

E-Banking : Problems and Prospects

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Abstract

The e-banking constitutes an electronic alternative network of payments and benefit of services. The need of creation of electronic alternative channels has been distinguished well in advance by the foreign banking organizations, which relied mainly on the outburst that was observed in the use of internet. The benefits are many, both for the customers and for the banks. The banks that are activated in the Internet are susceptible mainly to the systematic, law part and to the reputational risk and the customers of the electronic banking channel are puzzled concerning to the subject of safety of their transactions and personal data. The aim of this report is, not only to analyze the meaning of electronic banking and to present all the alternative providing banking service networks, but also to focus on the advantages and on the risks that the growth of electronic banking has brought about.

Keywords

E-Banking, ATM, Internet Security

I. Introduction

The advent of E-Business accompanied with technological innovations and globalization is constantly propelling the businesses organization to redefine their business operations in terms of value chain reengineering and restructuring business models. Likely, the financial sector is metamorphosing under the impact of competitive, regulatory and technological forces. Financial institutions especially the banking sector is currently in a transition phase. The banks have put themselves in the World Wide Web to take advantage of the internet's power and reach, to cope with the accelerating pace of change of business environment. The famous quote by Bill Gates that banking is vital to a healthy economy, but banks themselves are not, highlights the crucial nature of the electronic forces that are affecting banks more than any other financial service provider group. This transition of business operations by banks have crated new mode of operation called E-Banking.

E-banking is the banking of new era. The term Internet Banking or E-Banking Internet both are used as supplement. Making banking products and other services available to wholesale and retail customers, through an electronic distribution channel is called e-banking. In other words E-Banking refers to the banking operations, which is done over World Wide Web. E-banking is the outcome of technological innovations and competition. In fact, banks have been using electronic and telecommunication networks for delivering a wide range of value added products and services. The devices have been telephone, personal computers including Automated Teller Machines (ATM). The delivery channels have been direct dial up connections, private and public networks. To this newer edition of e-banking are being added e.g. Internet banking and mobile banking.

The use of ATM's lead to the concept of 'anywhere' and 'anytime' banking. Through the use of ATM cards, one can operate his bank account to withdraw money from any of bank's ATM installed or available at the nearest site. This had broken down the time and space barriers. The new banks are providing some of the services exclusively through ATM's.

The growing popularity of personal computers, easy access to internet and world wide web (WWW), has increased the use of internet by banks as a channel for receiving instructions and also delivering their pros\ducts and services to the customers., This is generally referred to as 'Internet banking' or I-banking or Net Banking. This is one of the newer forms e-banking which is gaining popularity. The other popular name for e-banking is on line banking.

- A. Indian Scene: internet banking has gained wide acceptance internationally. In India also the things are changing fast. India is on the threshold of a major banking revolution with the introduction of 'Net-banking'. In year 2002, only a dozen or so banks are providing services at different levels. However, almost double those numbers are ready to make entry. Others may be compelled to follow.
- B. Future Scene in India: The Indian banks lag far behind the international banks in providing online banking. In fact, this is not possible without creating sufficient infrastructure or presence of sufficient number of users. The experience of ICICI Bank Ltd. and HDFC Bank Ltd. shows that the number of transactions carried out on the Net are very limited.

No matter where online banking comes from or where it is today, it is most certainly here to stay. As a tool of modern living and as a lifestyle aid, it is absolutely indispensable. The fact is that many services that are now being offered with online banking are almost impossible to avail of in regular banking. This holds even truer for developments that the future of online banking will bring.

Judging by its current popularity and rate of implementation, online banking will increase in scope and user base in the future. Individuals and businesses that have refused to adopt it as a commercial tool before now will not really be left with much choice. As things stand now, using conventional methods of business inquiry, confirmation, order-placement and bill payment is retrograde at best. The speed (and reduced manpower) with which the same activities can be done online leaves the traditional methods completely in the shade. The same holds true for normal vs. online business-related banking.

In a domestic setting, too, shopping has been and will continue to be revolutionized by the Internet option. Payments for goods bought online will almost always be done via a bank-related credit card or direct deduction from a bank account.

However, traditional biases against online banking are not going to be overcome entirely by hard facts and figures in its favor. The rate at which this sector of banking will grow will depend on how many user-friendly facilities are incorporated the additional facilities that will be added and the way the concept is packaged for the general public.

It is unfortunately a fact that banks and their customers have rarely agreed on what is a useful facility and what isn't. A lot of market research and customer polling will be required before the gap between what is needed in banking and what is available is filled. When that finally happens, the final frontier of online banking will indeed be explored.

II. Steps for popularizing e-banking

Department of telecommunication is making additional bandwidth available. Steps have been initiated to appoint Certification Authority. As Chief Vigilance Commissioner is insisting on more computerization and Credit Information Bureau is proposed to be set up, this will help I-banking. The payment gateways being created by ICICI bank and HDFC bank will give boost to I-banking. The RBI has set up a group to examine various issues regarding I-banking and technology. This will help in creating the right kind of infrastructure.

A. Internet Banking in India – Guidelines

Reserve Bank of India had set up a 'Working Group on Internet Banking' to examine different aspects of Internet Banking (I-banking). The Group had focused on three major areas of I-banking, i.e. (i) technology and security issues, (ii) legal issues and (iii) regulatory and supervisory issues. RBI has accepted the recommendations of the Group to be implemented in a phased manner. Accordingly, the following guidelines are issued for implementation by banks. Banks are also advised that they may be guided by the original report, for a detailed guidance on different issues.

III. Technology and Security Standards

Banks should designate a network and database administrator with clearly defined roles as indicated in the Group's report. Banks should have a security policy duly approved by the Board of Directors. There should be a segregation of duty of Security Officer / Group dealing exclusively with information systems security and Information Technology Division which actually implements the computer systems. Further, Information Systems Auditor will audit the information systems. Banks should introduce logical access controls to data, systems, application software, utilities, telecommunication lines, libraries, system software, etc. Logical access control techniques may include user-ids, passwords, smart cards or other biometric technologies. At the minimum, banks should use the proxy server type of firewall so that there is no direct connection between the Internet and the bank's system. It facilitates a high level of control and in-depth monitoring using logging and auditing tools. For sensitive systems, a stateful inspection firewall is recommended which thoroughly inspects all packets of information, and past and present transactions are compared. These generally include a real time security alert. All the systems supporting dial up services through modem on the same LAN as the application server should be isolated to prevent intrusions into the network as this may bypass the proxy server.

It is also recommended that all unnecessary services on the application server such as FTP (File Transfer Protocol), telnet should be disabled. The application server should be isolated from the e-mail server. Physical access controls should be strictly enforced. Physical security should cover all the information systems and sites where they are housed, both against internal and external threats. Banks should have proper infrastructure and schedules for backing up data. The backed-up data should be periodically tested to ensure recovery without loss of transactions in a time frame as given out in the bank's security policy. Business continuity should be ensured by setting up disaster recovery sites. These facilities should also be tested periodically.

IV. Legal Issues

Considering the legal position prevalent, there is an obligation on the part of banks not only to establish the identity but also to make enquiries about integrity and reputation of the prospective customer. Therefore, even though request for opening account can be accepted over Internet, accounts should be opened only after proper introduction and physical verification of the identity of the customer.

From a legal perspective, security procedure adopted by banks for authenticating users needs to be recognized by law as a substitute for signature. In India, the Information Technology Act, 2000, in Section 3(2) provides for a particular technology (viz., the asymmetric crypto system and hash function) as a means of authenticating electronic record. Any other method used by banks for authentication should be recognized as a source of legal risk.

In Internet banking scenario there is very little scope for the banks to act on stop-payment instructions from the customers. Hence, banks should clearly notify to the customers the timeframe and the circumstances in which any stop-payment instructions could be accepted.

V. Regulatory and Supervisory Issues

As recommended by the Group, the existing regulatory framework over banks will be extended to Internet banking also. In this regard, it is advised that:

Only such banks which are licensed and supervised in India and have a physical presence in India will be permitted to offer Internet banking products to residents of India. Thus, both banks and virtual banks incorporated outside the country and having no physical presence in India will not, for the present, be permitted to offer Internet banking services to Indian residents.

The products should be restricted to account holders only and should not be offered in other jurisdictions.

The services should only include local currency products.

The 'in-out' scenario where customers in cross border jurisdictions are offered banking services by Indian banks (or branches of foreign banks in India) and the 'out-in' scenario where Indian residents are offered banking services by banks operating in cross-border jurisdictions are generally not permitted and this approach will apply to Internet banking also. The existing exceptions for limited purposes under FEMA i.e. where resident Indians have been permitted to continue to maintain their accounts with overseas banks etc., will, however, be permitted.

Overseas branches of Indian banks will be permitted to offer Internet banking services to their overseas customers subject to their satisfying, in addition to the host supervisor, the home supervisor.

A. Risks

e-banking poses some different risks as compared to the traditional banking. These risks are more pronounced in the case of Internet banking. Firstly, the risk of technological changes has to be carefully watched. This is essential to update technologies and remain cost effective and customer friendly.

The technologies are generally obtained from outside parties. The banks have to be careful about risks involved in such agreements. The security is an important area of risk. In fact it will be very crucial for the expansion of Net Banking. Another important area will emerge out of cross-border implications as

'Net Banking' breaks the geographical boundaries. Imposing regularity conditions on such transactions will be a difficult task.

B. Security Issues

While making online payments or transferring money from one account to another, the online bankers are always concerned about the hackers and anti-social elements. Hacking enables the unethical hackers to penetrate the accounts of online bankers, and spend their money. Availability of confidential information which is just secured by a user name and password makes it vulnerable to such threats. Most of the banks try to make their sites secured by implementing latest network security software. However, there have been plenty of cases in which web surfers were accidentally exposed to the financial details of online bankers.. Internet security had a setback when in 2004, Morgan Stanley admitted a serious security flaw in the system of the latest online banking operation. This flaw allowed customers to access account details of other clients.

C. Necessity of the Internet

For availing the benefits of online banking one should have access to the Internet. For this purpose, he should own a desktop, laptop or PDA device, and an Internet connection. This reason limits the usage of online banking, as sometimes it's almost impossible to have an Internet connection, to serve the purpose. One might also face problems if the Internet connectivity breaks down during an ongoing transaction, or if someone eavesdrop his user name and password, while accessing it in a cybercafe.

D. Customer Care Services

While carrying out online transactions there are many instances when the banker might need help of a representative, from the bank. The brick and mortar banks have customer care representatives who are easier to talk to, but in case of online banking, in which the banks provide customer care numbers, the bankers find it difficult to get their problems solved. Sometimes there is a congestion in the network and they have to wait for sometime, in order to talk to the bank's representative at the other end. Once the line is put through, one may either get somebody helpful and knowledgeable or may not, leaving him in a baffled and confused situation. Although online banking involves risk and imposes certain problems, there are many facilities provided by it. To avail these benefits, it is important for one to educate himself about the risks, and the steps he can take to protect his financial information. It is also necessary to understand the rights and responsibilities as an online banking consumer, in order to make a difference to one's own financial well-being.

E. Technical difficulties

Sometimes online banking Websites go down. When this happens, there's no backup branch that you can go to – and the phone lines will be clogged. To protect yourself, always keep a local bank or credit union account open with some emergency cash so you won't be penniless while they fix the problem.

F. Security Precautions

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.

VI. Conclusion

E-banking offers a higher level of convenience for managing one's finances even from one's bedroom. However, it continues to present challenges to the financial security and personal privacy. Many people have had their account details compromised, as a result of online banking. Thus, if one is going to use it for financial transactions, he should be aware of the risks involved. Awareness of the risks and problems enables him to take precautions for a more secured online banking experience.



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