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For B.Com.-II Sem
Banking Operations
Topic: E-Banking

History of E-Banking

The evolution process of latest service delivery mechanism through internet emanated during 1980s and late came to be popularly known as e-banking. Moreover, e-banking was referred to a banking medium of using a terminal, keyboard and monitor to access the banking system through a phone line. Further, this was also called as 'Home Banking' where the customers were using a numeric keypad to send tones down a phone line with instructions to the bank. In 1981, e-banking has been introduced in New York with offering home banking service using videotex system by Citi Bank, Chase Manhattan Bank, Chemical Bank and Manufacturers' Hanover Bank. However, due to failure of videotex system, Home Banking was not able to gain popularity except in France and UK. In 1983, the Bank of Scotland has provided first home online banking service of United Kingdom to the banking customers of Nottingham Building Society. The respective online banking service was based on Prestel system of UK and has used a computer like BBC Micro or keyboard connected to the telephone and television system. This system was called Homelink where the customers were able to view their bank statements online, online fund transfer and online bill payment. The customers need to send a written instruction having details of intended transaction for paying bills or transferring funds to Nottingham Building Society who set the details upon the Homelink system. The usual recipients of this service were electric company, gascompany, telephone companies and other banks. The account holder was required to provide the details of the payment through Prestel into Nottingham Building Society system. Thereafter, a cheque of amount equal to the payment has to be send by Nottingham Building Society to the payee and an instruction giving details of the payment was send to the account holder. Later, BACS was brought into application to directly transfer the payment. The Stanford Federal Credit Union was the first financial institution which has started providing the internet banking facility to all of its members in 1994. Now-a-days, many of the banks are functioning as internet only banks without any physical bank branches like their predecessors and are demarcating themselves by providing better rate of interest and internet banking facility.

Electronic banking aids users to get access to their funds through an electronic medium, thereby, eliminating the requirement for the banks' customers to visit the bank to do financial transactions. Since a greater number of customers are now using the internet for a host of their daily activities, this digital medium of banking makes banking far accessible and convenient for users. Electronic banking is also known with the names, like, e-banking, virtual banking, online banking, or internet banking. In simple words, the electronic banking is the use of electronic and telecommunications network for delivering different sort of banking products and services. Moreover, a customer can easily access his bank account and carry transactions by using his computer or mobile phone with the help of e-banking. In other words, Electronic banking can be

described as the use of electronic delivery channels for banking products and services, and is a subset of electronic finance. Some of the important electronic delivery channels include Internet, wireless communication networks, automatic teller machines (ATMs), and telephone banking. The internet banking is a component of e-banking and is primarily carried out by means of the Internet. The term transactional e-banking is generally used to demarcate the use of banking services from the mere provision of information. In simple words, Electronic banking or e-banking, takes under its gamut, the provision of retail and small value banking products and services through electronic banking channels as well as large value electronic payments and such sort of wholesale banking services delivered electronically.

Now-a-days, banks offer various types of services through electronic banking platforms. The basic level of services banks offer through their websites. The banks offer information about its products and services to customers through this service. Beside this, some banks receive and reply to queries through e-mail as well. Secondly, banks allow their customers to submit instructions or applications for different services, check their account balance, etc. However, banks do not allow their customers to carry any fund-based transactions on their accounts. Moreover, banks allow their customers to operate their accounts for funds transfer, bill payments, and purchase and redeem securities, etc.

Benefits of E-banking:

E-banking is very helpful for the customers and for the banks in overcoming the drawbacks of manual system as computers are highly capable of storing, analyzing, consolidating, searching and presenting the data as per the requirements of customers and that of the banks with a lot of speed and accuracy.

Advantages to the Banking institutions

- E-banking helps in scaling down the cost of delivering the services to the customers.
- E-banking provides banks with competitive advantage among their peers.
- E-banking decreases the use of paper money that helps the central bank in printing less paper notes.
- The banks can also earn revenue by promotional activities through websites.
- FAQs uploaded over the banks' website helps reducing the workload of bank employees.
- The customers can avail e-banking facility from anytime-anyplace, and therefore, there is an urgent need to invest more and more on relevant infrastructure.

Advantages to the customers

- E-banking provides services to customer 24x7.
- E-banking helps easy access to account information in quick time.

- Payment can be made online for the purchase of goods and services with the help of e-banking.
- E-banking allows customers to check their account balance, to get statement of their account, to apply for loans, to check the progress of their investments and to collect such other information.

E-banking Services in India

1. Automated Teller Machines (ATMs)

Automatic teller machines have entirely changed the concept of banking in India. It has eliminated the need to stand in long queue and filling the forms even for routine banking transactions. Now customers of banks can access their money with the scratch of an ATM. An ATM is an electronic computerized device which let the banks' customers to directly use a secured method of communication to access their bank accounts. Entry of Automated teller machines has changed the office atmosphere of the branches of banks. The customers don't need to visit branches, where they have their accounts, for their day to day banking transactions like cash deposits, cash withdrawals, balance enquiry, dropping cheque etc. Electronic channels have opened new avenues for banks. They are basically the electronic machines which are operated by customer himself to withdraw or deposit cash.

The customers are recognized at an ATM by inserting a plastic ATM/Debit card with a magnetic stripe or a plastic smart card with a chip which has a unique card number issued to the respective customers and some security information, like, an expiration date or CVVC (CVV). Authentication is done by the customer by entering a personal identification number (PIN) for using any service at ATMs.

Facilities provided to the customers having ATM

- ATMs help customers anytime-anywhere access to cash, withdrawal of cash on 24x7 basis.
- The money can be easily transferred from one account to another account is possible with the help of ATMs.
- A customer can track his/her the last transactions and current balance with the help of ATM. Additionally, a mini statement can also be generated with the help of ATMs.
- The personal identification number of ATM/debit card can be changed with the help of ATMs.
- The request for issuing a Cheque book can be made by the customers through ATMs.
- The fixed deposits can be made with the help of ATMs.
- The payment of utility bills can be made by the customers with the help of ATMs.
- The credit card bill can be made by the customers with ATMs.
- Mobiles recharges are possible using ATMs. Additionally, to get the latest updates on mobile, customers can also update their mobile number through ATMs.

- The check drop facility can be used at ATMs by the account holders.

2. Tele Banking

In tele-banking, banking transaction is done over the telephone. The account holders of the banks can get information about their accounts, make banking transaction like fixed deposits, money transfer, demand draft, collection and payment of bills etc by using telephones. With more and more people are using mobile phones, telephone banking is also possible with the help of mobile phones. Besides, telephone banking satisfies the customer with fast, anytime transaction and account information via telephone access. By simply pressing a button, customers can check a deposit, account information, transfer fund as well as perform number of other functions.

Telephone banking system uses advance technology which keeps the cost of delivering the service very at lower levels. On the other hand, customers of the banks can perform the banking work directly from their homes or from their office desk, without being stuck in traffic and without standing in queue at the bank's counters for hours and with no need to visit a bank branch or automated teller machine. Telephone banking facilitates the customers to access their account 24x7. They can simply call and get the current account information. For using telephone banking facilities, a customer must first register with the bank's branch for availing the service and a password is set for customer verification and customer has to make call on a specified phone number set up by the bank. Most of the telephone banking services use automated phone answering system with phone keypad response or voice recognition capability.

Facilities provided to the customers with tele-banking

- The customers can get the details of their savings account, current accounts, fixed deposits available with the bank.
- With the help of telephone banking, customers can get their cheque book and latest account statement delivered to them.
- Money transfers are also possible with the help of telephone banking.
- The customers can request the bank to stop payment of a particular cheque through telephone banking service.
- The request for availing the mobile banking can be made with the help of telephone banking.
- The customers can get the latest information regarding the interest rates prevailing along with the foreign exchange rates.
- The customer can use telephone banking to block the Internet Banking User ID and to block an ATM/debit card credit cards.
- The telephone banking can be used by the customers for requesting the issuance of an ATM card.
- The TDS certificate can also be received by the customers through tele-banking.

3. Internet banking

Internet banking refers to an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. It is also known by the names of online banking, e-banking or virtual banking,

- **National Electronic Fund Transfer (NEFT)**

National Electronic Funds Transfer (NEFT) is a nation-wide payment system which facilitates one-to-one transfer of funds. As the facility provided under NEFT, the individuals, firms and companies are able to electronically transfer funds from one bank branch to any individual, firm or companies having an account in another other bank branch in the country coming under the purview of the same. Those individuals, firms or corporates who have their accounts with a bank branch can transfer funds using NEFT. In case of those who do not have a bank account (walk-in customers) can also deposit cash at the NEFT-enabled branches with instructions released to transfer funds using NEFT. However, these kind of cash remittances will be restricted to a maximum of Rs. 50,000 per transaction at a time. Therefore, NEFT is actually facilitating the originators or remitters to perform transactions regarding transfer of funds even without having a bank account. Currently, the NEFT functions in hourly batches with the twelve settlements from 8 am to 7 pm from Monday to Friday and six settlements from 8 am to 1 pm on Saturday in a week.

- **Real Time Gross Settlement (RTGS)**

RTGS can be defined as the continuous (real-time) settlement of funds transferred individually on an order by order basis (without netting). Here, the term "Real Time" means the processing of instructions at the time they are actually received rather than at some later time. Secondly, the term "Gross Settlement" means the settlement of funds transfer instructions occurred individually (on an instruction by instruction basis). In consideration with this, the settlement of funds takes place in the books of the Reserve Bank of India (RBI) where the payments are final and irrevocable. The RTGS system is generally used for the transactions of greater value. The minimum amount of remittance through RTGS shouldn't be less than Rs. 2 lakh. However, there is no upper limita for RTGS transactions. The RTGS facility for the transactions to be made by the customers is available to banks from 9 am to 4:30 pm on week days and from 9 am to 2 pm on Saturdays for settlement at the RBI end in general. Further, the timings that the banks follow for availing the RTGS facility may vary depending on the customer timings of the bank branches.

- **Electronic Clearing System (ECS)**

The electronic clearing system, under the aegis of internet banking, is an alternative method for carrying payment transactions with respect to the utility-bill-payments such as telephone bills,

electricity bills, insurance premium, card payments and loan repayments, etc. All this has actually made obsolete the need for issuance and handling of paper instruments, thereby, facilitating improved customer service by the banks, companies, corporations, government departments and agencies, etc., while collecting and/or receiving the payments.

- **Immediate Payment Service (IMPS)**

The immediate payment service is such a component of internet banking which offers an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool for money transfer instantly within banks across India through mobile, internet and ATM which is safe as well as economical in terms of financial and non-financial perspectives.

Objectives of IMPS:

- To allow the banks' customers to use mobile instruments as a channel for accessing their banks accounts as well as for remitting funds.
- To make the payment simpler just by using the mobile number of the beneficiary.
- To sub-serve the goal of electronification of retail payments as set by the Reserve Bank of India (RBI).
- To promote & facilitate the operations supporting mobile payment systems in India with the Reserve Bank of India Mobile Payment Guidelines 2008 to be inter-operable across banks in a safer and secured manner.
- To prepare the base for a full range of mobile based banking services.

Facilities provided to internet banking customers

- It allows customers to check the current balance in their account.
- It allows customers to check all the past transactions from the date of opening the account.
- It allows customers to transfer money to any bank account of that particular bank or any other bank.
- It allows customers to transfer the funds with debit cards or credit cards.
- It allows customers to check customers to recharge their mobile online anywhere, anytime easily.
- It allows customers to buy and/or sell the Mutual Funds online with the help of internet banking account.
- It allows customers to check to apply for fixed deposits and recurring deposits with the help of internet banking account.
- The customers can make request for issuing cheque book and the same will be delivered on the said address and the customers can issue instruction to banks to stop payment of a particular cheques as well, as and when required.

- Internet banking account provides customer one point access to all accounts in a safe & secured manner along with enabling them to view all his/her accounts through single User ID.
- The customers can make request for ATM/Debit cards by using internet banking account as well as for re-issuance and up-gradation of ATM/Debit Cards.
- It allows customers to receive the statement of bank account on emails and to request for a Demand Draft with the help of Internet banking account.
- It allows customers to apply for renewal of current fixed deposit and recurring deposit and to request of premature closure of the same.
- It allows customers to change the password whether it is logged in or transaction password.
- The customers can view, in detail, the loan account, type of loan, date of sanction, date of maturity, rate of interest.
- The customers can get all the information about the rate of interest on deposit and loan scheme as well as payment of utility bills (electricity, telephone, house tax etc), bank credit, mobile bills, insurance premium, e-shopping bills, recharging of DTH connection.
- It allows customers to book the railway and air tickets along with trading in securities market.
- It allows customers to purchase gold and silver as well as Forex.
- Document storage facilities are also provided by the banks to their customers via internet banking account so that they can easily store birth or marriage certificate, passbook statement, life insurance policy, PAN card copy or any other prized document etc., and access them anytime-anywhere.
- It allows customers to make request for account opening. However, one can apply for a new account only in branches where he/she already has an account.

4. Mobile banking

These days the mobile technology is widely accepted and largely available, and that too at an affordable price. Therefore, it is considered suitable for banking and payment services as well as to provide huge opportunity to extend financial services to each and every individual irrespective of the place one's residence. Internet banking has helped the customers to ensure a safe and secured access to their accounts anytime, anywhere, at any place. Customers can check their account details, get their banks statement, perform many transactions in the comfort of their home or office.

However, the biggest limitation of the internet banking is that it requires personal computer or laptop or smart phone with a good internet connection. This drawback of internet banking is overcome by the mobile banking to a certain extent because the mobile banking reduces the customers' requirement to just having a mobile phone for using this service. Mobile phone usage has seen an explosive growth in India in the past few years. The major cause behind the

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mobile banking scoring over internet banking is that mobile banking enables anywhere, anytime banking and the customers needn't have an access of internet connection to make a transaction from his/her account. Besides, the customers can use their account on the go while waiting at the bus stop, travelling, at home, at work place. In simple words, the Mobile Banking refers to providing and making available the banking and financial services with the help of mobile telecommunication devices.

RBI Guidelines for Mobile Banking

As per the guidelines issued by the RBI, the mobile banking is defined as, "doing any banking transaction by using mobile phones by the banks" customer that would include debit/credit of customers account". RBI has laid down some guidelines to encourage the use of mobile banking due to continuous change in the environment and priorities of banking customers. Firstly, any branch which offers mobile banking services should note that the mobile banking service should be available to customers on any network available. It should not be limited to few networks only. Secondly, in the long run, each bank would enable transaction between two accounts in different banks, irrespective of the network.