**IMPACT OF ICT ON BANKS**

**BY**

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**Abstract**

*This seminar paper on the impact of ICT in Banks is aimed at revealing the effect or advantages of Information Communication in Banks. ICT has taken the center stage in almost every aspect of human endeavor. ICT help banks improve the efficiency and effectiveness of services offered to customers, and enhances business processes, managerial decision making, and workgroup collaborations, which strengthens their competitive positions in rapidly changing and emerging economies. This paper considers the impacts and trends of ICTs on the banking industry of the 21st century. Four (4) parameters, namely: productivity, market structure, Innovation and value chain were used for benchmarking. The seminar paper recommends that more attention has to be directed towards the use of information communication technology in the banking operations ensure proper monitoring and the determination of the optimum size required to attain banks performance.*

# INTRODUCTION

One of the modern yardsticks used for rating a modern business enterprise is its ICT infrastructural layout. This is an indication of the importance of ICT for business establishments. Banks in particular adopt information and communication technology to improve the efficiency and effectiveness of services offered to customers, improve business processes, as well as to enhance managerial decision making and workgroup collaborations. This helps strengthen their competitive positions in rapidly changing/emerging economies. Environmental, organizational, and technological factors are creating a highly competitive business environment in which customers are the focal point (Akinlolu, 2007). Furthermore, these factors can change quickly, sometimes unpredictably. Thus, the growth of any enterprise is tied to retaining loyal customers, improving productivity, cutting costs, increasing market share, and providing timely organizational response. ICT is a major enabler for dealing with these issues. Because the pace of change and the degree of uncertainty in today’s competitive environment are accelerating geometrically. Organizations are operating under increasing pressures to produce more, using fewer resources. in order to succeed (or even merely to survive) in this dynamic world, companies must not only take traditional actions such as lowering costs, but also undertake innovative activities such as changing structure or processes and continuously revising competitive strategies.

ICT affects all processes associated with modern day banking. From the daily routines of preparing payroll and order entry, to strategic activities such as the acquisition of a company, ICT surfaces as a key element. In View of the importance of ICT in the banking industry, a number research works has been carried out. In an evaluation of the response of Nigerian banks to the adoption of ICT was presented. In a technical model that to ascertain the impact of ICT on the Nigerian banking sector as a function of banking reforms was proposed (Brynjolfsson et al., 2012).

## A. Impacts of ICT on Productivity

ICT has productivity increasing effects on labor productivity and total factor productivity of companies. ICT induced productivity effects vary significantly between sectors and among countries. The banking industry is one of the sectors that enjoy the largest productivity growth effect of ICT.

The effect of ICT on the productivity of the banks is helping the cahiers to be more productive. The use of computers and peripherals simplifies the task of getting customers' data and counting money to effect transaction. This enables a single cashier to serve thousands of customers in a day which would have cost the bank enormous staff strength and large building (Clayton, 2017).

**B. Impact of ICT on Innovation**

A technological change such as the massive diffusion of ICT represents an interesting case for an analysis with respect to firms’ innovation strategies. For example, it is said that industry leaders often reject important inventions and fail to bring them to the market (Efraim et al., 2017). Entrepreneurial companies are more likely to exploit these opportunities. Entrants frequently introduce products or production processes based on a new technology, which can challenge incumbents or even drive them out of the market. This was the scenario that played out in the Nigerian banking industry with the emergence of new generation banks that introduced innovative products and services. Innovation in this context aims to reduce the cost of banking while making the process of transaction easier and more convenient.

## C. Impact on Market Structure

Innovations enabled by ICT changes the cost structure of companies. Hence, innovations have a significant impact on the market structure in which companies operate. Radical changes in technology traditionally lead to emergence of new products or change the production processes of existing products. In either case, companies face a large degree of uncertainty regarding future demand or cost of service delivery. Furthermore, during times of technological change, mergers reflect the process of assets reallocation toward more efficient firms (Arend, 2019).

Technological change forces firms to adopt new modes of production and, consequently, to reorganize its assets. If a company fails to reorganize internally, it will probably disappear from the industry and its assets will be reorganized externally. New technology spreads faster if such asset reallocation works smoothly. The diffusion of ICT is technological change that has greatly revolutionized the banking sector (Peter, 2011).

## D. Impact on Sector Value Chain

Empirical findings suggest that some of the main effects of ICT diffusion are organizational changes and the redefining of organizational boundaries (Arend, 2019). Thus, it is relevant to assess if the diffusion of ICT in the banking industry had any impact on the restructuring process. The impact on value chain reflects in re-shaping firm boundaries and changing the constellations of value chains are enormous.

**Advantages of using ICTs in Banks**

According to Efraim *et al.* (2017), the following are the advantages of using Information Communication Technologies (ICTs), in banks.

1. **Time-to-market Advantage:**

FBN's unique requirements were catered to using Finacle's Extensibility toolkit, the infrastructure that enabled the bank to customize its specific requirements without touching the source code. This provided significant time-to-market advantage to the bank and enabled them to design and launch new product offerings quickly.

1. **24/7 Operability:**

Regular version upgrades over the years have provided increased and more sophisticated functionality to the bank as the relationship has progressed. The new generation flexible architecture of Finacle has ensured 24/7 operability, with close to 100% uptime, a feature of immense importance in a country not known for failsafe network connectivity.

1. **Streamlined Operations:**

The new generation architecture of Finacle - fully web-enabled, with powerful and unique capabilities such as Straight Through Processing (STP), workflow, scalability and true 24/7 banking across multiple delivery channels has enabled the Bank to streamline its operations.

1. **The Internet**

The internet is a global network that enables computers to share and communicate services around the world. The internet is an enormously shared global resource of information and knowledge as well as means of collaborations knowledge as well as means of collaboration and cooperation among countless diverse communities (Ling & Yen, 2001). The internet and e-business has not changed the way companies do business and communicate with their partners, but has many years become a requirement for business survival. In order to be competitive in today’s networked business environment, companies must be able to deliver applications and services with real value for their partners. Internet based IT can manage the flow of goods, services and information inside and across organisation, this reducing the basic transaction costs involved in vertical flow of goods and services along a value chain (Bates, 2011).

**Security Measures**

The security measure is of special concern in the banking sector as banking is highly based on trust from its customers. The risk of hackers, denial of service attacks, technological failures, breach of customers privacy information and opportunities for fraud created by the anonymity of the parties to electronic transactions all have to be managed. Depending upon its nature and scope, a breach in security can seriously damage public confidence in the stability of a financial institution or of a nation’s entire banking system. Hence, by introducing the appropriate security measures and putting security concerns at bay, the banking industry might be able to attract the segments among consumers who previously were inclined to use e-banking. Furthermore, it is also the banks own interest to improve security, as digital fraud can be costly both in financial issues and in terms of the damage it does to the brand of the bank in question (Ling & Yen, 2001).

**Authentication of Users Information**

The common concern among users of e-banking is related to the authentication of users and data collection. The use of digital signature is not a common as PIN codes or encryption and reason is the fact that digital is reactively new technology.

**Automated Payment System**

Devices used in automated payment system include Automated Teller Machine (ATM) and Electronic Fund Transfer. ATM is still ranked higher in its spread this technology might be due to cost, fear of fraudulent practices and lack of facilities necessary for their operation. But generally speaking, the adoption of automated payment system increased dramatically.

**Technological Perspective**

In response to the demands for quick, efficient and reliable services, industry players are increasingly deploying technology as a means of generating insights into customers’ behavioural patterns and preferences. Well-developed outsourcing support function (technology and operations) are increasingly being used to provide services and manage costs (e.g. Automated Teller Machine networks cards processing, bill payment, software development, call centre operation and network management).

**ADVANTAGES AND DISADVANTAGES OF ICT IN BANK**

**Advantages**

1. An online account is simple to open and easy to operate.
2. It's convenient, because you can easily pay your bills and transfer your funds between accounts from nearly anywhere in the world.
3. You do not have to stand in a queue to pay off your bills. Also you do not have to keep receipts of all of your bills, as you can now easily view your transactions.
4. It is available all the time. You can perform your tasks from anywhere and at any time, even at night or on holidays when the bank is closed. The only thing you need to have is an active internet connection.
5. It is fast and efficient. Funds get transferred from one account to the other very fast. You can also manage several accounts easily through internet banking.
6. You can keep an eye on your transactions and account balance all the time.
7. You can get to know about any fraudulent activity or threat to your account before it can pose any severe damage.
8. It's a great medium for the banks to endorse their products and services.
9. More online services include loans and investment options.

**Disadvantages**

1. Understanding the usage of internet banking might be difficult at the first. That said, there are some sites which offer a demo on how to access online accounts (not all banks offer this). So, a person who is new to technology might face some difficulty.
2. You cannot have access to online banking if you don’t have an internet connection; thus, without the availability of internet access, it may not be useful.
3. Security of transactions is a big issue. Your account information might get hacked by unauthorized people over the internet.
4. Password security is a must. After receiving your password, change it and memorize it. Otherwise, your account may be misused.
5. Your banking information may be spread out on several devices, making it more at risk.
6. If the bank’s server is down, then you cannot access your accounts.
7. If the bank's server is down, due to the loss of net connectivity or a slow connection, then it might be hard to know if your transaction went through.
8. You might get overly marketed too and become annoyed by notifications. That said, these can easily be turned off.
9. You might become annoyed by constant emails and updates.

**CONCLUSION**

In conclusion the seminar paper indicates that basic ICT infrastructures such as computer and peripherals, local area networks, and ATMs are crucial to the operations of banks. However, in other for banks to meet the ever-increasing sophistication of customers, new government policies and stay competitive in a fast-changing economy, a scalable, flexible and robust ICT solution is essential.

**RECOMMENDATIONS**

This seminar paper recommends that more attention has to be directed towards the use of information communication technology in the banking operations since the industry serve as a lubricant to the cog of the wheel of the nation’s economy while appropriate policies must be put in place to ensure proper monitoring and the determination of the optimum size required to attain banks performance.

The seminar paper recommends the following:

1. Banks should evaluate the significant impact of ICT development in bank’s performance.
2. Operators in the banking sector should also endeavour to determine the rate at which ICT development has contributed to bank’s performance in Nigeria; and
3. Finally, they should determine the effectiveness of ICT development in Nigeria banks.

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