”

The significance and effects of information and communication technology on the banking industries has been one of the most discussed issues globally in the recent years. There have been a lot of debates on whether investing in the implementation of information and communication technology would outweigh its cost on the long run, provide improvements in banks productivity, prompt and efficient service delivery. Several empirical studies

have been conducted both at the academic and industry levels, and these have shown that there are significant positive impacts in investing in information and communication. According to Idowu *et al* [8] in their study, it was 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.

Agboola [1] in his study pointed out that the adoption of ICT has influenced the content and quality of banking operations. From all indications, ICT presents great potential for business process reengineering of Nigerian Banks. Investment in information and communication technology should form an important component in the overall strategy of banking operators to ensure effective performance. It is imperative for bank management to intensify investment in ICT products to facilitate speed, convenience, and accurate services, or otherwise lose out to their competitors. The banking industry in Nigeria presents ICT providers with great opportunity to market their innovations. Success in this area however depends on how they can customise their services to appeal to the ready minds of various stake holders in the industry. Jadhav [10] in his own paper described various channels of e-banking services such as ATM, Telephone banking (Tele-banking), Mobile banking, Internet banking and its features. His focus was also given on e-banking opportunities, challenges and security aspects in performing the banking transactions on the internet.

Hebbar [7] in his submission described that the advancements in computing and telecom have revolutionised the financial industry. Banks are developing alternative channels of delivery like ATM, telebanking, remote access, internet banking etc., Some questions that need to be answered are: how can one trust these channels, our personal data and transactions which are driven by technology? Are they reliable and accurate? Is there a way out to independently validate the integrity of information? Madueme [12] in her paper assessed the impact of information communication technology on the efficiency of thirteen commercial banks in Nigeria using the TRANSLOG and the CAMEL rating. It was discovered that information technology improved the efficiency of such banks after its adoption. According to Oluwagbemi *et al* [13] drew attention to the fact that there are indeed

no doubts that majority of organizations including the banks have taken the advantage of IT to enhance their operations. Today most of them have website on the Internet in order to extend their services globally, provide executive services and promote quality of service delivery [13].

## 2.1 The Significance of ICT in the Banking Industry

The usage of ICT broadly referred to computers and peripheral equipment has seen tremendous growth in service industries in the recent past. The most obvious example is perhaps the banking industry where through the introduction of ICT several products such as internet banking, electronic payments, security investments, information exchanges and diverse services can be provided to customers with less manpower. With all these patterns of growth, it seems obvious that IT can bring about equivalent contribution to profits.

By and large, some existing studies pointed that the two positive effects regarding the relation between ICT and banks' performance. Firstly, ICT helps to alleviate banks' operational costs (that is cost advantage). For instance, the internet helps banks to conduct standardized, low value-added transactions such as bill payments, balance inquiries and account transfer through the online channel, while focusing their resources into specialized, high-value added transactions e.g. small business lending, personal trust services and investment banking through branches. Secondly, ICT enhance transactions among customers within the same network (the network effect).

The adoption of ICT in banking has undergone several changes with the passage of time. Today ICT has become an inseparable segment of banking organization. The application of information technology in the banking sector resulted in the development of different concepts of banking such as: E-banking, Internet Banking, Online Banking, Telephone Banking, Automated Teller Machine, universal banking and investment banking. Information technology has a lot of influence on banking transactions. It ensures quick service with low transaction cost to the customers [14]. The adoption of information technology in the banking industry has a great impact on the bank both positive and negative; but the positive impact outweighs the negative influence.

At the beginning, computers only aided one portion of the bank's branch operations like that of ledger posting operations. Introduction of local area network automated the branches in preparation of

general ledger and cash book, and handles other tasks such as overdraft book which are no longer written manually as the computer can accommodate debit balances on daily basis and balance sheet figures and other statistics are compiled from figures extracted by the computer. The further advancement of the ICT in connecting branches together with one and others through telephone lines and satellite has made it an enabler of business instead of just a tool. Moreover, ICT increases the productivity and efficiency of a business. The advancement in the communication and digital technology has dramatic changes in our day-to-day life and businesses. The bank continues to increase the use of computers to create, transmit and store information in the electronic form instead of traditional paper document. Information stored in electronic form has many advantages such as the cost which is cheaper, easier to store, retrieve and faster to communicate to the bank and customers.

In addition, the introduction of information technology in the banking industry brought considerable changes in the functioning of clearing house mechanism. This facilitates the exchange of instruments and processing of payment instruction at a central point among participating banks. Clearing houses have gradually extended their range of activities to automated and electronic means for settlement of payment transaction. Another interesting importance of information technology is that it is slowly shifting from the traditional banking towards relationship banking. Traditionally, the relationship between the bank and its customers has been on a one-to-one level via the branch network. This was put into operation with clearing and decision making responsibilities concentrated at the individual branch level. The head office had responsibility for the overall clearing network, the size of the branch network and the training of staff in the branch network. The bank monitored the organization's performance and set the decision making parameters, but the information available to both branch staff and their customers was limited to one geographical location.

### “3. Materials and Methods”

For the purpose of this study a well structured questionnaire was used as the main instrument for carrying out the research. Alongside with the questionnaire, the researcher also conducted personal interviews with two senior management staff in the banks in order to gain an appreciation of the significance of information and communication technology in the growth of the banking industry. The

secondary sources of data were obtained from academic journals, research works and textbooks. Four banks in Nigeria namely Access Bank, Ecobank, Sterling Bank and Union Bank of Nigeria out of twenty-one banks left after the post consolidation of commercial banks as directed by Central Bank of Nigeria (CBN) were selected for this study. These sampling banks selected for this study was on the basis that they have branches in all the states in Nigeria.

A total of three hundred and fifty (350) copies of questionnaires were distributed among the four banks selected, one hundred seventy-five (175) copies were administered to the customers and same numbers to the staff of the four banks whose positions were from supervisor upward in order to gain an appreciation of how the various use of ICT has aided the bank to attain its top position. A total number of three hundred and thirty (330) questionnaires were returned to the researcher, one hundred and fifty copies (150) from the customers and one hundred and sixty (160) from the staff of the banks; while twenty (20) questionnaires were rejected because they were not completely filled. Hence, three hundred and ten (310) copies which makes up 93.94% of the respondents whose questionnaires were returned. The data collected through the questionnaires were analyzed, summarized and interpreted using simple percentage and Chi-square method to measure the inappropriateness existing between the observed and expected frequencies; and to also prove the level of significance in testing the stated hypotheses.

### “4. Data Presentation and Analysis”

**Table 1. Gender**

	Respondent	Percentage
Male	166	53.55
Female	144	45.45
Total	310	100

Source: Field Survey, 2013

Table 1 shows that 166 or 53.55% of the respondents were male while 144 or 45.45% of respondents were female. Thus, the survey revealed that more of the respondents were male.

**Table 2: The Application of ICT has a Positive Impact on Services Rendered to Customers'**

	Respondent	Percentage
Strongly Agree	281	90.65
Agree	28	9.03

Neutral	01	0.32
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

Table 2 showed that 281 or 90.65% of customers strongly agreed, while 28 or 9.03% only agreed and 1 or 0.32% was neutral that the application of ICT has a positive effect on the bank's services. Also, no respondent neither disagreed nor strongly to the fact that application of ICT has positive effect on the bank's services. Appreciably, majority of the respondents opined that the application of ICT has a positive impact on the services rendered to customers.

**Table 3: ICT Allows Prompt and Efficient Service Delivery**

	Respondent	Percentage
Strongly Agree	298	96.13
Agree	10	3.22
Neutral	2	0.65
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

Table 3 indicated that 298 or 96.13% respondents strongly agreed that ICT allows prompt and efficient service delivery to customers. 10 or 3.22% only agreed, and 2 or 0.65% were neutral, while non disagreed or strongly disagreed. Significantly, majority of the respondents which were customers (96.13%) believed that the use of ICT allows prompt and efficient service delivery.

**Table 4: ICT Improves Various Banking Transactions**

	Respondent	Percentage
Strongly Agree	261	84.19
Agree	45	14.52
Neutral	4	1.29
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

Table 4 shows that 261 or 84.19% of the customers that responded strongly agreed that ICT improves various banking transactions. 45 or 14.52% also agreed to the

same opinion, while 4 or 1.29% were neutral. There was no respondent that disagreed or strongly disagreed to the fact that ICT improves various banking transactions. From the survey, it can be deduced that majority of the customers that responded agreed that ICT improves various banking transaction.

**Table 5: The Benefits of Implementing ICT Outweighs Its Cost**

	Respondent	Percentage
Strongly Agree	273	88.07
Agree	27	8.71
Neutral	10	3.22
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

From table 5, out of 310 respondents, 273 or 88.07% strongly agreed that the benefits of implementing ICT outweighs its cost on the long run; while 27 or 8.71% only agreed. 10 or 3.22% respondents were neutral and no respondent disagreed or strongly disagreed to the opinion. Significantly, majority of the respondents believed that the benefits of implementing ICT outweighs its cost on the long run.

**Table 6: ICT Ensures High Standard of Work Output**

	Respondent	Percentage
Strongly Agree	188	60.65
Agree	109	35.16
Neutral	9	2.90
Disagree	4	1.29
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

As shown in table 6, 188 or 60.65% of the respondents strongly agreed, while 109 or 35.16% only agreed that ICT ensures high standard of work output, while 9 or 2.90% of the respondents were neutral and 4 or 1.29% disagreed and non strongly disagreed. Therefore, majority strongly agreed that ICT ensures high standard of work output.

**Table 7: Adequate Knowledge of ICT Increases Prospect For Advancement of the Bank**

	Respondent	Percentage
Strongly Agree	184	59.35
Agree	115	37.10
Neutral	11	3.55
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

Table 7 shows that 184 or 59.35% of the staff of the bank strongly agreed, 115 or 37.10% agreed, while 11 or 3.55% of the respondents agreed that having adequate knowledge of ICT will increase prospects for advancement of the bank. On the other hand, none of the staff was neutral and disagreed.

**Table 8: Use of ICT Has Aided the Bank to Attain Top Position**

	Respondent	Percentage
Strongly Agree	197	63.55
Agree	113	36.45
Neutral	Nil	0
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

Table 8 indicates that 197 or 63.55% strongly agreed, 113 or 36.45% agreed, while none was neutral, disagreed or strongly disagreed to the opinion that the various use of ICT has aided the bank to attain its top position in the banking industry.

**Table 9: ICT Would Lead to Effective Management**

	Respondent	Percentage
Strongly Agree	170	54.84
Agree	125	40.32
Neutral	15	4.84
Disagree	Nil	0
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

From table 9, 170 or 54.84% of the respondents strongly agreed, 125 or 40.32% agreed, while 15 or 4.84% was neutral, none disagreed or strongly

disagreed to the opinion that ICT would lead to effective management.

**Table 10: The Effective Application of ICT Has a Great and Positive Impact on the Development of the Banking Industry**

	Respondent	Percentage
Strongly Agree	254	81.93
Agree	46	14.84
Neutral	07	2.26
Disagree	03	0.97
Strongly Disagree	Nil	0
Total	310	100.00

Source: Field Survey, 2013

As shown in table 10, 81.93% or 254 out of the 310 of respondents that responded strongly agreed that information technology has a great and positive impact on the development of the bank, 46 or 14.84% of the respondents agreed, 7 or 2.26% were neutral, while only 3 or 0.97% of the respondents only disagreed. On the other hand there was no respondent that strongly disagreed. Thus, the survey revealed that most of the respondents strongly agreed that ICT has a great and positive impact on the development of the bank.

#### 4.1 Test of Hypotheses

Chi-square statistical tool was used to test the hypotheses of this research work in respect of the primary data collected. This involves calculating the probability that an observed value randomly picked from the population equals a normal curve frequency of the hypothetical population. Then the observed and expected frequency are compared and arranged in a table.

The formula for calculating Chi-square ( $X^2$ ) is stated as follows:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

Where O is the observed frequency,

E is the expected frequency

#### Hypothesis One

$H_0$ : The application of ICT has a negative impact on services rendered to customers?

$H_1$ : The application of ICT has a positive impact on services rendered to customers?

**Table 11: Test of Hypothesis 1**

Respondents View	Observed O	Expected E	Residual (O - E)	(O - E) <sup>2</sup>	(O - E) <sup>2</sup> / E
Strongly Agree	281	62.00	219.00	47,961.00	773.57
Agree	28	62.00	-34.00	1,156.00	18.65
Neutral	1	62.00	-61.00	3,721.00	60.02
Strongly Disagree	0	62.00	-62.00	3,844.00	62.00
Disagree	0	62.00	-62.00	3,844.00	62.00
<b>Total</b>	<b>310</b>	<b>310.00</b>			<b>976.24</b>

Source: Computed from data, 2013

Decision Rule: Reject Ho where X<sup>2</sup> calculated is greater than X<sup>2</sup> tabulated, otherwise accept H<sub>1</sub>

$$\text{Calculated } X^2 (\text{Chi-Square}) = X^2 = \sum \frac{(O - E)^2}{E} = 976.24$$

Degree of freedom (d.o.f) = n - 1,

Where n is the number of rows which is 5

Therefore, d.o.f. = 5 - 1 = 4

Tabulated X<sup>2</sup> at 0.05% level of significance for 4 degrees of freedom is 9.488

**Decision:** Since the calculated X<sup>2</sup> is greater than the tabulated, the null hypothesis (H<sub>0</sub>) is rejected and the alternative hypothesis (H<sub>1</sub>) is accepted. Thus, this indicates that the application of ICT has a positive impact on services rendered to customers'

**Hypothesis Two**

H<sub>0</sub>: The benefits of implementing ICT does not outweigh its cost on the long run

H<sub>1</sub>: The benefits of implementing ICT outweighs its cost on the long run

**Table 12: Test of Hypothesis 2**

Respondents view	Observed O	Expected E	Residual (O - E)	(O - E) <sup>2</sup>	(O - E) <sup>2</sup> / E
Strongly Agree	273	62.00	211.00	44,521.00	718.08
Agree	27	62.00	-35.00	1,225.00	19.76
Neutral	10	62.00	-52.00	2,704.00	43.61
Strongly Disagree	-	62.00	-62	3,844.00	62.00

Disagree	-	62.00	-62	3,844.00	62.00
<b>Total</b>	<b>310</b>	<b>310.00</b>			<b>905.45</b>

Source: Computed from data, 2013

Decision Rule: Reject Ho where X<sup>2</sup> calculated is greater than X<sup>2</sup> tabulated, otherwise accept H<sub>1</sub>

$$\text{Calculated } X^2 (\text{Chi-Square}) = X^2 = \sum \frac{(O - E)^2}{E} = 905.45$$

Degree of freedom (d.o.f) = n - 1,

Where n is the number of rows which is 5

Therefore, d.o.f. = 5 - 1 = 4

Tabulated X<sup>2</sup> at 0.05% level of significance for 4 degrees of freedom is 9.488

**Decision:** Since the calculated X<sup>2</sup> is greater than the tabulated, the null hypothesis (H<sub>0</sub>) is rejected and the alternative hypothesis (H<sub>1</sub>) is accepted. Thus, this indicates that the benefits of implementing ICT outweighs its cost on the long run

**Hypothesis Three**

H<sub>0</sub>: The effective application of ICT does not enhance development in the banking industry

H<sub>1</sub>: The effective application of ICT enhances development in the banking industry

**Table 13: Test of Hypothesis 3**

Respondents View	Observed O	Expected E	Residual (O - E)	(O - E) <sup>2</sup>	(O - E) <sup>2</sup> / E
Strongly Agree	254	62.00	192.00	36,864.00	594.58
Agree	46	62.00	-16.00	256.00	1,057.03
Neutral	7	62.00	-55.00	3,025.00	48.79
Strongly Disagree	3	62.00	-59.00	3,481.00	56.15
Disagree	0	62.00	-62.00	3,844.00	62.00
<b>Total</b>	<b>310</b>	<b>310.00</b>			<b>1,818.55</b>

Source: Computed from data, 2013

Decision Rule: Reject Ho where X<sup>2</sup> calculated is greater than X<sup>2</sup> tabulated, otherwise accept H<sub>1</sub>

$$\text{Calculated } X^2 (\text{Chi-Square}) = X^2 = \sum \frac{(O - E)^2}{E} = 1,818.55$$

Degree of freedom (d.o.f) = n - 1,

Where n is the number of rows which is 5

Therefore, d.o.f. = 5 - 1 = 4

Tabulated X<sup>2</sup> at 0.05% level of significance for 4 degrees of freedom is 9.488

**Decision:** Since the calculated  $X^2$  is greater than the tabulated, the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_1$ ) is accepted. Thus, this indicates that the effective application of ICT enhances development in the banking industry.

## “5. Results”

In view of the primary data analyzed in this research work, the findings include the following:

- ❖ More than 90% of the respondents were of the view that the application of ICT has positive impact on the customers’ services
- ❖ Also, more than 88% of the respondents strongly agreed that the benefits of implementing ICT outweighs its cost on the long run.
- ❖ The effective application of ICT on the banking activities would improve bank’s productivity
- ❖ Large number of staff the bank that were involved strongly agreed that having adequate knowledge of ICT will increase prospects for advancement of the bank.
- ❖ Conclusively, almost all the respondents (96.13) strongly agreed that the effective use of ICT allows prompt and efficient service delivery.

### 5.1 Further Observations and Findings

The study revealed that information and communication technology is a very strong factor in the development of the banking industry. The use of ICT ensures a high standard of work output and provides reliable and useful information about the organization and its customers. Also, having, adequate knowledge about information and communication technology increases prospect for advancement of the bank and allows working with fewer subordinates. In addition, ICT provides adequate information about past, present activities and future planning; as well as provision of significant increase in productivity leading to effective management.

## “6. Conclusion and Recommendation”

There are no doubts that the adoption of information and communication technology into the Nigerian banking industry has intensely improved the operational efficiency of the Nigerian banking industry by making it more productive and effective. From the study one can deduce that ICT has innumerable

positive impacts on the bank productivity, cashiers’ work, banking transaction, customers’ services, bank services delivery and bank patronage which by far outweighs the few challenges it poses on the customers. The study also revealed that ICT enables sophisticated product development and helps the help to reach geographically distant and diverse markets. The Internet has influenced the delivery channels of the bank and has equally emerged as an important medium of delivering banking products and services. In addition, the customers can view their accounts, get accounts statements, transfer funds, purchase drafts, pay electricity and telephone bills by just punching on few keys. The advent of information and communication technology to every aspect of human life especially the banking industries has been so evident that it does not need to be accentuated more. ICT has greatly improved the efficiencies of today’s banks.

However, the banking industry can still improve their investments on information technology by acquiring a high quality information technology equipment as this will produce an optimum result. Manpower development, training and re-training of personnel from time to time on latest software and information technology equipment is highly recommended knowing fully well that they are very dynamic. The government should make favourable importation policies that will encourage the local industries that are into the acquisition, production and assembly of computers, communication and information technology equipment. This will provide job opportunities and first hand necessary skills to our people; and invariably reduce the cost of acquiring and implementing information technology in the banking industries as well as all aspect of human endeavours.

## “7. References”

- [1] Agboola, A. (2005). Information and Communication Technology (ICT) in Banking Operations in Nigeria- An Evaluation of Recent Experiences. Obafemi Awolowo University, Ile-Ife, Nigeria.
- [2] Ananthakrishnan, G. (2004). Customer Service in Banks. *Vinimaya*, Vol. XXV, No.3, (2004-05).
- [3] Anonymous (2012). Background of Nigerian Banking Industry. Internet: <[http://www.icr.stakescapital.com/research\\_int/background/nigerian\\_banking\\_industry.html](http://www.icr.stakescapital.com/research_int/background/nigerian_banking_industry.html)>. Accessed on 27/12/2012.
- [4] Babalola, A. (2011). Bank Failure in Nigeria: A Consequence of Capital Inadequacy, Lack of Transparency and Non-Performing Loans?, *Banks and Bank Systems*, Vol 6 (1) pp. 99-109.



- [5] Brightman, R. W. and Dimsdale, J. M. (1986). *Using Computers In An Information Age*. Delmar Publishers, London, England, pp.15-30.
- [6] Dabwor, T.D. (2010). The Nigerian Banking System and The Challenges of financial Intermediation in the Twenty First Century. *Jos Journal of Economics*, 3 (1): 93-108.
- [7] Hebbar, R. (2003). Building Trust in E-Banking. *Vinimaya*, Vol. XXIV. No 4, 2003-04.
- [8] Idowu, P.A., Alu, A.O. and Adagunodo, E.R. (2002). The Effect of Information Technology on the Growth of the Banking Industry in Nigeria. *The Electronic Journal on Information Systems in Developing Countries*, 10 (2): 1-8.
- [9] Information Technology Impacts. [Online document] <http://www.anu.edu.au/people/Roger.Clarke/SOS/Itimapcts.html> (Accessed on 27<sup>th</sup> August, 2012)
- [10] Jadhav, A.S., Jadhav, R. A., (2004): "Status of e-banking in India", National Annual Convention of CSI, 2004
- [11] Jayasree R., (2000). Impact of the Information Technology Act' 2000: In Banking Sector. Available at <http://www.asianlaws.org/projects/impactbanking-sector.htm> (12/27/2004)
- [12] Madueme, I. S. (2010). Evaluation of The Impact of Information Communication Technology on Banking Efficiency Using the Trancendatal Lograthimic Production Function and Camel Rating *International Journal of Engineering Science and Technology*, Vol 2 (1):1- 6.
- [13] Oluwagbemi, O., Abah, J. and Adagunodo, E.R. (2011). The Impact of Information Technology in Nigeria's Banking Industry. *Journal of Computer Science and Engineering*, Vol 7 (2): pp 63-67.
- [14] Rajashekhara K. S., "Application of IT in Banking", *Yojana*, July 04
- [15] Sanyaolu, K. and Sanyaolu, T., (2010) "History of Banking In Nigeria (1892 - 2010)