GLOBAL E-BANKING SCENARIO AND CHALLENGES IN BANKING SYSTEM

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ABSTRACT

Internet banking involves consumers using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean 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, and buying financial products or services online.

This paper is an attempt to explore the various levels of Internet Banking services provided by banks using the secondary data. It also compares the traditional banking systems with net banking. It lists out the various advantages of internet banking and the successful security measures adopted by different banks for secured banking transactions. It also analyzes how E-banking can be useful for banking industry during this global financial melt down.

Key Words: E-Banking, ATM, Credit Card, Smart Card, Brick and Click E-business Model, Pure play E-Business model, CCS

INTRODUCTION

Internet banking (E-banking) involves consumers using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean 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, and buying financial products or services online. This is called "transactional" online banking.
Internet banking (or E-banking) means any user with a personal computer and a browser can get connected to his bank's website to perform any of the virtual banking functions. In internet banking system the bank has a centralized database that is web-enabled. All the services that the bank has permitted on the internet are displayed in menu. Any service can be selected and further interaction is dictated by the nature of service. The traditional branch model of bank is now giving place to an alternative delivery channels with ATM network. Once the branch offices of bank are interconnected through terrestrial or satellite links, there would be no physical identity for any branch. It would a borderless entity permitting anytime, anywhere and anyhow banking. The network which connects the various locations and gives connectivity to the central office within the organization is called intranet. These networks are limited to organizations for which they are set up. SWIFT is a live example of intranet application.

There are two ways to offer Internet banking. First, an existing bank with physical offices can establish a web site and offer Internet banking in addition to its traditional delivery channels. Generally this is called Brick and Click model of E-business. Second, a bank may be established as a "branch less, Internet only, or virtual bank" without any physical branch. This is called pure play E-business model.

OBJECTIVES

The primary objective of this article is to discuss about the various levels of internet banking services and the structure of banking services. It also compares the traditional banking systems with net banking. It lists out the various advantages of internet banking and the successful security measures adopted by different banks for secured banking transactions. It also analyzes how E-banking can be useful for banking industry during this global financial melt down

Methodology of Data Analysis and Interpretation

The secondary data has been collected from the different web sites. A number of articles, news items, reports and other materials have also been browsed for the same.

The secondary data explored the various levels of internet banking services provided by banks. It also compared the traditional banking with net banking. It lists out the Internet banking advantages and security issues as detailed below.

Levels of Banking services

Broadly, the levels of banking services offered through INTERNET can be categorized in three types:

(i) The Basic Level Services use the banks' websites which disseminate information on different products and services offered to customers and members of public in general. It may receive and reply to customers' queries through e-mail,

(ii) In the next level are Simple Transactional Websites which allow customers to submit their instructions, applications for different services, queries on their account balances, etc, but do not permit any fund-based transactions on their accounts,
(iii) The third level of Internet banking services are offered by **Fully Transactional Websites** which allow the customers to operate on their accounts for transfer of funds, payment of different bills, subscribing to other products of the bank and to transact purchase and sale of securities, etc.

Most of the banks providing Internet banking products and services offer, to a large extent, an identical and standard package of banking services and transactional capabilities.

**Structure of Banking services**

In general, Internet banking products are offered in a two-tiered structure.

* A basic tier of Internet banking products includes customer account inquiry, funds transfer and electronic bill payment.
* A second or premium tier includes basic services plus one or more additional services such as
  1) Brokerage.
  2) Cash management.
  3) Credit applications.
  4) Credit and debit cards.
  5) Customer correspondence.
  6) Demat holdings.
  7) Financial advice.
  8) Foreign exchange trading.
  9) Insurance.
  10) Online trading.
  11) Opening accounts.
  12) Requests and intimations.
  13) Tax services.
  14) E-shopping.
  15) Standing instructions.
  16) Investments.
  17) Asset management services etc.

**Traditional Banking Vs. Internet Banking**

In traditional banking, the customer has to visit the branch of the bank in person to perform the basic banking operations viz., account enquiry, funds transfer, cash withdrawing etc.,

On the other hand, E-banking enables the customers to perform the basic banking transactions by sitting at their homes or at offices through a desktop or laptop round the clock globally through electronic media. This is called any time, any where banking. The customers can access the banks’ website for viewing their account details and perform the transactions as per their requirements. Customers can make use of these services with no restricted banking hours, no queues, no tellers and no waiting.

**Models for E-Banking**

To implement effectively E-banking and augment the level of technology the following models have been suggested:

(i) Complete Centralized Solution (CCS)

(ii) Cluster Approach

(iii) High Tech Bank within Bank

**Complete Centralized Solution**

Of the above three models, the Complete Centralized Solution (CCS) is the ideal branch network model on which E-banking activities can be implemented uniformly and efficiently. Under this model, the bank has to provide web-server and the requisite software which is connected to the main server. The customers can access the web server for their basic banking operations using any standard browser at any location.
Features of CCS

The following are the features of Complete Centralized Solution:

(i) The entire system software, data for the entire bank etc., are stored in a centralized server with its hot standby server being placed at a different location and connected through high speed and efficient network.
(ii) Branches are provided with online nodes to receive requests from customers and to provide services across the counter.
(iii) The nodes provided at remote branches are connected through effective satellite links with enough redundancy to provide reliability as well as adequate bandwidth.
(iv) Skilled manpower is required only at the centralised location

Internet banking in India

The Reserve Bank of India constituted a working group on Internet Banking. The group divided the internet banking products in India into 3 types based on the levels of access granted. They are:

i) Information Only System: General purpose information like interest rates, branch location, bank products and their features, loan and deposit calculations are provided in the banks website. There exist facilities for downloading various types of application forms. The communication is normally done through e-mail. There is no interaction between the customer and bank's application system. No identification of the customer is done. In this system, there is no possibility of any unauthorized person getting into production systems of the bank through internet.

ii) Electronic Information Transfer System: The system provides customer- specific information in the form of account balances, transaction details, and statement of accounts. The information is still largely of the 'read only' format. Identification and authentication of the customer is through password. The information is fetched from the bank's application system either in batch mode or off-line. The application systems cannot directly access through the internet.

iii) Fully Electronic Transactional System: This system allows bi-directional capabilities. Transactions can be submitted by the customer for online update. This system requires high degree of security and control. In this environment, web server and application systems are linked over secure infrastructure. It comprises technology covering computerization, networking and security, inter-bank payment gateway and legal infrastructure.

Automated Teller Machine (ATM)

ATM is designed to perform the most important function of bank. It is operated by plastic card with its special features. The plastic card is replacing cheque, personal attendance of the customer, banking hour’s restrictions and paper based verification. There are debit cards. ATMs used as spring board for Electronic Fund Transfer. ATM itself can provide information about customers account and also receive instructions from customers - ATM cardholders. An ATM is an Electronic Fund Transfer terminal capable of handling cash deposits, transfer between accounts, balance enquiries, cash withdrawals and pay bills. It may be on-line or off-line. The on-line ATN enables the customer to avail banking facilities from anywhere. In off-line the facilities are confined to that particular ATM assigned. Any customer possessing ATM card issued by the Shared
Payment Network System can go to any ATM linked to Shared Payment Networks and perform his transactions.

**Credit Cards/Debit Cards**

The Credit Card holder is empowered to spend wherever and whenever he wants with his Credit Card within the limits fixed by his bank. Credit Card is a post paid card. Debit Card, on the other hand, is a prepaid card with some stored value. Every time a person uses this card, the Internet Banking house gets money transferred to its account from the bank of the buyer. The buyers account is debited with the exact amount of purchases. An individual has to open an account with the issuing bank which gives debit card with a Personal Identification Number (PIN). When he makes a purchase, he enters his PIN on shops PIN pad. When the card is slurped through the electronic terminal, it dials the acquiring bank system - either Master Card or VISA that validates the PIN and finds out from the issuing bank whether to accept or decline the transactions. The customer can never overspend because the system rejects any transaction which exceeds the balance in his account. The bank never faces a default because the amount spent is debited immediately from the customers account.

**Smart Card**

Banks are adding chips to their current magnetic stripe cards to enhance security and offer new service, called Smart Cards. Smart Cards allow thousands of times of information storable on magnetic stripe cards. In addition, these cards are highly secure, more reliable and perform multiple functions. They hold a large amount of personal information, from medical and health history to personal banking and personal preferences.

**You can avail the following services through E-Banking.**

**E-banking Transactions**

- Account Enquiry
- Fund Transfer
- Payment of Electricity, Water and Telephone bills
- Online payment for transactions actually performed through Internet
- Request for issuance of cheque books, demand drafts etc.,
- Statement of accounts
- Access to latest schemes
- Access to rates of interest and other service charges

**Bill payment service**

You can facilitate payment of electricity and telephone bills, mobile phone, credit card and insurance premium bills as each bank has tie-ups with various utility companies, service providers and insurance companies, across the country. To pay your bills, all you need to do is complete a simple one-time registration for each biller. You can also set up standing instructions online to pay your recurring bills, automatically. Generally, the bank does not charge customers for online bill payment.

**Fund transfer**

You can transfer any amount from one account to another of the same or any another bank. Customers can send money anywhere in India. Once you login to your account, you need to mention the payees’s account number, his bank and the branch. The
transfer will take place in a day or so, whereas in a traditional method, it takes about three working days. ICICI Bank says that online bill payment service and fund transfer facility have been their most popular online services. 

Credit card customers
With Internet banking, customers can not only pay their credit card bills online but also get a loan on their cards. If you lose your credit card, you can report lost card online.

Railway pass
This is something that would interest all the aam janta. Indian Railways has tied up with ICICI bank and you can now make your railway pass for local trains online. The pass will be delivered to you at your doorstep. But the facility is limited to Mumbai, Thane, Nasik, Surat and Pune.

Investing through Internet banking
You can now open an FD online through funds transfer. Now investors with interlinked demat account and bank account can easily trade in the stock market and the amount will be automatically debited from their respective bank accounts and the shares will be credited in their demat account. Moreover, some banks even give you the facility to purchase mutual funds directly from the online banking system. Nowadays, most leading banks offer both online banking and demat account. However if you have your demat account with independent share brokers, then you need to sign a special form, which will link your two accounts.

Recharging your prepaid phone
Now just top-up your prepaid mobile cards by logging in to Internet banking. By just selecting your operator's name, entering your mobile number and the amount for recharge, your phone is again back in action within few minutes.

Shopping
With a range of all kind of products, you can shop online and the payment is also made conveniently through your account. You can also buy railway and air tickets through Internet banking.

Advantage of Internet banking
As per the Internet and Mobile Association of India's report on online banking 2006, "There are many advantages of online banking. It is convenient, it isn't bound by operational timings, there are no geographical barriers and the services can be offered at a miniscule cost."

Through Internet banking, you can check your transactions at any time of the day, and as many times as you want to, where in a traditional method, you get quarterly statements from the bank. If the fund transfer has to be made outstation, where the bank does not have a branch, the bank would demand outstation charges. Whereas with the help of online banking, it will be absolutely free for you.

The following advantages are available through Internet banking
(i) Round the clock banking
E-banking facilitates performing basic banking transactions by customers round the clock globally. In fact there are no restricted office hours for E-banking.
(ii) Convenient Banking
Customers can perform basic banking transactions by simply sitting at their office or at home through PC or LAPTOP. No personal visit to the branch is required for routine basic transactions.
(ii) Low Cost Banking
The operational costs have come down due to technology adoption. The cost of transactions through internet banking is much less than any other traditional mode. There is also much saving on the cost of infrastructure as the banks can have access to a greater number of potential customers without the commitment costs of physically opening branches. Moreover, requirements of staff at the banks get reduced to a greater extent.

(iii) Profitable Banking
The increased speed of response to customer requirements can enhance customer satisfaction and consequently can lead to higher profits as a result of handling more number of customer accounts.

(iv) Quality Banking
Internet banking allows the possibility of improved quality and an enlarged range of services being made available to customers.

(v) Speed Banking
The increased speed of response to customer requirements will lead to greater customer satisfaction and handling a large number of transactions at a lesser time. Thus, it increases the customers’ convenience to a greater extent and facilitates better customer retention.

(vi) Service Banking
Banks can also offer many cash management products. Instant credit, one day credit, immediate payment of utility bills, instant transfer of funds etc., is possible under E-banking.

Security Precautions
The most common fear in e-banking or net banking is that of security. Most people avoid Net banking because they fear their account will be broken into by hackers. “I don’t transfer funds electronically because there is a risk factor involved,” says Sanjay Roy, a Pune based businessman. But if some basic precautions are taken (like not revealing your password to anyone, ensuring that you are properly logged out after you finish, not keeping the transaction webpage on your list of favorites, avoiding the use of a cybercafé when banking), there is little reason to fear. Customers should never share personal information like PIN numbers, passwords etc with anyone, including employees of the bank. It is important that documents that contain confidential information are safeguarded. PIN or password mailers should not be stored, the PIN and/or passwords should be changed immediately and memorized before destroying the mailers. Customers are advised not to provide sensitive account-related information over unsecured e-mails or over the phone. Take simple precautions like changing the ATM PIN and online login and transaction passwords on a regular basis. Also ensure that the logged in session is properly signed out.

Banks are coming up with variety of innovations to beef up security at every stage of transaction. While ICICI Bank has launched a new grid-based debit card, PNB has introduced a virtual keyboard that can be used to key in your login credential, thus defeating keyboard logging software, which may have been installed on the computer you are using.
HDFC Bank, on the other hand, has introduced Net Safe, a unique security solution that allows you to shop online through a virtual credit card. And Kotak Mahindra Bank has worked towards generating a virtual pre-set credit card that will let you e-shop within a 24-hour window. The validity of this virtual card expires after 24 hours, and any unused balance is transferred back to your bank account.

**Factors favoring the growth of e-banking in India**

According to a study done by IBM Global Services Consulting Group, the cost of providing phone and Internet-based banking services is 25% of what traditional banking costs. Standard Chartered Bank’s Gupta goes so far as to claim that traditional banking is eight times more expensive than online banking, and mobile banking.

Therefore, newer banks are promoting hi-tech banking to reduce their costs. Some banks are entirely virtual, and immensely successful at that, ING Direct being the best example. When the ING Group decided to start retail banking operations outside the Netherlands (not yet in India though), it opted for the direct banking route instead of building or buying branch networks. Twelve years on, ING Direct has 17.5 million customers in nine countries.

While purely virtual banks may be a pipe dream in the Indian context, at least for a long time, nobody is denying the need to adopt e-banking channels side-by-side with branch expansion. Public sector banks, traditionally slow in adopting new technology, too are in sync with the time. Says Jagmandir Singh, a branch manager with SBI, “Today there is no business left for which you will have to come to the branch. About 60% of our customers in urban areas prefer to bank from home.”

**Internet Banking – Financial melt down**

*Dr D Subbarao,* RBI Governor has listed major challenges facing the banking system in the country, particularly in the wake of the global financial crisis. According to him, the global financial situation continues to be uncertain and unsettled. What started off as a sub-prime crisis in the US housing mortgage sector has turned successively into a global banking crisis, global financial crisis and now a global economic crisis.

The government will have to instill confidence in masses to encourage bank deposits. Banks should open more branches all over India especially in Western parts of India. Information Technology (IT) solutions should be explored for providing a back bone of credit information, customer information apart from facilitating more efficient credit delivery and reducing cost of payments and remittances.

**Conclusion**

Even though Net banking is favorable for the present era, banks have a customer profile that will take time to adapt to new technology. The problem is also at the supply side. Even as new private banks embrace technology to reduce costs, the staff of many PSU banks tends to resist change. But these are temporary glitches. So in this global economic melt down, for the survival of the banking industry, adopting the technology solutions like e-banking /Internet banking is a must and without which the banks cannot survive.
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