



GROWTH AND DEVELOPMENT IN INDIAN BANKING SECTOR

Dr. Nafees A. Khan*

Ms. Fozia**

Abstract: *The purpose of the research article is to show the growth and technological development in Indian banking sector. The objectives of this research article are to show the growth in Indian banking sector; the technological development in Indian banking sector and computerisation in the banking sector. Technology enables increased access of the banking system, increases cost effectiveness and makes small value transactions possible. Technology allows transactions to take place faster and offers unparalleled convenience through various delivery channels. Technology enhances choices, creates new markets, and improves productivity and efficiency. Effective use of technology has a multiplier effect on growth and development.*

Keywords: *Growth, Development, Computerisation and Indian banking*

*Associate Professor, Department of Commerce, Aligarh Muslim University, Aligarh

**Research Scholar, Department of Commerce, Aligarh Muslim University, Aligarh



INTRODUCTION

In recent years, the banking industry around the world has been undergoing a quick transformation. The deepening of information technology has facilitated better tracking and fulfilment of commitments, multiple delivery channels for online customers. The Indian banking has welcomed this change. As an increasing number of Indian banks seem at the modern ways, such as Online banking, to make a customer's banking experience more convenient, efficient, and effective. The use of internet in banking has vastly reduced the physical transfer of paper money and currency from one place to another or even from one person to another which reduces costs for banks. It is also called electronic banking. It may include wire transfers, electronic funds transfers, and credit card, debit card.

Internet banking is allow to using automatic teller machine and telephone transaction and also websites for performing simple and advanced transaction without physical presence of customers in bank, allowing customer to submit their applications for different services, make queries on their account balance and submit instruction to the bank and also electronically transfer fund to their account, pay bill and other banking transaction online. It also allows banks to expand their markets for traditional deposit taking and credit expansion activities, and to offer new products and services.

GROWTH IN BANKING SECTOR

The banking sector comprises of 28 public sector banks with majority government ownership, 23 private banks and 27 foreign banks. Private sector banks were barred from involvement in the banking market after the nationalization of banks in 1969. Most important changes were implemented after 1990. First, the market was opened up to private sector banks and foreign banks. Second, regulations governing the establishment of branches were amended. Third, regulations relating to lending were eased. Fourth, public sector banks were allowed to procure financial resources from the stock market up to 49% of their paid-up capital.

The state of affairs began to change after 2000. The government adopted a policy of converting development financial institutions into banks, and ICICI became a bank in 2001, followed by IDBI in 2004. During this period, one public sector bank and four private sector banks were established, and 16 foreign banks entered the market. In March 1991, foreign



banks had 151 branches. This had increased to 205 by March 2001, and to 295 by March 2009

Table 1-showing Number of banks

	2006	2007	2008	2009	2010	2011
SBI Group	8	8	8	7	7	6
State-owned banks	20	20	20	20	20	20
Private sector banks	28	25	23	22	22	21
Foreign banks	29	29	28	31	32	34
Regional rural banks	133	96	91	86	82	82
Non-scheduled commercial banks	4	4	4	4	4	4
Scheduled commercial banks	218	178	170	166	163	163

Notes: As of March 31 in each year.

Source: STATISTICAL TABLES RELATING TO BANKS IN INDIA, RBI

Branch Expansion:

The country witnessed branch expansion in public sector banks, private sector banks and foreign banks in absolute term during period 2010-2011. The table showed that the percentage share of SBI group registered a growth of 3.5 during 2010-2011. The state-owned banks of India registered an increase of 5.4 per cent during 2010-11. During 2010-11 India's private sector banks, foreign banks and regional rural banks registered a growth 3.6, 2.9 and 1.9. The non scheduled commercial banks registered a growth 10.4 per cent during 2010-2011. all scheduled commercial banks registered a growth 5.5 per cent during 2010-2011.

Table-2 showing Number of branches

	2006	2007	2008	2009	2010	2011
Scheduled commercial banks	72,069	74,696	78,740	82,850	88,155	93,027
SBI Group	14310	14673	15848	16894	18186	18823
State-owned banks	35858	37415	39235	40937	43467	45850
Private sector banks	6835	7424	8324	9240	10452	12001
Foreign banks	259	272	279	295	310	319
Regional rural banks	14807	14822	15054	15484	15740	16034
Non-scheduled commercial banks	41	47	47	47	48	53

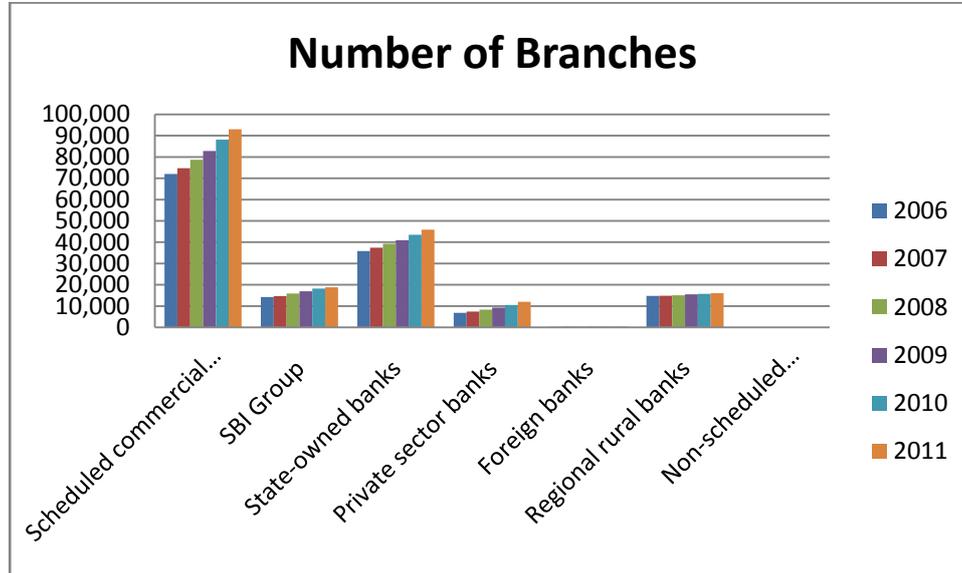
Notes : 1. Data is as per information reported by banks.

2. \$ Includees IDBI Bank Ltd.



3. Data on number of offices include administrative offices.

Source : Master Office File (latest updated version) on commercial banks, Department of Statistics and Information Management, RBI.



Growth of Bank Deposits:

The resource mobilisation is an integral part of banking activity. The basic principle of branch expansion is to tap deposit and culminate saving habit among the community .tapping of potential savings and uses them for a productive purpose in particular is the main objective.

Table-3-showing DEPOSITS OF SCHEDULED COMMERCIAL BANKS IN INDIA - 2010 AND 2011

(Amount in ` crore)

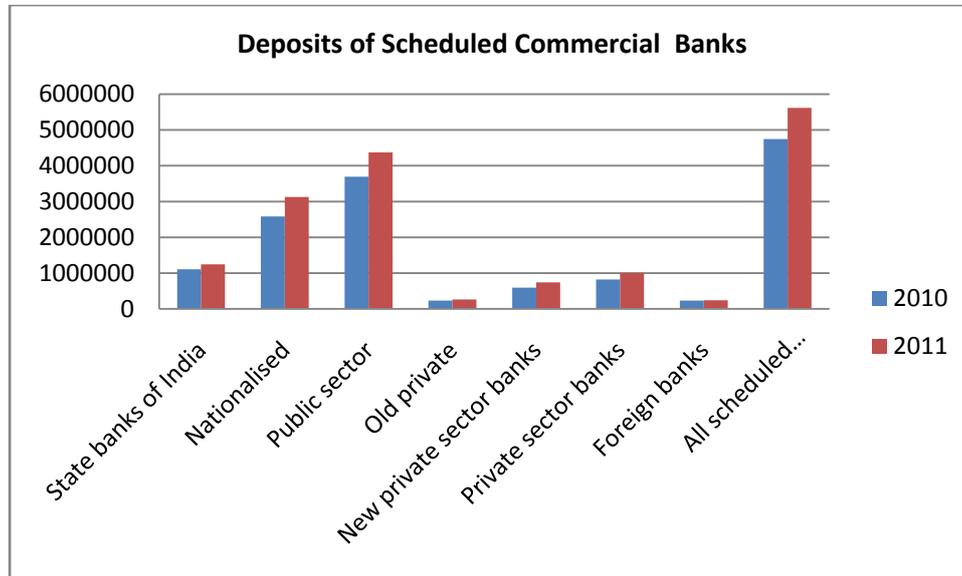
(As on March 31)

	2010	2011	Increase %
State banks of India & its associate	1108086	1245862	12.4
Nationalised	2583934	3127122	21.0
Public sector	3692019	4372985	18.4
Old private	229897	264157	15.0
New private sector banks	592904	738602	24.5
Private sector banks	822801	1002759	22
Foreign banks	232099	240689	3.7
All scheduled commercial banks	4746920	5616432	18.3

There has been a substantial rise of bank deposits since nationalisation. The table showed that the percentage share of state bank of India and its associate banks registered a growth of 12.4 during 2010-2011. The nationalised banks of India registered an increase of 21.0 per



cent during 2010-11. During 2010-11 India's public sector banks, old private sector banks, new private sector banks, private sector banks and foreign banks registered a growth 18.4, 15.0, 24.5, 22 and 3.7 per cent during 2010-2011. The all scheduled commercial banks registered a growth 18.3 per cent during 2010-2011.



Growth of Advances:

The credit from the bank is an important input in the production function of the agriculture, industry, commerce and allied productive activities for socio economic development of the country. The bank credits, its development, composition and direction are equally important in realising the country's various macroeconomic goals. The channelization of bank credit in proper direction, otherwise, there will be the adverse effect on the economy of the country.

Table-4 showing ADVANCES OF SCHEDULED COMMERCIAL BANKS IN INDIA - 2010 AND 2011

(Amount in ` crore)

(As on March 31)

	2010	2011	Increase %
State banks of India & its associate banks	857937	994157	15.9
Nationalised banks	1843082	2311478	25.4
Public sector banks	2701019	3305632	22.3
Old private banks	154085	184647	19.9
New private sector banks	478356	612886	28.1
Private sector banks	632441	797539	26.1
Foreign banks	163260	195539	19.8
All scheduled commercial banks	3496720	4298704	23.0



The table showed that the percentage share of state bank of India and its associate banks registered a growth of 15.9 during 2010-2011. The nationalised banks of India registered an increase of 25.4 per cent during 2010-11. During 2010-11 India's public sector banks, old private sector banks, new private sector banks, private sector banks and foreign banks registered a growth 22.3, 19.9, 28.1, 26.1 and 19.8 per cent during 2010-2011. The all scheduled commercial banks registered a growth 23.0 per cent during 2010-2011.

Growth of Bank Investment:

The table showed that the percentage share of state bank of India and its associate banks registered a growth of 5.6 during 2010-2011. The nationalised banks of India registered an increase of 26.4 per cent during 2010-11. During 2010-11 India's public sector banks, old private sector banks, new private sector banks, private sector banks and foreign banks registered a growth 19.0, 15.3, 15.6, 15.5 and 22.1 per cent during 2010-2011. The all scheduled commercial banks registered a growth 18.6 per cent during 2010-2011

Table-5 showing INVESTMENTS OF SCHEDULED COMMERCIAL BANKS IN INDIA - 2010 AND 2011

(Amount in ` crore)

(As on March 31)

	2010	2011	Increase %
State banks of India & its associate	357627	377658	5.6
Nationalised	655042	828125	26.4
Public sector	1012666	1205783	19.0
Old private	72393	83499	15.3
New private sector banks	234139	270618	15.6
Private sector banks	306531	354117	15.5
Foreign banks	130354	159286	22.1
All scheduled commercial banks	1449551	1719185	18.6

Growth of Bank Assets:

The table showed that the percentage share of state bank of India and its associate banks registered a growth of 13.1 during 2010-2011. The nationalised banks of India registered an increase of 22.0 per cent during 2010-11. During 2010-11 India's public sector banks, old private sector banks, new private sector banks, private sector banks and foreign banks



registered a growth 19.2, 15.0, 23.5, 21.5 and 12.9 per cent during 2010-2011. The all scheduled commercial banks registered a growth 19.2 per cent during 2010-2011.

Table-6 showing TOTAL ASSETS OF SCHEDULED COMMERCIAL BANKS IN INDIA - 2010 AND 2011

(Amount in ` crore)

(As on March 31)

	2010	2011	INCREASE %
State banks of India & its associate	1412253	1597684	13.1
Nationalised	3028574	3696133	22.0
Public sector	4440827	5293817	19.2
Old private	268905	309011	15.0
New private sector banks	881831	1089165	23.5
Private sector banks	1150736	1398176	21.5
Foreign banks	435362	491528	12.9
All scheduled commercial banks	6026925	7183522	19.2

TECHNOLOGICAL DEVELOPMENT IN BANKING:-

Indian banking has changed terrifically in the past few years. The changes are multiple and at a fast pace in the term of transformation of technology advancement. It has become completely dependent on technology as the service/ product channel. Up gradation of technology, innovation and modernization are the key factors of having excellence in banking sector. It becomes necessary for a bank to differentiate its products from others. The differentiation can be in terms of specialisation, new products, increasing added value by technology convergence.

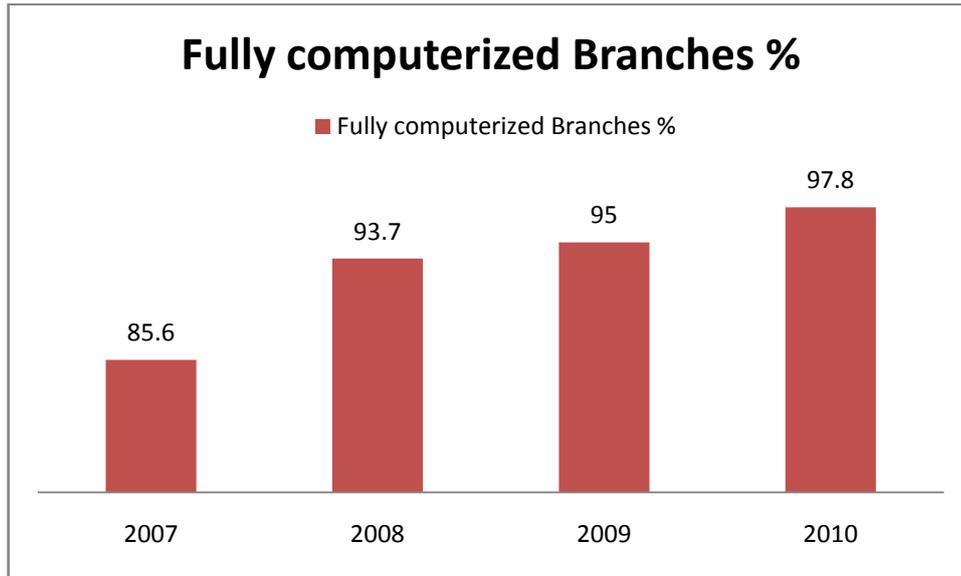
Technology in banking sector is one of the focus areas of banks. The banks in India are using Information Technology (IT) not only to improve their own internal processes but also to increase facilities and services to their customers.

Technological innovation not only enables a broader reach for consumer banking and financial services, but also enhances its capacity for continued and inclusive growth. IT improves the front end operations with back end and helps in bringing down the transaction costs for the customers.

Table 7-showing: Computerization in Public Sector banks

Category	2007	2008	2009	2010
Fully computerized Branches (%)	85.6	93.7	95.0	97.8

Source: RBI, Annual Report 2009-10



Automated clearing House (ACH): Automated clearing house (ACH) is an electronic network for financial transaction. In clearing house, computers are employed to handle cheques. The nature of work involved in clearing operations is voluminous, repetitive, routine in nature. ACH processes large number of debit and credit transaction in batches.

National Automated clearing house Association (NACHA): ACH is used to collect payment online customer in business, rather than accepting credit or debit. Both government and the commercial sectors use ACH payment. Rules and regulations governing the ACH network are established by NACHA and Federal Reserve. The Federal Reserve banks are collectively the nation's largest automated clearing house operator. FEDACH is the Federal Reserve's centralized application software used to process ACH transactions.

Electronic Clearing Services (ECS): ECS is an electronic mode of payment which is used for bulk transfer from one bank account to another bank account. The service is for companies and government department to make or receive large volume of payments, rather than for funds transfer by individual. There are two types of ECS service.

Table 8 showing ECS transaction in Rs. Crores

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011
ECS Credit	32,324	83,277	7,82,222	97,487	1,17,833	1,81,686
ECS Debit	12,986	25,441	48,937	66,976	69,819	73,646

Source: RBI, Annual Report 2010-11



National Electronic fund Transfer (NEFT): NEFT facilitates online transfer of funds from one bank account to another bank account. The limit of transferring fund is 200000/-. In India, NEFT system lives with effect from 21 November 2005. NEFT was sent to cover all banks which were participating in the special electronic funds transfer (NEFT) clearing. NEFT was made on the structured financial messaging solution (SFMS) platform. In NEFT public key infrastructure (PKI) technique used for maintaining security.

Electronic Funds Transfer (EFT): Electronic Fund Transfer (EFT) is a function of electronic banking that facilitates to customer transfer of funds from any branch of a bank to any other branch of any bank in the shortest time period. The EFT system presently covers all the branches of the 27 public sector banks and 55 scheduled commercial banks at the 15 centers viz:- Ahmadabad, Bangalore, Bhubaneswar, Kolkata, Chandigarh, Chennai, Guwahati, Hyderabad, Japura, Kanpur, Mumbai, Nagpur, new Delhi, Patna, and Thriuvananthpuram.

Table 9 showing: EFT/NEFT Transactions in Rs. Crores

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011
EFT / NEFT	61,288	77,446	1,40,326	2,51,956	4,11,088	9,39,149

Source: RBI, Annual Report 2010-11

EDI: EDI was born in the early 1970s.it is the first widely known application of business to business electronic commerce. It was first adopted by in the US to streamline their internal operations

Electronic data interchange is the inter-organisational exchange of business documentation in structured form such as order and invoice via computer to computer. It is the application to application transmission of business information and document in standard formats.

CARDS TRANSACTION:

1-Debit card: debit card is a card which designate to customer to withdraw own money from the bank in any time. It is also called a plastic card. Debit card is used for cash withdraw from ATM, funds transfer, paying bills, accessing detail account information, charging PIN etc. Bank gives debit card free of cost at the time of opening account. From 1st Jan 2011, RBI declared that for every transaction with debit card on ATM user has to enter password for every transaction. This is done for security purpose.

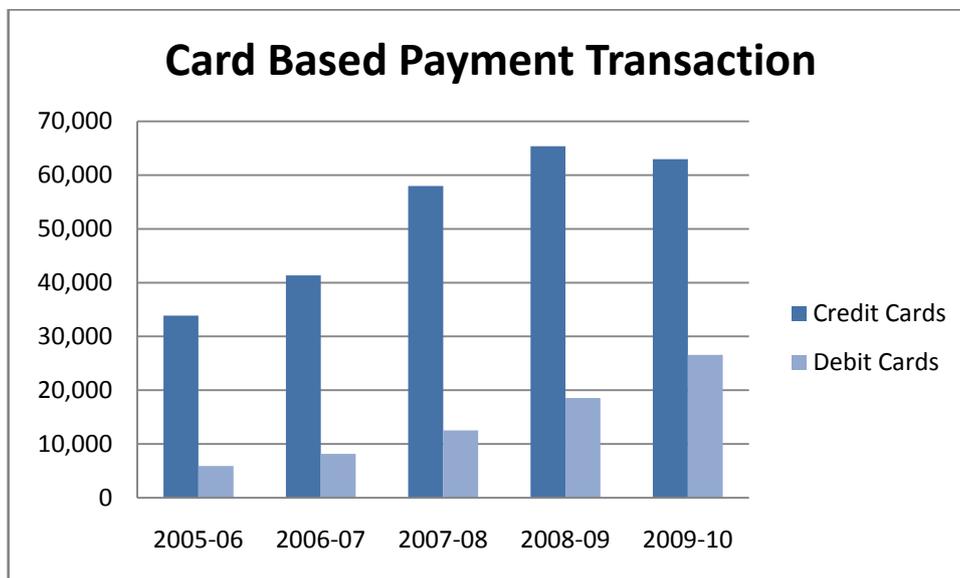


2-Credit card: Credit Card is a post paid card. The Credit Card holder is empowered to spend money wherever and whenever he wants with his Credit Card within the limits fixed by his bank.

Table 10 showing Card based payment Transaction Value (Rupees Crores)

Category	2005-06	2006-07	2007-08	2008-09	2009-10
Credit Cards	33,886	41,361	57,985	65,356	62,950
Debit Cards	5,897	8,172	12,521	18,547	26,566

Source: RBI, Annual Report 2009-10



Smart card: smart card was first introduced in Europe 1990s for low value payment system it is also called as stored value card or electronic purse system. The smart card technology is used for purchase through the internet, purchase product and services from market ,withdraw and deposits cash money .it is widely used in countries such as France, Germany, Japan and Singapore to pay for public phone calls, transportation and shopper loyalty programmes.

Core Banking: core banking solution is a networking which creates a environment where the entire bank's operations can be controlled and run from a centralized hub. This creates a centralized customer data base which makes anytime, anywhere, anyway banking possible. It provides faster and efficient service to the customers. An important development in the



percentage of branches of public sector banks implementing CBS. The percentages of such branches increased by 79.4 % at end March 2009 to 90% at the end of March-2010.

Table 11 showing: Branches under Core Banking (in %)

Name of the Bank	Branches under core banking solutions
Public Sector Banks	90%
Nationalised Banks	85.9%
State Bank Group	100

Source: Report on Trend and Progress of Banking in India 2009-10, PP-55

Automated Teller Machine (ATM): ATM is an electronic machine which allows to customer to withdraw or deposit funds, check account balances, transfer fund, and check statement information, Purchasing online products, Train tickets reservations, Products from shopping mall, Donating to charities, Claque processing module, Adding pre-paid cell phone/mobile phone credit, Advertising channels for own or third party products and services, Pay premium..

Table 12 showing: Growth in ATM Installation (2005 To 2009)

Year	Number of ATMs
2005 -06	21110
2006-07	25247
2007-08	34547
2008-09	43651

Source: Cyber Media DQ Estimates Research

In 2010-11 the number of ATMs increases of 24 per cent over the earlier year. However, the percentage of off-site ATMs to total ATMs show decline to 45.3 per cent in 2010-11 from 45.7 per cent in 2009-10. More than 65 per cent of the total ATMs belonged to the public sector banks as at end March 2011.



Table-13 showing: ATMs of Scheduled Commercial Banks (As at end-March 2011)

SR NO	Bank group	On-site No. ATMs	Off-site No. ATMs	Total number ATMs as of ATMs	Off-site ATMs as per cent of total ATMs
I	Public sector banks	29,795	19,692	49,487	39.8
1.1	Nationalised banks	15,691	9,145	24,836	36.8
1.2	SBI group	14,104	10,547	24,651	42.8
II	Private sector banks	10,648	13,003	23,651	55.0
2.1	Old private sector banks	2,641	1,485	4,126	36.0
2.2	New private sector banks	8,007	11,518	19,525	59.0
III	Foreign banks	286	1,081	1,367	79.1
	All SCBs (I+II+III)	40,729	33,776	74,505	45.3

Source: RBI

The use of electronic payment has witnessed manifold increase, partly reflecting increased adoption of technology. The growth of volume of ATMs indicates that customer most prefer ATMs for transactions because they do not want to go branches for their day to day banking transaction.

Mobile Banking: Mobile banking is used for performing balance inquiry, account transactions, payments etc. via a mobile phone. Mobile banking is performed via SMS or the Mobile Internet, but can also use special programmes downloaded to the mobile device

Magnetic Ink Character Recognition (MICR): MICR introduced in 1987 in India. In this system data are printed at the bottom of cheque in magnetic ink, for an electronic read is a typical use of electronics for cheque processing. In 14 centers the MICR clearing is operation viz- Hyderabad, Bangalore, Ahmadabad, Kanpur, Japura, Nagpur, Baroda, Pune, Gauhati, Trivandrum. Speed clearing, introduced in 2008, operating on the core banking infrastructure of banks has now been made available as a part of MICR. Dealing at all the 66 MICR cheque processing centers (CPCS).

Table 14 showing: Payment system indicators-annual turnover

Item	Volume (000's)			Value (Rupees in Crore)		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
MICR Clearing	1201045	1140492	1143164	6028672	5849642	6664003
MICR clearing	237600	233566	230567	1867376	2060893	1878425

Source: RBI, annual report 2009-10



Real Time Gross Settlement (RTGS): RTGS means funds are transfer on a real time from one bank to another .Real time refers to there is no waiting period. The transactions are settled as soon as they are processed or one to one basis without bunching with any other transaction.

Table 15 showing: Growth of RTGS in India

Item	Volume (000's)				Value (Rupees in Crore)			
	2007-08	2008-09	2009-2010	2010-2011	2007-08	2008-09	2009-10	2010-2011
RTGS	5840	13,366	33,241	49,3	2,73,18,330	3,22,79,881	3,94,53,359	4,84,87,234

Annual RBI report 2010-11

INFINET: The 'INFINET' - Indian Financial Network is a satellite based wide area network using VSAT (Very Small Aperture Terminal) technology set up by the RBI in June 1999. The hub and the Network Management System of the INFINET are located in the Institute for Development and Research in Banking Technology, (IDRBT) Hyderabad. A Closed User Group of the member banks of the network called the "INFINET User Group" has been formed to resolve issues of common interest on a continuing basis. Among the major applications identified for porting on the INFINET in the initial phase are e-mail, Electronic Clearing Service - Credit and Debit, Electronic Funds Transfer and transmission of Inter-city Cheque Realisation advices. Later, other payment system related applications as well as Management Information System (MIS) applications are proposed to be operationalised. (banknetindia.com)

S.W.I.F.T: SWIFT stand for the Society for Worldwide Inter-bank Financial Telecommunication. It was set up in 1973 and is based in Brussels. It facilitates reliable and expeditious telecommunication facilities for exchange of financial message all over the world. In SWIFT, financial world conducts its business operations with speed, certainty and confidence. SWIFT linked more than 9000 financial institutions in 209 countries, who were exchanging an average of over 15million messages per day as of September 2010.

Institute for Development and Research in Banking Technology (IDRBT): IDRBT was set up by RBI in 1996.The main purpose of IDRBT is to adopt research and development as well as consultancy in the application of technology to the banking and financial sector in the country.



Structured Financial Messaging Solution (SFMS): the SFMS was launched on December 14, 2001 at IDRBT. SFMS is a secure messaging standard for intra-bank and inter-bank application. It is similar to SWIFT which is the international messaging system used for financial messaging globally. SFMS system is used for secure communication within the bank and between the banks.

CONCLUSION:

Banking sector plays an important role in expansion of Indian economy. So banks need to optionally leverage technology to increase penetration, improve their productivity and efficiency, deliver cost-effective products and services, provide faster, efficient and convenient customer service and thereby, contribute to the overall growth and development of the country. Technology enables increased penetration of the banking system, increases cost effectiveness and makes small value transactions possible. Technology allows transactions to take place faster and offers unparalleled convenience through various delivery channels. Technology enhances choices, creates new markets, and improves productivity and efficiency. Effective use of technology has a multiplier effect on growth and development.

REFERENCES:

1. Ahmad,Uddin Jayanal and Raul, R.K (2005), public sector banks in India impacts of financial sector reforms, new Delhi, kalpaz publication,pp-81
2. Shimizu, Satoshi (2010), The State of the Indian Banking Sector and its Role in India's High Growth, Pacific Business and Industries Vol. X, 2010 No. 36
3. Das, Santosh Kumar (2010), Financial Liberalization and Banking Sector Efficiency: The Indian Experience, 12th Money and Finance Conference, 11 – 12th March 2010, IGIDR, Mumbai
4. Statistical tables relating to banks in India 2010-11, reserve bank of India
5. Statistical tables relating to banks in India 2009-10, reserve bank of India
6. Rayudu,C.S,(2004),E-commerce E-business,Nagpur, Geetangali Press Pvt LTD.PP-74
7. Agarwal,kamlesh.N ,Lal, amit and agarwal, deeksha (2000), new delhi, rajkamal electric press,pp-30
8. 'INFINET' - Indian Financial Network, assessed on-07-02-2012



9. Real Time Gross Settlement, 23 November 2011, *en.wikipedia.org/wiki*, assessed on-07-02-2012
10. Society for Worldwide Interbank Financial Telecommunication, 4 February 2012 *en.wikipedia.org/wiki*, assessed on -07-02-2012
11. Structured Financial Messaging System, 9 November 2011, *en.wikipedia.org/wiki*, assessed on-07-02-2012
12. Saxena, M.K(2004), E-commerce fundamentals and applications, new delhi, mangal deep publication
13. Information technology and banking- a continuing agenda, reserve bank of India
14. Tandon , dr. Deepak, et al(2011), Indian banking technology, innovation and key concerns, pp-18, Delhi , published in India by Prem Singh Bisht for Kunal Books and printed at Asian Offset Press.
15. Sawant, B.S. (2011), Technological Developments in Indian Banking Sector, Vol.1, Issue.IX/Sept; 11pp.1-4
16. Joseph.P.T,(2003), New Delhi, prentice hall of India private limited, pp-186
17. Ankit, Shah(2011), Factors Influencing Online Banking Customer Satisfaction and Their Importance in Improving Overall Retention Levels: An Indian Banking Perspective,
18. www.iiste.org, Information and Knowledge Management, ISSN 2224-5758 (Paper) ISSN 2224-896X (Online) Vol 1, No.1, 2011