

E-COMMERCE : BENEFITS AND CHALLENGES IN INDIAN BANKING SECTOR

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ABSTRACT

Electronic Commerce (E-Commerce) is where business transactions ensue through telecommunications networks, particularly with the help of Internet. E- Commerce has been the emerging business strategy in the era of globalization, with the help of E-commerce manager can see all the affairs of business from one desk and can make quick decisions. E-commerce's most significant impact is on the sectors that are primarily transmit information in (postal service, communications, radio and TV) and those that produce it (finance, entertainment, travel agents or stock brokers).After globalization, E-business has been increasingly become a necessary component of business strategy and a strong catalyst for economic development. E-banking has become popular because of its convenience and flexibility, and also transaction related benefits like speed, efficiency, accessibility, etc. The greatest advantage of E- commerce is that it connects people within a very short span of time from any part of the world. Allow people to enjoy, access products, services, information and other people which otherwise would not be so easily available to them. Banks are the back bone of every country's economy and help in speedy transactions which were not possible before the introduction of E-commerce. In this paper we show the benefits and challenges in the Indian banking sector through E-commerce.

Keywords: - E-Commerce, Indian Banking Sector, Benefits & challenges.

INTRODUCTION

'Electronic commerce is sharing business information, maintaining business relationships and conducting business transactions by means of telecommunications networks'. (Vladimir Zwass 2001) E-Commerce is one of the most important facets of the Internet to have emerged in the recent times. E-commerce or electronic commerce involves carrying out business over the Internet with the assistance of computers, which are linked to each other forming a network. To be specific ecommerce would be buying and selling of goods and services and transfer of funds through digital communications.

AN OVERVIEW OF INTERNET USAGE IN INDIA

The state-owned Videsh Sanchar Nigam Limited (VSNL) launched Internet Services in India in August 1995. For the first four years, VSNL was the sole provider of Internet Services in the Country. In the first years, broadband usage in India was growing 20% per month, according to the Internet Service Providers Association of India (ISPAI). Thanks to the progress in the penetration of ICT and especially, the Broadband Policy announced in 1995, the term "broadband" entered the mass lexicon and most Internet users were aware of faster Internet speeds. In November 1998, the Government ended VSNL's monopoly and allowed provisioning of Internet Services by Private Operators. The Terms and Conditions of the ISP's License were unusually liberal with no License Fee and allowed unlimited number of players. ISPs could set their own tariffs and even their own International Gateways. According to Internet and Mobile Association of India (IAMAI), a trade association that presents the online content and advertising, e-commerce and mobile content and advertising industry, Indian citizens use Internet for a number of activities including e-mail and IM - 98%, job search - 51%, e-banking - 32%, bill payment -18%, stock trading - 15%, and matrimonial search - 15%.(See Fig 1)

BENEFITS OF E-COMMERCE

- Ecommerce allows people to carry out businesses without the barriers of time or distance. One can log on to the Internet at any point of time, be it day or night and purchase or sell anything one desires at a single click of the mouse.
- The direct cost-of-sale for an order taken from a web site is lower than through traditional means (retail, paper based), as there is no human interaction during the on-line electronic purchase order process. Also, electronic selling virtually eliminates processing errors, as well as being faster and more convenient for the visitor.
- Ecommerce is ideal for niche products. Customers for such products are usually few. But in the vast market place i.e. the Internet, even niche products could generate viable volumes.
- Another important benefit of Ecommerce is that it is the cheapest means of doing business.
- The day-to-day pressures of the marketplace have played their part in reducing the opportunities for companies to invest in improving their competitive position. A mature market, increased competitions have all reduced the amount of money available to invest. If the selling price cannot be increased and the manufactured cost cannot be decreased then the difference can be in the way the business is carried out. Ecommerce has provided the solution by decimating the costs, which are incurred.
- From the buyer's perspective also ecommerce offers a lot of tangible advantages.
 1. Reduction in buyer's sorting out time.
 2. Better buyer decisions
 3. Less time is spent in resolving invoice and order discrepancies.
 4. Increased opportunities for buying alternative products.
- The strategic benefit of making a business 'ecommerce enabled', is that it helps reduce the delivery time, labour cost and the cost incurred in the following areas:-
 1. Document preparation
 2. Error detection and correction
 3. Reconciliation
 4. Mail preparation
 5. Telephone calling
 6. Credit card machines
 7. Data entry
 8. Overtime
 9. Supervision expenses
- Operational benefits of e commerce include reducing both the time and personnel required to complete business processes, and reducing strain on other resources. It's because of all these advantages that one can harness the power of ecommerce and convert a business to e-business by using powerful turnkey ecommerce solutions made available by e-business solution providers.

E-COMMERCE IN BANKING

E-Banking (Internet Banking) is an e-commerce application which allows the customers to perform any of the virtual banking functions, financial functions online in a protected and secure manner. It involves using the internet for delivery of banking products and services. E-banking function includes BFSI (Banking, Finance, Securities and Insurance). Banking concerns about providing the customers virtual banking functions, where as financial functions include stock broking, payment gateways, mutual funds etc.

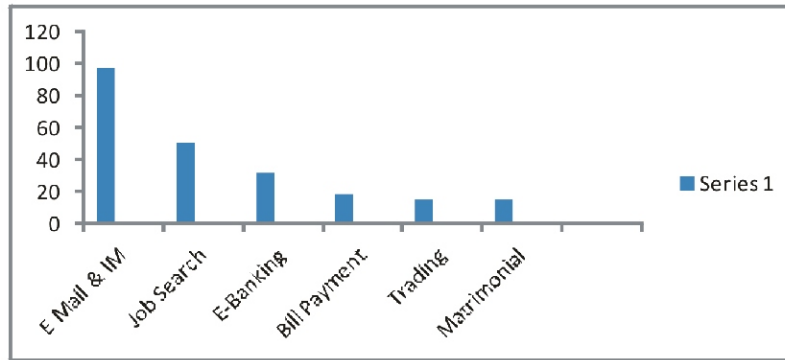


Figure 1.

Source: -www.Internetworldstats.com

According to a report released by Internet and Mobile Association of India (IAMAI) on Ecommerce industry in India, a growth of 47% in the e-commerce market is expected. This growth this principally motivated by the continuous expansion in the online travel industry in India. Online travel industry adds around 76% to the total Ecommerce market today. Other than travel industry, according to IAMAI forecasts, digital downloads and e-tailing segment that includes purchases of electronic items, home and kitchen appliances and personal items such as Apparel and Jewelry will register a growth by 62% to reach Rs 1,100 crores and Rs 2,700 crores respectively by the month December 2011. The Digital downloads segment is expected to grow in Indian Ecommerce market due to the explosion of mobile devices and the services available over the Internet. Financial services which includes online transactions, insurance and online classifieds such as matrimonial and jobs are also likely to grow in future. The whole Ecommerce market stood at Rs 19,688 crores in 2009 and in 2010 it touched Rs 31,598 crores. The e-commerce industry is expected to reach at Rs 46,520 crores by end of the year, 2011, according to a statement released by the Internet and mobile Association of India (IAMAI). Owing to high development in online marketing, the complete Ecommerce industry in India is expected to climb in future. People of India have shown their curiosity and concern both to make online purchases and are actively participating in online business. This ensures the success and bright future of Ecommerce in India. Following are the reasons that guarantee the victory of Ecommerce industry. The future prospect of Ecommerce in India certainly depends on these factors.

Internet Usage and Population Statistics:

1998	1,400,000	1,094,870,677	0.1 %
1999	2,800,000	1,094,870,677	0.3 %
2000	5,500,000	1,094,870,677	0.5 %
2001	7,000,000	1,094,870,677	0.7 %
2002	16,500,000	1,094,870,677	1.6 %
2003	22,500,000	1,094,870,677	2.1 %
2004	39,200,000	1,094,870,677	3.6 %
2005	50,600,000	1,112,225,812	4.5 %
2006	40,000,000	1,112,225,812	3.6 %
2007	42,000,000	1,129,667,528	3.7 %
2009	81,000,000	1,156,897,766	7.0 %
2010	100,000,000	1,173,108,018	8.5 %

Source: - <http://www.internetworldstats.com/asia/in.htm>

E-Banking includes

- Bill payment service
- Querying the account balance
- Applying for/claiming Insurance
- Shopping
- Credit Cards
- Smart Cards
- Cheques Truncation Payment System
- Internet Banking
- Fund transfers
- Credit card customers
- Investment through Internet Banking
- Automated Teller Machines,
- Debit Cards
- Electronic Funds Transfer (EFT) System
- Mobile Banking
- Telephone Banking

BENEFITS OF E-BANKING

- i. Time saving: Online banking, undoubtedly, saves time by allowing direct transaction from office, home or any place. The medium relieves from visiting the bank and waiting in a queue and provides a mental and physical relief from the unwanted rushes in the bank.
- ii. Convenience: The biggest advantage that online banking brings to the table is its convenience. We can pay phone and electricity bills via online banking without rushing to the utility company's bill collection outlets. It helps you avoid delayed payments.
- iii. 24x7 services: Online banking transactions can be performed at any time and from anywhere.
- iv. Eco-friendly Process: Online banking is an eco-friendly process as it does not consume volumes of paper like conventional banking modes and hence helps protect the environment.
- v. Easy Access: To perform online banking tasks, all you need is a basic computer system connected to the Web.
- vi. Faster Banking: Online banking is a faster way of performing banking functions. Whether you buy goods online, pay bills or transfer money, it gets done in realtime and within moments.
- vii. Cost Saving: The process is very cost-effective. It rids businesses of the practice of deputing people to specially pay company bills, who waste hours making the rounds of the banks to perform all the firm's banking-related functions.
- viii. Other Benefits: Online banking has several other benefits. Users can shop online, buy tickets, make advanced bookings, etc.

CHALLENGES IN E-BANKING

The information technology in itself is not a solution and it has to be effectively utilized. The concept of e-banking cannot work unless and until have a centralized body or institution, which can formulate guidelines, regulate, and monitor effectively the functioning of Internet banking. The most important requirement for the successful working of Internet banking is the adoption of the best security methods. This presupposes the existence of a uniform and the best available technological devices and methods to protect electronic banking transactions. In order for computerization to take care of the emerging needs, the recommendations of the Committee on Technology Upgradation in the Banking Sector (1999) may be considered. These are:

- (1) Need for standardization of hardware, operating systems, system software, and application software to facilitate interconnectivity of systems across branches
- (2) Need for high levels of security
- (3) Communication and networking - use of networks which would facilitate centralized databases and distributed processing
- (4) Technology plan with periodical upgradation

- (5) Business process re-engineering
- (6) Address the issue of human relations in a computerized environment
- (7) Sharing of technology experiences
- (8) Payment systems which use information technology tools. The Reserve Bank of India has played a lead role in this sphere of activity - with the introduction of cheque clearing using the MICR (Magnetic Ink Character Recognition) technology in the late eighties.

The Reserve Bank of India constituted a "Working Group on Internet Banking" which focused on three major areas of E-Banking.

(i) Technology and security issues

(ii) Legal issues

(iii) Regulatory and supervisory issues

These areas are selected in such a manner that the problems faced by banks and their customers can be minimized to the maximum possible extent. The Group recommended certain guidelines for the smooth and proper working of Internet banking. These centralized guidelines would bring uniformity in the selection and adoption of security measures, with special emphasis on a uniform procedure. The security of Internet banking transactions would not be endangered if these security mechanisms are adopted. This is because the success of Internet banking ultimately depends upon a uniform, secure and safe technological base, with the most advanced features. The RBI has accepted the recommendations of the Group, to be implemented in a phased manner.

The RBI has issued the following guidelines through a Circular for implementation by banks in this regard:

(i) Technology and Security Issues: The technology and security issues are of prime importance as the entire base of Internet banking rests on it. If the technology and security standards are inadequate, then Internet banking will not provide the desired results and will collapse ultimately. The RBI realizing this crucial requirement issued the following guidelines in this regard:

- a. Banks should designate a network and database administrator with clearly defined roles.
- b. 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.
- c. 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.
- d. 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.
- e. 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.
- f. All computer accesses, including messages received, should be logged. Security violations (suspected or attempted) should be reported and follow up action taken should be kept in mind while framing future policy.
- g. All applications of banks should have proper record keeping facilities for legal purposes. It may be necessary to keep all received and sent messages both in encrypted and decrypted form.

(ii) **Legal Issues:** The adoption and switch over to Internet banking will also raise certain legal issues and disputes in the future which have to be anticipated and remedial measures for the same need to be adopted. Further, these issues should also be compatible with the existing laws, particularly the Information Technology Act, 2000. The RBI, keeping in mind these factors, has issued the following guideline

- a. 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.
- b. 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, provides for a particular technology as a means of authenticating electronic record.
- c. Under the present regime there is an obligation on banks to maintain secrecy and confidentiality of customers' accounts. In the Internet banking scenario, the risk of banks not meeting the above obligation is high on account of several factors. Despite all reasonable precautions, banks may be exposed to enhanced risk of liability to customers on account of breach of secrecy, denial of service etc., because of hacking/ other technological failures.
- d. 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.
- e. The Consumer Protection Act, 1986 defines the rights of consumers in India and is applicable to banking services as well. Currently, the rights and liabilities of customers availing of Internet banking services are being determined by bilateral agreements between the banks and customers

(iii) **Regulatory and Supervisory Issues:** The banks operating in real space are regulated and supervised by the RBI on regular basis. This regulation and supervision is required to be extended to Internet banking as well. Thus, the RBI has issued the following guidelines in this regard:

- a. 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.
- b. The products should be restricted to account holders only and should not be offered in other jurisdictions.
- c. The services should only include local currency products.
- d. 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.

CONCLUSION

The E-banking in India will have its own advantages to both the banks and the customers. As India second largest populous country and the $\frac{3}{4}$ population lives in rural areas and there is a proper need to divert the efforts the entire areas city as well as villages. The use of information technology will not only reduce the costs of operation but also would be effective, easy to maintain, speedier and highly competitive. The banks cannot remain unapproachable from this perception of E-banking, and they should bring appropriate changes to meet the necessities and challenges of E-banking. The challenges posed by the Internet banking are mostly of procedural nature, which can be easily counterbalanced by adopting suitable technological and security measures. The domestic standards of banking have to

be in conformity with the well-known international standards and in the near future international dealings from India would be a reality, which are presently not liberal enough. There can be no doubt about the huge potential and open opportunities offered by advances in technology. However, there are pre-requisites and preparations, which have to be made before the full benefits of the technology can be harvested.

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