

# An Empirical Study on Role of ICT in Financial and Banking Services

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## ABSTRACT

In this paper we have tried to explain about role of information and communication technology in financial services that can be useful for customers and students in their daily life. The context we have considered in this paper is role of ICT in financial sectors. Computerized control of ledgers and transactions helped to lessen human error and initially detached the possibility of fraud. As systems established ICT increased in use, branches themselves adopted digital technologies, money became available 24 hours a day via Automated Teller Machines (ATM) and payment systems became digitalized after the introduction of chip and pin solutions. ICT's reach into Financial Services is still increasing as new entrants use digital technologies to enter new markets through payment schemes. At the same time the potential for industrial disruption is also increasing as computational capacity is distributed across the globe. The main objective is to present role ICT in financial services in simple and lucid manner so that customers and students can use it more effectively.

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## 1. Introduction

Financial services are the economic services provided by the finance industry, which encompasses a broad range of businesses that manage money, including credit unions, banks, credit card companies, insurance companies, accountancy companies, consumer-finance companies, stock brokerages, investment funds and some government-sponsored enterprises.

The economic scene in the post independence period has seen a sea change; the end result being that the economy has made enormous progress in diverse fields. There has been a quantitative expansion as well as diversification of economic activities. The experiences of the 1980s have led to the conclusion that to obtain all the benefits of greater reliance on voluntary, market-based decision-making, India needs efficient financial systems.

The financial system is possibly the most important institutional and functional vehicle for economic transformation. Finance is a bridge between the present and the future and whether it will be the mobilization of savings or their efficient, effective and equitable allocation for investment, it is the success with which the financial system performs its functions that sets the pace for the achievement of broader national objectives.

There are so many definitions of a bank given by various authorities. But summarizing all the definitions, a bank is simply a financial institution that accepts deposits from surplus economic units of the society and advances it to deficit units through the process of financial intermediation. Banks are the institutions that assist in managing financial system of a country. The financial systems are the totality of financial arrangement, agents, institutions etc that interact with each other and the rest of the world to develop, foster and enhance economic growth and development of a country. A robust financial system is very vital to the health of any economy.

(Ekezie,1997).So the role banking institutions play cannot be over emphasized. And that is why anything that affects the institution has both local and international consequences. The effective regulation of this institution helps the government to manage the monetary, political, and fiscal policies of the nation. There are divergent views on the impact of Information, Communication and Technology (ICT)in the banking sector as we have seen in our earlier discussions. Some of my colleagues agreed with me that ICT have impacted greatly the banking sector, while others disagree on the grounds that ICT have created some distortions by replacing human capital with machine capital so to say(example in comments made by Anthony). Some believe that the advantages far outweigh the disadvantages(example in comments made by Segun).Much as it has put a lot of people out of job, at the same time it has contributed significantly to creation of jobs. Again many agreed that other employment opportunities abound in other sectors like agriculture, manufacturing, construction etc can be exploited by those affected(example in comments made by Loretta).The bottom line being that one should equip himself or herself with others skills and knowledge as adaptive measures. Some believe that ICT is a welcome development in the banking industry or sector and there is no going back. That was why Paul O'Neil Chairman and CEO of Alcoa once said that "I don't see information technology as a standalone system. I see it a great facilitator."(Bill, 1999).

## 2. Significance and Definition

Banking refers to that process in which a bank which is a commercial or government institution offers financial services that include lending money, collection of deposits, issue of currencies and debit cards, and transaction processing etc. The majority of banks works as profit-seeking enterprises, however, a few government banks work as non-profit organizations. Central banks function as government agencies and they regulate the interest rates and circulation of money in the total economy.

The banking system plays a vital role in economic development of a country. The structure banking system in India consist unorganized sector and organized sector.

The Indian financial service industry has undergone a metamorphosis since 1990. It was dominated by commercial banks and other financial institutions which cater to the requirements of Indian industry.

### 3. The Concept of Banking & Financial Services

In today's highly competitive and regulated environment, the Banking and Financial Services (BFS) industry seeks new low-risk financial services and products. Banks need to reduce operational costs, while enhancing their ability to differentiate, innovate, and transform. Equally critical is the need to retain and maximize the potential of their existing customers and improve loyalty. They also need to embrace emerging technologies to offer greater convenience and superior services to customers.

### 4. Inter-relationship in the Financial System

A financial system provides services that are essential in a modern economy. The use of a stable, widely accepted medium of exchange reduces the costs of transactions. It facilitates trade and, therefore, specialization in production. Financial assets with attractive yield, liquidity and risk characteristics encourage saving in financial form. By evaluating alternative investments and monitoring the activities of borrowers, financial intermediaries increase the efficiency of resource use. Access to a variety of financial instruments enables an economic agent to pool, price and exchange risks in the markets. Trade, the efficient use of resources, saving and risk taking are the cornerstones of a growing economy. In fact, the country could make this feasible with the active support of the financial system. The financial system has been identified as the most catalyzing agent for growth of the economy, making it one of the key inputs of development.

### 5. Growth of banking and Financial Sector

The growth of financial sector in India at present is nearly 8.5% per year. The rise in the growth rate suggests the growth of the economy. The financial policies and the monetary policies are able to sustain a stable growth rate.

The reforms pertaining to the monetary policies and the macroeconomic policies over the last few years have influenced the Indian economy to the core. The major step towards opening up of the financial market further was the nullification of the regulations restricting the growth of the financial sector in India.

To maintain such a growth for a long term the inflation has to come down further. The financial sector in India had an overall growth of 15%, which has exhibited stability over the last few years although several other markets across the Asian region were going through turmoil. The development of the system pertaining to the financial sector was the key to the growth of the same. With the opening of the financial market variety of products and services were introduced to suit the

need of the customer. The Reserve Bank of India (RBI) played a dynamic role in the growth of the financial sector of India.

Today's business environment is very dynamic and undergoes rapid changes as a result of technological innovation, increased awareness and demands from customers. Business organizations, especially the banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Information and Communication Technology (ICT) is at the centre of this global change curve.

The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness. ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery.

Information Technology (I.T.) has been defined as the usage of computers, digital technology in various fields of production and service. Here in the banking sector it is used in concepts like Internet Banking, Automated Teller Machine (A.T.M) and Debit & Credit card, etc. It is a general term used for utilising of electronic technology for business information processes at all levels.

List of some of the processes of banking revolutionized by I.T. and Telecommunication technology are account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online. It assists customers to validate their account numbers and receive instruction on when and how to receive their chequebooks, credit and debit cards.

Communication Technology deals with the Physical devices and software that link various computer hardware components and transfer data from one physical location to another. ICT products in use in the banking industry include Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking. Several authors have conducted investigation on the impact of ICT on the banking sector of the Indian economy.

Some of the advancements made by ICT in the Banking sector are as follows -

- I. Bankers Automated Clearing Services: This involves the use of Magnetic Ink Character Reader (MICR) for cheque processing. It is capable of encoding, reading and sorting cheques.

- II. Automated Payment Systems: Devices used here include Automatic Teller Machine (ATM), Plastic Cards and Electronic Funds Transfer.
- III. Automated Delivery Channels: These include interactive television and the Internet.

One of the important and significant parts of Information Technology as far as banking is concerned is the concept of Mobile Banking. This feature is used by most of us in our daily lives but still some of us are still unaware about how much importance does this have in our lives.

Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. Mobile phones have become an essential communication tool for almost every individual. Advent of m-commerce has managed to take mobile VAS to next level, adding tremendous value to telecommunication industry. Mobile banking which is an integral part of m-commerce has become very popular among mobile users ever since its existence in 2007. It creates new, convenient communication and fast financial transactional channel for mobile users which is accessible from anywhere, anytime.

Checking account information, balance available, credit/debit card information, cheque status, setting alerts, payment reminders, locating ATMs and bank branches, accessing mini statement, accessing loan and equity statements, insurance policy management, placing orders for cheque books etc via mobile phones are some of the services offered in mobile banking. With multiple access channels such as SMS, downloadable client, mobile Internet (WAP) mobile banking is encouraging mobile users more to explore the service.

All the features of mobile banking and cell phones have just started to be utilized as said by many individuals. Every day new services are launched by the service providers to provide easier ways to make use of mobile banking services and to provide safety and security in the solutions. The data transfer rate and convenience has tremendously increased in the country with the launch of Third Generation internet technology (popularly called as 3G services). In India, where mobile subscribers far exceed fixed line subscribers because of better mobile infrastructure in comparison to fixed line infrastructure has made mobile banking much more appealing in India today. Various players involved in providing mobile banking services (banks, financial institutions, service providers, operators etc) are therefore expecting a potential growth in mobile banking industry in India.

#### 6. Advantageous of ICT (Internet banking)

1. Internet banking provides you with 24 hour banking facility, which helps you to access your account anytime. You can now skip the long queues and the endless wait to get things done in a bank.
2. You can access your account from anywhere by just logging into the bank's site and entering your id and password. You can check your account information and perform transactions from anywhere via a Smartphone, laptop, or any other Internet-accessible device.

3. You can apply online for a majority of the services such as loans, credit cards, savings accounts, and mortgages. Also, insurance products can be bought using internet banking.
4. Some banks provide online portfolio management services. Stocks, bonds, and other investments can be managed with online banking at your convenience, independent of a financial intermediary like a stockbroker. For example, through HDFC Securities customers can trade in the stock market or keep track of the portfolio.
5. Booking Railway tickets through online banking has become a widely used service by customers. This is because, in India a huge population use trains to travel across the country.
6. Another area where online banking is making headway is in the Online Shopping industry. The market size of online shopping industry in India is estimated at Rs. 2000 crores and is expected to reach Rs. 7000 crore by 2015. One of the important reasons for this huge growth will be the increase in internet banking.
7. Online banking also helps you to pay your utility bills like electricity, telephone, and satellite TV. This is turning out to be a great service for those who are short on time.
8. Now you can also make insurance payments over the net. What's more, you can even recharge your mobile through online banking.

#### 7. Recommendations

- Hacking has been the big issue nowadays, use secure mode while operating.
- Instant solve the problems if you face at any moment of transactions.
- 24 by 7, 365 days customer service facilities are available in all sectors of banks and financial services.
- The use of ICT will be impactful but the use makes it more important.
- There are end numbers of methods available for banking and financial transactions.
- Personal care should be taken in each transaction.
- Internet banking has changed the way our country banks. A whole new outlook has emerged about the concept of banking. With an estimated 65 million internet users in India, the future of internet banking is huge. And banks are fast adapting to the changing trends and demand of the customers.

#### 8. Conclusion

The impact of Information and Communications Technology in banking and financial sector is enormous and has global impact. It will create whole world as a global village. It has equally affected leading organizations all over the world. The use ICT will bring revolution with speed, accuracy, convenience and safety in each transaction. The desire change will create job opportunities in banking and financial sector. This paper will help in understanding the change role of ICT for efficient desire future. There is an urgent need of awareness amongst the users and advantageous of using ICT in daily routine.

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