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TECHNOLOGY BANKING IN INDIA: STATUS, BENEFITS AND CHALLENGES

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ABSTRACT

The global economy underwent revolutionary changes since 1980s. These revolutionary changes was motivated by different factors in which technology plays a crucial role. Technology embraced all walks of life and banking sector was not an exception. The conventional money is replaced by technology linked products popularly labeled as plastic money. In many of the countries, conventional money lost its significance and is dominated by technology innovations in the money market and capital market. The IT adoption in Indian banking industry has gained momentum since the adoption of New Economic policy in 1991. Even now IT adoption is continuing and in this context it is imperative to examine the present status of IT adoption, its benefits and related challenges.

KEY WORDS: banking technology, benefits, challenges.

INTRODUCTION

The advent of technology has changed all walks of life. The policy makers have realized the potential of technology to cater the needs of the economy and its close inter linkage with economic development. The Narasimham Committee Reports of 1993 and 1998, BASEL Committee reports etc paved way for technology based banking practices. With the economic

reforms of 1991, foreign banks and private sector banks emerged with state-of-the-art technology based services. Electronic banking can be defined as the process in which a customer could perform banking transactions electronically without visiting a brick-and-mortar institution. The term e-banking encompasses the entire sphere of technology

initiatives that have been taken place in the banking industry. the technology based services includes ATM facility, debit cards, credit cards, mobile banking, internet banking, ECS, EFT, RTGS, NEFT, core banking solutions etc.

OBJECTIVES OF THE STUDY

The objectives of the study are:

- (i) To examine the current status of technology banking in India.
- (ii) To examine the benefits and challenges of banking technology in India.

METHODOLOGY

The study is mainly based on secondary data obtained from the annual reports of Reserve Bank of India. Also information is collected from NIBM publications such as ‘Prajnan’ and other working papers. To analyze the data growth rate is used and also line diagrams and bar diagrams are used for data presentation.

RESULTS AND DISCUSSIONS

Technology banking is gaining much popularity and RBI has taken various initiatives in this regard. RBI has taken policy initiatives to enable non-bank entities to set up and operate ATMs called White Label ATMs. But in India technology banking has not yet in a developed stage.

Computerization in public sector banks:

The computerization of public sector was the starting point of technology based banking. In 2005 fully computerized branches were 71 percent which reached 97.8 percent in 2010. The percentage of partially computerized branches reduced from 21.8 percent in 2005 to 2.2 percent in 2010, which implies that the branches are soon to be fully computerized.

Table-1 Computerization in public sector banks in India (percent)

Year	Branches Already Fully Computerised (1)	Branches Under Core Banking Solutions (2)	Fully Computerised Branches (1) + (2)	Partially Computerised Branches
2005	60	11	71	21.8
2006	48.5	28.9	77.5	18.2
2007	41.2	44.4	86	13.4
2008	26.6	67.0	93.7	6.3
2009	15.6	79.4	95.0	5.0
2010	7.8	90.0	97.8	2.2

Source: RBI report

Issue of ATM cards:

The ATM cards issued by all the scheduled commercial banks in India are showing an increasing trend. In 2007 the scheduled commercial banks in India issued 27088 cards

which rose to 114014 in 2013. Public sector banks tops in the issue of ATM cards with 69652 in 2013 whereas private sector banks and foreign banks issued 43101 and 1261 ATM cards respectively.

Table-2 ATMs of Scheduled Commercial Banks

Banks	2005	2006	2007	2008	2009	2010	2011	2012	2013
Scheduled Commercial Banks	NA	NA	27088	34789	43651	60153	74505	95686	114014
Public Sector Banks			16329	21788	27277	40680	49487	58193	69652
Nationalized Banks	4772	7165	9888	13355	15938	19702	24836	31050	35359
State Bank Group	5220	5443	6441	8433	11339	20978	24651	27143	32591
Private Sector Banks	6853	7659	9799	11967	15320	18447	23651	36079	43101
Old Private Sector Banks	1241	1547	1607	2100	2674	3390	4126	5771	7566
New Private Sector Banks	5612	6112	8192	9867	12646	15057	19525	30308	35535
Foreign Banks	797	880	960	1034	1054	1026	1367	1414	1261

Source: RBI report

Debit cards:-

Debit cards are more popular compared to credit cards. During 2005-06, the scheduled commercial banks in India issued 75 million debit cards which has tremendously increased and reached 331.2 million in 2012-13 periods. The public sector bank dominates

in the issue of debit cards with 260.6 million in 2012-13 whereas private sector banks and foreign banks issued 67.3 million and 3.3 million respectively in the same period. The annual growth rate of debit cards issued by all scheduled commercial banks shows a declining trend.

Table-3 Debit Cards Issued by Scheduled Commercial Banks (in millions)

Year	1. Public sector banks			2. Private sector banks			3. Foreign banks	All SCBs (I+II+III)	annual growth rate of all SCBs
	Total	Nationalized banks	SBI group	Total	Old private sector banks	New private sector banks			
2006-07	44.1	19.2	24.9	27.2	3.9	23.3	3.7	75.0	-
2008-09	91.7	40.7	51.0	41.3	7.1	34.3	4.4	137.4	34.18
2010-11	170.3	80.3	90.1	53.6	12.4	41.1	3.9	227.8	25.16
2012-13	260.6	118.6	136.4	67.3	15.4	51.9	3.3	331.2	19.14

Source: RBI reports

Credit Cards:-

In the issue of credit cards private sector bank dominates with 11.1 million in 2012-13. The issue of credit cards by public sector banks have slightly went down from 4.1 million in 2006-07 to 3.5 million in 2012-13. The

scheduled banks in India issued 19.5 million credit cards in 2012-13. The annual growth rate of credit cards are negative from 2008-09 to 2011-12. But it shows an increase to 10.48 in 2012-13.

Table-4 Outstanding Number of Credit Cards (in millions)

Year	1. Public sector banks			2. Private sector banks			3. Foreign banks	All SCBs (I+II+III)	Annual growth rate of all SCBs
	Total	Nationalized banks	SBI group	Total	Old private sector banks	New private sector banks			
2006-07	4.1	0.8	3.4	10.7	0.0	10.7	8.3	23.1	-
2008-09	3.4	0.7	2.7	12.2	0.1	12.1	9.1	24.7	-10.50
2010-11	3.1	0.8	2.3	9.3	0.0	9.3	5.6	18.0	-1.64
2012-13	3.5	0.9	2.6	11.1	0.04	11.1	5.0	19.5	10.48

Source: RBI reports

Electronic transactions of scheduled commercial banks:-

Volume of electronic transactions of scheduled commercial banks:-

The volume of electronic transactions by means of ECS, EFT, NEFT and RTGS shows a

steady increase from the period of 2001-02 to 2013-14. During 2014 the volume of RTGS transaction was 69 million whereas in 2009-10 it was 33.2 million.

Table-5 Volume of electronic transactions of scheduled commercial banks

Year	ECS credit/debit /EFT/SEFT	ECS credit	ECS debit	EFT/NEFT	NEFT	RTGS
2004-05		40051	15300	2549		
2006-07		69019	75202	4776		
2008-09		88394	160000	32151		
2010-11		117.3	156.7		132.3	49.3
2012-13		122.2	177		394	69

Source: RBI reports

Note: from 2001-02 to 2008-09 unit is in thousands, from 2009-10 to 2012 -13 unit is in million

Value of electronic transactions of scheduled commercial banks:-

The value of electronic transactions has also increased drastically. The value of NEFT

during 2013-14 is Rs. 29022 billion and the value of RTGS for the same period is 676841 billion.

Table-6 Value of electronic transactions of scheduled commercial banks

Year	ECS credit/debit /EFT/SEFT	ECS credit	ECS debit	EFT/NEFT	NEFT	RTGS
2004-05	79479	20180	2921	54601		
2006-07		83273	25441	77446		
2008-09		97487	66976	251956		
2010-11		181686	73646		939149	48487234
2012-13		1771	1083		29022	676841

Source: RBI reports

Note: from 2001-02 to 2010-11, unit in crores , from 2011-12 to 2012-13 unit in billions.

BENEFITS OF TECHNOLOGY BANKING

Electronic banking is in the form of ‘click and portal’. It offers a wide range of benefits to both banks and customers.

1. Technology banking offers ‘anytime anywhere’ banking. Thus time and distance are no more barriers in performing banking activities with improved speed and efficiency.
2. Data management and data availability has become easier with the data warehousing systems.

3. Electronic banking helps in reducing transaction cost, making the banking transactions more cost effective. This also makes cross border transactions easier and cheaper.
4. Again, technology based banking is considered to be a means for financial inclusion through mobile banking and business correspondents.

5. In a knowledge based society customers are more informed and are demanding. Through IT adoption, banks are capable of providing better products and wider choices to the customers.
6. Banks can also have a better customer relationship management system which helps them to design and offer products that suits different classes of customers.
7. Banks can handle large volumes of transactions with ease.
8. Another benefit is that with the help of IT, banks can formulate better risk management systems.
9. Also banks can have a better credit appraisal system and can promote green banking.
10. Banks can also focus on fraud monitoring and prevention

CHALLENGES OF TECHNOLOGY BANKING

Even though electronic banking has benefited both banks and customers, it is not free from risks.

1. Technological failures give rise to operational risks which includes inaccurate processing of transactions, non-enforceability of contracts etc.
2. It includes security risks such as loss of data privacy and data integrity.
3. Electronic banking poses legal risks and confusion of laws regarding consumer privacy, disclosure information, validity of some agreements formed through electronic media and authentication of system by digital signature.
4. There are cross border risks in e-banking. Laws and rules related to customer protection, record keeping, privacy rules vary across the nations.

Issues related to data quality and consistency is also present

5. Electronic banking services raise some macro-economic challenges in the form of ineffective monetary policy due to cheap cross border transactions.
6. For a developing nation like India, there are infrastructural challenges to adopt global technology at low cost. Also rural customers have many barriers such as e-illiteracy, language barriers and negative perception towards technology banking.

SUGGESTIONS

1. Steps to enhance customer education.
2. Compatibility test to access customer acceptance before introducing new technology.
3. Government need to provide funds for technology adoption in banking sector.
4. Skilled and qualified staffs should be employed to assist customers in using advanced technologies.
5. Adequate legal frame work and security measures should be adopted.

CONCLUSION

Thus technology banking helps in meeting the challenges of economic growth and to ensure financial stability. Effective use of technology banking has a multiplier effect on growth and development. In this era of globalization technology enables rapid global growth and has led to structural changes. Thus with help of technology banks can adopt appropriate business and delivery models enabling acquisition of new customers and expansion of their banking territory.

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