

## **Evolution of E-banking in India-An empirical analysis**

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### **Abstract**

Traditional banks offer many services to their customers, including accepting customer money deposits, providing various banking services to customers. Indian Banks are using E-channel to deliver their services to its customers. Lower delivering cost, increasing sales and safe and convenience to customers. Delivering services through internet channel is fundamental difference from other channels like branch banking, Internet banking, Telephone banking, ATMs (automated teller machines) and Printing pass book machine. The objectives of paper is to study evolution of E-banking, E-Banking services offered by Indian banks, progress of E-banking and challenges face by Indian banks. The study is secondary based and analytical in nature. The study concluded that more and more customer will use E banking services offered by Indian banks.

**Keywords:** E-banking, Telephone banking, Internet banking and Automated teller machines.

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### **Introduction**

In economic development of country bank play an important role. Bank lend money through loan and advances and collect saving from public to invest in different sector of economy. Purchase and sell of financial product through secondary market like share, debenture. Offer other investment such as fixed deposits to customers. For business customers bank arrange foreign exchange for business transaction. Banks today operates in highly Globalized and competitive environment. To survive in emerging competitive situation banks need to modify their services and upgrade their information technology system. Now more and more people are switching to electronic platforms for executing financial transactions. The wider usage of cell phone and internet connection in mobile, laptop and PC seems to be playing a role in blurring physical boundaries. There are opportunities for banks in tapping newer customer segments.

Electronic channels and products such as ATMs, cards, internet banking and mobile banking are offered along with traditional branch channel. Also introducing real-time gross transfer (RTGS) and national electronic funds transfer (NEFT), this enabled fund transfers among account holders of the same bank as well as inter-bank transfers and offer innovative services and tightens security measures and the increase in awareness of services available.

### **E-Banking**

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 function.

The term "electronic banking" or e-banking covers both computer and telephone banking.

In other words it is said that it is updated "on-line, real time" "The system is updated immediately after every transaction automatically.

E banking is defined as delivery of banking products and services to customers through electronic channels. It does not

involve any physical exchange of money; it's all done electronically from one account to another through internet. E banking includes the systems that enable financial institution customers, individuals or businesses to access accounts any time and from any part of world and do so when you have time and not when the bank is open.

Basel committee on banking supervision (2003) [2]. The definition of electronic banking used in this study is adopted from the Basel committee report which defined it the provision of retail and small value banking products and services through electronic channels as well as a large value electronic payment and other wholesale banking services which are delivered electronically. Such products and services can include deposit taking, lending, account management, the provision of financial device, electronic bill payment, and the provision for other products and services such as electronic money. Jayawardhena and Foley (2000) [7]. Electronic banking services have benefits for both banks and customers. For banks, electronic banking is conceded a strategy weapon; help them to achieve competitive advantage and increase their market share. Furthermore, using electronic services can save the cost of resources, which are needed for traditional banking services.

E-based banking is also known as Cyber banking, home banking, and virtual banking and includes various banking activities that can be conducted from anywhere (Dheenadhyayan 2010) [5].

Electronic banking is a high-order construct, which consists of several distribution channels. It should be noted that electronic banking is a bigger platform than just banking via the Internet. The term electronic banking can be described in many ways. In a very simple form, it can mean the provision of information or services by a bank to its customers, via a computer, television, telephone, or mobile phone (Daniel, 1999) [4].

### **Objectives**

- To understand evolution of E-banking.

- To identify various e-banking services/products adopted by Indian banks. To find advantages of E-Banking to Customers and Banks.
- To study and analyze the progress made by Indian banking industry in adoption of technology.
- To study the challenges faced by Indian banks in adoption of technology and make recommendations to tackle these challenges.

### Methodology

The study is secondary based in analytical in nature. Using unpublished and published article, ongoing academic working paper and internet is used extensively as a source of information.

### Literature Review

R, Karuppusam (Nov 2011) [8]. Reasons for Adopting E-banking Facilities -Saves time, Feel comfortable in using E-banking services, always curious to use new technology, Desire to conduct banking independently, Transaction in E-banking is fast, Adds to prestige and status, Reduce cost of transaction, trustworthy and secure.

Swati, Vishnoi (Dec 2014) [14]. Factors for negative perception towards E-Banking:-Difficulty in Understanding, Unfriendly website, Security, Fear loss of Personal Information, Misuse. Factors for positive perception towards E-Banking:-Speed, Cost Effective and Saves times.

Fozia (Sep 2013) [6]. Age and occupation are the important demographic factors in the banks which have used to measure the perception of the customers on e-banking services.

Kumbhar (2011) [9]. Contact Facilities, System Availability, Fulfilment, Efficiency and Compensation are comparatively less important because these dimensions explain 21.70 percent of variance in customers' satisfaction. Security/Assurance, Responsiveness, Easy to Use, Cost Effectiveness and Compensation are predictors of brand perception in e-banking and Fulfilment, Efficiency, Security/Assurance Responsiveness, Convenience, Cost Effectiveness, Problem Handling and Compensation are predictors of perceived value in e-banking. Aarti Varma (Dec 2013) [13], E-banking has become very important for the survival of bank in the changing banking industry. More efforts should be taken by bank in undertaking advertisement and promotional campaign so that greater awareness among consumer is created.

### Evolution of E-Banking in India

Since the late 1990s E-Banking has developed from virtual insignificance to tens of millions of users worldwide (OECD, 2001) [3]. In India e-banking is recent origin. Only in the early 1990s there has been start of non-branch banking services. Opening up of economy in 1991 marked the entry of foreign banks. They brought new technology with them. Banking products became more and more competitive. Need for differentiation of products and services was felt. The good old manual systems on which Indian Banking depended upon for centuries seem to have no place today. The credit of launching internet banking in India goes to ICICI Bank. Citibank and HDFC Bank followed with internet banking services in 1999. Several initiatives have been taken by the Government of India as well as the Reserve Bank to facilitate the development of e-banking in India. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000 which provided legal recognition to electronic transactions and other means of

electronic commerce. The Reserve Bank is monitoring and reviewing the legal and other requirements of e-banking on a continuous basis to ensure that e-banking would develop on sound lines and e-banking related challenges would not pose a threat to financial stability.

A high level Committee under chairmanship of Dr. K.C. Chakrabarty and members from IIT, IIM, IDRBT, Banks and the Reserve Bank prepared the "IT Vision Document- 2011-17", for the Reserve Bank and banks which provides an indicative road map for enhanced usage of IT in the banking sector.

To cope with the pressure of growing competition, Indian commercial banks have adopted several initiatives and e-banking is one of them. The competition has been especially tough for the public sector banks, as the newly established private sector and foreign banks are leaders in the adoption of e-banking.

### Services Offers in Electronic Banking

- Internet Banking
- Mobile Banking
- Telephone Banking
- Automated teller machines (ATMs)
- Debit card/ credit card
- Electronic Fund Transfer

### Level of Services Offered in E-Banking

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

- 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.
- 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.
- 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.

### Advantages to Banks

- Very low setup cost.
- Capability to cater to a very large customer base.
- Saves a lot of operational costs. Adds to the baseline.

- Banks can offer a lot of personalized services to their customers.
- Reduction of burden on branch banking.
- On-line banking is effective medium of promotion of various schemes of bank, a marketing tool indeed.
- Reducing chance of fraud and misappropriation.

#### **Advantages to Customer**

- It is convenient.
- It isn't bound by operational timings.
- There are no geographical barriers.
- Services can be offered at minimal cost.
- Check your transactions at any time of the day, and as many times as you want to.
- Getting quarterly statements from the bank, transferring funds to outstation, and other such activities can be done free of charge through online banking.
- On-line purchase of goods and services

#### **Progress of E-Banking in India**

In India, Reserve Bank of India outlined the mission to ensure that payment and settlement systems are safe, efficient, interoperable, authorized, accessible, inclusive and compliant with international standards. The Vision is to proactively encourage electronic payment system for ushering in a less cash society in India. Regulation is keen to promote innovation and competition with an intention to help payment system achieve international standards. Various initiatives by Reserve Bank of India, in mid-eighties and early-nineties, resulted in offering technology based solutions. The need evolved to provide cost effective alternative system.

Electronic Clearing Service (ECS) was launched in 1990s to cater to bulk and repetitive payments. By September 2008, a new avatar in the form of National Electronic Clearing cell was launched to handle multiple credits to beneficiary accounts. National Electronic Clearing Service (NECS) rides on core banking solution of member banks. The retail funds transfer system was introduced in 1990s to allow electronic transfer of fund for people to people payment. In November 2005, a robust system was launched to allow one to one funds transfer requirement of individuals and corporate. Prepaid instruments allow transaction for goods and services against the value stored on payment instrument. It may be in the form of smart cards, magnetic stripe cards, internet wallets, mobile accounts, mobile wallets and paper vouchers. Consequent to the guidelines in mobile banking, selected banks were permitted to offer the service after receipt of necessary permission from Reserve Bank of India. Indian Retail payments pose significant challenges and opportunities. Based on Payment system vision document released by Reserve Bank of India, the number of non-cash transactions, at 6 per person, is low in India. It is estimated that Government subsidies alone constitute more than Rs.2.93 trillion and electrification has a potential to translate 4.13 billion electronic transactions in a year. Based on the report of Internet and Mobile Association of India (IAMAI), internet commerce is expected to reach Rs.465 billion by the year 2012.

#### **Challenges**

##### **1. Socio-cultural**

- Less awareness and familiar to internet and new technology.

- Illiteracy and Lack of computer knowledge.
- People want to have banking receipt.
- Tendency to hold cash.
- English language is barrier.
- Contact with Bankers.

##### **2. Economical**

- Average income per person is low in India so not able to achieve communication equipment.
- Heavy investment is needed for infrastructure.

##### **3. Knowledge**

- Lack of technology.
- Limited trained workers.
- Improper use of Technology.

##### **4. Infrastructure**

- Poor information infrastructure (poor internet penetration)
- Hardware available is not sufficient in the country (PC, ATM, POS, etc.).
- Weak Telecommunication (fibre optic, satellite networks, and communication bandwidth).

##### **5. Legal and Security**

- Lacking or weak security measures.
- Lack and limitation of regulation and law.

##### **6. Management and Banking**

- Managerial risk associated with E-banking.
- Lack of long term strategic management.
- Not focus on training for new technology for bank employee.
- Transfer of employee and manager therefore change in decision making is an obstacle.

#### **Suggestion**

- More efforts should be taken by bank in undertaking advertisement and promotional campaign so that greater awareness among consumer is created.
- More focus should be given on appropriate network facility.
- Easy method to operate online banking should be installed by the bank so as to make more and more customer to use net banking.
- Employees of banks should be given special technical training for the use of e-banking so that they can further encourage customers to use the same.
- Bank should take initiative to organize training campaign, seminar and workshop for their customer to boost use of e-banking.
- Government should make huge investments for building the information infrastructure.

#### **Conclusion**

E-Banking enables better business anywhere, anytime and 24\*7 hours services. More and more customers are switching to electronic platform for executing banking transaction. In India increasing use of mobile and internet connection in mobile, laptop and personal computer made customers uses more E-banking services. Presently, most banks have an online banking

website as well as a mobile app. These generally free apps can be downloaded onto most mobile devices and handle most of the basic transactions that a teller or ATM carries out. Progress of E-Banking in India shows that E-Banking is preferred mode of banking for Indian banks customers.

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