

ROLE OF TECHNOLOGY INNOVATIONS IMPACT OF INDIAN BANKING SECTOR

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Abstract: Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry. The Indian banking system consists of 27 public sector banks, 21 private sector banks, 49 foreign banks, 56 regional rural banks, 1,562 urban cooperative banks and 94,384 rural cooperative banks, in addition to cooperative credit institutions. In FY07-18, total lending increased at a CAGR of 10.94 per cent and total deposits increased at a CAGR of 11.66 per cent. India's retail credit market is the fourth largest in the emerging countries. It increased to US\$ 281 billion on December 2017 from US\$ 181 billion on December 2014. The advancement in Information Technology has changed the working of banks and has contributed to its growth. Creating an efficient banking system, which can respond adequately to the needs of growing economy, technology has a key role to play. In past one and a half decade, banks in India have invested heavily in the technology such as Tele banking, mobile banking, net banking, automated teller machines (ATMs), credit cards, debit cards, smart cards, customer relationship management (CRM) software, electronic payment systems and data warehousing and data mining solutions, to bring improvements in quality of customer services and the fast processing of banking operation. Heavy investments in IT have been made by the banks in the expectation of improvement in their performance. But improvement in the performance depends upon, differences in the deployment, use and effectiveness of IT.

KEYWORDS: Information Technology, Banking, Electronic Fund Transfer, Large Value Clearing and Settlement System etc

I. INTRODUCTION

In the advancement of Indian Economy, Banking area plays a significant and urgent job. With the utilization of innovation, there had been an expansion in infiltration, profitability, and effectiveness. It has expanded the cost adequacy as well as has helped in making little esteem exchanges practical. It additionally upgrades decisions, makes new markets, and improves profitability and effectiveness. It has been seen that monetary markets have transformed into a purchaser's business sectors in India. Innovation enables banks to make what resembles a branch in a business building's hall without enlisting labor for manual tasks. The branches are running on the idea of 24 X 7 working, made conceivable by the utilization of Telebanking, ATMs, Internet banking, Mobile banking, and E-banking. These innovation-driven conveyance channels are being utilized to connect with the greatest number of clients at a lower cost and in the most effective way. Successful utilization of innovation has a multiplier impact on development and advancement. Banks have traditionally been in the forefront of harnessing technology to improve their products, services and efficiency. They have, over a long time, been using electronic and telecommunication networks for delivering a wide range of value added products and services. The delivery channels include direct dial – up connections, private networks, public networks etc and the devices include telephone, Personal Computers including the Automated Teller Machines, etc. With the popularity of PCs, easy access to Internet and World Wide Web (WWW), Internet is increasingly used by banks as a channel for receiving instructions and delivering their products and services to their customers. This form of banking is generally referred to as Internet Banking, although the range of products and services offered by different banks vary widely both in their content and sophistication.

The levels of banking services offered through INTERNET can be categorized in to three types: (i) The Basic Level Service is the banks' websites which disseminate information on different products and services offered to customers and members of public in general. It may receive and reply to customers' queries through e-mail, (ii) In the next level are Simple Transactional Websites which allow customers to submit their instructions, applications for different services, queries on their account balances, etc, but do not permit any fund-based transactions on their accounts, (iii) The third level of Internet banking services are offered by Fully Transactional Websites which allow the customers to operate on their accounts for transfer of funds, payment of different bills, subscribing to other products of the bank and to transact purchase and sale of securities, etc. The above forms of Internet banking services are offered by traditional banks, as an additional method of serving the customer or by new banks, who deliver banking

services primarily through Internet or other electronic delivery channels as the value added services. Some of these banks are known as 'virtual' banks or 'Internet-only' banks and may not have any physical presence in a country despite offering different banking services.

II. OBJECTIVE AND METHODOLOGY

This paper main objective to study on overview of the Indian banking sector and analyze the impact of technology adoption on the Indian banking sector. The present study is based on the secondary data published by various agencies and organizations. The present study makes use of data and information provided by, RBI reports and Newspapers, Magazines, Books, Economic journals and Internet etc.

III. TECHNOLOGICAL DEVELOPMENT IN BANKS

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 specialization, new products, increasing benefit 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.

IV. TECHNOLOGY INNOVATIONS

NEFT

According to Reserve Bank of India, National Electronic Funds Transfer (NEFT) is a nation-wide payment system to facilitate one-to-one funds transfer. Under NEFT, individuals, firms and corporate 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. The funds under NEFT can be transferred by individuals, firms or corporate maintaining accounts with a bank branch. Even individuals not having a bank account can deposit cash at the NEFT-enabled branches with instructions to transfer funds using NEFT. However, such cash remittances will be restricted to a maximum of Rs. 50,000/- per transaction. Such walk-in-customers have to furnish full details including complete address, telephone number, etc. NEFT, thus, also help in transfer of funds even without having a bank account. This is a simple, secure, safe, fastest and cost-effective way to transfer funds especially for Retail remittances.

ATM

Automatic teller machine (ATM), is a computerized telecommunications device that provides Bank customers to have access to financial transactions without the need of visiting the bank with the help of ATM Machines and plastic cards. ATMs can be used by customers to have access to bank accounts in order to make cash withdrawals or check account balances. ATMs can be found easily in cities, allowing customers easier access to their accounts. Using a ATM operated by your bank is generally free of cost, but using ATM operated by a competing bank may involve a small fee.

MOBILE BANKING

Mobile banking is a system that allows one to conduct a number of financial transactions through a mobile device such as a phone. Mobile banking is increasingly getting popular with the increasing use of Smartphone and it is becoming very successful with time.

USE OF MICR TECHNOLOGY-

Among the most important improvement in paper-based clearing system was the introduction of MICR (Magnetic Ink Character Recognition) in the mid-1980s. MICR overcomes the limitation of clearing the cheques within banking hours and thus enables the customer to get the credit quickly. These are machine-readable codes added at the bottom of every cheque leaf which helped in bank and branch-wise sorting of cheques for smooth delivery to the respective banks on whom they are drawn. This no doubt helped in speeding up the clearing process, but physical delivery of cheques continued even under this partial automaton.

CTS (CHEQUE TRUNCATION SYSTEM)-

The CTS was launched on pilot basis in new Delhi in 2008 with the participation of 10 Banks. Truncation means stopping the flow of the physical cheques issued by a drawer to the drawee branch. The physical instrument is truncated at some point en route to the drawee branch and an electronic image of the cheque is sent to the drawee branch along with the relevant information like the MICR fields, date of presentation, presenting banks etc. This would eliminate the need to move the physical instruments across branches, except in exceptional circumstances, resulting in an effective reduction in the time required for payment of cheques, the associated cost of transit and delays in processing, etc., thus speeding up the process of collection or realization of cheques. Every bank customer is expected to obtain new cheque books from their respective banks as early as possible preferably before the end of December 2012. All bank customers should use only “CTS 2010” cheques, which have more security features with effect from 1 January 2013.

ELECTRONIC CLEARING SERVICES (ECS) –

The ECS introduced by RBI in 1995 which is similar to automated clearing houses that are operational in other countries like US. The ECS was the first version of “Electronic Payments” in India. It is a mode of electronic funds transfer from one bank account to another bank account using the mechanism of clearing house. It is very useful in case of bulk transfers from one account to many accounts or vice-versa. ECS facility available at more than 74 Centers in India. The beneficiary has to maintain an account with the one of bank at ECS centre.

There are two types of ECS (Electronic Clearing Service)

ECS- CREDIT - ECS credit clearing operates on the principle of „single debit multiple credits“ and is used for transactions like payment of salary, dividend, pension, interest etc

ECS-DEBIT- CS debit clearing service operates on the principle of „single credit multiple debits“ and is used by utility service providers for collection of electricity bills, telephone bills and other charges and also by banks for collections of principal and interest repayments. Settlement under ECS is undertaken on T+1 basis. Any ECS user can undertake the transactions by registering themselves with an approved clearing house. The RBI has recently launched the National Electronic Clearing Service (NECS), in September 2008, which is an improvement over the ECS. Under NECS, all transactions shall be processed at a centralized location called the National Clearing Cell, located in Mumbai, as against the ECS, where processing is currently done at 74 different locations. ECS system has a decentralized functioning, and requires users to prepare separate set of ECS data center-wise. Users are required to tie-up with local sponsor banks for presenting ECS file to each ECS Centre. As on September 2008, 25000 branches of 50 banks participate in the NECS. Leveraging on the core banking system, NECS is expected to bring more efficiency into the system.

REAL TIME GROSS SETTLEMENT (RTGS) –

RTGS was launched by RBI in 2004 which enabled a real time settlement on a gross basis. RTGS system is a funds transfer mechanism where transfer of money takes place from one bank to another on a “real time” and on “gross basis”. This is the fastest possible money transfer system through the banking channel. 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 bunching with any other transaction. RTGS system is used only for large value transactions and retail transactions take an alternate channel of electronic funds transfer, a minimum threshold of one lakh rupees was prescribed for customer transactions under RTGS on January 1, 2007.

CORE BANKING SOLUTIONS (CBS) –

Computerization of bank branches had started with installation of simple computers to automate the functioning of branches, especially at high traffic branches. Core Banking Solutions (CBS) is the networking of the branches of a bank, so as to enable the customers to operate their accounts from any bank branch, regardless of which branch he opened the account with. The networking of branches under CBS enables centralized data management and aids in the implementation of internet and mobile banking. Besides, CBS helps in bringing the complete operations of banks under a single technological platform.

PHONE BANKING-

Customers can now dial up the banks designed telephone number and he by dialling his ID number will be able to get connectivity to bank's designated computer. By using Automatic voice recorder (AVR) for simple queries and transactions and manned phone terminals for complicated queries and transactions, the customer can actually do entire non-cash relating banking on telephone: Anywhere, Anytime.

TELE BANKING-

Tele banking is another innovation, which provided the facility of 24-hour banking to the customer. Tele-banking is based on the voice processing facility available on bank computers. The caller usually a customer calls the bank anytime and can enquire balance in his account or other transaction history. Tele banking is becoming popular since queries at ATM's is now becoming too long.

INTERNET BANKING-

Internet banking enables a customer to do banking transactions through the bank's website on the Internet. It is a system of accessing accounts and general information on bank products and services through a computer while sitting in its office or home. This is also called virtual banking.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)-

(CRM) refers to the methodologies and tools that help businesses manage customer relationships in organized way-finding, getting and retaining customers. CRM processes that help to provide employees with the information they need to know their customers' wants and needs and build relationships between the company and its customers.

CONCLUSION

Information Technology offers enormous potential and various opportunities to the Indian banking sector. It provides cost-effective, rapid and systematic provision of services to the customer. The efficient use of technology has facilitated accurate and timely management of the increased transaction volumes of banks which comes with larger customer base. Indian banking industry is greatly benefiting from I.T. revolution all over the world. Another concept i.e. Virtual banking or Direct Banking is now gaining importance all over the world. According to this concept Banks offer Products, services and financial transaction through only through electronic delivery channels generally without any physical branch. This concept already has been tested in advanced countries such as U.S and Europe. Owing to lower branch Maintenance and manpower cost such banks are able to offer competitive pricing for their product and services as compared to traditional banks. In India also, the technology –savvy bank will adopt this concept. To be competitive with this globalized era Indian banks should also adopt this concept.

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