

SWOT Analysis of Electronic Banking in India

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**Abstract**

*Banking sector is the building block of an economy and plays a pivotal role in the financial structure of any nation. It is the most crucial financial intermediary as it connects surplus and deficit economic agents. Moreover, with the advent of technological revolution, the banking today is redefined and Re-engineered to provide more sophisticated, innovative and cost-effective products to their customers such as ATMs, tele-banking, Mobile banking, Internet Banking, Core Banking Solutions, Electronic Fund transfers etc. E-banking is an extension of conventional banking system which uses an electronic delivery channel for exchange of banking products and services. With continuous product and process developments evolving rapidly, more products and services may soon become the order of the day. The arrival of computerised technology in Indian Banking scenario dates back to 1990's- the post- reform period. With the adoption of financial sector reforms as suggested by Narasimham Committee, the banking sector has undergone major overhaul and several initiatives have been taken by the Reserve bank of India, the private players and the government to develop e-banking in India. Further, The Government of India enacted the Information Technology Act, 2000 to provide legal recognition to transactions occurring over electronic media and other forms of E-commerce. Following these efforts towards liberalisation, many foreign banks were attracted to India, thereby opening up new markets and innovative products. Today, Internet banking has become the essence of the Banks, a strategic tool to transform banking business with a pool of banking services and products accessible 24\*7 to customers. This paper aims to analyse the current scenario of Internet banking in India and the major risk areas and challenges faced by banking sector with the usage of Information technology. It also tries to emphasise on the strengths and weaknesses of the Internet banking and the future plans that could be adopted to overcome the weaknesses.*

**Key Words:** Core Banking Solutions, cost-effective products and services, financial sector reforms, Internet Banking, IT Act, strategic tool, technological revolution

## Introduction

Financial system in India is majorly dominated by banks, accounting for over 60% of the total assets. Before the adoption of liberalisation, privatisation and globalisation policies by Indian government in 1990's, the banking sector sickened with lack of competition, low capital base, low productivity and high intermediation cost. There was minimal role of technology and poor quality of service. The thrust of the 1990's reforms was to create an efficient, stable and competitive financial sector by removal of structural bottlenecks, relaxation of restrictions to improve trade, more transparency, creating liquidity and efficient price discovery process, technological upgradation, etc. in order to align the Indian standards with international best practices. Thus, Indian banking sector was exposed to the world market after financial sector reforms in 1991.

Indian banking industry has witnessed tremendous developments due to sweeping changes that are taking place in the information technology. According to an Industry report, it has the potential to become the 5<sup>th</sup> largest banking industry in the world by 2020. The last few decades have changed the face of banking industry. It began with computerization of a few core functions and departments in principal branches and progressed towards achieving 100% branch automation. Then there was arrival of network based operations which led to 'interbank connectivity'. Furthermore, deployment of ATMs and the adoption of Core Banking Solutions brought about user friendly technology for customers which radically transformed the way banking was done in India both by bankers and customers. The overwhelming innovations in the form of new delivery channels like internet banking, payments and settlement systems such as RTGS, NEFT, pre-paid cards issued by non-banking entities, mobile banking started gaining worldwide popularity. India also became a member of the Basel Committee of Payment Settlement systems.

### Electronic Banking defined...

E-banking can be defined as the automated and effective delivery of new and conventional banking products and services directly to customers through electronic, interactive communication channels. It includes the systems that enable financial institutions, individual customers or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. It encompasses the wide technological innovations that have taken place in banking from transferring funds online, making online payments for almost any service, managing account balances to making railway, airway and hotel bookings online. It has removed the barriers of 'Brick and mortar' model of banking.

### Literature Review

**Jain, Megha & Popli, G.S.** in their article "**Role of Information Technology in the development of Banking Sector in India**", have tried to analyse the banking innovations and the extent of computerization in the public sector banks of India. They have also identified certain challenges being faced in the implementation of IT solutions in various spheres of banking. Their study shows that 97.8 percent were fully computerized at the end of March 2010 whereas all branches of SBI were fully computerized. It also reveals the increase in the spread of NEFT to 86,449 branches and RTGS to 84,638 branches as at the end of May 2012. As at end-March 2012, 49 banks with a customer base of 13 million provided mobile banking service in India. Also noted that during the year 2011-12, 25.6 million mobile banking transactions valued at 18.2 billion were observed. It proves Indian Banking

industry has come a long way providing greater convenience, transparency, new segments and improved bank-customer relationship. However, having discussed the blessings of Internet banking we also need to note the threats and challenges faced by E-banking. Such as, the potential for frauds, money laundering and system failure needs to be ruled out which requires huge investments by government.

**Lal, Roshan & Saluja, Rajni, E-Banking: The Indian Scenario.** The authors have tried to address the technological concerns in banking. Their paper begins with the analysis of various reports on trends and progress of banking in India published by RBI mainly on parameters such as ATMs, Computerisation of branches and Retail electronic payment methods. Based on their analysis, they feel special arrangements could be made by banks to ensure 100% data security online for which technically trained staff and experts need to be employed. Additionally, they noted Indian banks in spite of making sincere efforts in installation of electronic delivery channels and technology into the system, still need to make the masses in the system fully aware of the concept. More and more seminars and workshops on the usage of e-banking especially for those who are ATM or computer illiterate should be organised. Bank employees should be given adequate training in the field of e-banking to enhance efficiency and effectiveness of the model.

**Manikyam, K. Ratna, Indian Banking Sector – Challenges and Opportunities,** the paper reviews the impact of liberalization, privatization & globalization on banks and analysed the resulting opportunities and challenges. It entails a detailed summary of Indian banking structure based on secondary data collected from journals, books, periodicals etc. Post liberalization era has evidently spread new colours of growth in India, but has simultaneously posed some challenges like high transaction costs, diminishing consumer loyalty, intense competition from foreign banks, privacy & safety of online data and transactions. The global level competition has compelled the banks to rethink their policies and strategies and timely upgrade technology to meet demands. It also talks about building knowledge-driven, learning organizations in this rapidly evolving operational environment.

**Sureshchandar G.S., Rajendran Chandrasekharan, Anantharaman R.N., "Customer perceptions of service quality in the banking sector of a developing economy: a critical analysis":** This paper focuses on investigating the factors affecting customers' perception of service quality of banks in India. It has first divided the data into three groups of banks and made comparison on the basis of service quality factors from customers' perception. The results show a great amount of variation in the level of service quality offered by the three groups of banks. It has identified the factors that discriminate the three groups of banks. Customers in developing economies seem to keep the "technological factors" of services such as core service and systematization of the service delivery as the yardstick in differentiating good and bad service while the "human factors" seem to play a lesser role in discriminating the three groups of banks. The service quality indices with respect to the three groups and the Indian banking industry as whole, offer interesting information on the level of service quality delivered by banks in India.

#### **Research Methodology**

The present study is based on the secondary data on Indian Banking Sector collected from different journals, research articles, periodicals, websites and published data from various issues of RBI, Indian Banks' association. Various studies on this subject available on internet have also been referred in this paper.

### Current Indian Scene: Findings

The Reserve Bank of India has divided the internet banking products in India into 3 categories which are as follows:

- **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. No customer identification is done.
- **Electronic Information Transfer System** - This system entails provision of customer- specific information in the form of account balances, transaction details, and statement of accounts. Customer identification and authentication is required.
- **Fully Electronic Transactional System** - It allows bi-directional capabilities. Customers can submit transactions for online update. This system requires high degree of security and control. It comprises technology covering computerization, networking and security, inter-bank payment gateway and legal infrastructure.

With around 90 scheduled commercial banks and over 90,000 branches operating in India currently, there are umpteen e-banking products and services which banks have continuously strived to bring for the ease of customers. Figure 1 included below depicts the service tree of e-banking. Some of them have been listed below:

- Automated Teller Machines (ATMs)
- Internet Banking
- Electronic Fund Transfer
- Mobile Banking/ Telebanking
- Electronic Clearing Services
- Smart Cards
- Door Step Banking
- Electronic Clearing Cards
- Online payments
- NEFT/RTGS
- **Electronic Payment Services** –  
E Cheques
- E-tax
- E-ticketing
- Demat account
- Account Opening Request
- Account statement on emails, etc.

E-banking services at a glance:

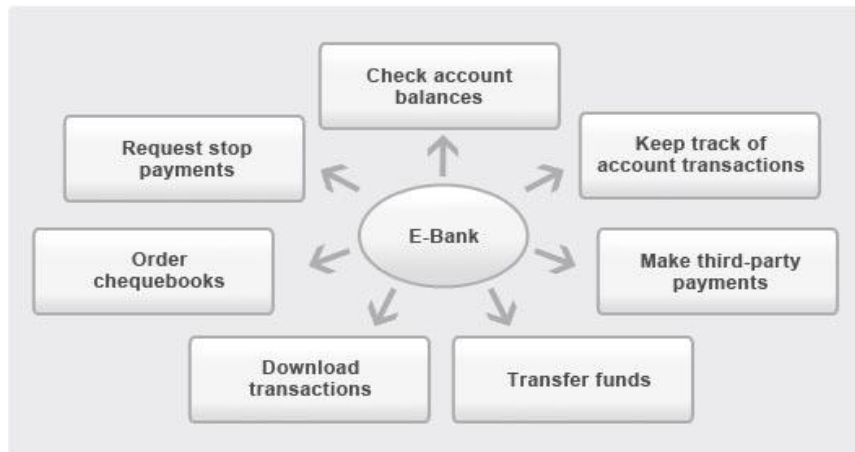


Figure 1

- India is set to become the 2<sup>nd</sup> largest internet user base surpassing US. The country has grown 30% yearly on an average, according to a report by the Internet and Mobile Association of India (IAMAI) and IMRB International. Subsequently, people tend to transact on internet than triggering the old fashioned offline transaction. The dramatic increase in the smartphone and mobile internet users in India has fuelled the growth of digital payment industry further. Figure 2 presents that out of the total digital payments recorded in 2013, 44% were done through internet banking and the rest with debit or credit cards. 2013 recorded a total of 800 million transactions in India over electronic media.

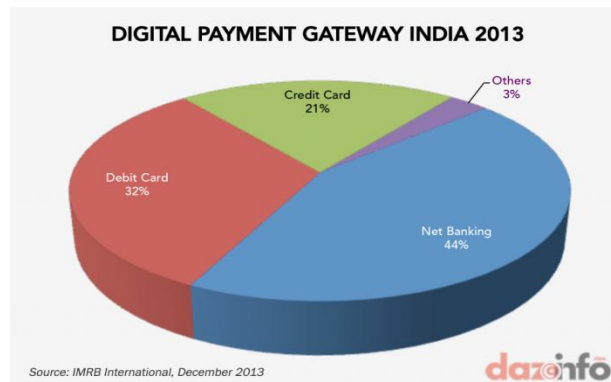


Figure 2: (Source- IMRB International December 2013)

- All the branches of Public sector banks are fully computerised and more than 90% of them are offering Core banking solutions.
- Growth in the number of ATMs across the country: As per the National Payments Corporation of India, the total number of ATMs in India by the end of February 2014 was **155,387**.
- The intermediation cost of the scheduled commercial banks has come down significantly from 2.59% in 1991-92 to 1.71% in 2010-11.
- RTGS volumes registered a remarkable 72 fold increase in volumes from 2005-06 to 2009-10 with an Average Annual Growth Rate of 146.34 per cent.
- The business per employee, as well as the business per branch has increased several folds. Among the several factors which have contributed to these changes, technology ranks high.

- Over the last few years, while the number of customers using the mobile for banking transactions have multiplied and crossed a total of 35 million in 2013-14 (as shown in Figure 3), the cumulative value of the banking transactions by these customer have shot up over 11-folds during the period. According to Reserve Bank of India estimates, there is an incentive for both banks and customers to convert to mobile banking, considering that mobile banking costs 2 per cent of branch banking, 10 per cent of ATM and 50 per cent of internet banking.

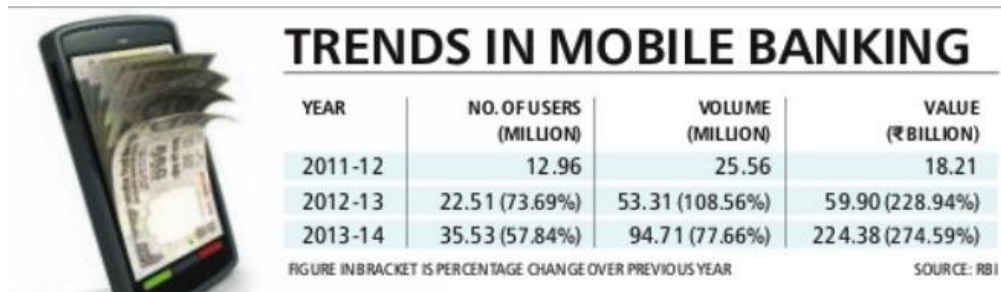


Figure 3: (Source- www.financialexpress.com)

#### SWOT Analysis based on findings:

After attempting, the macro level environmental analysis of Indian Banking Industry, a SWOT analysis of e-banking has been done based on the findings.

#### Strengths:

- It offers superior & user friendly technology
- Anywhere-anytime banking. Further, instant information is available to users as soon as the transaction takes place.
- No paper work and physical handling and storage of paper instruments
- Low cost of online transactions- A Study mentioned that the cost per transaction through a branch was Rs. 66, through Automated Teller Machines was Rs. 22, and through internet was Rs.10, ignoring the extreme variations owing to the investment cost and nature of transactions.
- Competition from private sector and foreign banks has led to creation of more and more innovative products and services such as e-wallet, plastic cards, online transaction history, buying and selling shares/ Mutual funds online, Renewal/ premature closure of FD/ RD, Bills Payment, Convert to EMI, Online loans, Online tax payments and lots more.
- Faster response to customer queries and complaints. Better customer relationship management.
- Improved management, transparency and accountability.
- Improved trade relations across boundaries with easier transfer of funds through net banking.
- Multi-folds growth in the business of banking sector with variety of banking players in the market- public, private, foreign, regional rural, etc. It also establishes healthy competition and promotes better consumer services.
- With development in technology, banks are reaching more and more remote locations in the country allowing access to rural people who earlier did not have convenient access to banks.
- Strong Regulatory Institutional Framework constituting RBI, IT act, 2000, Banking regulations act, etc.



**Weakness**

- Complexity in online transactions. The people who are not tech savvy cannot operate bank accounts online unless they are made aware of the e-banking culture.
- There is a 'digital divide' as the poor are excluded from the use of the internet and so from the financial system.
- The confidentiality and integrity of data and information over internet is still a major concern in India. There has been a rise in the number of cyber crimes registered by CBI recently. Of the total cyber crimes recorded in 2012 around the globe, 56% were from India as per a report of RBI (Figure 4)

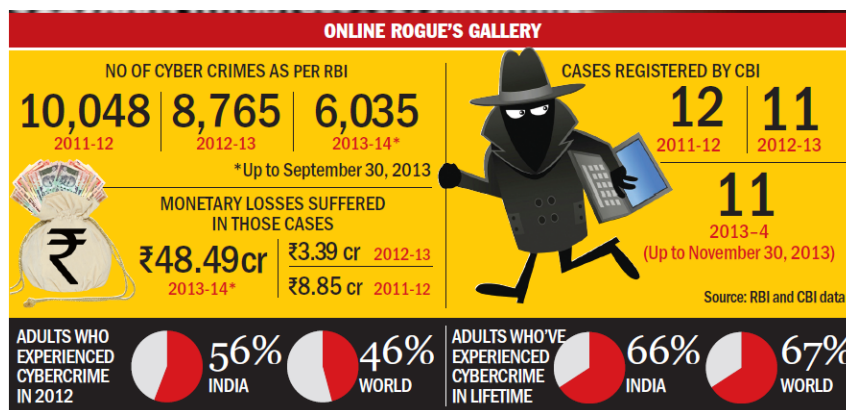


Figure 4: (Source- www.newindianexpress.com)

- The usage of Internet banking is dependent upon the availability of internet which means when the server is down, the whole system is paralysed.
- Lack of physical presence of bankers which at the time of customer grievances proves to be a negative point.
- Ineffective maintenance of technological infrastructure in some branches.
- Still, there are some banking personnel are not adequately trained and equipped to handle e-banking which creates barriers and limitations in the system.

**Opportunities:**

- India is a growing economy with large numbers of savers and investors. It holds immense potential for market expansion.
- One of the biggest opportunities for Indian banking sector is the Indian consumer. With demographic changes over the years, in terms of income levels and rising standards of living, the demand for sophisticated, competitive and retail banking services have risen. Banks need to tap that market by delivering solutions.
- Integration of domestic banks with foreign markets offer countless opportunities to Indian banking sector to get exposure to the world. In this global world, countries seek high quality banking services with operational efficiency. Hugely talented Indian manpower can seek good opportunities across globe. Additionally, it will create employment opportunities for the youth.

- There still lies a large untapped rural market in India which in the coming years, needs to be explored for better reach of the banking sector. That leads to greater “financial inclusion”.
- Better development in areas like Risk management and CRM (Customer Relationship Management).
- Advancement in current IT base to avoid system failures and provide efficient and secure platform for online transactions. Safe and secure payment gateways.
- Financial Inclusion

#### Threats:

- One of the major threats is that it’s not secure all the time. Lately, there have been cases where cyber criminals have tricked users through spam sites, social media, etc. to give out their personal information.
- High transaction costs for banks if their customers do not often transact online because huge investment goes into the setting up of Internet banking systems.
- In the times of fierce competition if the banks do not timely upgrade technology, they will have to face and suffer losses of customers as well as profits.
- The legal and regulatory framework suffers some loopholes which allow criminals to take advantage of the situation. It needs to be more stringent to prevent frauds.
- Lack of customer loyalty
- Proportion of workforce incapable of handling e-banking business results in inefficiency.

#### Conclusion

E-banking is a survival and growth weapon for businesses and is fundamental aspect of the Indian Banking industry. It has removed all barriers across international borders and created a global banking scenario with ease and availability of services online. The efficient use of technology has facilitated accurate and timely management of the increased transaction volumes of banks which comes with larger customer base. Further, the Information Technology Act, 2000 has provided the much needed legal recognition to the creation, transmission and retention of electronic data. The upward surge in the ATMs across the nation, multi folds increase in RTGS/NEFT transactions, rise in the number of E-banking users, all are indicative of the fact that Indian banking industry has largely been successful in catering to the needs of the masses and there is no looking back. In spite of such a blessing Internet banking has proven to be, it is hounded by issues like security theft, phishing attacks, money laundering, etc. which is why customers are cautious of conducting banking transactions over the internet. However, such issues can be addressed by ensuring people are aware of the e-banking model and code of conduct especially in the rural remote areas. For that, government can conduct seminars and workshops organised at mass level and reaching the masses. In addition to that, more funds needs to be invested in ensuring safety and security of personal data with installation of customer identification devices, periodic reviews on compliance with laws, information screening techniques, etc. On the whole, we can conclude that technology alone doesn’t help but intellectual and trained human resources are supposed to handle such tools which will bring performance improvement and give a competitive edge to banks.



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