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Techno-Based Services: An Alternative Way of Banking in India

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Abstract
Indian economic policy has been founded on the philosophy of economic growth with social justice. It is against this background that we have to assess the steps taken by the Indian banking system during the recent past which makes a significant departure from the beaten track of traditional banking . Intense competition among the banks has redefined the concept of the entire banking system. The banks are looking for new ways not only to attract but also to retain the customers and gain competitive advantage over their competitors through universal banking and relationship banking. India's banking system has seen some major financial innovations in the past decade as well as steps to promote financial inclusion, schemes that aim to take banking services to yet-to-be-banked areas. The various innovations in banking and financial sector are ECS, RTGS, EFT, NEFT, ATM, Retail Banking, Debit &Credit Cards, free advisory services, implementation of standing instructions of customers, payments of utility bills, fund transfers, internet banking, telephone banking, mobile banking, selling insurance products, issue of free cheque books, traveller's cheques and many more value added services. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. Financial innovation associated with technological change totally changed the banking philosophy and that is further tuned by the competition in the banking industry. Challenging business environment within the banking system create more innovation in the fields of product, process and market. .
Keywords: Internet banking, financial innovation, ATM, Credit Cards

INTRODUCTION
To cope with the pressures of growing competition, commercial banks have adopted several initiatives to strengthen their business practices including, among others, greater product so-phistication, increased customer orientation, improved risk-management (particularly credit risk management techniques), and updated management information systems, greater focus on e-finance channels and diversification into newer business areas. The competition was especially tough for the public sector banks as the newly established private sector and foreign banks had sharpened their competitive edge. However, they have re-sponded proactively to the challenges posed by the private sector banks and there has been a significant improvement in their performance in terms of profitability and operational efficiency Some of the proactive public sec-tor banks have now realized that in a new business environment, they have to be flexible enough to accommodate changes and at the same time have the necessary stability to retain the core competencies to deal with change. In the post-reform environment, the sophisticated clients choose the well-informed and responsive (attentive) banks. Therefore, the banks now focus more on upgrading their knowledge base in response to the process of continuous change and internet banking functions that provide a consistently positive multi-channel experience for the customer. This experience is enabled by an integrated CRM sys- tem built on an open IT infrastructure. With the use of technology there had been an increase in penetration, productivity and efficiency. It has not only increased the cost effectiveness but also has helped in making small value transactions viable. It also enhances choices, creates new markets, and improves productivity and efficiency. It has been noticed that financial markets have turned into a buyer‘s markets in India. Commercial Banks in India are now becoming a one-stop Supermarket. The focus is shifting from mass banking to class banking with the introduction of value added and customized products. Technology allows banks to create what looks like a branch in a business building‘s lobby without having to hire manpower for manual operations. The branches are running on the concept of 24 X 7 working, made possible by the use of Tele banking, ATMs, Internet banking, Mobile banking and E - banking. These technology driven delivery channels are being used to reach out to maximum number of customers at lower cost and in most efficient manner. Today, the banks able to offer the choice of customer services to provide his/her banking business across the bank counter, over the telephone or through computer or internet. "The key to survival, therefore, is retention of customer loyalty by providing him with value added services tailored to his needs.

LITERATURE REVIEW
Avasthi & Sharma (2000-01) have analyzed in their study that advances in technology are set to change the face of banking business. Technology has transformed the delivery channels by banks in retail banking. It has also

impacted the markets of banks. The study also explored the challenges that banking industry and its regulator face.Dr. Satish Tanaji Bhosale, Dr. B.S Sawant, "Technological Developments in Indian Banking Sector" This paper talks about the role of banking sector in the development 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 overall growth and development of the country. It highlights that technology allows transactions to take place faster and offer unparallel convenience through various delivery channels. This paper also talks about various technologies like MICR, Cheque transaction system, RTGS, NEFT etc. KPMG, "Technology enabled transformation in Banking", The Economic Times Banking Technology, Conclave 2011: The article has concluded that Information technology in banking is fast evolving. From enabling banking services to driving transformation in the industry, Information technology holds a promise to change the face of banking in the next few years. New entrants are looking to leverage their existing strengths in the Indian banking arena. The opportunity available to these entrants through leveraging their understanding of technologies and markets they operate in, promises innovative business models with a focus on delivering customer value. The pace of change aided by regulatory directions will push banks to direct their strategies to a customer centric focus over the next four years. According to Ozuru et al. (2010) "The importance of electronic payment system in any country can never be over emphasized, due to the dramatic transformation intechnological advancements that is being experienced by the global financial industry".B.Janki (2002) analyzed that how technology is affecting the employees' productivity. There is no doubt, in India particularly public sector banks will need to use technology to improve operating efficiency and customer services. The focus on technology will increase like never before to add value to customer services, develop new products, strengthen risk management etc. the study concludes that technology is the only tool to achieve their goals. Technological change and the advent of the internet are among the most dramatic and challenging areas of change for the sector.Jalan, B. (2003), IT revolution has brought about a fundamental transformation in banking industry. Perhaps no other sector has been affected by advances in technology as much as banking & finance. It has the most important factor for dealing with the intensifying competition & the rapid proliferation of financial innovations.Padhy, K.C. (2007) studied the impact of technology development in the banking system and he also highlights the future of banking sector. The core competencies will provide comparative advantages. Mittal, R.K. & Dhingra, S. (2007) studied the role of technology in banking sector. They analyzed investment scenario in technology in Indian banks but this study was related to the time period before the Information Technology Act and at that time technology in Indian banks was very low. But both the researchers nicely presented their views.

OBJECTIVES OF THE STUDY

- To study the role of information technology in satisfying various customer needs in banking.
- To study the various financial innovation in banking sector.
- To study the challenges of banks in changing banking scenario.

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RESEARCH METHODOLOGY

The present study is based on the secondary data collected from different journals, magazines, web sites and published data from various issues of RBI and different Public sector banks. Various studies on this subject have also been referred in this study.

TECHNOLOGICAL INNOVATIONS IN BANK:

Today banking is known as innovative banking. Information technology has given rise to new innovations in the product designing and their delivery in the banking and finance industries. Customer services and customer satisfaction are their prime work. Current banking sector has come up with a lot of initiatives that oriented to providing a better customer services with the help of new technologies. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. Financial innovation associated with technological change totally changed the banking philosophy and that is further tuned by the competition in the banking industry. Challenging business environment within the banking system create more innovation in the fields of product, process and market.

ATM

The use of ATM"s leads to the concept of „anywhere" and „anytime" banking. Through the use of ATM cards, one can operate his bank account to withdraw money from any of the bank' ATM installed or available at the nearest site. This had broken down the time and apace barriers. The new banks providing some of the services exclusively through ATM"s.

Table 1: ATMs of Scheduled Commercial Banks
(As at end-March 2013)

Sr.No	Bank group	On-site ATMs	OFF SITE ATMS	Total number of ATMs
1	2	3	4	5
I	**Public sector banks**	40,241	29,411	69,652
1.1	Nationalized banks*	20,658	14,701	35,359
1.2	SBI Group	18,708	13,883	32,591
II	**Private sector banks**	15,236	27,865	43,101
2.1	Old private sector banks	4,054	3,512	7,566
2.2	New private sector banks	11,182	24,353	35,535
III	**Foreign banks**	283	978	1,261
IV	**All SCBs (I+II+III)**	55,760	58, 254	1,14,014

Note: *: Excluding IDBI Bank Ltd.
Source: RBI Report

Debit card is a payment card that deducts money directly from a consumer's checking account to pay for a purchase. Debit cards eliminate the need to carry cash or physical checks to make purchases. In addition, debit cards, also called check cards, offer the convenience of credit cards and many of the same consumer protections when issued by major payment processors like Visa or Master Card. Unlike credit cards, they do not allow the user to go into debt, except perhaps for small negative balances that might be incurred if the account holder has signed up for overdraft coverage. However, debit cards usually have daily purchase limits, meaning it may not be possible to make an especially large purchase with a debit card.

CREDIT CARD

A credit card is a payment card issued to users as a system of payment. It allows the cardholder to pay for goods and services based on the holder's promise to pay for them.[1] The issuer of the card creates a revolving account and grants a line of credit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user.A credit card is different from a charge card: a charge card requires the balance to be paid in full each month.[2] In contrast, credit cards allow the consumers a continuing balance of debt, subject to interest being charged. A credit card also differs from a cash card, which can be used like currency by the owner of the card. A credit card differs from a charge card also in that a credit card typically involves a third-party entity that pays the seller and is reimbursed by the buyer, whereas a charge card simply defers payment by the buyer until a later date.

Table 2: Credit and Debit Cards Issued by Scheduled Commercial Banks (As at end-March) (in millions)

Sr. No	Bank group	Outstanding Number of Credit Cards		Outstanding Number of debit card	
-		2012	2013	2012	2013
	I Public sector banks	3.1	3.5	214.6	260.6
	1.1 Nationalized banks*	0.8	0.9	97.7	118.6
	1.2 SBI Group	2.2	2.6	112.0	136.4
	II Private sector banks	9.7	11.1	60.0	67.3
	2.1 Old private sector banks	0.04	0.04	13.9	15.4
	2.2 New private sector banks	9.6	11.1	46.0	51.9
	III Foreign banks	4.9	5.0	3.8	3.3
	IV All SCBs (I+II+III)	17.7	19.5	278.4	331.2

Notes: 1. *: Excluding IDBI Bank Ltd.
2. Figures may not add up to the total due to rounding off.
Source: RBI Report

RTGS

Real time gross settlement systems (RTGS) are specialist funds transfer systems where transfer of money or securities[1] takes place from one bank to another on a "real time" and on "gross" basis. Settlement in "real time" means payment transaction is not subjected to any waiting period. The transactions are settled as soon as they are processed. "Gross settlement" means the transaction is settled on one to one basis without bundling or netting with any other transaction. Once processed, payments are final and irrevocable. RTGS systems are typically used for high-value transactions that require immediate clearing. In some countries the RTGS systems may be the only way to get same day cleared funds and so may be used when payments need to be settled urgently. However, most regular payments would not use a RTGS system, but instead would use a national payment system or network that allows participants to batch and net payments.RTGS systems are usually operated by a country's central bank as it is seen as a critical infrastructure for a country's economy. Economists view that an efficient national payment system reduces the cost of exchanging goods and services, and is indispensable to the functioning of the interbank, money, and capital markets. A weak payment system may severely drag on the stability and developmental capacity of a national economy; its failures can result in inefficient use of financial resources, inequitable risk-sharing among agents, actual losses for participants, and loss of confidence in the financial system and in the very use of money.

NEFT

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme.

Table 3: Volume and Value of Electronic Transactions by SCBs
(Volume in million, Value in ` billion)

Type of Transaction	Volume 2011-12	Volume 2012-13	% change	Value 2011-12	Value 2012-13	%change
ECS Credit	121.5	122.2	0.6	1,838	1,771	3.6
ECS Debit	165	177	7.2	834	1,083	29.9
Credit cards	320	397	23.9	966	1,230	27.3
Debit cards	328	469	43.2	534	743	39.1
NEFT	226	394	74.3	17,904	29,022	62.1
RTGS	55	69	24.5	5, 39, 308	6, 76,841	25.5

Note: Percentage change could be slightly different as absolute numbers
Source: RBI Report

CHALLENGES & PROSPECTS OF TECHNOLOGY BANKING

The challenge before the Indian retail banking industry is two-fold: focus and execution. Each bank must sharply focus on its target market-place and rapidly execute its services. Electronic banking services, whether delivered online or through other mechanisms, have spread quickly in recent years. The impact of e-banking is not limited to industrial and the most advanced emerging economies. Even for countries with underdeveloped banking systems, e- banking offers an opportunity to leapfrog. Because e- banking is much cheaper – since it lowers processing costs for providers and search and switching costs for consumers – providers can market banking services involving smaller transactions to lower-income borrowers even in remote areas. Although online-only banking has been less successful than was anticipated, with several online-only banks running into difficulties, incumbent banks have started to offer banking services electronically. The threat of new entrants has led many banks to offer e-finance ranging from basic to fully integrated internet services In India, currently, there are two types of customers– one who is a multi-channel user and the other who still relies on a branch as the anchor channel. The primary challenge is to give consistent service to customers irrespective of the kind of channel they choose to use. The channels broadly cover the primary channels of branch (i.e., teller, platform, ATM) phone banking, (i.e., call centre, interactive voice response unit), and internet channel (i.e., personal computer, browser, wireless). A retail customer selects a bank based on two criteria – convenience and relationship and would continue with a bank if it provides good service. A customer would leave a bank if its services manifested errors, long wait, and in- consistent information. For customers who are multi-channel users, consistent information across all channels is the key requirement of modern retail banking. Banks need to emphasis on retaining customers and increasing market share. Information technology poses both opportunities and challenges. Even with ATM machines and Internet Banking, many consumers still prefer the personal touch of their neighborhood branch bank. Technology has made it possible to deliver services throughout the branch bank network, providing instant updates to checking accounts and rapid movement of money for stock transfers. However, this dependency on the network has brought IT department’s additional responsibilities and challenges in managing, maintaining and optimizing the performance of retail banking networks. Some of the challenges that the banks are facing today are: Changing needs of customers, Coping with regulatory reforms, Restructuring and reorganizing banks' setup towards thinner and leaner administrative offices, Closing down and/or merging of unviable branches particularly in urban and metropolitan branches, maintaining high quality assets, Management of impaired assets, Keeping pace with technology up-gradations, Sustaining healthy bottom lines and increasing shareholder value.

CONCLUSION

IT has no doubt changes the overall pattern of banking system. The banking today is redefined and re-engineered with the use of IT and it is sure that the future of banking will offer more sophisticated services to customers with the continuous product and process innovations. Thus there is a paradigm shift from seller's market to buyer's market. So banks also change their Approach from "Conventional Banking to Convenience Banking" and "Mass banking to Class Banking". So banks are now more concentrate on providing value added services to customers. But IT can be fully useful only if they enable to meet the challenges in the present environment. In India it can be successful only if it is properly implemented in rural areas also. There is also Need to maintain privacy and confidentiality of data.

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