

Extent of use of ICT Facilities in selected Banks, located in Federal University of Technology, Akure, Ondo State, Nigeria

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ABSTRACT

This paper recognized ICT as a tool for surviving competition in contemporary banking industry, using First bank of Nigeria PLC, Guarantee Trust Bank and United Bank for Africa, Federal University of Technology, Akure, Ondo State, as case study. The paper identified the ICT facilities that are utilized in these banks and examined the extent to which these facilities are utilized. The paper searched for answers to research questions by employing survey design, random sampling to select the banks, and the respondents were selected randomly. Data were gathered from 294 respondents with the aid of a 13-item questionnaire. The respondents comprised the selected banks' customers. Data were analyzed using descriptive statistic – Relative Importance Index, and Chi Square was used to test hypotheses at 5% significant level. The research instrument was validated through Pilot test and reliability was tested using Cronbach Alpha. The study disclosed that, there was a high extent of use of ICT facilities in the banking industry. The paper recommended more investment and use of ICT modern technologies, in order to withstand the intense competition in the banking industry.

Keywords: ICT, Facilities, ICT Facilities, Extent of Use

INTRODUCTION

Information technology (IT) is perceived as a necessity to pursue the rationalization and cost management occasioned by intensified competition in the financial sector (DeBandt and Davis, 2000). It has transformed the way businesses are conducted by impacting on almost all aspects of business operations including product development, automation of processes, storage of customers' data, communication and

interaction with customers and suppliers (Ndungu, 2014). IT and e-banking contribute to the future of developing countries. Therefore, underestimating their importance may ultimately increase the gap between underdeveloped and industrialized countries (Oluwagbemi, *et al.*, 2011). The use of ICT in banking operations has become an issue of concern to all banks operating in Nigeria, and certainly, a precondition for international competition (Ugwu, Oyebisi, Ilori and Adagunodo, 2002). It has become necessary for organizations in the world, to understand the changing needs of customers and apply up to date information technology system to supply these needs, in order to compete more effectively (Malhotra and Mukherjee, 2004).

Knowing the necessity of ICT in the banking industry, Nigerian banks have been adopting ICT to enhance their services. Ndukwe (2005), Woherem (2000), Ovia (2001), Adeoti (2005), in their studies, disclosed that Nigerian banks' investment in ICT has increased, while Harold and Jeff (1995) and Ayo (2001), stated that banks' senior management in Nigeria, have failed to grasp the relevance of technology and incorporate it into their strategic plans. Also, Chinedu, Chima and Emeka (2012), discovered that, despite the distribution of above 900 ATM machines by banks in Nigeria, a huge number of customers are still hesitant to patronize the ATM service.

ICT is the automation of processes, controls, and information production using computers, telecommunications, software's and other gadgets that ensure smooth and efficient running of activities. It is a term that largely covers the coupling of electronic technology for the information needs of a business at all levels (Agbolade, 2011). It refers to software applications that captures, manipulates and allows access to information, hardware that helps run installed applications and telecommunication devices and networks that facilitate transfer of information within an organization and beyond. Rahman (2002) defined ICT as the technology of creation, processing, storage, electrical and

electronic (hardware), and electronic computing (software), as well as the internet and global system of mobile communication (GSM).

The main objective of this study is to examine the extent of use of ICT facilities in First Bank Nigeria PLC., Guarantee Trust Bank and United bank for Africa, Federal University of Technology, Akure, Ondo State, Nigeria. The specific objectives are to: identify the ICT facilities used in the banks, and examine the extent to which these facilities are utilized. United Bank for Africa (UBA) has 4 ATMs and 4 tellers (only 3 operational). First Bank has 4 ATMs and 3 tellers (only 2 operational) and Guarantee Trust Bank has 6 ATMs and 4 tellers. United Bank for Africa (UBA) was opened in 2005, installed ATMs in 2008, has 13 members of staff including Business Manager and Operations Manager, First Bank was opened in 2012, installed ATMs the same year, has 15 members of staff including Business Manager and Operations Manager, while Guarantee Trust Bank was opened in 2013, installed ATMs the same year, has 24 members of staff including the Branch Manager.

Statement of the Problem

Notwithstanding the enormous investment on ICT facilities in the banking industry in Nigeria, a huge number of customers are still hesitant to patronize some of the services, for fear of fraud, making mistakes, among others. Woherem (2000), Ndukwe (2005), Ovia (2001), Adeoti (2005), among others, affirmed that Nigerian banks' investment in ICT has increased greatly, while Ayo (2001), Harold and Jeff (1995) stated that banks' senior management in Nigerian have failed to grasp the relevance of technology and incorporate it into their strategic plans. Also, Chinedu *et. al.* (2012) revealed that, despite the distribution of above 900 ATM machines by banks in Nigeria, a huge number of customers are still hesitant to patronize the ATM service. What is the situation in First bank of Nigeria PLC, Guarantee Trust Bank and United Bank for Africa, Federal University of Technology, Akure

(FUTA) branch, Ondo State, Nigeria? This question necessitated the need for this study.

PREVIOUS RESEARCH

ICT Goods, Applications and Services used in Nigerian Banks

Ndungu (2014), Basweti, Masese, and Martin (2013), Dauda and Akingbade (2011), Agboola (2006), Oluwagbemi, Abah, and Achimugu (2011), Ehikhamenor (2003), Shokan (2005), Alabar (2011), Fenuga and Oladejo (2010), Ovia (2005), Sing, Chhatwal, Yahyabhoy and Yeo (2002), among others, itemized some ICT products and applications in use in Nigeria banks. They include; Automated Teller Machine (ATM), Internet banking, Smart Cards, Efficient Quick Service (EQS), mobile commerce, Telephone Banking, Electronic banking, Electronic Payment System (e-PS), MICR, Electronic publishing, Optical Character Recognition (OCR), Electronic Funds Transfer (EFT), Cheque handling, Electronic Purse Service (EPS), Electronic Letter of Credit, Electronic Data Interchange, Wireless Transfer (WT) and Electronic Billing.

Others include: Customer relationship management, Computerized credit rating, Enterprise resource planning, Point of sales system, Computerized financial accounting and reporting, Mobile money transfers, Electronic data exchange, Local Area Network, Wide Area Network, Human resources solution, among others. Irechukwu (2000) enumerated some bank services that have been transformed via the use of ICT as, customer account mandate, opening of account and processing and recording of transaction. He further explained that ICT has provided self-service facilities (automated customer service machines) which allow prospective customers to fill and complete document for opening account, directly online. Also, it aids customers to authenticate their account numbers and receive instruction on how and when to take delivery of their credit, debit cards and cheque books.

Extend of Use of ICT Facilities in the Banking Industry

Agboola (2007) disclosed that, with regards to the spread of ICT facilities, ATM still ranks the least, whereas Telephone Banking, Make Cheque Available Program and Electronic Home and Office Banking follow in that order. He associated the low rate of spread of these technologies with, lack of facilities necessary for their operation, fear of fraudulent practices, and cost. However, Mallat, Dahlberg, Saarinen, and Tuunainen (2001), revealed that, in accessing account information on transactions and accessing account balance, ATM was the utmost popular channel utilized (53%) by customers as a primary channel. They further stated that, the internet followed as a good runner-up, and the use of other channels as primary mode was very low. They further explained that, it is likely that a lot of people access account information while withdrawing cash or paying bills. However, as secondary means, they disclosed that, the use of several channels was more deviated. ATM was again the most commonly used, by 24.6% of respondents, followed by Counter Service (17.8%). Then Internet (14.9%) and phone banking (10.3%) were also used. They also disclosed that, ATM (90.8%), was the most common channel used for cash withdrawals, while in bill payments, the Internet (41.6%) surpassed ATM (35.1%) as the most popular transaction channel used. ATM was most popularly used as secondary means for bill payments (21.6%). They opined that, the roles performed by mobile services, and phone banking, were significantly low, while Counter Service was the utmost used channel for investment services, submitting loan applications which customarily necessitates high-touch service with human interaction that involves asking of questions and advice, and Retail loans which involves negotiations about interest rate.

Akinuli (1999) opined that, banking is becoming vastly ICT based, and due to its link between sectors, it seems to be gaining most of the benefits of technological revolution, and this is apparent since ICT is applied in almost all areas of its activities. He further stated that, ICT

revolution in the area of cost per unit, speedy operation, and innovation rate, has made a lot of banks to embrace the use of ICT infrastructure in their operations. In fact, nearly all the banks in Nigeria have internet and on-line real time banking facilities, and this has enhanced the scope of Nigerian banking (Osabuohien, 2008). The culture of ICT in Nigerian economy can be said to be on the rise. Ndukwe (2005) disclosed that Nigeria's tele density has greatly increased by more than 2,550% from 0.35% in 1992 to 9.3% in 2004. In so doing, it has hugely surpassed the benchmark of the International Telephone Union's (ITU) of 1%. He further revealed that Nigeria is the biggest Internet subscriber in Africa with about 100,000 internet users as at the year 2000, and this estimate has greatly increased (Balancing Act, 2007). Woherem (2000) and Ovia (2001) disclosed that since 1980s, Nigerian banks have achieved better in their investment profile and use of ICT systems, than the rest of industrial sector of the economy. The usage level of ICT in the banking sector, has substantially improved, although it may not be as high as those experienced in advanced countries (Adeoti, 2005). The speedy reduction in the price of ICT gadgets, coupled with the business environment that became comparatively flexible to accommodate new forms of technological changes occasioned by reforms in the country, has encouraged banks to increase their level of ICT usage (Ovia, 2005).

On the other hand, Harold and Jeff (1995) and Ayo (2001), opined that the most significant shortcoming in the banking industry presently, is the extensive failure by banks' senior management, to grasp the relevant of technology and incorporate it into their strategic plans. Also, Chinedu *et. al.*, (2012) discovered that, despite the distribution of above 900 ATM machines by banks in Nigeria, a huge number of customers are still hesitant to patronize the ATM service. He further emphasized that in Lagos area, where you have the most ancient of banking customers; fewer than 10% of customers presently patronize the banks' product/service. Again, Devlin (1995) emphasized that although the

number of branch offices is reducing; personal services offered by personnel in physical branch offices are still and will remain vital in getting to a lot of customer segments. In addition, Mallat, et. al. (2001), stated that, presumably branch offices will specialize in providing services for customers that are unwilling to carry out banking services by themselves, and also, offering more complicated banking and finance products that necessitate personal service, guidance, and interaction with bank personnel.

METHODOLOGY

Since the main objective of this study is to assess the extent of use of ICT facilities in First Bank of Nigeria PLC, Guarantee Trust Bank (GTB), and United Bank for Africa (UBA), FUTA branches, Akure, Ondo State, Nigeria, survey design was used to collect data from 294 respondents. The respondents comprised the selected Banks' customers. The banks were selected by the use of simple random sampling, and the customers were selected randomly. A 13-item structured questionnaire was used to gather information from the respondents. The questionnaire was made up of two sections, A and B. Section A comprised information on personal bio-data of the respondents while section B consisted of questions intended to obtain information that would help to examine the extent of use of ICT facilities from respondents in the selected banks. 320 copies of questionnaire were administered to the customers on face-to-face bases. 294 questionnaires were retrieved. Meaning, the response rate was 92%. Descriptive statistic – frequency, percentages and Relative Important Index (RII) were used to analyze data for this study.

FINDINGS AND DISCUSSION

Personal Characteristics of the Respondents

Table 1: Personal characteristics of the respondents

Gender of the respondents	Frequency	Percent
Male	217	73.8
Female	77	26.2
Age Distribution of respondents		
20 -29	60	20.4
30 – 39	93	31.6
40 – 49	81	27.6
50 – 59	47	16.0
60 and above	13	4.4
Nationality of respondents		
Nigerian	294	100.0
Marital Status of respondents		
Single	64	21.8
Married	222	75.5
Divorced	8	2.7
Academic Qualification of respondents		
WAEC	29	9.9
OND	12	4.1
B.SC/HND	135	45.9
M.SC	86	29.3
PHD and others	32	10.8
Distribution of respondents by bank		
First Bank	93	31.6
GTBank	119	40.5
UBA	82	27.9
Respondents year of opening account with the banks		
1986 – 1995	7	2.4
1996 – 2005	24	8.2
2006 – 2016	263	89.4

Source: Field Work 2016

Table 1 shows that the male respondents constituted out 217 (73.8%) out of 294, and the female respondents were 77 (26.2%). The table also

disclosed that 60 (20.4%) of the respondents were between the age bracket of 20 - 29 years, 93 (31.6%) were between, 30 – 39 years, 81 (27.6%) were between 40 – 49 years, and 47 (16.0%) were between 50 - 59 years, and 13 (4.4%) were above 60 years. The whole respondents were Nigerians. 64 (21.8%) of the respondents were single, 222 (75.5%) married, and 8 (2.7%) divorced. In addition, 29 (9.9%) of the respondents were holders of WAEC, 12 (4.1) OND, 135 (45.9%) BSc/HND, 86 (29.3%) MSc, and 32 (10.8%) Ph.D. holders. The educational qualification of the respondents disclosed that most of the respondents were competent enough to comprehend and interpret the statements on the questionnaire appropriately, and make available, answers that best reflect their views on the topic of the study. The table again, revealed the distribution of respondents from each of the selected banks as: First Bank, 93 (31.6 %,) respondents, GT Bank, 119 (40.5%), and UBA, 82 (27.9%). GT bank respondents were higher than the respondents from the other banks, perhaps, due to the views of some respondents that GT bank as a new generation bank, is associated with efficiency in service. This made a lot of students and members of staff to open account with the bank. Also, it was disclosed on table 1 that, a lot of the respondents have had account with the banks for over five (5) years, this shows that they have enough knowledge on the banks' operations, and can give accurate information on the topic.

Extent of use of ICT Facilities in selected Banks, located in Federal University of Technology,
Akure, Ondo State, Nigeria

Table 2: Types of ICT Facilities in use, and their Extent of use in the Individual Banks
(VH = Very High, H = High, M = Moderate, L = Low, VL = Very Low, RII = Relative Importance Index)
F = First Bank, G = GT Bank, U = UBA Bank

Types of ICT Facilities in Use	Extent of Use																	
	VH			H			M			L			VL			RII		
BANKS	F	G	U	F	G	U	F	G	U	F	G	U	F	G	U	F	G	U
Telephone Banking	7	59	16	33	34	9	28	6	16	25	20	15	0	0	26	0.65	0.82	0.54
Internet Banking	9	34	9	40	58	25	14	14	23	23	7	10	7	6	15	0.65	0.78	0.61
Bankers Automated Clearing Service	33	33	0	15	46	23	15	33	26	23	7	8	7	0	25	0.69	0.78	0.51
Automated Teller Machine	46	60	34	24	40	40	16	13	8	7	0	0	0	6	0	0.83	0.85	0.86
Customer Relationship Management	17	27	0	15	59	22	45	27	60	16	6	0	0	0	0	0.67	0.78	0.65
Enterprise Resource Planning	9	0	0	24	45	24	38	48	32	7	26	16	15	0	10	0.61	0.63	0.57
Mobile Money Transfers	15	41	7	23	52	16	31	7	17	9	19	42	15	0	0	0.63	0.79	0.57
Mobile Commerce	7	33	0	24	33	24	17	28	16	23	18	32	22	7	10	0.54	0.71	0.53
Cheque Handling	7	47	7	24	33	16	31	7	8	9	19	41	22	13	10	0.57	0.74	0.52
Electronic Funds Transfer	31	65	15	9	45	15	22	6	18	23	7	25	8	0	9	0.67	0.88	0.60
Smart Cards	31	53	9	17	27	22	31	33	34	7	0	7	7	6	10	0.72	0.80	0.63
Point of Sales System	16	46	9	17	54	0	22	6	31	30	6	24	8	7	18	0.61	0.81	0.50
Electronic Data Interchange	7	19	0	33	62	14	14	14	34	24	18	24	15	6	10	0.58	0.72	0.53
Electronic Data Processing and Transmission	7	26	7	26	68	7	21	13	42	24	6	16	15	6	10	0.57	0.77	0.56
Electronic Payment System	14	48	7	16	45	16	24	20	34	39	0	7	0	6	8	0.61	0.82	0.59
Computerized Credit Rating	7	34	7	32	46	25	15	14	8	31	6	25	8	19	7	0.60	0.72	0.55
Electronic Mail	7	10 0	0	40	19	51	23	0	15	23	0	7	0	0	9	0.67	0.97	0.66

Source: Field Work 2016

Table 3: Summary of Types of ICT Facilities in use, and their Extent of use in all the Selected Banks (Cumulatively)

(VH = Very High, H = High, M = Moderate, L = Low, VL = Very Low, RII = Relative Importance Index)

S/N	Types of ICT Facilities in Use	Extent of Use					
		VH	H	M	L	VL	RII
1.	Automated Teller Machine	140	104	37	7	6	0.85
2.	Electronic Mail	107	110	38	30	9	0.79
3.	Electronic Funds Transfer	111	65	46	55	17	0.73
4.	Smart Cards	93	66	98	14	23	0.73
5.	Customer Relationship Management	44	96	132	22	0	0.71
6.	Telephone Banking	82	76	50	60	26	0.69
7.	Internet Banking	52	123	51	40	28	0.69
8.	Electronic Payment System	69	77	78	56	14	0.69
9.	Bankers Automated Clearing Service	66	84	74	38	32	0.68
10.	Mobile Money Transfers	63	91	55	70	15	0.68
11.	Point of Sales System	71	71	59	60	33	0.66
12.	Electronic Data Processing and Transmission	40	101	76	46	31	0.65
13.	Computerized Credit Rating	48	103	37	62	44	0.63
14.	Cheque Handling	61	73	46	69	45	0.62
15.	Electronic Data Interchange	26	109	62	66	31	0.62
16.	Enterprise Resource Planning	9	93	118	49	25	0.61
17.	Mobile Commerce	40	81	61	73	39	0.61

Source: Field Work 2016

Tables 2 and 3 disclosed the types of ICT facilities used in the selected banks and the types mostly used by the banks' customers. These ICT facilities are not different from those listed by Ndungu (2014), Basweti, Masese, and Martin (2013), Dauda and Akingbade (2011), Agboola (2006), Oluwagbemi, Abah, and Achimugu (2011), Ehikhamenor (2003), Shokan (2005) Alabar (2011), Fenuga and Oladejo (2010), Ovia (2005), Sing, Chhatwal, Yahyabhoy and Yeo (2002). The table also revealed that, the types of ICT facilities mostly used by customers in the selected banks, in a descending order includes: Automated Teller

Machine, with Cumulative RII of 0.85, and Fist bank, having RII of 0.83, GT bank, 0.85, and UBA, 0.86. This is followed by Electronic Mail, with Cumulative RII of 0.79, and Fist bank, having RII of 0.67, GT bank, 0.97, and UBA, 0.66, then, Electronic Funds Transfer, with Cumulative RII of 0.73 and Fist bank, having RII of 0.67, GT bank, 0.88, and UBA, 0.60. Followed by Smart Cards, with Cumulative RII of 0.73 and Fist bank, having RII of 0.72, GT bank, 0.80, and UBA, 0.63. This is in disagreement with Agboola (2007) whose study revealed that, ATM ranks the least, in terms of spread of ICT facilities, followed by Telephone Banking, Make Cheque Available Program and Electronic Home and Office Banking follow in that order. He associated the low rate of spread of these technologies to, cost, and lack of facilities necessary for their operation and fear of fraudulent practices. However, the result is in agreement with Mallat, *et al.*, (2001)'s study, which revealed that, in accessing account information on transactions and accessing account balance, ATM was the utmost popular channel utilized by customers as a primary channel, followed by the internet.

Also disclosed on tables 2 and 3 are, the types of ICT facilities that customers least use in the selected banks. These facilities, starting from the least used, include: Mobile Commerce, with Cumulative RII 0.61, and Fist bank, having RII of 0.54, GT bank, 0.71, and UBA, 0.53, followed by Enterprise Resource Planning, with Cumulative RII of 0.61, and Fist bank, having RII of 0.61, GT bank, 0.63, and UBA, 0.57. Then Electronic Data Interchange, with Cumulative RII of 0.62, and Fist bank, having RII of 0.58, GT bank, 0.72, and UBA, 0.53. followed by Cheque Handling, with Cumulative RII of 0.62, and First bank, having RII of 0.57, GT bank, 0.74, and UBA, 0.52.

**Table 4: Test Statistic on the Extent of Use of ICT Facilities in the Selected Banks
 Test Statistic**

N	294
Chi-Square	551.670
Df	16
Asymp. Sig.	.000

Friedman Test

H_0 : ICT facilities are not used to a high extent in First bank of Nigeria PLC, Guarantee Trust Bank and United Bank for Africa, Federal University of Technology, Akure, Ondo State, Nigeria

Table 4 shows that the value of chi square test performed on the extend of use of ICT facilities by the selected banks' customers, at significant level of 0.05 and level of confidence of 95% was significant. It was .000, which is lower than 0.05. Based on this finding, the null hypothesis (H_0) which states that ICT facilities are not used to a high extent in the selected banks was rejected, while the alternate hypothesis (H_1) which states that ICT facilities are used to a high extent in the selected banks was accepted. This means that ICT facilities are used to a high extent in First bank of Nigeria PLC, Guarantee Trust Bank and United Bank for Africa, Federal University of Technology, Akure, Ondo State, Nigeria.

CONCLUSION

It can be inferred from the findings above, that, the ICT facilities mostly used by customers in the selected banks, in a descending order include: Automated Teller Machine, with Cumulative RII of 0.85, and Fist bank, having RII of 0.83, GT bank, 0.85, and UBA, 0.86. Followed by Electronic Mail, with Cumulative RII of 0.79, and Fist bank, having RII of 0.67, GT bank, 0.97, and UBA, 0.66, then, Electronic Funds Transfer, with Cumulative RII of 0.73 and Fist bank, having RII of 0.67, GT bank, 0.88, and UBA. Also revealed is that, the least types of ICT

facilities that customers use in the selected banks, starting from the least used, are, Mobile Commerce, with Cumulative RII 0.61, and Fist bank, having RII of 0.54, GT bank, 0.71, and UBA, 0.53, followed by Enterprise Resource Planning, with Cumulative RII of 0.61, and Fist bank, having RII of 0.61, GT bank, 0.63, and UBA, 0.57. Based on these finding, the study recommended that the banks' customers need to be enlightened and educated their customers, on the use and benefits of Mobile Commerce, Enterprise Resource Planning, and other ICT facilities that are not popularly used by these selected banks' customers in particular, and other banks' customers in general. This is to enable banks' customers take advantage of the use of these facilities, and reduce the stress of bank workers, who continuously have to augment their ICT services, with manual services, due to customers' failure to use some ICT services provided by the Nigerian banks.

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