Online Banking in India: Growth & Challenges Dr. Awadhesh Singh Fati Shafaat

Associate Professor, Department of Commerce, Udai Pratap College, Varanasi Research Scholar, Department of Commerce, Udai Pratap College, Varanasi

ABSTRACT

With the introduction of the Internet and the increasing popularity of use of computers has changed the total banking scenario of banking system. The global economy is undergoing transformation at a rapid pace and know-how is the major source for this change. The days are gone when customers had to wait in a long waiting line to withdraw money from their accounts. This impact of technological innovation is also being experienced by banking sector. The Indian banking sector has also transformed due to the enhancement of computerization and also use of technology by the customers. That is due to customer education as well as use of Internet. Banking is no longer limited to traditional brick and mortar system rather it is shifting to brick and click system and virtual banking. Today new services are being offered by the banks through the medium of internet. Finland was the first country in the world to have taken a lead in E-banking. In India, it was ICICI Bank which initiated E-banking as early as 1997 under the brand name Infinity. Online banking utilizes technology to bypass time consuming aspects of traditional banking. Use of smart phones also enhanced the popularity of online banking and it compels the banks to shift their banking procedures from traditional banking to e-banking which enhances the customer satisfaction also. This article elaborates the paradigm shift of banking phenomena from time consuming, paper-based traditional banking to remote banking.

Key Words: Online- Banking, Information Technology, Growth of E-banking in India, Major Drivers and Challenges of E-Banking.

INTRODUCTION:

A Bank is a Financial Institution which is one of the main contributors to the financial system among financial sector in India. Banking offers various facilities to the customer for banking operations. From the nationalization of banks in 1969, the public sector banks, possessed by the government, which acquired a very noble place, with incredible growth. Now India is becoming an emerging economy because of use information technology. The long journey of IT use in banking sector has seen by a number of changes due to technology and innovation. Banking system plays a very important role in every country's economy. It is vital for any nation because it serves for the needs of credit for all the sections of the society. India is the world's largest democratic nation as well as it is an emerging economy also. Growth of it is also dependent on the strong banking system. The blend of information technology in banking sector has completely changed banking sector operations. To survive in the new challenging world, banks had to opt for this new change. Over a long period of time banks have been utilizing electronic and telecommunication modes for distributing a wide range of value integrated products/services.

Online banking has changed the face of the entire banking system. Internet banking helps the customers to carry out their financial transactions using a secure website or Web portal. It serves as single point of contact for the customers and offers them with a wide range of facilities right from allowing them to access their bank accounts to advanced value added services like paying bills, online purchasing of goods and services, withdrawing and transferring funds anywhere by own etc. Online banking is a influential value-added tool to the banking system which is used to attract new customers and retain the existing ones. It helps them acquire more business from the existing customers. In other words, online banking is a way to open a new channel for banks to reach their customers and serve them in an effective manner.

The Internet assured a best proposal for commercial exchange, helping banks to achieve new levels of efficiency in financial transactions by strengthening customer relationship,

promoting price discovery and spend aggregation and increasing the reach. Electronic finance offered considerable opportunities for banks to expand their client base and rationalize their business while the customers received value in the form of savings in time and money.

INTERNET GROWTH IN INDIA:

With 451 million monthly active internet users at end of financial **year 2019**, India is now second only to China in terms of internet users, according to a report by **Internet and Mobile Association of India (IAMAI).** However, with only 36 per cent internet penetration, there is still much headroom for growth, it said.

The report also said that of the 451 million monthly active users, 385 million are over 12 years of age and 66 million are in the age bracket of 5 to 11 years, who access internet on the devices of family members.

The report stated that in terms of absolute numbers, urban India with 192 million users had almost the same number of users as rural India. However, in terms of percentages or penetration, given the disparity of population distribution in urban and rural India, urban India had a considerably higher penetration level.

In rural India, a sizeable portion does not have access to Internet, and provides a huge opportunity for growth which will contribute to an increase in the overall Internet population over the next few years, it said.

According to the report, nearly 2/3rd of the Internet population in India was daily users. 9 out of 10 users' in urban accessed the Internet at least once a week with young users, aged between 16-29 years being the most frequent users. However, there is still a section of users, who used Internet less than 'once a week'. About 1 in 5 rural Internet users belonged to this category.

In India, nearly 1/3rd of users accessed Internet for 'more than one hour' in urban India, where as in rural India, a similar proportion of users accessed Internet for 15-30 minutes. With better connectivity, quality of service and affordability of mobile Internet, there could be an increase in rural consumers spending more time on the internet in future, the report stated.

E-BANKING

The term online came into existence during the late 1980s and that designates use of a computer system. The concept of online banking came to the light when the major US banks like **the Citi Bank**, **Chase Man Hattan** and others offered banking at home services. That time it was difficult job to access bank accounts from distant locations. But online banking has made it possible in banking history. Stanford federal credit union was the first financial institution which offered online banking services in October, 1994. Online bill payment was facilitated by **Columbus, Check Free Corp**., which currently controls around 70% of the electronic bill payment business.

Finland was the first country in the world to have taken ahead in Online-banking. In India, it was ICICI Bank which initiated E-banking as early as 1997 under the brand name *Infinity*. Several programs and initiatives had taken by the Government of India as well as the Reserve Bank of India (RBI) which helped in the growth of Online-banking in India. In 1988, Reserve Bank of India formed a Committee on computerization in banks headed by Dr. C. Rangarajan. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000, which provides legal appreciation to electronic transactions and other means of electronic commerce.

The trend electronic delivery of banking products and services is occurring partially due to a product of consumer demand and partially because of the increasing competition in the global banking industry. The Internet has also changed the customers' behaviors who demand for more personalized products/services at a lower price. This online banking has

reduced the pressure and opened the opportunity for banking system in terms of profitability and growth in comparison to brick and mortar banking system.

E-BANKING IN INDIA:

As the name implies, electronic banking or e-banking involves infusion of electronic technology with the banking sector. It relates to provision of banking products and services through electronic delivery media. Beneath this system, the banking services are delivered by way of a Personal Computer controlled system. Online Banking engages providing banking and related service through widespread use of information technology without direct route to the bank by the customer. Due to enhancing popularity and advantages of e-banking, lot of banks have realized the importance, competition and challenges brought forth with this new technology and are adapting to this improved banking.

The traditional model for banking has been through branch banking. Only in the early 1990s there has been start of non-branch banking services. Now the old manual systems on which Indian Banking depended upon for centuries seem to have no place. This credit of launching internet banking in India goes to ICICI Bank. Citibank and HDFC Bank followed with internet banking services in 1999. 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.

Electronic banking is not new to the banks or its customers in India. Banks have been providing their services to customers electronically for years through software programs. These software programs allowed users personal computer to access the bank directly. In the past, however, banks have been very reluctant to provide their customers with banking through the Internet just because of security issue. But today, the scene in Indian banking has changed. Now the banks seem to be jumping the bandwagon of Internet banking.

The Reserve Bank is scrutinizing and reviewing the legal and other requirements of online banking on a regular basis to make sure that e-banking would develop on efficient 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 a problem-solving road map for enhanced usage of IT in the banking sector.

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

Internet have helped the banks to transform themselves into Virtual Banking for serving the customers in better way. Virtual banks do not have bricks; they entirely exist on the Internet. With the help of the Internet, banks can offer wide range of services and adhere to the federal regulations as any bank working near your place.

Online banking has several advantages when compared to the traditional banking system. Some of them are:

- **Availability:** The sites of the online banks can be accesses any time.
- **Performance:** The customer can access and manage all his bank accounts, including FDs, IRAs, CDs, Account statements, even securities from one secure site.
- **Ubiquity:** As online banking allows the customers to access their bank accounts from any part of the world, its omnipresent nature eases the customer is life.
- **Speed:** Online bank sites are undoubtedly much faster than manual transaction processing mechanism.
- **Effectiveness:** Banks can offer various kinds of sophisticated tools at their Web portal such as account aggregation, stock quotations, and portfolio management programs for effective management of assets.

DRIVING FORCES OF GROWTH IN E-BANKING:

The three broad facilities that e-banking offers are:

- **Convenience-** All the banking transactions can be handled at convenience in the comfort at home through online banking operations.
- **No more Queues** There is no queues at an online bank.
- **24x7 service** Bank online services are provided 24 hours a day, 7 days a week and 52 weeks a year.

The six primary drivers of Internet banking includes, in order of primacy are:

- Improved customer access
- Make possible the offering of more services
- Increase customer loyalty
- Attract new customers
- Provide services offered by competitors
- Reduce customer attrition

GROWTH OF E-BANKING IN INDIA:

Till 1990s banks are adopted traditional method of banking over branch banking. After financial reforms, the banking business also viewed the innovative movement of banking services. The Indian banking sector has accepted automation in banking since 1993, more out of total pressure and necessity to survive in increasing overload and inconvenience of the manual system to sustain further growth. In 1993, the employees' association of the Indian banks (IBA) contracted an agreement with the bank management about the introduction of computerized application in banks. This agreement was the major breakthrough in the introduction of computerized applications and the development of communication networks in banks. The first initiative in the area of bank computerization, however, started out of the attraction reports of the two committees headed by former RBI governor, Dr. C Rangarajan. Both the reports had strongly recommended computerization of banking operations at various levels and suggested appropriate architecture

The significant technical growths viewed in the new age payment structures in India are:

- 1. In 1980 to 1990's Arrival of debit card and credit card
- **2. From 1984 to 1988** Banks started using computers, MICR cheques were introduced.
- 3. In 1987 HSBC is the first bank to introduce the ATM concept in India
- 4. In 1990 ECS payment was introduced in India by the RBI
- **5. In 1991** India joined Society for Worldwide Interbank Financial Telecommunication.
- **6. In 1997** Shared payment network system has been set up
- **7. In 1999** A pilot project for Smart cards conducted jointly by Reserve bank of India, IIT (Mumbai) and IDRBT, Hyderabad
- 8. In 2000 Information Technology act was passed,
- 9. In 2002 mobile banking was started in India by way of SMS banking
- 10. In 2003 Introductions of Special Electronic fund transfer
- 11. In 2004 Introduction of Real-time gross settlement
- **12. In 2005** overall 11 Percent of branches of Public sector banks have been brought under Core banking solutions and the introduction of national electronic funds transfer.
- **13. In 2007** the payment and settlement system act, 2007 was passed
- **14. In 2008** Introduction of Cheque truncation system and operative guidelines on mobile banking transactions were issued.
- **15. In 2009** Free cash withdrawal from ATMs.

- **16. In 2010** Introduction of Immediate payment service
- **17. In 2016** Bharat bill payment system & Unified Payments Interface is stated in banks across the country started to upload their interface in August 2016.
- **18. In 2016** Bharat Interface for Money (BHIM) is a mobile app developed by National Payments Corporation of India (NPCI), based on the Unified Payment Interface (UPI).
- **19. In 2018-** ICUBE 2018 report that tracks digital adoption and usage trends in India, it noted that the number of internet users in India has registered an annual growth of 18 percent and is estimated at 566 million as of December 2018, a 40 percent overall internet penetration, it observed.
- **20.** In **2019** India's internet users expected to register double digit growth to reach 627 million in 2019, driven by rapid internet growth in rural areas, market research agency Kantar IMRB
- **20. In 2020** With over 560 million internet users, India is the second largest online market in the world, ranked only behind China. It was estimated that by 2023, there would be over 650 million internet users the country. Despite the large base of internet users, the internet penetration rate in the country stood at around 50 percent in 2020. A majority of India's digital population accessed the internet via their mobile phones. In 2018, about 29 percent of the country's total population was mobile internet users, and this was expected to grow to over 35 percent or approximately 500 million users by 2023.

Source: (https://www.statista.com/topics/2157/internet-usage-in-india/) Published by Sandhya Keelery, Jul 7, 2020

Today it has become very easy to know about credit card balance, payments to fund transfer, account balances, booking tickets, depositing cash and many more through PC banking (A form of online banking that enables customers to execute bank transactions from a PC via a modem). Shopping anywhere, anytime possible just because of online payment facilities through credit or debit cards which are provided by banks.

Today banks also providing mobile banking facilities due to demand of the current generation who having Android phones. Through m-banking we can easily recharge our mobiles, dish, fund transfer, e-ticketing, bookings for movies etc. by downloading the applications on mobile set. Now a days e-banking has changed the lifestyle of a common man.

ELECTRONIC BANKING PRODUCTS IN INDIA

Automated Teller Machine

ATM is a computerized machine that provides the customer to make a financial transaction without the help of a bank employee. For using ATMs, the customer has to find an ATM card or debit card from his bank. Using ATMs a customer can benefit various service like withdrawal of cash, depositing money, check the balance inquiries etc. The system is recognized as "Any Time Money" or "Anywhere Money". The below table shows the increase in ATM deployment by the banks in India from the period 2015 to 2018. It is clear from the data that the number of ATM deployed are increased from 1.81 lakhs to 2.07 lakhs between the periods 2015 to 2018 but there is decrease in 2019 which is 2.02 lakh and it is showing a slow growth rate in the year 2018 and 2019 compare to the previous year 2017 and overall compound annual growth rate showing 2.6% percent.

Table 1: Growth in ATM Deployment by Banks

	Number of ATMs	Growth Rate (%)
March15	181,398	-
March 16	199,099	9.76
March 17	208,354	4.65
March18	207052	625
March 19	202,196	-2.40
Total	998,099	
CAGR	2.6%	

Source: Annual Report of RBI

Debit Cards

A debit card is a plastic card, which carrys an alternative payment system to cash when we make purchases. Customer need not carry paper cash, instead of using paper cash, they can use their cards to cash withdrawal and make purchases. As and when cash is a required customer can withdraw money with the help of Debit card. It also enables customers to use ATM machines. Although many debit cards are of the Rupay card, Visa or Master card kind, there are many other forms of a debit card, each recognized only within a particular country. The table shows the number of debit cards issued outstanding (after adjusting the number of cards withdrawn/cancelled) from March 2015 to March 2019. By the data analysis it is clear that there has been an enlarged from 55.35Cr. to 90.58Cr. In the issue of debit cards by the banks and the increase in issuing of debit cards in the period 2013 to 2018 has been more than double. Growth rate of issuing debit cards was at the top in the year 2016 and it is showing a constant growth rate in last three years and overall compound annual growth rate indicating 13.25 percent.

Table 2: Total Number of Debit Cards Issued Outstanding

Year	Number of Debit Cards	Growth Rate (%)	
March15	553451553	-	
March16	661824092	19.6	
March17	771649172	16.6	
March18	861076200	11.6	
March19	905813162	5.2	
Total	3753814179		
CAGR	13.25%		

Source: Annual Report of RBI

Credit Cards

A credit card is also known as plastic money which permits its customer to buy goods and services on credit bases. The credit cards are given by the banks, and when customers sweep the card for their purchases a line of credit is granted by him, as he can make purchases on credit bases which are to be repaid later to the bank. A credit card transaction is often more secured than other forms of payment such as cash payments or cheque payments.

The table shows the number of credit cards issued outstanding (After adjusting the number of cards withdrawn/cancelled) from March 2015 to March 2019. It is clear from the table that the number of credit cards issued has been an increase from 2.11 Cr. to 4.71 Cr. between the period 2015 and 2019. We can identify the positive growth and continuous increase in credit cards issued outstanding. The overall Compounded annual growth rate shows **22.27** percent.

Table 3: Total Number of Credit Cards Issued Outstanding

Year	Number of Credit Cards	Growth Rate (%)
March15	21110653	-
March16	24505219	16.07
March17	29842235	21.77
March18	37484955	25.61
March19	47088647	25.62
Total	159931709	
CAGR	22.27%	

Source: Annual Report of RBI

National Electronic Fund Transfer

National electronic fund transfer is a nation-wide payment system enabling one to one fund's transfer. Under this system individuals and corporate can electronically transfer funds from any bank branch to any individual, corporate having an account with any other bank branch in the country participating in the scheme.

For being a part of the NEFT funds transfer network, a bank branch has to be National electronic fund transfer enabled. Any individuals, firms who holds saving bank accounts with a bank branch can receive or send funds through the NEFT scheme hence it is necessary for the customers to have an account with NEFT enabled bank branch. There is no maximum limit on the number of funds that could be transferred using NEFT.

The below table shows the NEFT transactions in forms of Volume (Million) and Value (Billion) made by banks from the period of 2015-16 to 2018-19. From the data we can observe that NEFT transactions increased in volume and value of transactions from 106 million to 242.40 million and 7173.09 billion to 25470 billion for period 2015-16 to 2018-19. And it shows the positive growth rate in NEFT transactions in form of volume and value. The overall Compounded annual growth rate of volume and value shows **23.55** percent and **38.3** percent respectively. Chart 4 represents the growth of NEFT transactions in form of volume and value with the trend/linear line.

Table 4: NEFT transactions in form of Volumes and Values

Year	NEFT volume Millions	Growth Rate	NEFT Value Billions	Growth Rate (%)
March15	106.00	-	7173.09	-
March16	129.24	21.9	10226.36	42.56
March17	186.7	44.46	16294.50	59.31
March18	212.01	13.56	22540.77	38.33
March19	242.4	14.26	25470	13
Total	876.35		81704.72	
CAGR	23.55%		38.3%	

Source: Annual Report of RBI

Real Time Gross Settlement

Real-time gross settlement (RTGS) is the continuous process of settling payments on an individual order basis without netting debits with credits across the books of a central bank (e.g., bundling transactions). Once completed, real-time gross settlement payments are final and irrevocable.

Real-time gross settlement lessens settlement risk overall, as interbank settlement usually occurs in real time throughout the day—instead of simply all together at the end of the day. This eliminates the risk of a lag in completing the transaction. (Settlement risk is often called delivery risk) RTGS can often incur a higher charge than processes that bundle and net payments. RTGS is mainly meant for large value transactions. The lowest amount to be settled through RTGS is Rs. Two lakhs and there is no upper limit for RTGS transactions.

The RTGS system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2, 00,000/- with no upper or maximum ceiling.

The table shows the RTGS transactions in forms of Volume (Million) and Value (Billion) made by banks from the period of 2015-16 to 2017-19. From the table we can observe that RTGS transactions increased over the period of time in the forms of volume as well as value and it shows the variability in growth rate with respect to the volume and value of RTGS transactions. The overall Compounded annual growth rate of volume and value of RTGS transactions shows 31.95 percent and 14.47 percent respectively.

Table 5: RTGS transactions in form of Volumes and Values

Year	RTGS volume Millions	Growth Rate (%)	RTGS Value Billions	Growth Rate
March15	9672739	-	87421.48	(10)
March16	9864091	91.98	100045.36	14.44
March17	12538081	27.11	123375.83	23.32
March18	12683495	1.16	126340.68	2.40
March19	13640534	7.55	148729.35	17.72
Total	58398940		585911.70	
CAGR	31.95%		14.47%	

Source: Annual Report of RBI

Mobile Banking

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet. Unlike the related internet banking it uses software, usually called an app, provided by the financial institution for the purpose. Mobile banking is usually available on a 24-hour basis. Some financial institutions have restrictions on which accounts may be accessed through mobile banking, as well as a limit on the amount that can be transacted. Mobile banking is dependent on the availability of an internet or data connection to the mobile device.

The table shows the Mobile banking transactions in forms of Volume (Million) and Value (Billion) made by banks from the period of 2015-16 to 2018-19. The table shows that Mobile banking transactions increased significantly over the period of time. And it shows the high in growth rate in the year 2016 and 2018 in form of volume, 2016 and 2017 in form of the value of mobile banking transactions. The overall Compounded annual growth rate of volume and value of mobile banking transactions shows more than 100 percent i.e., 163.965 percent and 158.41 percent respectively.

Table 6: Mobile banking transactions in form of Volumes and Value

Year	Mobile Banking Volume Millions	Growth Rate (%)	Mobile Banking Value Billions	Growth Rate (%)
March15	19.76	-	169.14	-
March16	49.48	150.40	572.80	238.65
March17	113.5	129.69	1730.88	202.18
March18	239.90	111.09	1415.03	-18.25
March19	872.93	263.87	4401.53	211.06
Total	1295.72		8289.38	
CAGR	163.965%		158.41%	

Source: Annual Report of RBI

ONLINE BANKING: MAJOR CHALLENGES AND FUTURE:

Even though Internet is an added advantage to the banks, it occupies only a part. Authentication, security, trust, non-repudiation and privacy issues are some of the challenges that online banks have to cope with. If a bank is going in with the idea of a

three-year turnaround, it is making big mistakes, says Nancy Didia, Vice-President of Chase Manhattan Bank Electronic Commerce, US. The future of web-based e-banking in developed areas appears bright but consumers and merchants in developing countries face in number of barriers to successful e-banking, including less reliable telecommunications infrastructure and power supplies, less access to online payment mechanisms and relatively high costs for personal computers and Internet access. The Reserve Bank plans to set up an Integrated Compliance and Tracking System portal to handle various supervisory functions including oversight of cyber security arrangements. On-line portal for reporting of cyber security incidents would be expanded to cover other regulated entities as well.

The success of online banking depends on:

- **1. Security Issues**: Security is the most significant issue in online banking. It may arise in form of risk in case of unauthorized access of key information of bank account. Many people are still not comfortable with online portals, especially from the security point of view. In addition to this, banks also face threats from the internal sources like employee frauds.
- **2. Technical Issues**: Banks may encounter problems due to wrong choice of technology, insufficient control processes and inappropriate system design. Wrong selection of technology may lead to a loss in terms of financial loss as well as loss of brand image and goodwill. Due to this reason, many banks rely on third party service provider for technical issues. However, there is no way through which they can avoid this kind of risk.
- **3. Consumer Adaptation Issue**: Despite the banks presenting various products and services to their customers online, its scope is small. Banks must work hard to attract more number of customers. This is possible only when they assure security of online transactions. Moreover, banks that have created a distinctive online offering could attract more number of customers when compared to those banks which are using almost similar products and services. This reflects the fact that customers are looking for better approach in terms of security as well as products and services also. Consumer adaptation issue becomes more relevant when referring India. Although there is an increase in the number of internet users in our country, but still we stand nowhere when compared to the US and the European countries. Banks need to put more effort to gain consumers attention. The future of online banking corporations depends on their ability to convince their customers to use their online portals.
- **4. Think from the Customer's Perspective:** The focus must be on customer needs and satisfaction. The employees must place themselves in the place of the customers to better understand his needs, expectations, feeling about online banking experience, etc.

Each and every customer wants to get benefits from online banking and the growth of online bank accounts has lagged expectations. In the UK, more than five million customers logged on to the Internet in 2005 to obtain financial information. It is the first step towards conducting transactions online. Banks can attain success only when they meet their customer expectations and gain confidence in them. The online portal of the bank must incorporate the following features for satisfying their customers.

- Protect the customers with full-fledged security tools.
- Well-designed Web page with appropriate tools.
- User-friendly.
- **5. Does Not Bet on a Single Approach, Keep Open Your Options**: The banks must not confine themselves to the traditional banking system. The question of getting online or offline is tough to answer and creating completely autonomous online enterprise may be easy decision but not best.
- **6. Creativity and Innovation in Design and Implementation of Processes**: New developments will attract more customers like the advent of broadband Internet access allows customers to obtain data and information at a faster pace and increases utility of online banking.

CONCLUSION:

Today all the banks are shifting to online banking services because this is the only way to attract customers towards banks. The researchers also show that number of customers is the users of smart phones whether they are urban or rural. The percentages of rural users of mobile internet are growing day by day. It has increased from 4% to 46 % from 2012 to 2015. While internet users grew by 7 percent in urban India, reaching 315 million users in 2018 and digital adoption is now being propelled by rural India, registering a 35 percent growth in internet users over the past year.

In 2018 the report of Kantar IMRB managing director Media and Digital Hemant Mehta found that 97 percent of users use mobile phone as one of the devices to access internet.

The study shows that there is growth in online services. According to the **Reserve Bank** of **India's (RBI)** annual report for 2017-18, **mobile banking** services witnessed a growth of 92 per cent and 13 per cent in volume and value terms, respectively.

The number of registered customers rose by **54 per cent to 251 million** at end-March 2018 from **163 million** at end-March 2017. This indicate that customers are shifting towards advance technologies so to fulfill their demands banks are also shifting towards these technologies like mobile banking, EFT, ATM, Paytm etc. to provide convenience and hazel free payment facilities. The surveys by bankers research show that from 2012 to 2015 there is the today banks the of 55 banks to 70 banks in mobile banking services.

The AMAI, Crisil Gartner, PWC analysis and Industry experts shows the growth in e-commerce from 3.8 to 21.3 in e-commerce while from 0.8 to 6 in e-tailing. The IMRB survey also shows that the number of mobile users in both Urban & Rural areas has increased from 44 to 160 million in urban and 4 to 54 million in rural areas.

Nowadays, banks have realized that the success of a banking system without Information technology and it has expanded the role of the banking sector in the economy. All the banking transactions can now be processed quickly and easily with the help of Electronic banking. As can be observed from data given above, be it ATMs deployment, issuing of debit and credit card, transactions relating to NEFT, RTGS, Mobile banking (Values and Volumes) we can observe the growth in recent years. Our young generation has accepted the changes of the banking system for more as a convenience more than a challenge.

REFERENCES:

- Internet in India 2015 by Internet and Mobile Association of India (IAMAI) and IMRB International.
- Digital Payment Gateway India, source IMRB survey December 2013.
- Snapshot of Technology Development in Indian Banking Sector , Forbes India.com
- Deloitte 2019 Banking Industry Outlook Optimism for banking and capital markets (www2Deloitte.com)
- $\bullet \ \ https://economic times.india times.com/tech/internet/internet-users-in-india-to-reach-627-million-in 2019 report/articleshow/68288868.cms$
- Uppal R K, "E-Age Technology- New Face of Indian Banking Industry: Emerging Challenges and New Potentials", Journal of Social and Development Sciences, Vol. 1, No. 3, April 2011, pp. 115-129.
- Ms. Jasdeep Kaur, Growth of E-Banking in India, International Journal of Research in Finance and Marketing (IJRFM) Vol. 7 Issue 5, May 2017
- Changing Marketing Paradigm In Service Marketing Published: 23, March 2015
- Kumar, R. and Sinha A. B. (2009), "An overview of E-banking in India", Professional banker, October issue, pp. 35-37.
- Mavri, M & loannou, G., "Consumer's perspectives on Online Banking service", International Journal of Consumer Studies, Vol. 30, No. 6, pp 552-560. Mishra.
- Dr. v. Antony Joe Raja, Global E- Banking Scenario and Challenges in Banking System, International.
- Suhas D1, H.N Ramesh, "E-Banking and Its Growth in India- A Synopsis View". Journal of Management Research and Analysis, October-December, 2018;5(4):376-383

- Reserve Bank of India, Annual Report, various years. Report on trend and progress of banking in India.
- a. (2015 to 2019), Report on trend and progress of banking in India.
- b. (2015 to 2019), A Statistical table relating to banks in India.
- c.https://www.rbi.org.in/SCRIPTs/PublicationReportDetails.aspx?UrlPage=&ID=243#ch
- $\bullet \ \ https://economic times.india times.com/wealth/personal-finance-news/mobile-banking-catching-on-fast-heres-the-proof/articleshow/65593432.cms$