Abstract: Online banking, the wave of the future, it provides enormous benefits to consumers in terms of ease and cost of transaction, through internet, telephone or other electronic delivery. Many under-graduate students have bank accounts and they are conversant with the evolving technology associated with modern banking. As newer technologies are introduced every day, so do students adjust their lifestyles, values and even their spending habits to suite these emerging developments and newer needs. Generally, students have theoretical knowledge of e banking and different service in e banking but all students use this knowledge in practical way and so to find out proper findings that whether students really using e banking or not this research is necessary it is the research on Awareness of online banking service in graduate students.

Index Terms - E-banking

I. INTRODUCTION

Electronic banking is the newest delivery system of banking services. The definition varies amongst researchers partially because electronic banking refers to several types of channels through which a bank’s carry out most retail banking services via computer, television or mobile phone. Some researchers described e-banking as an electronic connection between the bank and customer in order to prepare, manage and control finances and transaction. Electronic banking has changed the way the banking industry considers non- traditional channels of delivering services to customers. No doubt in the future banking environment will be more paperless and will overcome the traditional barriers of distance and geographic boundaries. Channels promises to be more efficient by providing low-cost operations and access, to financial services remotely.

II. ORIGIN OF E-BANKING

The concept of Internet banking has been simultaneously evolving with the development of the World Wide Web. Programmers working on banking data bases came up with ideas for online banking transactions, sometime during the 1980s. The creative processes of development of these services were probably sparked off after many companies started the concept of online shopping. The online shopping promoted the use of credit cards through Internet. Many banking organizations had already started creating data ware housing facilities to ease their working staffs. The development of these databases was widely used during the development of ATM’s.

Sometime in 1980s, banking and finance organizations in Europe and United States started suggestive researches and programming experiments on the concept of ‘home banking’. Initially in the 80’s when computers and Internet were not so well-developed, ‘home banking’ basically made use of fax machines and telephones to facilitate their customers. The widespread of Internet and programming facilities created further opportunities for development of home banking.

In 1983, the Nottingham Building Society, commonly abbreviated and referred to as the NBS, launched the first Internet banking service in United Kingdom. This service formed the basis for most of the Internet banking facilities that followed. This facility was not very well-developed and restricted the number of transactions and functions that account holders could execute. The facility introduced by Nottingham Building Society is said to have been derived from a system known as Prestel that is deployed by the postal service department of United Kingdom.
III. PROGRESS OF ELECTRONIC BANKING IN INDIA

Internet banking refers to the use of Internet as a remote delivery channel for banking services such as opening a deposit account or transferring funds at different accounts etc. Further, it is a desirable opportunity for banks where the key to success is customer adoption. There is evolution in development of internet banking. At the basic level, Internet banking includes the setting up of a web page by a bank to give information about its product and services. At an advance level, it involves provision of facilities such as accessing accounts, funds transfer, enabling integrated sales of additional process and access to other financial services such as investment and insurance. There is advantage for customers as it provides opportunity to handle their banking transactions without visiting bank tellers. The services through Internet banking are e-tax payment; access the account to check balance, online trading of shares, online remittance of money, electronic bill payment system, railway reservation, transfer of funds from one customer’s account to other, application of loan, etc. Internet banking channel is convenient compared to bank branch system because stakeholders can access their account at any time. Banks leveraged the advantage of the Internet by offering online services in recent years.

The Internet has revolutionized the way we live, shop, entertain and interact and also the way we save and invest. Internet banking arrived in India in the late 1990s. ICICI was the first bank to champion its usage and introduced internet banking to its customers in 1996. With lower internet costs and increased awareness about electronic media, online banking established itself only in 1999. Other banks followed suit, including HDFC, Citibank, IndusInd and the now redundant Times Bank.

Internet banking changed both the banking industry as well as banks’ services to its customers. ‘Anywhere banking’ came to be recognized as an opportunity also for differentiated and competitive services. Ancillary online services like checking account status, fund transfer, ordering demand drafts, loan applications, credit card verifications, shopping portals etc. as well as not requiring a visit to the branch during office hours were viewed as high-value offerings and increasingly started to become a necessity rather than a service. Once banking institutions recognized the low processing cost per transaction via the internet, they began viewing online banking as an extension of the bank rather than as an add-on service. The motivation to introduce online banking now also included new business potential, additional funds from new and existing customers, expansion in geographical reach, image as a tech-savvy bank especially if targeting the youth and the threat of customers shifting loyalty if they did not introduce it. Nationalized banks initially viewed online banking as insecure and counterintuitive and were therefore hesitant. But eventually, SBI, Canara Bank, Allahabad Bank, Punjab National Bank, Bank of Baroda, Syndicate Bank and others introduced it. SBI launched internet banking in 2001 and experienced good response. In general, internet banking saw an exponential rise in users. Today, banks encourage their customers to use online banking. Besides cost and revenue impacts, this paradigm shift is because they also recognize that self-control transactions have greater potential for customer satisfaction and retention. Online banking has thus come to be among essential banking services. The approach to adopting online banking however is often to merely stay abreast of industry and technology and online banking is becoming a separate business unit driven by technological possibilities. The user often has minimal place in such an approach as evidenced by non-human centric experiences that flourish. However, the cultural and organizational shift needed by Indian banks to draw old customers into this new banking channel as well as to draw new customers requires a user centric focus.

IV. TYPES OF E-BANKING FACILITIES IN INDIA

The following are the important up-to-date e-banking products and services offered by the Indian banks.

1. ATM
2. Credit Card
3. Internet Banking
4. Mobile banking
5. Phone Banking
6. Tele Banking
7. Utility Bill Payment and other regular periodical payment facilities
8. Electronic Fund Transfer (NEFT / RTGS/ MICR)
9. Electronic Clearing Services  
10. E-Commerce Transactions  
11. MICR/OCR Clearing System  
12. Pre-Paid Instruments  
13. Truncation of Cheques System  
14. Door step banking  
15. E-cheque  

Here, some are explained in detail;  

1. **NATIONAL ELECTRONIC FUND TRANSFER (NEFT)**  
   It is a national wide funds transfer system to facilitate transfer of funds from any branch to any other bank branch. The operationalization of the NEFT in November 2005 was a major step in the direction of setting up and operating a National Level Payment System. There is no restriction of center or of any geographical area inside the country. The system uses the concept of centralized accounting system and the bank’s account that is sending or receiving the funds transfer instructions gets operated at one center viz. Mumbai only. The individual branches participating in NEFT could be located anywhere across the country. NEFT facility is available with all Core Banking Branches (CBS). The beneficiary gets the credit on the same day or the next day depending on the time of settlement.  

2. **REAL TIME GROSS SETTLEMENT (RTGS)**  
   RBI introduced Real Time Gross Settlement (RTGS) system with a view to enhance the efficiency of the Cheque clearing system. The Real Time Gross Settlement was implemented by the RBI after a comprehensive audit and review of the software and also by conducting extensive training of users at commercial banks on March 26, 2004. The Real Time Gross Settlement system is being designed to provide large volume funds transfer and settlement in an on-line real time environment to the banking industry, with settlement on a gross basis.  

3. **ELECTRONIC CLEARING SERVICE**  
   Electronic clearing service is a mode of electronic funds transfer from one bank account to another bank account using the services of a clearing house. This is normally for bulk transfers from one account to many accounts or vice versa. This can be used both for making payments like distribution of dividend, interest, salary, pension etc. by institutions or for collection of amounts for purposes such as payments to utility companies like telephone, electricity or charges such as house tax, water tax etc. or for loan installments of financial institutions/banks or regular investments of persons.  

   There are two types of (ECS) called:  
   
   Electronic Credit Clearing Service (ECS) (Credit)  
   Electronic Debit Clearing Service (ECS) (Debit)  

4. **CARD BASED PAYMENT SYSTEMS**  
   There are three types of card-based payment system. They are: 1. Credit card 2. Debit card and 3. Smart card. Here, they are explained in detail.  

4.1 **CREDIT CARDS**  
   Credit card is the modern system of payment which has to a large extent replaced the traditional forms of payment by cash, cheque etc. VISA and MASTER CARD, MAESTRO, CIRRUS DINEKS are associations of banks, which dealt in credit cards. Bank credit cards are a type of consumers’ loan, revolving in nature i.e., automatically renewing itself with in specific limits. The holder has the option to utilize it in part or full depending upon his needs. The credit so availed has to be paid within a period and with repayment, the limit gets renewed automatically.  

4.2 **DEBIT CARDS**  
   Debit card is a pre-paid card with some stored value, which optimizes conveniences for the customers. A customer possessing a debit card need not carry cash. It is like carrying cash from the bank account, without the inconvenience or risk of carrying liquid cash. In other words, debit card allows ‘anywhere any time accesses to the customer with their savings or current account.'
4.3 SMART CARDS

Banks are adding chips to their current magnetic stripe cards to enhance security and offer new service, called Smart Cards. Smart cards are plastic cards just in the shape of visiting cards. It looks like any other credit cards. Smart card contains a small microprocessor or computer chip on the face of the card. Smart Cards allow thousands of times of information storable on magnetic stripe cards. Smart card is actually a debit card loaded with a sum of money. It can be used for both small payments and pre-paid telephone card.

5. PHONE BANKING

Phone banking includes mobile banking, telebanking and banking via landline phone network.

5.1 MOBILE BANKING

Mobile banking refers to provision and ailments of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information.

5.2 TELEBANKING

Telebanking is innovative form of electronic banking introduced by banks through which banking services or products are rendered through telephone to its customers. Company can access customer’s account through the telephone at any time or at any place throughout the country with the same telebanking PIN they desire. Customers can carry on a number of transactions from their own home or office; in fact, from anywhere they have access to a phone and in a very convenient and comfortable manner.

6. INTERNET BANKING

Internet banking enables customers to open accounts, pay bills, know account balances, forward loan applications, calculate interest, view and print copies of cheques and deposits, transfer funds, stop payments, recording of stop payment instructions, reorder Cheque books and statements, receive banking industry news, send and receive messages to and from the bank through e-mail and other forms of traditional banking services.

Different banks have different levels of such services offered, starting from level-1 where only information is disseminated through Internet to level-3 where on line transactions are put through.

7. MICR/OCR CLEARING SYSTEM

The two types of technology being adopted in clearing are the Magnetic Ink Character Recognition (MICR) and Optic Character Recognition (OCR) technology. This is also known as Automated Clearing System (ACS). In India, MICR technology is used in clearing of cheques. Under this system, specific type of paper is used for printing the cheques. These cheques are processed in a high-speed machine.

8. PRE-PAID INSTRUMENTS

Pre-paid payment instruments are payment instruments where value for use is stored in advance, such as smart cards, magnetic strip cards, internet accounts, internet wallets, mobile accounts, paper vouchers etc. Pre-paid payment instruments enhance convenience as a mode of payment in lieu of cash. Also, this facilitates E-payments for goods and services purchased through internet/mobile. The maximum loss on account of fraudulent use is limited to balance available on the card.

9. TRUNCATION OF CHEQUE SYSTEM

The system of Cheque truncation i.e., instead of presenting a Cheque physically to the drawee bank on which it is drawn the presenting bank captures the image of the Cheque and send it electronically to the clearing house. The clearing house in tern submits the Cheque image electronically to payee branch. The payee branch verifies the image and takes decision to pay.

10. MAGNETIC INK CHARACTER RECOGNITION

MICR code is a code printed on cheques using MICR (Magnetic Ink Character Recognition technology). This enables identification of the cheques and which in turns means faster processing. An MICR code is a 9-digit code that uniquely identifies the bank and branch participating in an Electronic Clearing System (ECS).

11. REAL-TIME GROSS SETTLEMENT

RTGS systems are special funds transfer systems where the transfer of money or securities takes place from one bank to any other bank on a "real-time" and on a "gross" basis. Settlement in "real time" means a payment transaction is not subjected to any waiting period, with transactions being settled as soon as they are processed. "Gross settlement" means the transaction is settled on a one-to-one basis, without bundling or netting with any other transaction. "Settlement" means that once processed, payments are final and irrevocable.
Reference


