Information Technology and its Impact on Development of Indian Banking System
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Abstract

Information technology has changed the speed of transactions in the function and banks of the bank. The technology advances of the banking industry, as well as providing better service to our customers, is to achieve a competitive advantage. It is a chance to provide a unique platform that provides a variety of services to our customers to expand the range of the bank. The service sector has created new products, services and market opportunities over the past decade, the application of technological innovation to witness more information driven business and management processes and systems. Development of information technology in the world of banking is more flexible payment methods and the development of more efficient financial services Have a huge impact on development.

Keywords: Information technology, ATM, Electronic money, Credit cards, Internet banking.

Introduction
This technology provides efficient delivery channels to provide banking services to customers in banking institutions and customers with bank transactions at the selected location and time. As a result of technical improvements, banking and banking has become easier and more customer-friendly.

Banking electronics and information technology such as ATM to support and critical role, especially credit cards, a large number of debit cards and smart cards services, telephone banking, electronic services such as e-banking, known as net banking product, ATM is in the Delivering banking services to customers around the world as the most favorite channels. At present, India is the relationship between technology and banking inseparable. The user uses technology to be an important tool in determining the success or effectiveness of the technology(1).

Revolutionary developments in information and communication technology for the last 20 years have had a major impact on both individuals and companies.
Internet banking and mobile banking is a technological innovation that can change the structure and properties of finance. In order to maintain corporate competitiveness, more and more banks will be transformed into a technology-driven approach to banking in traditional brick and mortar banking(2).

The main success factors of e-banking and gradually increase customer satisfaction and retention. Whereas IB fast-growing evidence that IB is accepted by the consumer is not enough. The bank's operating environment has changed significantly from the needs of the company and the reform of regulation with regard to liberalization and competition in domestic and foreign competition, protection of age legacy. At the same time, the introduction of information technology in the sector began to all seriousness(3).

Start of back office automation, automated processing of large amounts of data and check targeting operations primarily. Technology is transferred to the counter in the form of total office automation. This study was to explore the evolution of electronic banking in India and highlighted the structure, services and general features(4).

**Technology in Indian Banking Sector**

Information and Communication Technology (ICT) has changed the business of banks and other financial institutions around the world. The most important innovation of the 1980s began using ALPM (Advanced Ledger Posting Machines). Extensive automation has reduced the level of error calculations and transaction services provided to provide error-free to customers and print account statements. Full Bank Automation in the late 1980s (TBA) refers to the automation of entire database and the branches have been introduced in both the front end and back end activities in the same place. In a number of steps from the mechanized Indian banking sector, Magnetic Ink Character Recognition (MICR) established mechanical processing to control system to use the technology(5).

Indian banking sector has witnessed remarkable advances in the field of information technology in recent years. RBI has also agreed to continue to operate IT insurance and improve the modernization of payment traffic with a view to improving the banking sector's efficiency(6).

The development of the last 25 years since Information and Communication Technology (IT) clearly shows that it has a positive impact on banks and financial institutions. Before the technological innovations of all banks were craft for all services, including data processing, account management and processing, and the customer's reception and meeting the needs(7).

Have your customers have the time and patience to fully perform their transactions with the bank. They cause a lot of unnecessary data are needed for a limited period of time and the lack of adequate information to meet the financial needs have suffered difficulties(8). The increasing among customers It was absolutely necessary for automating these areas to lead
to disappointing this to Roy to solve all problems(9). With 1980 PC and the progress of emerging networks, IT development automatically has automated trading by Technologies(10). ICT has been introduced into the electronic commerce breakthrough in structural and functional changes in rural and urban areas and NCR. This has changed the strategic actions to improve the operational scale. Improvements to IT to save costs are very useful to improve the banks. Customers can now use the faultless service due to the development of information and communication bank's efficiency. Technical efficiency, lowers transaction costs and increases bank profit. Trade through technology reduces channel is much less expensive than the customer's transactions to reach the banks. The relative costs of bank transactions with different IT channels are shown in Table 1.

Table 1: Relative cost of banking transaction through different modes.

<table>
<thead>
<tr>
<th>Channels</th>
<th>Cost Per Transaction in Rs.</th>
</tr>
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<tbody>
<tr>
<td>Physical branch</td>
<td>100</td>
</tr>
<tr>
<td>Postal</td>
<td>40</td>
</tr>
<tr>
<td>Telephone</td>
<td>18</td>
</tr>
<tr>
<td>ATMS</td>
<td>18</td>
</tr>
<tr>
<td>Internet</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Bank of International Settlements

Core Banking Solution:
One of the largest contributors to the previous technology, banking is Core Banking Solutions or CBS. CBS records the transactions that store customer information for the calculation of interest means a software application to complete the process of delivering the items in a single database. You can evaluate the full account data centrally. In this way, customers can connect to the bank through internet banking, mobile banking, telephone banking, ATM, etc. desired channel(11).

The technical solutions are adopted when all modules on a bank base want to spread across banks. Therefore, the bank has a 24 x 7 of each chosen by the customer.

Technological developments in Public Sector Banks
Financial reform, that is, banks with new private sector access and the introduction of the Internet is to select a single central database without having multiple databases for all offices of the cost of the distributed network. After private and foreign banks access in 1996, banks public sector (public broadcasters) have taken different initiatives under the competitive pressure, one of which is technology(12). Technology puts pressure on the network and the point P883, and has a more skilled workforce. Technological revolution has had a significant impact on strategic business issues by the Indian banks considering the delivery and transaction costs considerably.
In India, the current multi-channel user, other channels are the digital divide still trusted in the main channel(13). The challenge for banks is to satisfy your customers, regardless of the type of channels they use. The new private sector banks and foreign banks have introduced ATMs, telebanking and internet banking from the outset. Without a choice in hand, banks public sector followed suite. Current and future investments in this technology are huge(14).

Role of RBI to promote Electronic Banking in India
As the information technology industry has contributed to the bank RBI has taken a number of measures to promote the use of technology in the Indian banking system. Since the beginning of 1980 on a regular basis in almost five years, RBI has appointed committees and working groups for this purpose. RBI sees it as its responsibility to ensure this technology can facilitate bank efficiency and customer management, distribution and range, product innovation and efficient payment and settlement. RBI was expected by this development in the field of domestic and decision-making to improve customer service and productivity and ultimately improving profitability(15).

In 1998, RBI used the Technical Assistance of the British Ministry of International Development (DFID) project to upgrade to the enhanced monitoring system and automated surveillance environment. RBI has invested heavily in a variety of IT-based tools and equipment for the Bank for Mechanization of the Total Banking. RBI has begun to build a comprehensive network in order to provide a reliable communications backbone that can be for a mail in accordance with Saraf's recommendations, excluding the use of the banking and financial sector(16).

Products And Services Of E-Banking In India
The banking industry has become a technology-intensive industry, the aviation industry following: Financial reform, globalization and liberalization, which began in the early 1990s, has introduced a whole new working environment for banks in India. Indian bankers now offer the following innovative and attractive technology-based services and products(17).

Internet Banking
Internet banking is changing the banking system and has a significant impact on Indian banking relationships. ICICI Bank is the first bank to conduct online banking for a limited number of services, such as account data, correspondence, and 1997, previously funded. Dan Citibank, HDFC Bank, RBI issued guidelines in accordance with the recommendations of the Technology UP Grade Committee, the President, Mr. Srinivasan under the Banking Sector (1999), in June 2001 to develop online services. Internet banking:

1. Technology and security issues.
2. Legal issues.
3. Regulatory and supervisory issues.
This area has been chosen in such a way as to minimize the problems of the bank and
the customer. Group has recommended specific guidelines for the smooth and effective operation of Internet Banking.

**Telephone Banking, Mobile Banking And SMS Banking**

Telephone banking is the provision of certain banking services over the phone. Customers can make transactions over the phone. Latest Mobile banking is a new and growing facility for banking customers. Most banks offer SMS alerts facility to Indian customers. The importance of the development of payment means and payment channels roseouiyi channel has been recognized by the Fed. Thus, the Reserve Bank of India issued guidelines for mobile banking transactions issued in October 2008. According to the guidelines, the Bank gave the command to be terminated on the other bank of mobile banking transactions based on one bank account each transaction(18).

They also extend the Bank through business correspondent facilities. RBI has allowed mobile banking in 40 banking customers using mobile banking facility 80 days in September 2010 was recorded 8.87 lacs compared to the end of August 2010 6.16 lacs. During the months of January to September 2010 of 4.9 lacs R. All this for the purchase of goods and services and the transfer of funds 44 was carried out using the payment method(19).

**PCS (Point Of Sale Terminal)**

Use of the map by customers in India has witnessed a large scale use for the last 10 years has gained popularity since the mid-1980s. The first newcomer to the card sector is witnessing a mass credit card acceptance in many media (Point of Sales) POS merchants across multiple facilities. According to the RBI announced in 2009, POS (Point-of-Sale) terminals in use pin passes from other traders facility are steadily increasing. And decided to have admitted cash withdrawals at a further step on your way to ease, RBI is for the total number of debit cards and POS terminals issued in India, up to 1,000 rupees per day P08 terminal to the plastic money using theirs 470,287 people (RBI, 2009).

P08 card transactions account for about 5% of India’s retail sales. As much as the cost of printing banknotes is 2,800 crore, the use of cards in the P08 brings about a saving of around 140 crore in currency management. Each time you use the card in retail sales rose by 1% in printing costs, 28 crore savings (excluding significant costs such as transportation, false money detection / prevention), are noted(20).

**Electronic Money**

To make the electronic money requires trust between the authorities and the customers. In January 2002, RBI put together a working group on electronic money. This group is at the same time preventing the implementation of monetary policy from being related to corruption and more widespread use of electronic money was partially confirmed worrying from the perspective of the central bank at the same time also ensures the integrity of the Financial instruments. Well kept. See the terms of the working group as follows (RBI,
2002):

1. To examine the various dimensions of E-money and the implications for payment System.
2. To review the international experience on prudential practices governing use of E-money and their impact on the conduct of monetary policy.
3. To assess the current situation in India in the context of international best practice.
4. To study the extent of use of E-money and to suggest appropriate policies from the point of view of the RBI in the wake of use of E-money(21).

**ATM (Automated Teller Machine)**

ATM (Automated Teller Machine) is one of the most popular devices in the Indian banking system that allows customers to include money for two weeks to 24 hours a day, 7 days. The first bank to introduce ATM concept in India was in 1987 in Hong Kong and Shanghai Bank (HSBC). Now, almost all commercial banks offer ATM facilities to its customers. Since April 2009, access to an ATM machine is free in India. Reserve Bank of India has announced that it is a national switch to close the IDRBT (Banking Technology in Development and Research) ATM facility in Hyderabad in 1996, the ATM network of a bank in the country. If all Bank of India is connected to the ATM switch in the lab, you can exchange for the ATM network nationwide can "chat" cardholder smoothly. In recent years, growth has grown steadily increasing ATM 2009-10 37.8%(22).

More importantly, the growth of off-site ATM was relatively high during the year 44.6%. March 2010 end, the ratio of total off-site ATM ATM has included 45.7% of all SCBS. Like many bank branches due to the decline in population per ATM ATMs, it has increased in recent years.

Although urban areas than ATM focus on more recent ATM number and percentage of rural areas, it has steadily increased. ATM part of the countryside accounted for 28.4% of the end of March 2009, the total ATM flow increased to 32.7% at the end of March 2010. A large part of the increase in ATM rural areas is due to the banking sector audience(8).

**Plastic Cards**

Plastic cards namely credit and debit cards are becoming increasingly accepted and momentum as a medium of financial transactions. Plastic or plastic money cards originated in India in the form of credit cards in 1981. Credit cards were very high in India as the introduction of foreign banks that use has increased steadily.

**Credit Card:**

As the name indicates, the cardholder may enjoy the issuer's credit for a certain period after payment. During this transition period, cardholders can use the card to pay for additional charges. In India, because most of the credit cards issued by the bank becomes the nature of the charge card, the cardholder will receive the credit until the next billing cycle. Reserve Bank of India has launched a series of liberalization measures, such as those granted by the International Bank
credit card Indians who have been living(23).

**Debit Card:**
Debit card is a plastic card that offers cash payment instead of the road at the time of purchase. Pin transactions are currently being processed in two ways: online debit cards and offline debit cards. Online debit cards require electronic authorization of each transaction and are immediately visible in your account debt.

Offline debit cards, regular credit cards (eg: Visa of Master Card) or large debit cards: may be the logo (eg Maestro), used at the point of sale as a credit card. The daily limit can be applied to a debit card of this type, the maximum is the amount of deposit for a check / bank account. Almost all banks in India have issued a debit card(24).

**Conclusion**
Indian Bank has concluded that assistance and support from the Reserve Bank of India receive the approval of new technologies for better performing electronic banking. The study also highlights some of the automated evolution of the Indian banking industry that showed some development in adoption in the IT sector and the banking sector.

This development is linked to back office management improvement, centralization processing and communication networks, primarily in the form of better rationalization of the management information system (MIS).

But it's time Indian banks need more in order to attract and retain customers focus on front office automation and CRM (customer relationship management). This is because Internet penetration is low and lack of technical knowledge, lack of awareness, lack of other parts of India to the tribe. The lack of government initiative, including skilled staff and the various economic and social factors, are the main obstacles that hinder the development of the benefits of electronic / banking.

The qualitative change of service means equal responsibility of the user and the bank. Technology should only be done more trusted and accessible banking customers a guard, so take advantage of new banking fashion harden the guard. Reserve Bank of India has decided to promote the integrated use of technology in banking services that use a common platform providing different products and services. Regional national banks were asked to switch to the core banking solution at an early stage.

More encouraging, the point is to deal with cooperative banks to establish core banking solutions. You can then use the national financial switch reduces the benefits that are available to other ATM customers.

In India, you need to mix the traditional forms of technology so the financial sector is providing services in an efficient way to properly protect all types of customer requirements. Banks need to investigate the technical information in a holistic way, rather than a meal solution.
Reference


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