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## E-BANKING -AN EMERGING TREND IN AN INDIAN ECONOMY

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### Abstract

*Information Technology led to evolution in banking sector. E-banking makes a revolution change in the economic structure in developing countries like India. It provides tremendous opportunities to the developing countries to stand at global level. With the introduction of the new technology in banking sector, customers are fast moving away from the traditional branch banking system to the convenience electronic banking services. Today, Banking is not confined to limited services but provide services regarding anywhere, anytime banking. The introduction of liberalization measures and the emergence of new private sector equipped with latest technology, led to increased competition in the banking sector. While E-banking has improved the efficiency and established the effectiveness, it poses several challenges to the regulators. This paper reveals the current scenario in an Indian e-banking sector and contains trend and progress of RBI. This paper explains the need and benefits of e-banking. It also highlighted the challenges and opportunities available in e-banking.*

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

### INTRODUCTION

Banking sector has played a very important role in the change of economic structure of an economy. With the liberalization measures and Entry of private and foreign banks with updated technology makes a drastic change in the banking sector. Customers are moving away from traditional banking to E-banking services. Even Government is also taking initiative to digitalized banking sector so customers can get the advantage of latest technology and face the competition at global level.

Delivery of banking services to customers through the use of electronic channels is termed as internet banking. In today's competitive scenario, technological revolution has plays a drastic change in Indian banking sector. E-Banking is the result of innovation and competition. Banks are continuously introducing innovative measures of delivering the services to their customers with the use of emerging technologies. E-banking allows the customer to access financial facilities like easily fund transfer, effective payment system, checking accounts information, Investment services. The concept of E-banking is still evolving. E-banking has improved efficiency and convenience, but poses a several challenges to the regulators.

Government of India as well as the Reserve Bank of India (RBI), have taken initiative for development of E-banking in India. The government of India enacted the Information Technology (IT) 2000, which provides legal recognition to electronic transactions and other means of electronic commerce. It issued guidelines to control the risk and advise them to evaluate the risks inherent in the systems and provide adequate control mechanisms to address

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these risks. It covers various issues that fall within the framework of technology, security standards, and legal and regulatory issues.

### REVIEW OF LITERATURE

Sharma (2009) opined that the trend towards electronic delivery of banking products and services is a result of consumer demand and competitive environment in the global context.

Kumar and Sinha (2009) prove that cyber crimes in the e-banking has several loopholes that can be easily exploited and need to be extra cautious while making online transactions.

Srinivas (2009) discussed various e-banking channels and suggested security tips regarding password frequently, abstaining from revealing PIN either via mails or phone, avoiding cyber cafes for net banking etc.

Shukla and Shukla (2011) stated that 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. Customers has given solutions not to share personal information like PIN numbers, passwords etc with anyone, including employees of the bank; change ATM PIN and online login and transaction passwords on a regular basis; ensure that the logged in session is properly signed out.

Mishra (2011) provided useful tips to ensure safety of e-banking transactions. E-banking users are advised not to share login id or password, and not to click on any link provided in any mail, claiming to be the link for the bank's website.

Trivedi & Patel (2013) analyzed the problems faced by customers while using e-banking services in India. It observed that most of the customers know about the e-banking services offered by their bank but there is a significant difference amongst different problems identified while using e-banking services. It also found that some problems affect or less in use of banking services. It concluded that all the reasons are not equally responsible for not using e-banking services.

Haq & Khan (2013) analyzed the challenges and opportunities in the Indian Banking sector. The study showed that only 28 per cent banking clients were using internet banking services properly. It found that there was no significant relationship in between age and use of cyber banking. It also depicted that there is no relation in between gender and the adoption of internet banking. It observed that education and income of the respondents were playing an important role in the acceptance of online banking. The study suggested that it is the need of time that financial literacy of the users and create awareness of internet banking.

Gupta & Mishra (2012) examined the new emerging trends of E-banking in Indian banking industry. The study found that there are many challenges faced by banks in E-banking and there are many opportunities available with the banks. It concluded that banking sector will need to create a new business model by building management and customer services.

Chavan (2013) described the benefits and challenges of Internet banking in an emerging economy. It observed that online banking is now replacing the traditional banking. It showed

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that online banking has a lot of benefits which value added services to customers. It also discussed some challenges in an emerging economy to avail the services of e-banking.

Singh and Malhotra (2014) analyzed presents data, drawn from a survey of commercial banks websites, on the number of commercial banks that offer Internet banking and on the products and services they offer. It investigates the profile of commercial banks that offer Internet banking, using statistical analysis, with respect to profitability, cost efficiency, and other characteristics. By the end of first quarter 2004, differences between Internet and non-Internet banks had begun to emerge in funding, in sources of income and expenditures and in measures of performance. It was also found that the profitability and offering of Internet banking does not have any significant correlation.

Jayshree Chavan (2013) paper discusses challenges in an emerging economy. It concluded that one of the benefits that banks experience when using e-banking is increased customer satisfaction. Customers may access their accounts anywhere. Banks should provide their customers with convenience, meaningful services through several distribution channels (ATM, Internet, physical branches) and have more functions available online.

Roshanlal and R saluja (2012) concluded that the progress in e-banking is measured through various parameters such as Computerization of branches, Automated Teller Machines, Transactions through Retail Electronic Payment Methods etc. Statistical and mathematical tools such as simple growth rate, percentages and averages etc are used. It also highlights the challenges faced by Indian banks in adoption of technology and recommendations are made to tackle these challenges.

### **Objectives of the study**

- To study the need of E-banking in India.
- To study and analyze the current scenario of E-banking in India.
- To study the challenges and 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 annual reports of RBI and, Report on trend and progress of banking in India, various reputed journals.

### **Need and benefits of E-banking**

E-banking is an efficient and cost effective delivery mechanism for banking service. Through internet banking, banks offer value-added services to customers to expand their customer bases like Automated Teller Machines, credit Cards, debit Cards, smart Cards, electronic Funds Transfer (EFT) System, cheque truncation payment system, mobile banking, internet banking, telephone banking. They are making their strategies to retain the customers and try to build customer relation management. Customers can access their account at any time, bill payment and other regular periodical payment facilities, simple online submissions for personal accounts, loans and credit and many much more facilities. It attracts new customers who are

using traditional banking system. It helps the customers in saving of time by the automation of banking services. It reduces the costs in accessing and using the banking services, increase in comfort and time saving, quick access to information, convenience in performing banking transactions, speed in getting response, proper management of funds.

### Current status of financial innovations in Indian banking sector

The Reserve Bank's continued efforts towards migrating to a less-cash society. With the rapid advancement of technology and the advent of new developments and innovations in the payment landscape, the Bank enhanced its focus on the safety and security of the payment systems important payment and settlement systems in India. (Source: rbi.org.in)

Table1.1: Payment System Indicators- Annual Turnover

Item	Volume (million)			Value (billion)		
	2014-15	2015-16	2016-17	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
<b>Systemically Important Financial Market infrastructures (SIFMIs)</b>						
1. RTGS	92.8	98.3	107.8	754,032	824,578	981,904
<b>Total Financial Markets Clearing (2+3+4)</b>	<b>3.0</b>	<b>3.1</b>	<b>3.7</b>	<b>752,000</b>	<b>807,370</b>	<b>1,056,173</b>
2. CBLO	0.2	0.2	0.2	167,646	178,335	229,528
3. Government Securities Clearing	1.1	1.0	1.5	258,917	269,778	404,389
4. Forex Clearing	1.7	1.9	1.9	325,438	359,257	422,256
<b>Total SIFMIs (1 to 4)</b>	<b>95.8</b>	<b>101.4</b>	<b>111.5</b>	<b>1,506,033</b>	<b>1,631,948</b>	<b>2,038,077</b>
<b>Retail Payments</b>						
<b>Total Paper Clearing (5+6+7)</b>	<b>1,196.5</b>	<b>1,096.4</b>	<b>1,206.7</b>	<b>85,434</b>	<b>81,861</b>	<b>80,958</b>
5. CTS	964.9	958.4	1,111.9	66,770	69,889	74,035
6. MICR Clearing	22.4	0.0	0.0	1,850	0	0
7. Non-MICR Clearing	209.2	138.0	94.8	16,814	11,972	6,923
<b>Total Retail Electronic Clearing (8+9+10+11+12)</b>	<b>1,687.4</b>	<b>3,141.5</b>	<b>4,205.0</b>	<b>65,366</b>	<b>91,408</b>	<b>132,255</b>

8. ECS DR	226.0	224.8	8.8	1,740	1,652	39
9. ECS CR	115.3	39.0	10.1	2,019	1,059	144
10. NEFT	927.5	1,252.9	1,622.1	59,804	83,273	120,040
11. Immediate Payment Service (IMPS)	78.4	220.8	506.7	582	1,622	4,116
12. National Automated Clearing House (NACH)	340.2	1,404.1	2,057.3	1,221	3,802	7,916
<b>Total Card Payments (13+14+15)</b>	<b>1,737.7</b>	<b>2,707.3</b>	<b>5,450.1</b>	<b>3,326</b>	<b>4,483</b>	<b>7,421</b>
13. Credit Cards	615.1	785.7	1,087.1	1,899	2,407	3,284
14. Debit Cards	808.1	1,173.6	2,399.3	1,213	1,589	3,299
15. Prepaid Payment Instruments (PPIs)	314.5	748.0	1,963.7	213	488	838
<b>Total Retail Payments (5 to 15)</b>	<b>4,621.6</b>	<b>6,945.2</b>	<b>10,861.7</b>	<b>154,126</b>	<b>177,752</b>	<b>220,634</b>
<b>Grand Total (1 to 15)</b>	<b>4,717.4</b>	<b>7,046.6</b>	<b>10,973.2</b>	<b>1,660,158</b>	<b>1,809,701</b>	<b>2,258,711</b>

Source: Trend and progress of RBI Annual Report 2016-17

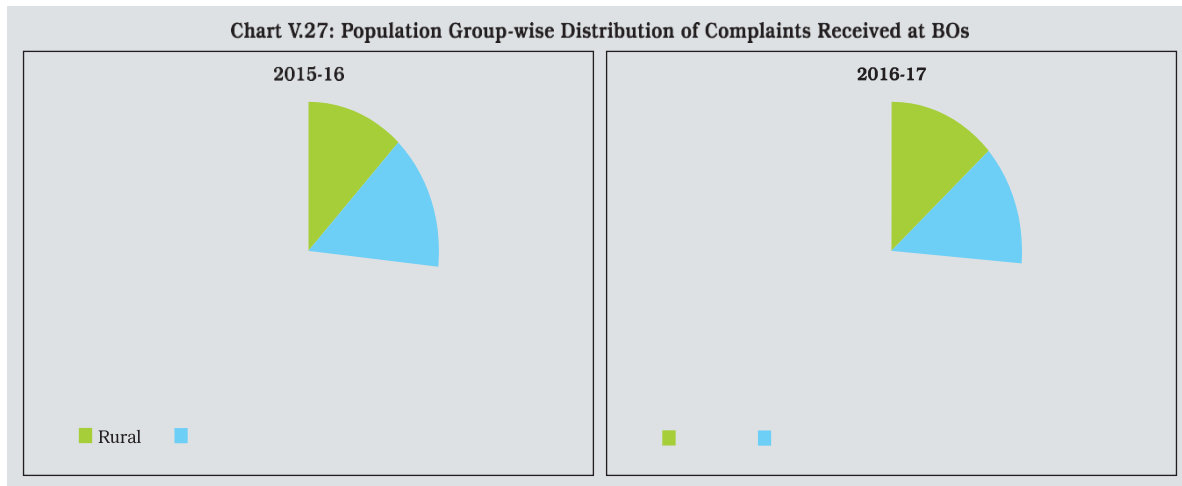
The payment and settlement systems continued its robust growth during 2016-17, with volume and value growing at 55.7 per cent and 24.8 per cent, respectively on top of an increase of 49.4 per cent and 9 per cent in 2015-16. The share of electronic transactions moved up to 89.0 per cent in total volume of non-cash payments from 84.4 per cent in the previous year (Table 1.1). From amongst electronic modes of payments, Real Time Gross Settlement (RTGS) handled 108 million transactions, valued at around `982 trillion in 2016-17, up from 98 million transactions valued at `825 trillion in the previous year. At end-March 2017, the RTGS facility was available through 198 banks. During 2016-17, National Electronic Funds Transfer (NEFT) handled 1.6 billion transactions valued at `120 trillion, up from around 1.3 billion transactions for `83 trillion in the previous year. At end-March 2017, the NEFT facility was available through 130,013 branches of 172 banks, in addition to business correspondent (BC) outlets. During 2016-17, 1.1 billion transactions, valued at around `3.3 trillion and another 2.4 billion transactions, valued at `3.3 trillion were carried out through credit cards and debit cards, respectively. Prepaid Payment Instruments (PPIs) recorded around 2.0 billion transactions, valued at `838 billion. Mobile banking service witnessed strong growth of 151 per cent and 224 per cent in volume and value terms, respectively while the number of registered customers rose to 163 million at end-March 2017 from 105 million at end-March 2016. The RBI - SEBI Working Group on Replacement of Commercial Bank Settlement Model with Central Bank Settlement Model for Securities Market. To provide a channel for customers to make digital payments using their Aadhaar-seeded bank



accounts at merchant locations, in- principle approval was accorded to NPCI to launch a pilot on BHIM-Aadhaar Pay. BHIM-Aadhaar Pay is a smart phone-based application with a dongle attached to it for capture of customer’s biometric data. The customer will authenticate the payment transaction by providing biometric identification on the merchant device. These transactions are processed as part of the existing Aadhaar Enabled Payment System (AEPS) with a separate transaction type assigned to them. The Committee on Payments and Market Infrastructures (CPMI) in February 2017 published a report, “Distributed ledger technology in payment, clearing and settlement- An analytical framework”. The report states that DLT is viewed by many as having the potential to disrupt payment, clearing, settlement and related activities. DLT, including block chain technology, draws upon both well established and newer technologies to operate a set of synchronized ledgers managed by one or more entities. DLT may provide an alternative to the traditional centralization of database management, as is the case with financial market infrastructures. (Source: rbi.org.in)

### Challenges in adoption of E-banking

Government is taking initiative to digitalize the economy but consumers are not properly ready to facilitate the services because they do not trust the services of the bank. Lack of knowledge about internet and poor infrastructure is one of the challenges for the government and on the other side internet banking is not free from technological risks. It has many types of risk that are associated with e-banking like operational risk, security risk, money laundering risk etc. Regulators and supervisors are aware of different types of risks in internet banking but there are no complete measures to control them.



In recent years, non-observance of the fair practices code has been a major complaint against banks, followed by complaints related to ATM/ credit/ debit cards, non-adherence to the code of the Banking Codes and Standards Board of India (BCSBI) and pensions. Bank in PSBs (67.9 per cent) received the largest number of complaints, followed by PVBs (29.3 per cent) and FBs (2.7 per cent) largely reflecting their shares in total loans.

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### **Opportunities to a banking sector**

E-banking sector is still evolving. By creating a proper marketing strategy with high quality services, they can capture the potential market. In India, More than 70% population is living in rural areas. Indian Prime Minister – Mr. Narendra Modi has initiated a project to build a broadband highway connecting 2.5 lakh panchayats across the country. This infrastructure would help a banking system to cover the untapped area. Even Government is promoted E-Governance and digitalized the public sector. So it provides tremendous opportunity and government support to promote e-banking sector. More than 40% population of India is young generation. Standard of living of people is totally changed. The Indian customers try to fulfill his lifestyle aspirations by getting debt. Banking sector offers value added services to create the customers. This will be a key driver of economic growth for banking system.

### **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 change poses problems like operational risk, security risk, reputational risk, legal risk. There is a need to find new solutions so that the challenges can be solved and opportunities can be availed efficiently. In this direction, as part of the Bank's cyber security reinforcement measures has been made to monitor, detect, prevent and mitigate various types of cyber security risks. Government has to maintain a law and proper regulation and ensures its proper implementation.

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