

A Study on ‘Online Banking in India’

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Student Declaration

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I hereby declared that the project work which the title of “**Online Banking in India**” submitted by me for the partial fulfilment of the degree of MBA (Finance) in Banking and Finance under the Galgotias University is my own original work and has not been submitted earlier to any other university for the fulfilment of the requirement for any other degree.

I do here by also declare that no chapter of this manuscripts in whole or in part has been incorporated in this Report from any earlier books or work done by other or by me. However, extract of any literature which has been used for this Report has been duly acknowledged providing detail of such literature in this reference.

I. INTRODUCTION

BACKGROUND

Electronic banking, or e-banking, is the term that describes all transactions that take place among companies, organizations, and individuals and their banking institutions. First conceptualized in the mid-1970s, some banks offered customers electronic banking in 1985. However, the lack of Internet users, and costs associated with using online banking, stunted growth. The Internet explosion in the late-1990s made people more comfortable with making transactions over the web. Despite the dot-com crash, e-banking grew alongside the Internet.

- Online banking (or internet banking or E-banking) allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or building society.
- Online banking is the practice of making bank transactions or paying bills via their Internet. Thanks to technology, and the Internet in particular, people no longer have to leave the house to shop, communicate, or even do their banking. Online banking allows a customer to make deposits, withdrawals, and pay bills all with the click of a mouse.

II. HISTORY

While financial institutions took steps to implement e-banking services in the mid-1990s, many consumers were hesitant to conduct monetary transactions over the web. It took widespread adoption of electronic commerce, based on trailblazing companies such as America Online, Amazon.com and eBay, to make the idea of paying for items online widespread. By 2000, 80 percent of

U.S. banks offered e-banking. Customer use grew slowly. At Bank of America, for example, it took 10 years to acquire 2 million e-banking

HISTORICAL DEVELOPMENT:

- The precursors for the modern home online banking services were the distance banking services over electronic media from the early 1980s. The term 'Online' became popular in the late '80s and referred to the use of a terminal, keyboard and TV (or monitor) to access the banking system using a phone line. Online services started in New York in 1981 when four of the city's major banks (Citibank, Chase Manhattan, Chemical and Manufacturers Hanover) offered home banking services using the system. Because of the commercial failure of videotex these banking services never became popular except in France where the use of videotex (Minitel) was subsidized by the telecom provider and the UK, where the Prestel system was used.

Banks and the World Wide Web:

In the 1990s, banks realized that the rising popularity of the World Wide Web gave them an added opportunity to advertise their services. Initially, they used the Web as another brochure, without interaction with the customer. Early sites featured pictures of the bank's officers or buildings, and provided customers with maps of branches and ATM locations, phone numbers to call for further information and simple listings of products.

At the beginning of 2004, some 33 million U.S. households (31% of the market) were using one form or another of online banking. Five years later, 47% of Americans were banking

online, according to a survey by Gartner Group. Meanwhile, in the Ukic e-banking grew its reach from 63% to 70% of Internet users between 2011 and 2012.

III. DIFFERENT TYPES OF ONLINE BANKING

3.1. CORE BANKING SOLUTION ORBS:

Core Banking is a banking service provided by a group of networked bank branches where customers may access their bank account and perform basic transactions from any of the member branch offices. Core banking is often associated with retail banking and many banks treat their retail customers as their core banking customers. Businesses area usually managed via the Corporate banking division of their institution. Core banking covers basic depositing and lending of money.

- Normal Core Banking functions will include transaction accounts, loans, mortgages and payments. Banks make these services available across multiple channels like ATMs, Internet banking, mobile banking and branches.

The core services rely heavily on computer and network technology to allow a bank to centralize its record keeping and allow access from any location. It has been the development of banking software that has allowed core banking solutions to be developed.

HISTORY

Core banking became possible within the advent of computers and telecommunication technology that allowed information to be shared between bank branches quickly and efficiently.

Before the 1970s it used to take at least a day for a transaction to reflect in their account because each branch had their local servers, and the data from the server in each branch was sent in a

However, the use of password does not provide adequate protection against Internet fraud such as phishing. The problem with password is

that when it has been compromised, the fraudsters can easily take full control of online transactions. In such cases, their password is no longer works as an authentication token because we cannot be sure who is behind the keyboard typing that password in.

However, easy access and convenience should not be at the expense and mercy of this security of information. This is important in order to ensure the confidentiality of information and that it is not being manipulated or compromised by the fraudsters.

batch to the servers in the data center only at the end of the Day (Edom).

Over the following 30 years most banks moved to core banking applications to support their operations where CORE Banking may stand for "**centralized online real-time exchange**". This basically meant that all the bank's branches could access applications from centralized data centers. This meant that the deposits made were reflected immediately on the bank's servers and the customer could withdraw the deposited money from any of the bank's branches.

ADVANTAGES:

1. Centralized Accounting:

- i) All the transactions of the bank directly impact the General Ledger and Profit and Loss Account.
- ii) This helps for timely effective decision making for financial management, a very critical

IV. SECURITY ISSUES OF NET BANKING

INTRODUCTION:

The Internet has made banking, shopping, and conducting other financial transactions online quite convenient. But when it comes to your money, you want to make sure your transactions are safe.

Security of a customer's financial information is very important, without which online banking could not operate.

Presently, Internet banking customers only need a computer with access to the Internet to use Internet banking services.

Customers can access their banking accounts from anywhere in the world. Each customer is provided a login ID and a password to access the service. It is indeed easy and convenient for customers.

In this lesson, we will review strategies you should employ when dealing with money and their Internet. You will learn how to make sure a **website is secure**, including checking the **SSL certificate**. In addition, you'll learn the steps you need to take to

make **shopping online** a safe and enjoyable experience.

TYPES OF FRAUDS:

interest application can be done centrally from one place for all the branches.

- iii) Bank can quickly respond to market scenario and customer needs. This gives competitive edge to the bank.

3. Introduction of Technology Based Services:
 - i) Service channels such as ATM, either on-site or offsite, can be started.
 - ii) Cheque Deposit Machines (CDM) can be installed. Such machine in WAN connectivity can allow any customer to deposit the cheque for collection at any branch.
 - iii) Cheque book printing machine can be installed at central location to give personalized cheque books. Such machine in WAN connectivity can receive command from any branch.
4. Centralized Customer Account Management:
 - i) Any customer becomes the customer of the bank rather than of branch.
 - ii) With unique ID / Account Number the accounts of the customers can be viewed centrally by the bank.

Nowadays, the nature of attacks is more active rather than passive. Previously, the threats were all passive such as password guessing, dumpster diving and shoulder surfing. Here are some of the techniques used by the attackers today:

- and dynamic function in today 's banking.
2. Centralized Product Control & Monitoring:
 - i) Centralization helps in better product analysis, monitoring and rollout.
 - ii) Aspects like interest rate modifications, product modification and
- **Trojan Attack.** The attacker installed a Trojan, such as key logger program, on a user 's computer. This happens when users visited certain websites and downloaded programs. As they are doing this, key logger program is also installed on their computers without their knowledge. When users log into their bank 's website, the information keyed in during that session will be captured and sent to the attacker. Here, the attacker uses the Trojan as an agent to piggyback information from the user 's computer to his backyard and make any fraudulent transactions whenever he wants.
 - **Man-in-the-Middle Attack.** Here, the attacker creates a fake website and catches the attention of users to that website. Normally, the attacker was able to trick the users by

Step 2 (victim access accesses the attacker

website): representative of the bank and informing you about some irregularities with your account. All you need to do to sort things out is to provide your password or other account information to verify your identity. If you ever receive a communication that appears to be from your bank and requests this type of information, contact your

bank by phone immediately. Do not give out account information to a caller, and do not click any links provided in any e-mails that claim to be from your bank. You should also ensure that any employees with access to the company's accounts follow the same procedures.

- **Phishing.** One of the primary methods a hacker gains access to account information is through phishing, or tricking the victim into giving up the information voluntarily. A hacker might send an e-mail or even call, pretending to be a

V. ONLINE BANKING SCENARIO WITH INDIAN ECONOMY

Online BANKING SCENARIO:

Internet Banking has become an integral part of banking system in India. The concept of e-banking is of fairly recent origin in India. Till the early 90's traditional model of banking i.e., branch-based banking was prevalent, but after that non-branch banking services were started. The Indian government enacted the IT Act, 2000, with effect from the 17th October 2000. To examine different aspects of Internet banking RBI set up a committee on Internet Banking. The committee had focused on three major areas of Internet banking, Technology and security issues, legal issues and regulatory and supervisory issues. RBI had accepted the suggestions and recommendations of the Working committee and accordingly issued guidelines to banks to implement internet banking in India. The old manual systems which were prevalent in Indian banking for centuries seem to be replaced by modern technologies.

VI. FINDINGS, RECOMMENDATIONS & CONCLUSIONS

6.1. THE MAJOR FINDINGS OF THE PRIMARY SURVEY:

- 50 people respond to this study. But out of which 42 people claim that they perform online banking service.
- 34 respondents use internet more than three

hours in a week.

- Out of 50 people 28 are male and 22 are female. That means the male have more knowledge about the transactions and having more knowledge about the services provided by the banks. Only working ladies and school-college students have knowledge about that service.
- Most of the respondents who lie under below 20-35 are using E-Banking services.
- Among 50 respondents 38 people are either service holders or business men.

Because the services are more benefited towards this people.

- Most of the respondents are either H.S pass or Graduate.
- 70% respondents who are using these facilities having income lie up to Rs.30000, and the rest having income between Rs.30000-50000.
- It is very interesting to see that 28 people have accounts in SBI, AXIS and IIC banks. But SBI BANK has more customers than others.
- Among 50 respondents 45 said that their banks run under CORE BANKING SOLUTION and this is very good for Indian economy.
- 24*7 BUSINESS HOURS is the main benefit which online banking users have seen among other options.
- Most of the online banking users have a tendency to spend Rs.1000 or below this amount in a single transaction.
- Users got excellent services from ATM BANKING, BALANCE ENQUIRY, BILLS PAYMENT, ONLINE

SHOPPING and ONLINE RECHARGE etc. and other services have not excellent performance like that.

- Among 50 respondents 37 people said that their bank educated them about the several online banking services and on the other hand 7 people said that their bank did not educate them about their net banking services. So it is very controversial matter.
- Most of the users have no requirement for daily or monthly base transactions, they prefer monthly base transactions.
- This study revealed that most of the users claim that they are aware of security threats and they took recommended steps to secure the net banking.
- Maximum number of respondents claim

that their banks do not charge extra charges for net banking facilities.

- Out of 50 respondents 34 people said that they will continue online banking activities in future.
- Most of the respondents claim LACK OF causes for non-accessibility of online banking by majority of people in their area.
- People also claim that ATM SERVICE, BILL PAYMENT SERVICE and INTERNET SECURITY SERVICE should be modified in near future. Some people also vote for Customer FEEDBACK service.
- Moreover 38 people are highly satisfied with this service and 12 people are satisfied and remain are not properly satisfied.

VII. CONCLUSION AND LIMITATION:

In a country like India, there is need for providing better and customized services to the customers. Banks must be concerned about the attitudes of customers with regard to acceptance of internet banking. The importance of security and privacy for acceptance of internet banking has been noted in many earlier studies and it was found that people claim that they have knowledge about security issues but they have no clear idea about all kind of frauds. The present study shows that customers are more reluctant to accept new technologies or methods that might contain little risk. Hence, banks should design the website to address security and trust issues. The survey was conducted with 50 people of Noida and Greater Noida. So, we can't say that this is the real trend of net banking of whole the country.

People are not confident enough to whether to rely completely on online banking. There is hesitancy in their minds with regards to preference. So, they use both the online and offline banking.

At the time of survey when I give questionnaires to people, they very casually fill it without think of the depth of the study.

Another point is people are not disclosing their personal data truly.

Due to shortage of time data can't be collected from all types of people.

The study was conducted with the help of students, service holders and business men etc.

The study reveals that ATM BANKING, BILL PAYMENT, ONLINE SHOPPING and ONLINE RECHARGE etc. are performed by so many respondents but it does not reflect that

NEFT, RTGS or DMAT services are not performed by the people.

RECOMMENDATIONS:

We can see the time is changing and we are now accepting technology but there is still a lot of perceptual blocking which hampers the growth its normal tendency of technology, that why the growth of internet banking is very primitive in nature.

❖ Recommendations to banks:

- Banks should obey the RBI norms and provide facilities as per the norms. But this are not completely followed by the banks. Some of our respondents complained that their bank does not give feedback of online transaction in proper times. If customers do not get proper feedback, then their interest in online services will be reduced. So, bank should take proper steps to build their feedback services.
- Internet banking facilities must be made available in all banks as well as in all branches.
- There are some co-operative banks in this area and this type of banks still do not have core-banking facilities. For this reason, this type of bank loses their customers. So co-operative banks should be covered under core-banking system.
- Link failure is a big problem especially in UCO bank and for this reason the important business deals have been hampered. So, banks should modify their software immediately.
- Now some banks install automated balance update machine to avoid customer harassment but all banks should except this system very quickly.
- Banks should develop their services not only in town areas but also in village areas. Banks should install more and more ATMs in both urban and rural areas.
- There is another problem I faced at the time of conducting this survey that the respondents complained that there are so many ATM machines in this locality but most of the ATMs have normally no cash at all. So, bank should extend this service with regular cash filling.
- Fairly dealing with the customers is more preferable. The staff should be co-operative, friendly and must be capable to understand the problems of the customers.

- Banks should give proper training to customers to use net banking.
- Banks should always update their security systems and create a trust in the mind of customers towards security of their accounts.
- Banks should make their sites more user friendly. Customers should be motivated to use internet banking facilities more.
- Banks are now using two factor authentications i.e., password and OTP but they should improve that and using three factor authentications because hackers sometimes break the two-factor authentication system.

Recommendation's trousers:

- Use anti-virus and maintain the integrity of your computer by scanning regularly for computer viruses.
- If using the same computer or mobile for online banking, e-mail and web browsing, always LOG OFF banking sessions before checking e-mail or web browsing. Computer viruses today are capable of installing themselves through e-mail links as well as web sites where just passively moving your mouse over an image could be enough to install a script that grabs your cached online banking credentials (user ID and password) and allows a criminal to steal money from your account. Always keep your anti-virus software up-to-date.
- Always use original operating system with original commercial anti-virus which could be better than crack version or free sample.
- If you are using computers with multiple operating system (e.g., Ubuntu, Dos or Windows) you must separately install anti-viruses for each.
- Do not respond to e-mails requesting account information, account verification or banking access credentials such as usernames, passwords, PIN codes and similar information.
- Do not use e-mail (or e-mail-based fax systems like Facey's) to send sensitive information.
- Install a dedicated, actively managed network firewall to limit the potential for unauthorized access to your network or computer. Consider installing a spyware detection program.
- Clear the browser cache before starting an online banking session to eliminate copies

of web pages that have been stored on the hard disk.

- Verify the secure session (https or not https) in the browser.
- Avoid using automatic login features that save your personal details.
- Create a strong password but that will be easy to remember without writing it down anywhere.
- Frequently change your password combination for better protection.
- Last but not the least, some of our respondents share that they received a phone call by which a male or female gave a news that the respondents won lottery worthy 25 lacs or a big amount from either their mobile company or somewhere else. But the fact is this type of caller wants customer's bank details or ATM card details to send the huge money and someone was trapped by it and told them their very confidential information and then the scam happened when customers want to check their bank balance, they see there is no balance at all and this is very shocking news to them. So do not believe such phone call or e-mail otherwise you will be cheated.

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I am pleased to state that the whole report is just the presentation of their facts that have been found during their project through different sources and its each sentence an exact representation of the information obtained and their analysis thereof. I hope that I have manifested my sincere attempt to represent all the information and other things to the best of my ability.