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NEW HORIZON OF THE INDIAN COMMERCIAL BANKING SECTOR

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ABSTRACT

Banking Sector is an important and significant segment of the Indian economy and act as a backbone of economic Progress. Currently the most important factor shaping the world is Globalization. The benefits of globalization have been well documented and are being increasingly identified. Therefore banking industry transformed into a very volatile and competitive industry. It has undergone sea change in last one decade and changing very fast. It has become a challenge to keep pace with technological changes and advancement for the Indian Economy. The new entrants have compelled the commercial banks to change their system and attitude to meet the situational demand for their survival.

During the last decade the pattern of Commercial banking has undergone a considerable change. The IT revolution and Globalization aroused enormous expectations from the banking sector in India. Their activities have extended to achieve the economic development and economic growth of the country.

The new banking policies, as formulated in the Global era have sought to change the very structure of commercial banking in the country. The wind of liberalization and Globalization sweeping through India has affected all sectors of the Indian economy and the centre of all the activities is the Indian Banking Industry. In such a fast-changing environment to meet emerging needs, the operations in banks need immediate automation to provide services comparable to best international standard and to match technological changes taking place in other countries.

This paper discusses the rapid changes in banking sector due to globalization, liberalization and deregulation. This has made Indian Commercial Banking Sector more competitive segment in financial market. The Objective of this chapter is to make aware about the technological up-gradation in the banking sector, Customer services, customer friendly approach, hassle free banking around the clock, overseas operations of the Indian Commercial Banks, Financial inclusion etc.

KEYWORDS: Information Technology, Overseas operations, Computerization.

INTRODUCTION Technological Developments in Banks:-

Indian Banks undertook very little efforts for modernization in respect of work technologies particularly in the area of introduction of computers and Communication networks until the early 1980s.¹

Prior to 1983 (when the agreement with unions on computerization was signed), most of the banks, being practically unable to computerize, had taken a passive view of this issue resulting in automation taking a very low priority. However the new agreement reversed this trend and banks started the process of computerizing operations at various levels.

Only after 1983 and after the first report of 'Rangarajan Committee' were there brisk activities in order to bring quick technological changes in the field of computers and communications.

The concept of technological upgradation practically started after 1980-81 and more precisely gained pace in the year 1983-84, after setting up a committee in the year 1983 under the chairmanship of the Deputy Governor of RBI, Dr. C. Rangarajan. This committee was set up to study the possibilities and stages involved in technological upgradation and to prepare guide-lines for the same. The report submitted by the Committee in the year 1984 was known as First Rangarajan Committee Report on bank mechanization.

Another Committee was constituted in 1988 under the chairmanship of Dr.C.Rangarajan to draw up a perspective plan on upgradation of banks for a five year period 1990-94

After 1990-94, over the years, the Reserve Bank has laid special emphasis on technology infusion in the day to day operations of banks. Technology, apart from increasing the efficiency of banking services is expected to boost the ongoing process of financial inclusion emphasized by the Reserve Bank.

Technological developments have vastly altered the banking landscape in India with significant improvement in process and procedures leading to higher productivity, rapid product development through alternative delivery channels, and reduction in the transaction cost. In particular the technology is being leveraged increasingly to expand the baking outreach.

NEED FOR BANK COMPUTERIZATION

The four major objectives of Computerization in banking are to improve-(a) Customer Service (b) housekeeping (c) decision making (d) Productivity & Profitability. A question, often raised, is whether in order to achieve these objectives, Computerization is at all necessary. Speed and accuracy are the hallmarks of computers. Computers have a vital role to play wherever there is a huge volume of transactions and the work needs Completion within a specified period. Consumers today are becoming more discerning and demanding. There is a price on their time and therefore, when they visit a branch for a deposit or a cheque encashment, they are looking for a quick settlement of their transactions. Thus, the advantages flowing from Computerization are many and most people working in the banking industry recognize it.

The main objectives of computerization at the branch level should be to improve customer service, quality of housekeeping and generation of data for better management control. At the regional and head office levels, the purpose of computerization should be store, analyses and retrieve data received from branches, generating information speedily, thereby strengthening the internal control over branches for policy formulation.

Developments in the field of information technology (IT) strongly support the growth and inclusiveness of the banking sector thereby facilitating inclusive economic growth. IT not only enhances the competitive efficiency of the banking sector by strengthening back-end administrative processes, it also improves the front-end operations and helps in bringing down the transaction costs for the customers. It has the potential of furthering financial inclusion by making small ticket retail transactions cheaper, easier and faster for the banking sector as well as for the small customers. The Reserve Bank has thus been actively involved in harnessing technology for the development of the Indian banking Sector over the years.

The most fundamental way in which technology has changed the face of the Indian banking sector has been through Computerization. While new Private Banks and foreign, banks have an edge in this regard, Public sector banks have been investing for upgrading their operations by way of computerization of the total number

(notes)

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¹ Principles & Practices of Banking, 2ndEdition, page no.264,

of public sector bank branches, 97.8 Percent were fully computerized at end March 2010. All branches of the SBI group were fully computerized.

A technological development closely related to computerization in bank branches is the adoption of the core banking solutions (CBS). CBS enable banks to offer a multitude of customer-centric services on a continuous basis from a single location, supporting retail as well as corporate banking activities thus making "One-Slop" Shop for financial services a reality. An important development 2009-10 was a significant increase in the Percentage of branches of public sector banks implementing CBS.² The percentage of branches under CBS was much larger for the SBI group as compared to nationalized banks.

While Computerization in general, and CBS in particular, having reached near completion, It is important to leverage on to this technological advancement to look at areas beyond CBS that can help in not just delivering quality and efficient services to customers but also generating and managing information effectively with regard to the second aspect of information management, a system of receiving data from banks by the Reserve Bank in an automated manner without any manual inter venation is under examination :

		(Per	cent of to	tal bank b	ranches)
Category	2006	2007	2008	2009	2010
Fully Computerized Branches (i+ii)	77.5	85.6	93.7	95.0	97.8
(i) Branches under core Banking solutions	28.9	44.4	67.0	79.4	90.0
(ii) Branches already Computerised ²	48.5	41.2	26.6	15.6	7.8
Partially; Computerized Branches.	18.2	13.4	6.3	5.0	2.2

Table 1. Computerization in Public Sector Bank.

Source: Compiled from various issues of Report on Trend and Progress of Banking in India

After the year 2010, the computerization of the branches reached the edge of Completion. The Proportion of Public sector bank branches achieved full computerization. The process of Computerization, which was the Starting point of all technological initiatives, reached near completion for most of the banks. Public sector banks expend large amount on computerization and development of communication networks.

ELECTRONIC PAYMENT SYSTEMS

The growth of technology has changed Payment Systems the world over during the past two decades. More and more innovations are being introduced in both the cash payment system and non-cash payment systems. In the recent years, the use of electronic payments has witnessed manifold increase, partly reflecting increased adoption of technology. The growth of volume of transactions directed through electronic payment method has grown up. The introduction of automatic teller machines (ATMS) and the plastic cards has given the banking customers the facility of round the clock (24 hours) banking.

The major routine processing in day-to-day banking operations originates at the cash counter or letter counters in the banks. Essentially the idea behind the electronic payment system is that a number of the activities related to payment should be done with the help of computers. Over the years, RBI has laid special emphasis on technology infusion in the day-to-day operations of banks. Technology, apart from increasing the efficiency of banking Services, is expected to boost the ongoing process of financial inclusion emphasized by the RBI. In recent years, increase in the Number of off-site ATMS in various locations as well as use of mobile phones for delivering banking technology has further facilitated banking Outreach ;in remote areas. The IT Vision Document, 2011-17 of the Reserve Bank sets out the roadmap for implementation of key IT applications in banking with special emphasis on seamless delivery of banking services through effective implementation of Business Continuity Management (BCM), information Security Policy, and Business Process Re-engineering (BPR).

While the Computerization and adoption of core Banking Solutions in banks almost reached the final stage of completion, the focus has now shifted to adoption of more advanced technologies in banking, which would use analytics and business intelligence to enhance their customer. Relationship Management (CRM) and improve internal effectiveness including Management Information systems (MIS) and managing risks arising out of IT implementation.

² Other than branches under core banking solution

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⁽notes)

	Table 2. ATMs of Scheduled Commercial Banks							
S.N	Bank groups	2006	2007	2008	2009	2010	2011	2012
1.	Public Sector Banks	14670	16329	21443	27277	40680	49487	58193
1.1	Nationalized Banks	8435	9888	11567	15938	19702	24836	31050
1.2	SBI group	6235	6441	9876	11339	20978	24651	27143
2.	Private Sector Banks	8765	9799	12356	15320	18447	23651	36079
3.	Foreign Banks	890	960	990	1054	1026	1367	1414
	All SCBs (1+2+3)	24325	27088	34789	43651	60153	74505	95686

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Note Excluding IDBI Bank ltd

Source Compiled from various issues on trend and Progress of Banking in India.

The Table 2 shows that there is an increase in the total volume of electronic payments. There is a sustained increase I n total number of ATMs from 2006 to 2012 indicating none towards door-step banking.

For optimizing the cost on investments in ATMs, Banks joined together in small clusters to share their ATM networks. There are many such ATM network clusters functioning in India. In order to facilitate inter-Operability among three clusters at the National level, the IDRBI has initiated the process of setting up a 'National Financial Switch' to facilitate apex level connectivity of others Switches established by banks.

ATMs in India have come to occupy a key component of retail channel strategy adopted by the banks worldwide. As a self-service channel, banks have delivered exceptional customer convenience in deploying the ATMs. In the Indian situation, the Public Sector banks are implementing their technology blueprint by networking their branches. Their customers have started experiencing the transition from being a branch customer, to becoming a customer of the bank, thanks to the core banking solutions which are under implementation.

The major technological development which has revolutionized the delivery channel in the banking sector is the development of ATM. ATMs particularly off-site ATMs, act as substitutes for bank branches in offering a means of anytime cash withdrawal to customers. Growth in ATMs had been generally on a rise in the recent years.

Changing Trend of the Payment Systems from cash to Cashless or noncash payment:-

In India, cash continues to be the predominant mode of payment. The policy initiatives and the regulatory stance of the Reserve Bank has continued to focus on increasing the acceptance and penetration of safe, secure and efficient non-Cash payment modes comprising cheques, credit/debit cards, and transactions through ECS / RTGS/NEFT, over the years. Due to these measures the non-cash retail payment continues to over the last 5 years.

Year	Non-cash retail Payments*
2006-07	1,94,459
2007-08	3,05,382
2008-09	3,29,736
2009-10	4,06,116
2010-11	4,76,291
2011-12	5,16,332

 Table 3. Trend in Payments Systems

 (in hillions)

Source : Various RBI Publications and Database on Indian Economy (DBIE). *Cheques, ECS, NEFT, Cards, RTGS. Customer transactions

Table 3 shows the trend in non-Cash retail payment. The Non-Cash retail payment continues to increase from 2006-07 to 2011-12. It was 1, 94,459 in 2006-07 which tend to rise and it becomes 5, 16,332 in 2011-2212.

The bank-led mode for mobile banking has also started gaining popularity in the recent years. By the end of 2012 69 banks were granted approval to provide mobile banking facility, of which 49have started operations. In the year 2010. National Payment Corporation of India (NPCI) was given approval to launch Interbank Mobile Payment Service (IMPS), which is a unique 24x7 inter-bank electronic funds transfer system providing instantaneous credit to the beneficiaries. With this channel having now stabilized and gaining further customer acceptance, the earlier transaction limit for mobile baking has been removed by the Reserve Bank. The banks are now free to fix their own per transaction limit based on their own risk perception with the approval of their respective Boards. Apart from this, the volume and value of transactions through the two Major electronic Payment Systems of the country, i.e., RTGS and NEFT has increased rapidly.

Pre-paid payment instruments (PPIs) have emerged as a convenient replacement / Substitution for cash transactions, besides providing a proper and it trail. PPIs are Payment instruments that facilitate purchase of goods and Services against the value Stored on such instruments. By the end of 2012, 40 banks were granted approval/authorization under the Payment and settlement system (PSS) Act, 2007 to issue PPIs in India. Three types of PPIs are popularly issued, i.e., Paper voucher, Cards and m-wallets. Amongst these, the paper vouchers are the most popular in terms of numbers and value.

Going forward, the relaxation in the domestic money transfer guidelines introduced in October 2011 are expected to provide further impetus towards financial inclusion through electronic PPIs, including the use of mwallets, by enabling all authorized entities to increase domestic remittances through formal Payment Channels.

TECHNOLOGY BASED SOLUTIONS FOR RURAL CREDIT DELIVERY

The Reserve Bank has been encouraging banks to use technology-based solutions for increased financial inclusion. Credit delivery in rural areas has often been expensive for banks with large number of small loan accounts to be service. Information Technology (IT) enabled methods are being looked into as the best alternative for rural credit delivery that can increase outreach and reduce cost of delivery.

Permission to banks to appoint business correspondents (BCs) has opened Possibilities of outreach which were not available earlier. The use of appropriate technology by the BCs has the Potential of reducing operational costs and building up a powerful management information system (MIS) in addition to creating rural employment. The use of technology combined with an effective use of BCs has the potential of creating a banking outpost in every village, which can enhance the rural credit delivery.

Several models have emerged in the last couple of years to enable technology driven rural outreach by banks. Nearly all of them converge on the following essential components;

- 1) a customer with a multi application smart card which can be contact card or a contact-less card,
- business correspondent with a computer / hand held terminal/mobile phone enabling banking services.

- 3) a central processor unit,
- 4) the bank and
- 5) a centralized card management for each of the above systems.

The technology application model is premised on providing financial services in the rural areas through the BC model using low cost and simple IT based solutions. A central system which could be a shared infrastructure providing for economies of scale and consequential cost benefits, and a field system which enable access to the central computer by the BCs are essential components of the model. Hand held computer devices which connect to remote servers using fixed line connectivity and mobile technology are being extensively used. Finger print method for uniquely identifying customers for extending financial services is being widely accepted. It has been observed that bio-metric identification for KYC purposes is emerging as the mode popular method. Transactions in the accounts such as cash deposits and withdrawals can be carried out by customers without having to go to the bank branch. The customers are issued hard copy of transaction details facilitated by a tiny printer.

An IT enabled model for banking outreach is basically implemented as under:-

- Information regarding potential customer is collected by business facilitators and passed on to the bank in a prescribed format or the BC enrolls the customer account for the bank.
- Banks carryout KYC scrutiny and arrange for opening a savings bank account for the customer, after relevant information is captured, such as his photograph, fingerprints and signature (optional). This information is encrypted in the smart card.
- While handing over the card to the customer, the BC activates the card for the customer by fingerprint identification. At the time of activation, the balance available in the bank account is recorded on the smart card.
- A customer can withdraw and deposit money using his smart card at the terminal of the BC. Every time a transaction is made, a print out is provide to the customer. Transactions cannot be undertaken unless a biometric verification of the cardholder is done.
- Banking transactions are freed from branch timings and can be done whenever the BC is available with a capture device.

EPRA International Journal of Economic and Business Review

If a BC does not have requisite money to pay the customer, a print out will be given to him stating that no cash is available at the customer's end. This information will be passed on to the bank through the central processor to facilitate immediate replenishment of cash. Incidentally, this also acts as a check to prevent business correspondent from denying service to customers.

The terminal with the BC is operated with a rechargeable battery and not dependant on steady supply of electricity.

- An added facility that can be enabled is that the customer can use the smart card as a debit card at merchant establishments.
- A central processor unit integrates village level terminals and identified merchant establishments with the bank.
- The technology seamlessly integrates into core banking solutions of the banks concerned and supports various types of deposits and loan accounts.

Each hand held model can be use to service 500 to 1000 accounts by BC : the device when seen in ;the context of its servicing capabilities and range is very cost effective. Such models have already been adopted by some private sector and public sector banks. In the Annual Policy for the year 2007-08, banks were urged to scale up IT initiatives for financial inclusion speedily while ensuring that solutions are highly secure, amenable to audit, and follow widely accepted open standard to ensure eventual inter-operability among the different systems.

Automated Data Flow in the Banking Sector: The future of effective Data Transmission and Management:-

World over, central banks and various regulatory bodies depend on information received from regulated entities which helps in discharging their responsibilities and functions in an efficient manner. It also enables them to frame appropriate policies. Information consists of data which should be collected based on the principles of integrity, reliability, and accuracy. This information is systematically and meaningfully derived from data. It I, therefore, Pertinent that data and information reaches the regulators not only in a timely manner but also is free from errors and distortions. The requirement is, therefore, to ensure collation of quality data along with its processing and flow to the appropriate level in a timely manner.

The concept; of Automated Data Flow (ADF) seeks to fulfill this requirement in which data is seamlessly transmitted from the host systems to the recipient system without any intermediation, thus making the whole process more efficient. Consistent and reliable. At the same time, as a major spin-off benefit, the system of automated data flow also streamlines the information sharing mechanism at the host level thus serving as a potent MIS tool and encourages good data management practices. It should help banks not just to deliver robust and reliable services. To their customers at a lower cost, but also generate and manage information effectively.

Submission of consistent data in a timely manner by banks is significant for the Reserve Bank in discharging its regulatory and supervisory functions. The flow of data from banks to the Reserve Bank in an automated manner would not only ensure its timely availability but also provide a better information-environment for building an effective decision support system. Large volumes of data relating to customers and transactions are now available with banks. Which can be gainfully utilize through proper analysis with an objective to tailoring business strategies, meeting diversified internal and external MIS requirements and building robust risk management systems.

With computerization of commercial banks having reached a plateau (even with regard to adoption of CBS), it has become possible to bring about a paradigm shift in the data flow and information sharing arrangements by harnessing the benefits of IT resources. The system of ADF would help in leveraging on these benefits and propel the information sharing system between banks and Reserve Bank to the next higher level.

OVERSEAS OPERATIONS OF INDIAN BANKS

Indian banks Continued to expand their presence overseas. Even though Bank of Baroda continued to have largest overseas presence, State Bank of India also increased its operations overseas significantly during the years to narrow the gap. Among Private sector banks, ICICI Bank Ltd. had the largest foreign Presence. All total the Indian Banks are operating well abroad.

S.N	Name of the Bank	2006	2007	2008	2009	2010	2011	2012
	Public Sector Banks	151	168	175	189	203	211	215
1	Allahabad Bank	1	2	2	2	2	2	2
2	Andhra Bank	1	1	1	2	2	2	2
3	Bank of Baroda	51	56	58	58	59	60	59
4	Bank of India	26	28	31	33	33	33	33
5	Bharat Overseas Bank	1	-	-	-	-	-	
6	Canara Bank	3	4	3	3	5	5	6
7	Corporation Bank	-	-	-	2	2	2	2
8	Indian Bank	3	3	3	3	3	4	4
9	Indian Overseas Bank	8	9	10	10	11	11	9
10	IDBI Bank ltd	6	-	-	-	1	1	1
11	Punjab National Bank	6	7	7	9	11	12	13
12	State Bank of India	45	50	50	55	59	64	69
13	State Bank of Travancore	-	-	-	-	-	-	-
14	Syndicate Bank	1	1	1	1	1	1	1
15	UCO Bank	5	6	6	6	6	6	5
16	Union Bank	N.A	1	3	4	6	6	6
17	United Bank of India	-	-	-	-	1	1	1
18	Oriental Bank of Commerce	-	-	-	1	1	1	1
	New Private Sector Banks	21	25	28	30	30	33	35
19	Axis Bank	1	4	5	5	5	6	7
20	Centurian Bank of Punjab.	2	1	-	-	-	-	-
21	HDFC Bank Ltd	1	1	2	3	3	4	4
22	ICICI Bank Ltd	15	17	18	18	18	19	20
23	Indus Ind Bank Ltd	2	2	2	2	2	2	2
24	Federal Bank Ltd.	-	-	1	1	1	1	1
25	Kotak Mahindra Bank Ltd.	-	-	-	1	1	1	1
	Total	172	193	203	219	233	244	250

Table 4. Overseas Operations of Indian Banks

Note Data Comprises of total No. of Banks including Branch, Subsidiary, Representative Office, Joint Venture Bank

Source Data Compiled from various issues on trend and Progress of Banking in India

By analysis the table, it may be noted that in Public Sector banks the overseas Operation of State Bank of India, occupies a first place proceeding by Bank of Baroda on the second place. In case of new private Sector banks ICICI Bank Ltd. Occupies a first place in overseas operation. There has been a Continuous increase in overseas operation from 172 in 2006 to 2.50 in 2012. This expansion in the growth of overseas operations by Indian Banks is remarkable. Thus Indian banks continued to expand their presence overseas.

TECHNOLOGY AS A DRIVEN FORCE FOR COST REDUCTION

Technology will bring fundamental shift in the functioning of banks. It would not only help them bring improvements in their internal functioning but also enable them to provide better customer Service. Technology will break all boundaries & encourage cross border banking business. Bank would have to undertake extensive business process Re-engineering & tackle issues like.

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- a) How best to deliver products & services to consumers
- b) Designing an appropriate organizational model to fully capture the benefits of technology & business process changes brought about.
- c) How to exploit technology for delivering economies of Scale & how to create cost efficiencies &
- d) How to create a customer centric operation model.

IT spent by banking &financial Services industry in U.S.A is approximately 7% of the revenue as against around 1% by Indian Banks. With greater use of technology solutions, we expect IT spending of Indian Banking system to go up significantly. The other area where the banking system can reduce the investment cost in technology applications in by showing of facilities. We have already the banks coming together to share ATM networks. The more advanced the technology, the higher the cost saving generated with much wider coverage resulting in quicker, cheaper & reliable service. However one should not get lost in the maze of new technologies as statistics do not support the Proposition of technology aggression.

The concept of Retail banking is not new to the Indian banks but only in the recent times it has attracted the special attention of banks. As opposed to wholesale banking, it focuses individuals. & their personal needs. The retail banking strategy of banks is a response to the changing banking environment from the point of view of Profitability & Risk management.

The Introduction of new technology & delivery channels has helped banks acquire customers rapidly. Take the case of I.C.I.C.I. Bank which has nearly doubled its customer base to five million in April 2003 from 2.2 Million in the Previous year. Similarly for HDFC bank, it process more than 10 Million transactions a month in the corresponding previous year.

NEED FOR IMPROVING THE QUALITY OF BANKING SERVICE

Quality of banking services is another area which requires continuous improvement to attract more customers to the formal banking channels. It is a welcome development that at the aggregate level the number of complaints received at various banking Ombudsman offices registered a decline in the recent years. However, a detailed analysis revealed that both foreign banks and new private sector banks need to make continuous efforts to improve the quality of service offered by DSA as more than 90% of the complaints with regard to DSA were received against these two bank groups. Further, these two bank groups need to promote transparency by way of informing customers about different charges levied by them.

To conclude, focused attention on the issues that are being confronted by the banking sector may be imperative in the larger interest of securing economic growth with equity. Once these issues are addressed, the Indian banking sector has the potential to become further deeper and stronger. Greater attention to these issues would facilitate better financialization of the economy and the medium to long-term lead to broad based economic growth.

CONCLUSION

The objective of computerization in India is not to replace men with machines. Rather, the objective is to make the work life more meaningful. As we deal in an industry, which is the largest processor of information and data, reliance on technology is inevitable. Needless to say, absorption and effective utilization of the new technology will involve a change in structure, organization and systems as well as attitudes of those working in the industry. With the development of modern communication facilities, electronic payment systems are becoming popular. These are teller machines available for bank customers within the bank as well as outside the bank premises. Customers need not necessarily visit the bank to do banking transactions when there banker provides them tele banking or remote banking facility.

The overseas operation of the banks shows strong network of the Indian banking industry and the emergence of universal banking. It removes the geographical barriers as it could reach out to customers of different countries.

Area for future research:-

This is not the end of this study; we should further go ahead for intensive research on the technological development and new face of the Indian Banking Sector. Some of the core issues need to be listed below:-

- Study on the changing nature of technology, a series of longitudinal studies can be pursued showing its impact on the banking sector along the study of technology as cost driven force for the banking sector.
- The further research can be conducted on the overseas operation of the Indian Banks, as Indian Banks opened branches and representative offices abroad and the expansion in the growth of overseas operation by Indian Banks are remarkable.

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