A CRITICAL ANALYSIS OF INFORMATION TECHNOLOGY AND CUSTOMERS' SATISFACTION IN LAGOS BANKING ENVIRONMENT OF NIGERIA

Oginni, B.O,

Department of Economics and Business Studies,
Redeemer's University,
Mowe - Ogun State, Nigeria.

Omoyele, S.O

Department of Economics and Business
Studies, Redeemer's University,
Mowe – Ogun State, Nigeria

Ogunwole, O.A.C,

University of Ibadan, Ibadan,
Oyo State, Nigeria

ABSTRACT

The focus of the research work was on the critical analysis of information technology and customers' satisfaction in Lagos banking environment of Nigeria. It identified the various aspects of information technology made available by banks in Nigeria to aid customers' satisfaction; it examined the customers' satisfaction on each of the dimensional elements in information technology and also determined the role of information technology in customers' satisfaction. Questionnaire was used as primary data collection method which was developed in line with Likert 5point rating scales and administered to 900 respondents who were customers of different banks in the three senatorial districts of Lagos State (East, West and Central) through random sampling technique but purposive sampling technique was adopted to choose the banks. Out of the 900 questionnaire administered, 612 were collected but 573 were actually found useful for analytical purpose thus representing 64% response rate of the respondents while the secondary data were obtained through the review of relevant journals, books and government gazettes. Descriptive statistics and Z table value of 1.96 (two tailed test) at 0.05 level of significance were used to test the emerging hypotheses while percentage and frequency distribution tables were used to give adequate interpretation to the data collected for the paper. The study revealed that all the dimensions of information technology found in practice in the banking environment of Lagos and Nigeria as a whole does not satisfy customers equally. It is therefore obvious that the various dimensions of information technology in the banking environment of Nigeria has not been fully developed and this call for urgent attention so as to take full advantage of derivable economic benefits of information technology obtainable from efficient and effective operations.

Keywords: Information technology, customers' satisfaction, electronic banking, technological environment, network facilities and E-business.

Introduction:

All over the world, electronic banking is making rapid strides due to the evolving system of communication technology thus giving rise to the penetration of internet banking in most countries of the world of which Nigeria is inclusive (Oluwagbemi etal, 2011). In the views of Adebayo etal (2004) supported by Fornell etal (2004) the success of organisations is contingent upon the business environment (internal and external environment) which

has man at the centre and that all business activities are geared towards meeting the needs and wants of people which is the sole of marketing. In the world of marketing, it is a general consensus that the satisfaction of customers in respect of product consumption will call for repeat purchase thus leading to brand loyalty and in the long run economic profit (Olayinka and Aminu, 2006). To the economists, this assertion is said not to be true because the demand for product can be classified into two namely

elastic and inelastic demands and that the demand for product under inelastic will continue to enjoy constant patronage that could be linked to brand loyalty whether they are satisfied or not whereas demand for product under elastic would only enjoy constant patronage when customers are satisfied (Peterson, 1992). Kotler etal (1999) has that the company's marketing environment can be divided into the micro environment and macro environment. The micro environment consists of five components (internal environment, marketing channel, types of market, competitors and public) while the macro environment consists of primary forces that shapes opportunities and pose threats to the company to include demographic, economic, natural, technology, political and cultural forces. However, of all these forces, it is the technological environment that is the most dramatic and dynamic force of all because it reveals rapid technological change, unlimited innovation opportunities, high demand for research and development in order to response to rapidly changing market conditions and strong competitors others also enjoys change which is somewhat static in progression (Adebayo etal, 2004). The Nigerian business environment is made up of manufacturing and service sectors with service sector embracing information technology more than the manufacturing sector most especially the banking industry of the service sector (Agboola, 2003). The information technology of banks in Nigeria is prominent in the area of Internet, E–business, GSM banking, Automated Teller Machines (ATMs), On-line banking, Electronic mail, Bankers Automated Clearing Services (Oluwagbemi, 2011).

Statement of the Problem:

If marketing activity is geared towards man and marketing is the main source of revenue into the organisation, it then implies that the satisfaction of the man should be of paramount importance to any business organisation that is willing to record competitive success and long term economic performance. Thus explaining why the banks in Nigeria have seen information technology as a tool of service marketing to improve customers' satisfaction which has become one of the most important and modern directions that have witnesses a substantial expansion during the last decade in almost all the societies and this is so because banking activities have become wide in varieties with sophistication in product packaging (Adetayo etal, 1999). In order to response to improvement in customers' satisfactions through convenient banking, Nigerian banking organisations are now making greater use of information technology with different options to soothe their respective objectives and this attention on the information technology together with commensurate investment has increased operating cost which has made work process easier. However, situations where the banks have invested so much in the information technology like their counterparts in other countries but the infrastructural facilities in their respective place of operations did not support the introduction of the chosen element(s) of the

information technology, what will be the implication on customers' reaction and satisfaction, hence this study on information technology and customer's reactions and satisfaction; now that consumer satisfaction and customer retention have emerged as key metrics for measuring competitive success and long term economic performance of organisation (Fornell etal, 2004).

Objective of the Study:

The main objective of the research was to investigate the impact of information technology on customers' satisfactions which was achieved through the following specific objective;
- To identify the various aspects of information technology made available by banks in Nigeria to aid customers' satisfaction.
- To examine the customers' satisfaction on each of the elements in information technology.
- To determine role of information technology in customers' satisfaction.

Research Questions:

In order to give the research work a direction in line with the research objective, the following questions were asked.
- What are the various aspects of information technology that aided customers' satisfaction?
- What is the customers' satisfaction level with respect to the elements of information technology?
- What is the role of information technology in customers' satisfaction?

Scope of the Study:

The study covers all the banks in Nigeria with reference to Lagos where branches as well as headquarters of all these banks are located and the area of study was information technology and customers' satisfaction.

Literature Review:

The hallmark of any business organisation in the pursuit of profit maximization objective is seeking comfort of customers through quality delivery of service (Oginni, 2005) and this explains why the business world has witnessed a lot of metamorphoses in the area of technological advancement which has impacted so much on both internal and external means of communication of business organisations. The banking sector of Nigerian economy is not left of this experience which heralded the adoption of information technology in their modules of operations.

Meaning of Information Technology and Customer satisfaction:

The Information Technology Association of America has defined information technology (IT) as "the study, design, development, application, implementation, support or

management of computer-based information systems" (Butler, 2012) but the term has also been applied more narrowly to describe a branch of engineering dealing with the use of computers and telecommunications equipment to store, retrieve, transmit and manipulate data (Hilbert, 2012). Although commonly used to refer to computers and computer networks, IT encompasses other information-distribution technologies such as television and telephones, a wider field more explicitly known as information and communications technology (Daintith, 2009 and Chandler etal, 2012). In the views of Alter (2002) information technology (IT) is the hardware, software and other tools and equipment used by the participants while doing their work. Farag etal (2009) lent his voice to this by describing IT as the technology dedicated to information storage, processing and communication i.e is the combination of hardware, software, telecommunications and office equipment to transform raw data into useful information for speedy retrieval. Opera etal (2010) opined that organisational technology is the information, equipment, techniques and processes required to transform inputs in an organisation. Emanating from this is that any organisation can adopt IT for her operation for the purpose of disseminating information to both internal and external stakeholders. It is therefore crystal clear that the use of information technology as a communicating system in banking operation is called electronic banking (Ovia, 2001). Electronic banking is therefore a product of e-commerce in the field of banking and financial services which is sometimes described as Business - to – Customer domain for the banking industry. This can therefore be summarised as the act of carrying out the business transaction of a bank through the use of electronic devices. (Oluwagbemi, 2011) The electronic banking system devices offers different online services like balance enquiry, request for cheque books, electronic mail, on-line banking, recoding stop payment instruction, GSM banking, automated teller machines, bankers automated clearing services, balance transfer instruction, account opening and funds transfer.

Customers' Satisfaction:

The awareness in the world of business is today is not just production of quality product, service or perhaps provision of superior customers service, the focus now is getting customers satisfied to herald loyal customers who will identify with the organisation over long period of time (Osho 2008). It is for this reason that made organisation to develop series of technique to cope with this new direction in business such as total quality management (TQM), continuous process improvement (CPI), business process reengineering (BPR) etc. Gerson (1993) described customers' satisfaction as the ability of a product to meet the expectations of customers upon consumption. However the views of Brown (1995) was a radical one in that customers' satisfaction is exceeding customers' expectations by going extra miles. Rust and Oliver (1994) were of the opinion that customers' satisfaction is a

function of customers' perception about their expectation in respect of a product consumption which is somewhat subjective in absolute term of evaluation. The views of Massnick (1997) in a related work on customers' perspective; he identified customers' value, product quality and service quality as factors influencing the perception of customer about their satisfaction.

Nigerian Experience of Electronic Banking:

The current structure of financial institutions in Nigeria most especially banks has changed the industry in no drastic measures thus bringing about a lot of significant changes in the sector. These significant changes heralded by depth competition compelled banks to show zeal towards information technology and customers' satisfaction through efficient delivery of quality services (Oluwagbemi etal, 2011). The uniqueness of these significant changes was the deliberate attempt on the part of the banks to outperform or out shine its peers in banking operations by developing different business models leading to customers' sophistication in terms of enlightenment, interest, expectation and convenience (Olayinka and Aminu, 2008). The history of e-banking activities in Nigeria can be traced to 1986 when the banking sector was deregulated. The deregulation effect was complete overhauling of bank services through computerisation of operations and reengineering of service processes. The deregulation was also followed by liberalisation of banking licence which gave room for more players to come into the sector and the banks that were established around this time were known as new generation banks (Agboola, 2000). The new generation banks were the first to embrace information technology to have edge over the old generation banks but it was too long before the old generation banks also adopted the information technology when it was glaring that many of their existing customers were leaving them to join the new generation banks as a result of quick services received through electronic devices that were found to be in operation (Ugwu, 2000).

E-banking Electronic Devices in Nigeria:

There are many of these electronic devices in the world of banking with each adapted to the peculiarity of the environment. However, there is a common unique of these devices which is known as personal identification number (PIN) i.e a series of secret codes known to the customers that operates the account or anyone authorised by the operator of the account. The major banking electronic devices that were found to be in operation in Nigeria as at the moment include GSM banking, Automated Teller Machines (ATMs), Funds Transfer, On-Line Banking, Electronic Mail, Bankers Automated Clearing Services and internet network facilities (Agboola, 2003). The GSM banking is phone enabling transaction which allows access into the account as long as phone and service supports the operation in question. ATM is cash enabling dispenser

through the use of PIN, aside this, bills can also be settled and solve the problem of long queue in the banking hall. Funds transfer is now made easier through the use of information technology, funds can be transferred across the globe without any problem or delay as long as adequate information about the receiver is correct. The on-line banking this affords the customer ample opportunities to make payment for goods and services without actual contact with physical cash also transaction of any kind can be performed electronically. It is the electronic mail that made communication between different branches of banks in different location to be possible. Confirmation of cheque payment is equally facilitated by the electronic mail and the bankers automated clearing services which is in the area of cheque processing. It uses magnetic ink character reader (MICR) to fast track cheque processing (coding, reading and sorting) and request for cheque book and draft payment are also facilitated by this electronic device (Ovia, 2001, Agboola, 2003, Amedu, 2005 and Oluwagbemi, 2011). It is worth noting that majority of these electronic devices are internet based activities.

Regulatory and Other Challenges of Information technology:

At the national level, the Nigerian government through the relevant regulatory agencies most especially the Central Bank of Nigeria (CBN) had strived to matched the rapidly changing electronic banking environment with necessary regulations and institutional frameworks. Some of these were Banks and other Institutional Acts of 1991, Recovery of Debt and Malpractices in Banks Decree No 18 of 1994, Money Laundering Decree of 1995, Electronic Banking guidelines (2003) etc. The essence of these Acts and Decree were to prevent the banks from being vulnerable to all kinds of risks, including transaction, strategic, reputation and foreign risks. However, the non enforcement of the procedure clearly stated in those provisions of the law rendered these instruments inactive and rather than serving as deterrent, it aided the increase in financial crimes. Aside the regulatory challenges, the poor state of the information technological infrastructure in the country upon which electronic banking is built affected effective workability of the system as many customers of the bank relied on the services of the commercial cyber cafés to meet their internet needs. Electricity is another challenge affecting effective electronic banking simply because it is not constant but very erratic in supply thus increasing the cost operation heralding fluctuation in their services.

Research Hypotheses:

Emanating from the above review in line the research work at hand, the following hypotheses were developed and stated in positive form (alternative) in order to determine the level of consumers' satisfaction with respect to information technology through the variables identified as dimension of IT;
H1: Customers are satisfied with internet network facilities.
H2: Customers are satisfied with automated teller machines.

H3: Customers are satisfied with on-line banking.
H4: Customers are satisfied with GSM banking.
H5: Customers are satisfied with Funds transfer.
H6: Customers are satisfied with Electronic Mail.
H7: Customers are satisfied with Bankers Automated Clearing Services.

Methodology:

The research work was based on primary and secondary data. The primary data was administered personally by the authors in the three senatorial districts (East, West and Central) of Lagos State through structured questionnaire developed in line with Likert five point scales which provided the respondents options to choose ranging from strongly satisfied, adequately satisfied, moderately satisfied, somewhat dissatisfied and strongly dissatisfied. The research work made use of random and purposive sampling techniques in the course of administering the questionnaires to 900 respondents who were the customers of the banks in the area of focus and has questions on seven information technology dimensions such as Internet, E–business, GSM banking, Automated Teller Machines (ATMs), On-line banking, Electronic mail, Bankers Automated Clearing Services. Out of the 900 questionnaires administered, 612 were collected back but 573 were found to be useful for the purpose of the research work representing 64% response rate of the respondents. The secondary data were obtained through the review of relevant journals, books and government gazettes and the descriptive statistics, factor, content analyses as well as percentage and frequency distribution table were made use to give adequate interpretation to the data collected for the paper.

Analysis Interpretation and Discussion of Findings:

Table 1: Demographic information of the respondents

Variables	Frequency distribution	%
Age Limit		
Less than 25years	51	8.90%
26 – 35 years	76	13.26%
36 - 45 years	151	26.35%
46 – 55 years	252	43.98%
56 yrs and above	43	7.50%
Total	**573**	**100%**
Level of Education		
B.Sc / HND/ B.Ed	184	32.11%
M.Sc/ MBA/M.Ed	298	52.01%
Professional	35	6.11%
Others	56	9.77%
Total	**573**	**100%**
Gender		
Male	326	56.89%
Female	247	43.11%
Total	**573**	**100%**
Marital Status		
Single	92	16.06%

Married	389	67.89%
Divorced	57	9.95%
Widow/widower	35	6.11%
Total	**573**	**100%**
Level of Exposure		
International(outsideAfrica)	129	22.51%
Regional (Africa)	188	32.81%
Local (within Nigeria)	256	44.68%
Total	**573**	**100%**
Work experience		
none	23	4.01%
Less than 5 years	89	15.53%
5 - 9 years	279	48.69%
10 – 14 years	121	21.12%
15 years and above	61	10.65%
Total	**573**	**100%**

Source: survey 2012

From table 1 above, the majority of the respondents were between 46-55 years of age representing 43.98% followed by respondents within the age bracket 36-45 years. The implication of this for research was that the respondents are matured to understand and give information without being bias. With respect to level of education, most of the respondents were master's degree holders which were 298 representing 52.01% followed by 184 respondents who were first degree holders representing 32.11% aside this, some were professionally qualified which was 6.11% while some were having qualification that not up to the first degree and the respondents here were 56 representing 9.77%. This showed that majority of the respondents had compound qualification which equally made them to understand what satisfaction is all about. The genders revealed that majority of the respondents were male which was 326 representing 56.89% although the female respondents' frequency was close to that of male with 43.11%. The implication on the research was that the respondents were customers of banks and do make use of their information technology dimensions. The majority of the respondents were married with 389 frequency representing 67.89% which was the highest frequency recorded by any other variables. The is a further confirmation of maturity of the respondents and a pointer to the fact that the respondents were emotionally stable and can make a reliable decisions as only a fraction of the respondents were divorced (9.95%) while some were either widow or widower (6.11%). With respect to the level of exposure, majority of the respondents were only expose to the events within the country which was 256 representing 44.68%, however a cursory study of the frequency distribution of the percentage, respondents with exposure outside the country were more than those within as some were with international (22.51%) while some had regional exposure (32.81%) which was greater than that of the local if put together. The essence of this was to know whether the respondents had witness the operation/performance of these dimensions of information technology in other countries which provided a basis for

comparison with the ones available in the country. Among the respondents 23 respondents representing 4.01% were found to be out of job while the majority had between 5-9 years working experience representing 48.69% followed by 10-14 years representing 21.12%. The implication of this was that the respondents in their respective place of work also renders services to satisfy their customers, therefore the content of satisfaction of customers is well understood.

Table 2: Percentage of consumer satisfaction to the dimensions of information technology

Responses Dimensions	INF	OB	FT	ATM
Strongly satisfied	7.74	3.21	11.37	2.20
Satisfied	5.25	8.90	38.26	6.72
Neutral	23.11	27.46	17.15	22.83
Dissatisfied	45.07	26.52	22.13	37.68
Strongly Dissatisfied	18.83	33.91	11.09	30.57
TOTAL	**100**	**100**	**100**	**100**

Source: Survey 2012, where Internet network facilities (INF), On line banking (OB), Funds transfer (FT), Automated teller machines (ATM), GSM Banking (GSMB), Electronic mail (EM), Bankers automated Clearing Services (BACS).

The table 2 above has information about the percentage of customers' satisfaction on different levels of information technology dimensions. The table indicates that the highest 45.05% customers were not satisfied with the state of internet network facilities followed by GSM banking with 43.56%, customers representing 37.68 were not also satisfied with the automatic teller machines services and about 26.52% customers were not satisfied with on line banking facilities and the same facilities has 33.91% customers were strongly dissatisfied with the on line banking which indicated poor service. 18.83% customers were strongly dissatisfied while highest 30.57% customers were strongly dissatisfied with automatic teller machines. 40.55% customers were strongly satisfied with bankers automated clearing services and 26.61% customers were satisfied with electronic mails. 38.26% of the customers were satisfied with funds transfer followed by electronic mail with 28.82% and 25.13% of the customers were also satisfied with bankers automated clearing services. A good percentage of the customers were indifferent to all the dimensions of the information technology implying they did not know whether they are satisfied or dissatisfied, i.e internet facilities network (23.11%), on line banking (27.46%), fund transfer (17.15%), automatic teller machines services (22.83%), GSM banking(29.18%), electronic mail (17.68%) and bankers automated clearing services (18.55%). Thus, the analysis indicated that customers are not fully satisfied with any of the information technology dimensions. Therefore, the quality of services for all the dimensions of information technology should be improved to save investment on the information technology and long term future of the banks.

Table 3: Computation of Z value at 0.05 level of significance (two tailed test) is 1.96 (Ztab = 1.96)

Information technology Dimensions	N	Mean	Standard Deviation	Standard error	Z Value (calculated valued)	Mean Rank
Internet network facilities	573	7.24	1.13	0.13	4.02	1
On line banking	573	6.12	1.00	0.11	3.89	4
Funds transfer	573	5.57	0.99	0.11	1.47	6
Automated teller machines	573	6.56	1.04	0.12	5.48	3
GSM Banking	573	7.05	1.04	0.12	6.13	2
Electronic mail	573	5.43	1.17	0.13	1.65	7
Bankers automated clearing services	573	5.89	1.04	0.12	1.05	5

Table 3 contained statistical information to further substantiate and clarify the discussions in table 2 vis-á-vis the hypotheses.

H1: Customers are satisfied with internet network facilities:

From the hypothesis, it was assumed that the internet network facilities work properly to give desired satisfaction to customers and customers' accounts can easily be accessed whenever they approach their banks. The calculated Z value is 4.02 and the tabulated Z value is 1.96 therefore Z calculated is greater than Z tabulated i.e Zcal > Ztab (4.02 >1.96). The alternative hypothesis is hereby rejected and null hypothesis is accepted that is customers are not satisfied with internet network facilities. It is then concluded that customers are not satisfied with quality of service received on internet network facilities.

H2: Customers are satisfied with automated teller machines:

The hypothesis assumed that customers are satisfied with the functionality, security as well as location of the automatic tellers machines. The calculated Z value is 5.48 and the tabulated Z value is 1.96 therefore Z calculated is greater than Z tabulated i.e Zcal > Ztab (5.48 >1.96). Therefore the alternative hypothesis is rejected and the null hypothesis is accepted that is customers are not satisfied with automated teller machines. It is concluded that customers are not satisfied with the functionality, security and the location of automated teller machines.

H3: Customers are satisfied with on-line banking:

It was hypothetically assumed that customers are satisfied with the quality of service as well as levels of performance in the on line banking operations. The calculated Z value is 3.89 and the tabulated Z value is 1.96 therefore Z calculated is greater than Z tabulated i.e Zcal > Ztab (3.89 > 1.96). Therefore the alternative hypothesis is rejected and the null hypothesis is accepted that is customers are not satisfied with on line banking. It is thus concluded that

customers are not satisfied with the quality of service as well as levels of performance in the on line banking operations. This conclusion is in conformity with hypothesis 1 which expressed the dissatisfaction of customers to internet network facilities on which on line transaction is built.

H4: Customers are satisfied with GSM banking:

The hypothesis was built on the thought that customers are satisfied with GSM banking. However the result from statistical analysis reveals that The calculated Z value is 6.13 and the tabulated Z value is 1.96 therefore Z calculated is greater than Z tabulated i.e Zcal > Ztab (6.13> 1.96). Therefore the alternative hypothesis is rejected and the null hypothesis is accepted that is customers are not satisfied with the GSM banking operations coupled with the established fact that the internet network facilities is not adequate and the GSM service provider networks are currently experiencing coverage problems.

H5: Customers are satisfied with Funds transfer:

The hypothesis considered that customers are satisfied with quality of service with respect to funds transfer outside the country or into the country as well as within the country. The result showed that calculated Z value is 1.47 and the tabulated Z value is 1.96 therefore Z calculated is less than Z tabulated i.e Zcal < Ztab (1.47 < 1.96). Therefore the null hypothesis is rejected and the alternative hypothesis is accepted that is customers are satisfied with funds transfer. It is thus concluded that customers are satisfied with the levels and quality of service received through funds transfer.

H6: Customers are satisfied with Electronic Mail:

The hypothesis assumed that customers are satisfied with the activities of the banks through electronic mail. The result showed that calculated Z value is 1.65 and the tabulated Z value is 1.96 therefore Z calculated is less than Z tabulated i.e Zcal < Ztab (1.65 < 1.96). Therefore the null hypothesis is rejected and the alternative hypothesis is accepted that is customers are satisfied electronic mail. It was concluded that customers are satisfied with activities of banks through electronic mail most especially the confirmation of third party cheque or payment, balance as well as intra bank cash and cheque payment and withdrawal.

H7: Customers are satisfied with Bankers Automated Clearing Services:

The hypothesis indicated that customers are satisfied with the bankers automated clearing services. The statistical analysis of the data reveals that calculated Z value is 1.05 and the tabulated Z value is 1.96 therefore Z calculated is less than Z tabulated i.e Zcal < Ztab (1.05 < 1.96). Therefore the null hypothesis is rejected and the alternative

hypothesis is accepted that is customers are satisfied with the bankers automated clearing services.

In addition to the above statistical result for testing the hypotheses, the descriptive statistic in table 3 has customers are satisfied on some dimensions of information technology while they were not satisfied on some dimensions as well such as internet network facilities (mean = 7.24 and mean rank 1st), GSM banking (mean = 7.05 and mean rank 2nd), automated teller machines (mean = 6.56 and mean rank 3rd), on line banking (mean = 6.12 and mean rank 4th), bank automated clearing services (mean = 5.89 and mean rank 5th), funds transfer (mean = 5.57 and mean rank 6th) and electronic mail (mean = 5.43 and mean rank 7th). Table 2 also indicated which dimensions were highly satisfied or dissatisfied with employees. It is therefore clear that all dimensions of the information technology were not equally satisfied to the customers as confirmed by the descriptive and inferential statistics adopted for the paper.

Conclusion:

The study established the existing relationship between customers' satisfaction and various dimensions of information technology found to be in operation in the country. The study achieved this by examining seven major dimensional elements which represented most of the information technology adopted by banks in Nigeria. The study revealed that all the dimensions of information technology found in practice in the banking environment of Lagos and Nigeria as a whole does not satisfy customers equally. Most of the customers are dissatisfied with internet network facilities, on line banking, automated teller machines and GSM banking while some customers were satisfied with funds transfer, electronic mail and bankers automated clearing services. It is therefore obvious that the various dimensions of information technology in the banking environment of Nigeria has not been fully developed and this call for urgent attention so as to take full advantage of derivable economic benefits of information technology obtainable from efficient and effective operations. After the whole analysis of the research, it can be stated that internet facilities is the mediator and plays dominant role to enhance the quality of service that may be available in all the dimensions of information technology which will consequently determine the level of customers' satisfaction.

Recommendations:

In views of various challenges that were associated with information technology and in the midst of this, striving to satisfy customers. The following recommendations were made that;

1. The information technology dimensions should be due to the end result of environmental scanning which made them to respond to the needs and dictate of the customers in that particular environment.

2. IT should be acquired because it is needed in the area of operation not because it is in vogue in the industry.

3. the banks should be in partnership with a reliable network service providers instead of developing their own network due to high cost of maintenance that make service to be epileptic in supply.

4. the government of the day should endeavour to make available basic infrastructural facilities especially power generation (electricity) in order to ensure uninterrupted supply in their mode of service delivery which will bring about cost reduction in operation.

5. the CBN (regulatory body) should liberalise its policy on the location of ATMs as against what is the operation now (where ATMs can only be within the banking vicinity) for convenience purpose.

6. The staff training on effective use of IT dimension and public awareness on the dimensions should be carried out from time to time in order to get maximum return on the investment in IT.

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