Significance of Information Technology in the Banking Industry

Umar Lawal Aliyu

Prof. Dr. Umar Lawal Aliyu
Faculty Of Management, Department Of Business Administration
LIGS University Hawaii, USA

Abstract: Information technology is the study or use of systems (especially computers and telecommunications) for storing, retrieving, and sending information. In fact, Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. This study intends to evaluate the impact of information technology in the banking industry. In addition, the article presents a scrutiny, which aims to psychoanalyse the portrayal of Information technology (IT) in the banking industry. Much than most opposite industries, financial institutions rely on processing, analysing, and provide services in order to cater for the needs of their customers and this is why banks in this modern world of science and technology use information technology (IT) in most of their activities/dealings. Information technology includes any communication devices such as telephone i.e. cellular phone television computer and network hardware and software satellite system and so on as well as video conferencing and distance learning. It is apparently clear that banks in these days cannot do without information technology. The paper will try to find out the significance of information technology in the banking industry and it will review the various forms and types of information technology (IT), their impact and recommendations that will curtail any bad menace resulting from using it and the significance of information technology in the banking industry.

Keywords: Banking, Communication, Computer, Data, Industry, Information Technology, Prevention, Punishment.

1. INTRODUCTION

According to Laudon and Laudon, (1991) they contend that managers cannot ignore Information Systems because they play a critical role in contemporary organisation. Thus, Laudon and Laudon in a research are of the opinion that the entire cash flow of most fortune 500 companies is linked to Information System and technology. Technology has continuously played an important role in the working of banking institutions and the services provided by them from storing, retrieving, and sending information; to gathering, processing, analysing and providing information in order to meet the needs of their customers. Safekeeping of public money, transfer of money, issuing drafts, exploring investment opportunities and lending drafts, exploring investment being provided have always been the fundamental concern of the banking industry and this makes the use of information technology in the banking industry very vital and significant.
The thrust of the research thesis is to examine the significance of information technology in the banking industry and to proffer to the extent information technology (IT) plays a critical role in the economy of our country by facilitating flow of funds in our economy and ensuring financial resources are allocated efficiently towards promoting economic growth and development.

2. LITERATURE REVIEW

2.1 Theoretical Framework

A bank is a financial institution, which is involved, in borrowing and lending money. Banks take customer deposits in return for paying customers an annual interest payment. The bank then uses the majority of these deposits to lend to other customers for a variety of loans and making of profits. Banks play an important role in the financial system and the economy and being a key component of the financial system, banks allocate funds from savers to borrowers in an efficient manner and these financial services help to make the overall economy more efficient.

The introduction of Computers in Banks has proffered a tremendous success in the growth and development of banks in recent time and resulting to aggravated economic growth and development of countries all over the world. Throughout the past, several decades there have been numerous advances in electronic resources. Technologies such as cellular phones, pagers, home computers, the Internet, websites, and palm pilots have added another dimension to promoting economic growth and development in the Banking industry.

Banks use mainframe computers to maintain their customer accounts by dealing with transactions generated because of withdrawals and deposits. It also operates a network of automated teller machines or ATMs, which continuously plays an important role in the working of banking institutions and the services provided by them to their respective customers. This is increasingly making the banking industry invest heavily in digital banking technology, in which customers use mobile, web or digital platforms to use banking services.

In an era of rapid technological change, IT offers a range of services to help financial services firms improve business performance, reduce operational risk and develop compelling value propositions for their customers the banking industry is not an exception. In addition, Technology has been a helpful and beneficial thing to many banking industry and with the help of technology, banks are able to reach out to more customers and provide better services to them.

2.2 Information Technology (IT)

Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. Typically, Information technology (IT) is used in the context of enterprise operations as opposed to personal or entertainment technologies. (Margaret Rouse).

In fact, Information technology (IT) is the use of computers to store, retrieve, transmit, and manipulate data, or information, often in the context of a business or other enterprise. The commercial use of Information technology (IT) encompasses both computer technology and telephony. Information technology (IT) is considered a subset of information and communications technology (ICT). An information technology system (IT system) is generally an information system, a communications system or, more specifically speaking, a computer system – including all hardware, software and peripheral equipment – operated by a limited group of users. (Wikipedia).

The “Harvard Business Review” coined the term information technology, in order to make a distinction between purpose-built machines designed to perform a limited scope of functions and general-purpose computing machines that could be programmed for various tasks. As the IT industry evolved from the mid-20th century, computing capability advanced while device cost and energy consumption fell lower, a cycle that continues today when new technologies emerge. Information technology (IT) in its modern sense first appeared in a 1958 article published in the Harvard Business Review; authors Harold J. Leavitt and Thomas L. Whistler commented that "the new technology does not yet have a single established name. We shall call it information technology (IT)." (Wikipedia).
2.3 Types Of Information Technology (IT)

Information technology (IT) is a large industry that includes thousands of well-known software packages and services. There are many types of Information technology (IT) and few types of information technology include: Accounting packages, Algorithms, Analytics, Architecture software, Artificial intelligence, Asset Management Software, Business relationship management, Big data, Business rule management, Capacity management, Communication tools, Compliance Software, Configuration management, Content Authoring, Content Management, Cost control software, Data integration, Data analysis tool etc.

It is good to note that there are over seventy 70 types of Information technology that not all can be mentioned in this research work.

2.4 Role Of Information Technology (IT) In Banking Industry

This thesis intends to examine the role of information technology on banking industries and its adverse advantages on economic development. With emergence of information technology, banking industries have in a great deal tremendously improved in performance and is increasingly contribution to economic development of nations all over the world irrespective of their economic and political policies. In fact, information technology has been able to contribute to the development of the nation economy all over the world.

In 1970’s banks in Nigeria where operating mostly as they work today, but more slowly and using mostly papers. Thus, a person makes deposit to the bank; the clerk would count the money, register it in a book and give the deposit and a receipt of the depositor. The bank would keep the money and regularly send the money and a copy of the registry to the central bank. This was, of course, more time consuming and bureaucracy consuming than today, and required each branch to be more independent controlled by regular audits.

The Software Packages for Banking Applications in Nigeria had their beginnings in the middle of 1980s when the Banks started computerising the branches in a limited manner. By 1990’s there was the introduction of plummeting hardware prices and advent of cheap and inexpensive but high powered PC’s and Services that make banks went in for what was called Total Branch Automation (TBA) packages. In addition, by rapid revolution in communication technologies and evolution of novel concept of convergence of communication technologies, like internet, mobile/cell phones etc. Technology has continuously played an important role in the working of banking institutions and the services provided by them. Safekeeping of public money, transfer of money, issuing drafts, exploring investment opportunities, lending drafts, exploring investment, using of ATMs machines and host lots of other Information Technology facets. Introduction of Information Technology in the banking industry in 1990’s have resulted to the four pillars of the Nigerian banking sector reforms. This are enhancing the quality of banks in Nigeria, enhancing financial stability, to bring about healthy financial sector evolution that will result in the much-desired financial sector inclusiveness and to ensure that the financial sector contributes to the real sector of the economy.

Today banks are going for the latest technologies, which is being perceived as an ‘enabling resource’ that can help in fast and rapid growth and development by providing a more flexible structure that can respond quickly to the dynamics of a fast changing market scenario. Information Technology has become an important medium for delivery of banking products and services and an instrument of cost reduction and effective communication with people and institutions associated with the banking business. Information Technology have become a very vital and important part of the banking industry in this modern times because it enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets. This is to say that information technology has significantly influenced delivery channels of the banks from all banks modus operandi synonym.
2.5 Advantages And Benefits Of Information Technology (IT) To Bank And Customer

1) To the Customer:-
   - Anywhere Banking no matter wherever the customer is in the world. Balance enquiry, request for services, issuing instructions etc., from anywhere in the world is possible.
   - Anytime Banking – Managing funds in real time and most importantly, 24 hours a day, 7 days a week.
   - Convenience acts as a tremendous psychological benefit all the time.
   - Brings down “Cost of Banking” to the customer over a period of time.
   - Cash withdrawal from any branch / ATM
   - On-line purchase of goods and services including online payment for the same.

2) To the Bank:-
   - Innovative, scheme, addresses competition and present the bank as technology driven in the banking sector market
   - Reduces customer visits to the branch and thereby human intervention
   - Inter-branch reconciliation is immediate thereby reducing chances of fraud and misappropriation
   - On-line banking is an effective medium of promotion of various schemes of the bank, a marketing tool indeed.
   - Integrated customer data paves way for individualised and customised services.

2.6 Advantages And Benefits Of Information Technology (IT) In Banking Industry

In an era of rapid Information Technology (IT) the banking industry have resorted to employing Information Technology (IT) in all aspects of services. Many banks have modernized their services with the facilities of computer and electronic equipment’s. The electronics revolution has made it possible to provide ease and flexibility in banking operations to the benefit of the customer. The e-banking has made the customer say goodbye to huge account registers and large paper bank accounts. The e-banks, which may call as easy bank offers the following services to its customers:

- Credit Cards/Debit Cards: - A debit card (also known as a bankcard, plastic card or check card) is a plastic payment card that can be used instead of cash when making purchases. It is similar to a credit card, but unlike a credit card, the money is immediately transferred directly from the cardholder's bank account when performing a transaction.

- ATM: - a machine that dispenses cash or performs other banking services when an account holder inserts a Bankcard.

- E-Cheques: - An electronic check, also referred to as an e-check, is a form of payment made via the internet, or other data network, designed to perform the same function as a conventional paper check.

- EFT (Electronic Funds Transfer):- Electronic funds transfer (EFT) is electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems, without the direct intervention of bank staff.

- DeMAT Accounts: - A Demat Account is an account that allows investors to hold their shares in an electronic form. Stocks in Demat account remain in dematerialized form. Dematerialization is the process of converting physical shares into electronic format.

- Mobile Banking: - Mobile banking refers to the use of a smartphone or other cellular device to perform online banking tasks while away from your home computer, such as monitoring account balances, transferring funds between accounts, bill payment and locating an ATM.

- Telephone Banking: - a method of banking in which the customer conducts transactions by telephone.

- Internet Banking: - a method of banking in which transactions are conducted electronically via the Internet. "The payment can be made through Internet banking”.

- EDI (Electronic Data Interchange): - EDI (Electronic Data Interchange) is the transfer of data from one computer system to another by standardized message formatting, without the need for human
intervention. EDI permits multiple companies — possibly in different countries — to exchange documents electronically.

3. CONCLUSION

Computers are introduced with the view of making things easier for those who use them and the banking industry is greatly taking advantage of it. Computer has one Logo: “Garbage in – Garbage Out, and banks are greatly using it to enhancing the quality of banks in Nigeria, enhancing financial stability, to bring about healthy financial sector evolution that will result in the much-desired financial sector inclusiveness and to ensure that the financial sector contributes to the real sector of the economy.

Bank monitored the organisation’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 and all this is possible with Information Technology (IT). The modern banking cannot rely on its branch network alone because customers are now demanding new, more convenient, delivery systems, and services such as Internet banking which have a dual role to the customer. The use of interactive electronic links via the Internet has gone a long way in providing the customers with greater level of information about both their own financial situation and about the services offered by the bank.

In addition, data being stored in the computers is now being displayed when required on through internet banking mobile banking, ATM’s etc. and all this is possible with Information Technology (IT). The customers can view the accounts; get account statements, transfer funds and purchase drafts by just punching on few keys. The smart card’s i.e., cards with microprocessor chip have added new dimension to the scenario. An introduction of ‘Cyber Cash’ the exchange of cash takes place entirely through ‘Cyber-books’. Collection of Electricity bills and telephone bills has become easy. The upgradeability and flexibility of internet technology have unprecedented opportunities for the banks to reach out to its customers. No doubt, banking services have undergone drastic changes and so the expectation of customers from the banks has increased greater.

The research work has concluded that Information Technology (IT) is increasingly moving from a back office function to a prime assistant in increasing the value of a bank over time and making Information Technology (IT) becoming very significant in the Banking industry.

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