

# E-Banking in India: Innovations, Challenges and Opportunities

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**Abstract:** *Saving money is the life saver of an economy. The present and eventual fate of any economy relies on the achievement and advancement of saving money. The goal can't be accomplished with the customary keeping money as now is the period of innovation. Indian managing an account industry, today, is amidst an IT (Information Technology) unrest. The opposition among the banks has prompted the expanding all out keeping money computerization in the Indian managing an account industry. E-Banking is a nonexclusive term including web saving money, phone managing an account, portable keeping money and so on. At the end of the day, it is a procedure of managing an account administrations and items through electronic stations, for example, phone, web, mobile phone and so on. The idea and extent of E-managing an account is as yet advancing. The present paper has concentrated on the need and advantages of E-managing an account. It has likewise uncovered the present status of money related advancements in Indian Banking area. It likewise featured the difficulties looked in E-managing an account and the open doors accessible with the banks in E-saving money.*

**Keywords:** E-Banking, ATMs, Information Technology, RTGS, Debit and Credit cards

## 1. Introduction

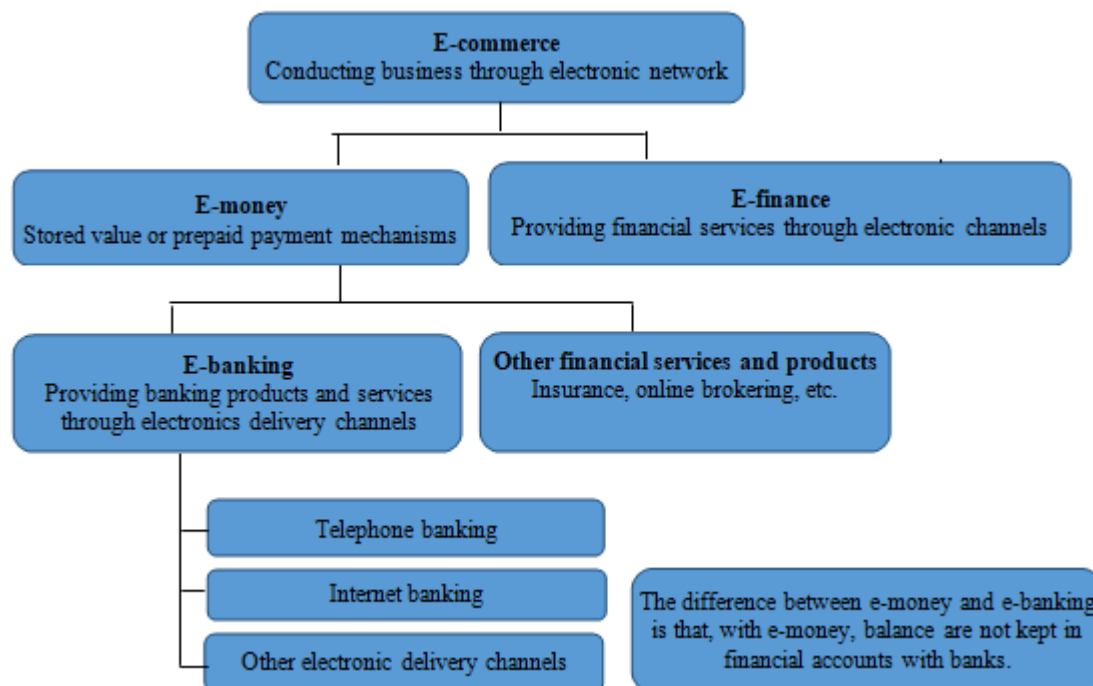
Managing an account is the life saver of an economy. The present and eventual fate of any economy relies on the achievement and advancement of managing an account. The goal can't be accomplished with the conventional managing an account as now is the period of innovation. Indian managing an account industry, today, is amidst an IT (Information Technology) transformation. The opposition among the banks has prompted the expanding absolute keeping money mechanization in the Indian saving money industry. Finland was the primary nation on the planet to have taken a lead in E-keeping money. In India, it was ICICI bank which started E-managing an account as right on time as 1997 under the brand name Infinity. Electronic managing an account is characterized as "Conveyance of bank's administrations to a client at his office or home by utilizing Electronic innovation can be named as Electronic Banking." Online Banking or Internet Banking or E-saving money permits clients of budgetary exchanges on a secured site worked by the establishment, which can be a retail bank, virtual bank, credit association or building society. To get to a monetary institutions' web based managing an account office, a client having individual web get to must enroll with the foundation for the administration, and set up some secret word for client check. To get to internet managing an account, the client would go to the budgetary institution's site, and enter the web based saving money office utilizing

the client number and secret key Popular administrations secured under E-Banking. The prominent administrations secured under E-keeping money incorporate:-

- a) Automated Teller Machines
- b) Credit Cards
- c) Debit Cards
- d) Smart Cards
- e) Electronic Funds Transfer (EFT) System,
- f) Cheques Truncation Payment System
- g) Mobile Banking, Internet Banking
- h) Telephone banking

E-Banking is a generic term encompassing internet banking, telephone banking, mobile banking etc. In other words, it is a process of banking services and products through electronic channels such as telephone, internet, cell phone etc. The concept and scope of E-banking is still evolving. E-banking facilitates an effective payment and accounting system there by enhancing the speed of delivery of banking services. While E-banking has improved efficiency and convenience, it has also posed several challenges to the regulators and supervisors. There are also many opportunities that are available in E-banking in the Indian Banking sector. E-banking concept has been clearly shown by the diagram

**What is Electronic Banking?**



## 2. History of Online Banking

The originator for the advanced home internet saving money administrations were the separation managing an account benefits over electronic media from the mid 1980s. The term online wound up mainstream in the late „80s and alluded to the utilization of a terminal, console and TV (or screen) to get to the managing an account framework utilizing a telephone line. „Home Banking“ can likewise allude to the utilization of a numeric keypad to send tones down a telephone line with guidelines to the bank. Online administrations began in New York in 1981 when four of the city’s significant banks (Citibank, Chase Manhattan, Chemical and Manufacturers Hanover) offered home saving money administrations utilizing the videotext framework. In view of the business disappointment of videotex these keeping money benefits never wound up well known aside from in France where the utilization of videotex (Minitel) was sponsored by the telecom supplier and the UK, where the Prestel framework was utilized. The UK’s first home web based keeping money administrations was known as Homelink and it was set up by Bank of Scotland for clients of the Nottingham Building Society (NBS) in 1983. The framework utilized depended on the UK’s Prestel see interface framework and utilized a PC, for example, the BBC Micro, or console (Tandata Td1400) associated with the phone framework and TV. The framework permitted on-line review of proclamations, bank exchanges and bill installments. With a specific end goal to make bank exchanges and bill installments, a composed guideline giving points of interest of the proposed beneficiary must be sent to the NBS who set the subtle elements up on the Homelink framework. Common beneficiaries were gas, power and phone organizations and records with different banks. Subtle elements of installments to be made were contribution to the NBS framework by the record holder by means of Prestel. A check was then sent by NBS to the payee and a guidance giving subtle elements of the installment was sent to the record holder. BACS was later

used to exchange the installment specifically. Stanford Federal Credit Union was the main money related foundation to offer online web saving money administrations to the greater part of its individuals in October 1994. Today, numerous banks are web just banks. Dissimilar to their antecedents, these web just banks don’t keep up physical bank offices. Rather, they regularly separate themselves by offering better loan costs and more broad internet managing an account highlights.

## 3. Review of Literature

Trivedi and Patel (2013) investigated the issues looked by clients while utilizing e-saving money offices in India. It watched that the greater part of the clients think about the e-saving money administrations offered by their bank. The examination found that there is a huge contrast among various issues distinguished while utilizing e-saving money administrations. It likewise found that a few issues influence progressively and a few issues influence less being used of keeping money administrations. It presumed that every one of the reasons are not similarly in charge of not utilizing e-keeping money administrations. Haq and Khan (2013) broke down the difficulties and openings in the Indian Banking part. The investigation demonstrated that exclusive 28 for every penny saving money customers were utilizing web managing an account subsequent to assessing the populace qualities. It found that there was no critical relationship in the middle of age and utilization of digital managing an account. It likewise portrayed that there is no connection in the middle of sex and the appropriation of web managing an account. It watched that capability regarding training and salary of the respondents were assuming the part in the acknowledgment of web based keeping money. The investigation recommended that it is the need of time that money related proficiency of the clients ought to be expanded through different projects which ought to be controlled by banks to build the consciousness of web saving money. Gupta and Mishra (2012) examined the new

rising patterns of E-managing an account in Indian saving money industry. The investigation found that there are numerous difficulties looked by banks in E-saving money and there are numerous open doors accessible with the banks. It presumed that keeping money part should be another plan of action by building administration and client administrations. It likewise proposed that banks ought to contribute escalated endeavors to render better administrations to their customers. Chavan (2013) described the advantages and difficulties of Internet saving money in a rising economy. It watched that web based keeping money is presently supplanting the conventional saving money rehearse. It demonstrated that web based saving money has a considerable measure of advantages which increase the value of customers' fulfillment as far as better nature of administration offerings and in the meantime empower the banks pick up advantage over the contenders. It additionally talked about a few difficulties in a developing economy. Srivastava (2007) dissected the customer's observation on use of web managing an account. It additionally centered around what are the drivers that drive purchasers, how customers have acknowledged web managing an account and how to enhance the utilization rate. The investigation uncovered that instruction, sex, salary assumes a vital part in the utilization of web managing an account. It additionally watched that inhibitory variables like put stock in, sexual orientation, training, culture, religion, security, cost can have negligible impact on shopper outlook towards web saving money.

#### **Objectives of the study**

- 1) To study the need and benefits of E-banking.
- 2) To study the current status of financial innovations in Indian banking sector.
- 3) To study the challenges faced in E-banking.
- 4) To study the opportunities available in E-banking.

#### **Research Methodology**

The present study is descriptive in nature. The data used for the study is secondary in nature and has been collected from RBI (Reserve Bank of India) bulletin, annual reports of RBI and, Report on trend and progress of banking in India, various reputed journals, newspapers, white papers and websites of RBI.

#### **4. Need and Benefits of E-Banking**

Numerous innovations and upsets have occurred in the historical backdrop of managing an account yet no such things have changed the matter of saving money as quick as the e-keeping money transformation. Presently a-days, banks everywhere throughout the world are making their business techniques in the light of new open doors offered by e-managing an account. E-managing an account has encouraged banks to scale fringes, change vital conduct and in this manner achieve new conceivable outcomes. E-keeping money has supported genuine managing an account conduct nearer to neoclassical monetary speculations of market working. As there is nearness of supreme straightforwardness of the market, customers (both business and retail) can make correlation of the administrations gave by different banks effectively. For instance, at each tap on the web you'll confront your rivals. On the off chance that

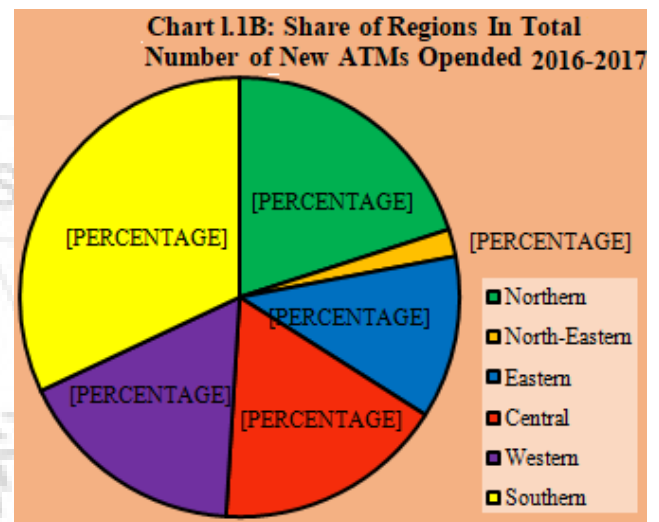
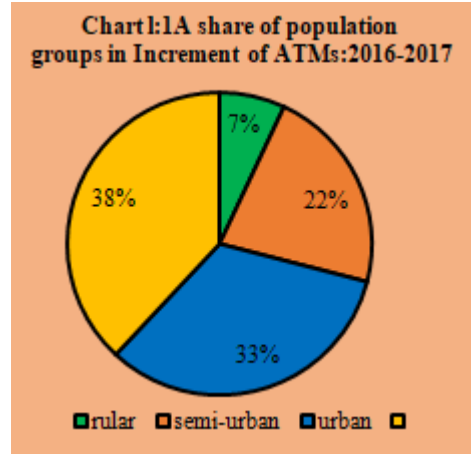
customers are not cheerful and happy with the items, costs or administrations offered by a specific bank, they are equipped for changing their saving money accomplice effectively when contrasted with what occurs in the physical or genuine bank-customer relationship. In this manner, from the view-purpose of banks, utilization of the web has fundamentally decreased the physical expenses of keeping money tasks. In this way, e-managing an account administrations whether conveyed on the web or through different systems, have spread rapidly lately. The essential advantage of e-keeping money from the bank customers' perspective is critical sparing of time by the computerization of saving money administrations preparing and presentation of a simple support apparatuses for overseeing customer's cash. Different advantages of E-saving money are likewise there, for example, diminishment in costs in getting to and utilizing the keeping money administrations, increment in comfort and timesaving, brisk and persistent access to data, better administration of money, accommodation in performing saving money exchanges, speed in getting reaction, appropriate administration of assets.

#### **Current Status of Financial Innovations in Indian Banking Sector**

Today managing an account is known as imaginative saving money. Data innovation has offered ascend to new advancements in the item outlining and their conveyance in the managing an account and fund enterprises. Client administrations and consumer loyalty are their prime work. Current saving money segment has thought of a considerable measure of activities that situated to furnishing a superior client administrations with the assistance of new innovations. Managing an account through web has developed as a key asset for accomplishing higher proficiency, control of tasks and lessening of cost by supplanting paper based and work concentrated strategies with computerized forms in this manner prompting higher efficiency and benefit. Money related advancement related with innovative change completely changed the managing an account theory and that is additionally tuned by the opposition in the saving money industry. Testing business condition inside the keeping money framework make more advancement in the fields of item, process and market. An investigation on the Internet clients, directed by Internet and Mobile Association of India (IAMAI), found that around 23% of the online clients lean toward Internet Banking as the managing an account divert in India, second to ATM which is favored by 53%. Out of the 6,365 Internet clients inspected, 35% utilize web based saving money directs in India. Plastic cash is the other option to the money or standard cash. It is advantageous to convey. The different Plastic cash/cards incorporate ATM cards, Debit Card, ATM cum Debit Card, Credit Card. Plastic cash was a scrumptious blessing to Indian market. Presently a few new highlights added to plastic cash to make it more appealing. Visa is a budgetary instrument, which can be utilized more than once to get cash or purchase items and administrations on layaway. Banks, retail locations and different organizations for the most part issue these. Based on their credit constrain, they are of various types like exemplary, gold or silver. The electronic installment frameworks, for example, Electronic Clearing Service (ECS) credit and charge, National Electronic Fund Transfer (NEFT) for retail exchanges and



Real Time Gross Settlement (RTGS) for extensive esteem, enhanced the speed of money related exchanges, over the country. The presentation of ATMs in banks has changed managing an account by giving keeping money benefits ANY TIME & ANYWHERE, ANYBANK to the client. The client is spared the hazard or trouble of conveying hard money or travellers' check while voyaging. It has additionally given cost investment funds to banks. Section of ATMs has changed the profile of front workplaces in bank offices. Clients never again need to visit branches for their everyday keeping money exchanges like money stores, withdrawals, check gathering, adjust enquiry etc. Off-site ATMs has more importance than on location ATMs for managing an account entrance. Off-site ATMs assume a critical part by giving the fundamental keeping money administrations like money withdrawal, exchange of assets even without the nearness of undeniable block and-concrete branches. Amid 2016-17, there was an expansion of 14,365 new off-site ATMs. Be that as it may, metropolitan regions represented the greatest number of recently opened ATMs. Southern locale had greatest number of recently opened ATMs, trailed by northern district. Be that as it may, the offer of rustic regions in the aggregate number of ATMs kept on staying little. The subtle elements of offer of Population Groups in Increment of ATMs and the offer of Regions to add up to number of new ATMs opened are appeared by Chart I.1A and I.1B.



The details of ATMs of SCBs (Scheduled Commercial Banks) at various locations at end-March 2017) are shown in Table I.6.

**Table 1.6:** Number of ATMs of SCBs at Various Locations (At end March 2017)

| Bank Group   | Rural                                   | Semi- Urban                                  | Urban   | Metropolitan                                   | Total   |
|--|---|--|---|--|---|
| 1  | 2                                       | 3  | 4   | 5  | 6   |
| Public sector banks  | 6,673(11.5)                             | 15,135 (26.0)                                | 19,213 (33.0)                                 | 17,172 (29.5)                                  | 58,193 (100.0)                                    |
| Nationalised Banks State Bank Group                                    | 3,383(10.9)                             | 6900 (21.9)                                  | 10,196(32.8)                                  | 10,681(34.4)                                   | 31,050(100.0)                                     |
| Private sector banks Old Private Sector Banks New Private Sector Banks | 1,938 (5.4)<br>523 (9.1)<br>1,414 (4.7) | 7,529 (20.8)<br>2,025 (35.1)<br>5,495 (18.1) | 11,526 (31.9)<br>1,976 (32.5)<br>9,649 (31.8) | 15,097 (41.8)<br>1,357 (23.3)<br>13,750 (45.4) | 36,097 (100.0)<br>5,771 (100.0)<br>30,308 (100.0) |
| Foreign Banks  | 29 (2.1)                                | 22 (1.6)                                     | 268 (19.0)                                    | 1,095 (77.4)                                   | 1,414 (100.0)                                     |
| <b>Total</b>   | <b>8,637 (9.0)</b>                      | <b>22,678 (23.7)</b>                         | <b>31,007 (32.4)</b>                          | <b>33,354 (34.9)</b>                           | <b>95,687 (100.0)</b>                             |
| Growth over Previous year  | (20.5)                                  | (24.4)                                       | (29.9)  | (33.4)   | (29.4)  |

**Note:** Figures in parentheses indicate population group-wise percentage share of total ATMs under each bank group.

### Challenges in E-Banking

- Implementation of global technology:** There is a need to have an adequate level of infrastructure and human capacity building before the developing countries can adopt global technology for their local requirements. In developing countries, many consumers either do not trust or do not access to the necessary infrastructure to be able to process e-payments.
- Strengthening the public support:** In developing countries, in the past, most e-finance initiatives have been the result of joint efforts between the private and

public sectors. If the public sector does not have the necessary resources to implement the projects it is important that joint efforts between public and private sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives.

- Confidentiality, integrity and authentication:** These three are the very important features of the banking sector and were very successfully managed all over the world before the coming of internet. Communication across an open and thus insecure channel such as the

internet might not be the best base for bank-client relations as trust might partially be lost.

- d) **Customer Satisfaction:** In today's competitive world, satisfaction of customers is a major challenge for the banking sector because customers have alternative choices in various types of services provided by banks.
- e) **Availability of Personnel services:** In present times, banks are to provide several services like social banking with financial possibilities, selective up gradation, computerization and innovative mechanization, better customer services, effective managerial culture, internal supervision and control, adequate profitability, strong organization culture etc. Therefore, banks must be able to provide complete personnel service to the customers who come with expectations.
- f) **Non- Performing Assets (NPA):** Nonperforming assets are another challenge to the banking sector. Vehicle loans and unsecured loans increases N.P.A. which terms 50% of banks retail portfolio was also hit due to upward movement in interest rates, restrictions on collection practices and soaring real estate prices. So that every bank have to take care about regular repayment of loans.
- g) **Competition:** The nationalized banks and commercial banks have the competition from foreign and new private sector banks. Competition in banking sector brings various challenges before the banks such as product positioning, innovative ideas and channels, new market trends, cross selling ad at managerial and organizational part this system needs to be manage, assets and contain risk. Banks are restricting their administrative folio by converting manpower into machine power i.e. banks are decreasing manual powers and getting maximum work done through machine power. Skilled and specialized man power is to be utilized and result oriented targeted staff will be appointed.
- h) **Handling Technology:** Developing or acquiring the right technology, deploying it optimally and then leveraging it to the maximum extent is essential to achieve and maintain high service and efficiency standards while remaining cost effective and delivering sustainable return to shareholders. Early adopters of technology acquire significant competitive advances Managing technology is therefore, a key challenge for the Indian banking sector.

#### Other Challenges:

- a) Coping with regulatory reforms
- b) Development of skill of bank personnel
- c) Customer awareness and satisfaction
- d) Corporate governance
- e) Changing needs of customers
- f) Keeping space with technology up gradation
- g) Lack of common technology standards for mobile banking
- h) Sustaining healthy bottom lines and increasing shareholders value
- i) Structural changes
- j) Man power planning

#### 5. Opportunities

- a) **Untapped Rural Markets:** Contributing to 70% of the total population in India is a largely untapped market for

banking sector. In all urban areas banking services entered but only few big villages have the banks entered. So that the banks must reach in remaining all villages because majority of Indian still living in rural areas.

- b) **Multiple Channels:** Banks can offer so many channels to access their banking and other services such as ATM, Local branches, Telephone/mobile banking, video banking etc. to increase the banking business.
- c) **Worthy Customer Service:** Worthy customer services are the best brand ambassador for any bank for growing its business. Every engagement with customer is an opportunity to develop a customer faith in the bank. While increasing competition customer services has become the backbone for judging the performance of banks.
- d) **Internet Banking:** It is clear that online finance will pickup and there will be increasing convergence in terms of product offerings banking services, share trading, insurance, loans, based on the data warehousing and data mining technologies. Anytime anywhere banking will become common and will have to upscale, such up scaling could include banks launching separate internet banking services apart from traditional banking services.
- e) **Retail Lending:** Recently banks have adopted customer segmentation which has helped in customizing their product folios well. Thus retail lending has become a focus area particularly in respect of financing of consumer durables, housing, automobiles etc., Retail lending has also helped in risks dispersal and in enhancing the earnings of banks with better recovery rates.
- f) **Indian Customers:** The growing Indian banking sector with its strong home country linkages, seek a unique combination of Indian ethnicity and global standards that offers a valuable nice opportunities for Indian banks. The biggest opportunity for the Indian banking sector today is the Indian costumers. Demographic shifts in terms of income level and cultural shifts in terms of life style aspirations are changing the profile of the Indian customer. This is and will be a key driver of economic growth going forward. The Indian customers now seek to fulfil his lifestyle aspirations at a younger age with an optimal combination of equity and debt to finance consumption and asset creation. The consumer represents a market for a wide range of products and services he need a mortgage to finance his house, an auto loan for his car, a credit card for on-going purchases, a bank account, a long term investment plan to his children's higher education, pension plans for his retirement, a life insurance policy the possibilities are endless and this consumer does not live just in India's top ten cities. He represents across cities, towns and villages i.e. in rural areas. Consumer goods companies are already tapping this potential it is for the banks to make the most of the opportunity to deliver solutions to this market.

#### Other Opportunities

- a) To enter new business and new markets
- b) To develop new ways of working
- c) To improve efficiency
- d) To deliver high level of customer services.

## 6. Conclusion

In the past few years, the Indian banking sector has completely transformed. The banks are facing many challenges and many opportunities are available with the banks. Many financial innovations like ATMs, credit cards, RTGS, debit cards, mobile banking etc. have completely changed the face of Indian banking. But still there is a need to have more innovative solutions so that the challenges can be solved and opportunities can be availed efficiently by the banks.

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