

Banking System in India: from Bricks to Clicks to What Next?

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Abstract

During the days of brick and mortar banking (manual banking system), the customers were required to reach the respective branches in person for carrying out their banking transactions, be it depositing cash, sending remittance, payment of taxes or repayment of loans. Advent of computers and internet heralded an era of electronic revolution in the global banking arena. Firstly, it was Internet Banking that became a milestone in the history of Indian banking system and then it was Mobile Banking that played pivotal role in increasing the banking penetration especially in the hinterland.

The paper focuses on explaining the evolution route of banking system in India in terms of technology, from brick and mortar banking to internet banking to mobile banking and finally concludes at the discussion of future of tech driven banking.

As the new age tech based banking channels come into the mainstream, banks have continuously innovated to stay ahead of the curve. M-wallet, virtual cards, plastic money are some of the new products which will drive the growth in the banking industry in the days ahead. Use of biometrics, encryption and digital technologies will help the banks to improve the reliability and safety of their services.

KEYWORDS: Internet Banking, Mobile Banking, E-Commerce, M-Commerce, Brick and Mortar

INTRODUCTION

Acceptance of deposits and lending are age old concepts of banking. Organised banking services started in the 15th century in Europe, when banks began opening branches in major towns and cities. In early days, London was predominant banking and financial centre in the world. Advent of industrialisation and growth of factories and manufacturing had given a major flip to the growth of banking. The 20th century saw emergence of major manufacturing and trading centres in USA, Japan and Europe resulting in rapid growth of banks. The outlook of banks also underwent a major shift from mercantile finance to development finance. The resultant growth in income and affluence of the people necessitated the development of broad based retail banking which ushered the era of branch banking.

During the days of brick and mortar banking (manual banking system), the customers were required to reach the respective branches in person for carrying out their banking transactions, be it depositing cash, sending remittance, payment of taxes or repayment of loans. Over a period of time this personal interaction between the customer and the banks had resulted in a relationship based on trust and belief, a kind of personal bonding of which there are any number of anecdotal instances. However,

the spread of industrialisation and the resulting growth in trade and commerce in general and growth of services sector in particular have necessitated the banks to come out with more efficient and faster modes of providing banking services. Adoption of technology by the banks enabled them to not only improve the speed of delivery but also to provide round the clock 24x7 customised banking services.

Advent of computers and internet heralded an era of electronic revolution in the global banking arena. In India, developments in the area of telecommunications enabled the banks to improve the pace, range and reach of their services--- onset of banking globalisation in India. The dynamic nature of present day electronic communication systems together with their ubiquitous reach has enabled banks to leverage the same as a delivery platform to offer a range of IT based online banking products and services. Computerisation enabled the banks to offer real time online banking services which are aimed at enhanced customer convenience and ease of success and monetised the concept of time value of money.

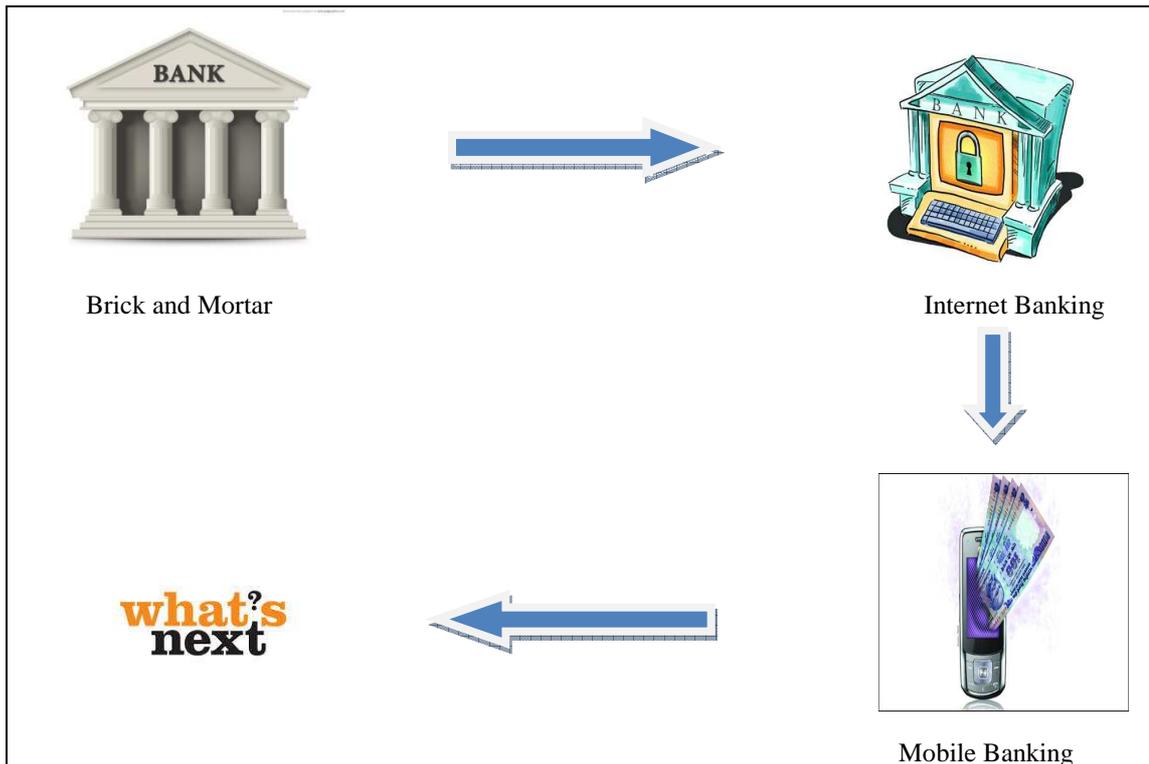
Passage of IT Act by Parliament in 2003 had given a major flip to the growth and development of online banking products and services in India. Wide spread usage of PCs/laptops, availability of low cost and faster networking technologies and increasing internet connectivity acted as a catalyst to the growth of innovative IT based solutions in e-commerce and e-business. Banks also leveraged on the new technology platforms and to launch various online retail banking products and services like internet banking, mobile banking and telephone banking etc.

Internet Banking (E-banking)

The first ever internet banking services known as Homelink was established by Bank of Scotland in 1983. However, it was ICICI Bank in early 1997 that brought the phenomenon of internet banking in India. This is a technology product of great convenience and flexibility for the mobile customers, which is available 24x7. The customers have the option of availing the touch of the screen, a wide ranging banking, payment and remittance services without stepping out of the convenience of their offices/ homes. Some products and services offered through internet banking are balance enquiry and statement of accounts; online issue of demand drafts; online funds transfer--- Real Time Gross Settlement (RTGS)/ National Electronic Funds Transfer (NEFT); remittance services; setup standing instructions; online tax payment; online bill payments for services and utilities; Dematerialized account (DEMAT A/c) and Initial Public Offer (IPO)/ Investment through Applications Supported by Blocked Amount (ASBA); railway ticket booking; bulk uploading of salary/ pension/scholarships etc; making donations etc.

Figure 1: Evolution of Banking System in India

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Mobile Banking (M-banking)

The era of mobile banking in India began several years back when Reserve Bank of India (RBI) mandated SMS alerts to customers for their physical banking activities. The mobile alerts were the genesis of m-banking in India. RBI took this forward gradually, firstly included alerts for ATM withdrawals and then transactions followed by more service offerings. Corporation Bank is the public sector bank who started mobile banking in India.

M-banking offers services ranging from basic account enquiry to funds transfer, utility bill payment, requisition of cheque books, etc. through mobile phones. Through multiple access channels like SMS, downloadable client application and mobile internet (WAP) etc., m-banking is encouraging the customers in India to use mobiles to explore services like funds transfer; inter-bank mobile payment service; enquiry services; DEMAT A/c services; requests-for cheque book and OTP; bill payment services; mobile top-up; m-commerce.

According to RBI data, 5,554,327 m-banking transactions amounting to Rs. 624.85 crores have taken place in January 2013 as compared to 3,123,105 transactions amounting to Rs. 232.50 crores in March 2012. In State Bank of India (SBI), during the same period, m-banking transactions were 3,635,332 amounting to Rs. 224.71 crores.

As of 2012 we had 151 million internet users in India. Compare to this, we have more than 950 million registered mobile users, which cover almost 90% of the population. M-banking platform, therefore, is poised to play a pivotal role in increasing the banking penetration especially in the hinterland.

Direct Cash Transfers

Taking advantage of the online banking facility, the government of India is now embarking on routing of subsidies to the bank accounts of the beneficiaries under the direct cash transfer scheme as a means to improve targeting, eliminate wastage, control expenditure, facilitate reforms and reduce corruption. The gigantic task would not have been conceivable in the absence of a robust online banking platform.

Payment Solutions

An efficient and well administered system is sine-qua-non for the efficient functioning of any economy. The vision for this was set out in the 'Vision Document' on payment and settlement systems for the year 2009-2012 by RBI. The document clearly identifies the new frontiers and a road map for implementation of a new RTGS system which would provide additional features including that for liquidity management.

India has one of the lowest numbers of ATMs and Point of Sale (PoS) terminals- just 63 ATMs and 497 PoS per million populations (as per 2012 statistics). Only a small proportion of the 10 million plus retailers in India have facility of accepting card payments. Though the usage of m-banking and e-banking is growing, a significant percentage of banked customer base is yet to be covered under this. Thus there is vast scope for increasing the availability of ATM and PoS terminals.

E-commerce

With the growth of e-commerce market in India, which has grown by almost 50% in the last 5 years, the role of internet/mobile banking is only going to be bigger in the coming years. The considerable rise in internet user, growing acceptability of online payments, the explosion of internet-enabled devices and favourable demographics are the key factors driving the growth story of e-commerce in the country. The number of users making online transactions has been on a rapid growth route and it is expected to grow from 11 million in 2011 to 38 million in 2015.

Some of the major factors which are going to drive this growth are:

- a) Annual disposable income per household to grow by 2.5 times by 2015.
- b) Discretionary spending expected to form a major portion of expenditure in India.
- c) Explosion in the sales of technology products is expected.
- d) More Indians are spending time online.
- e) Probability of growth in internet user base, mirroring that of voice user base.
- f) Increase in number of payment options.

M-commerce

A study by SAP indicates an impressive traction of m-commerce in India and states that consumers in India are leading the demand for mobile commerce services, with 97% of consumers asking for more mobile interactions with banks, telecommunication companies, retailers, utilities and other businesses.

The study found that India scores high in using mobile for banking transactions when compared to other countries in the world. As per the statistics, excluding voice

messages, most of the mobile owners turn to their mobile phones for bill payments, bank transactions and for setting up a new account.

While embracing the appetite for mobile purchase adoption, it is vital that organisations, looking to develop products and services for India are able to balance the desire for ease and convenience with security requirements because:

- a) In a study, 57% of the users in the country believe that once they gain confidence in mobile security, they will increase their mobile payment activity.
- b) Providing services that are of lower cost and customized will encourage mobile owners to make more bank transfers through their mobile phones, in turn increasing the mobile based consumption in India.

Challenges

- a) **Demography:** India is a very rich country in terms of demographic diversity. Apart from English and Hindi there are other 16 official languages in India. Technology developers and implementers have a tendency of assuming English as a global language and ignore the multiplicity of languages in India. Also, in India a large population of 287 million adults are illiterate, amounting to 37 per cent of the global total. These issues hinder the deployment of tech driven banking solutions in India.
- b) **Security Challenges:** E-banking makes our money more vulnerable to cyber crimes. According to a study conducted by Rupinder Pal Kaur (2013), 422 cyber crime related cases were registered in 2011 and 601 cyber crime related cases were registered in 2012 in India. Tech based banking solutions are potentially exposing traditionally isolated systems to the open and risky world of web.
- c) **Infrastructure Facilities:** Internet penetration in India with the rate of 12.60% in 2012 is still low as compared to other developing countries such as Russia (53.30%) and China (42.3%). Access to connectivity has remained an issue in rural and remote areas but even in urban areas uninterrupted connectivity is still a dream to come true. Further, it is difficult to predict usage of e-banking on daily basis. These scalability problems can give rise to a slowing down of the website or even a website crash.
- d) **High Capex and Fast Redundancy:** The tech platforms and solutions require huge capex by the banks for a pan India full scale rollout. Advent of newer and faster hardware and software require continuous up gradation to stay modern with the customer expectations.
- e) **Economic Challenges:** Since use of e-banking and m-banking is low in India, cost per transaction is very high for the banks. Profitability can be used only by large volumes of transactions which require significant initiative from the banks.

Opportunities

- a) **Skilled Manpower:** With growing number of internet savvy manpower together with steady expansion in coverage of internet and broadband services, there is incredible scope for improving the range and reach of tech related products and services.

- b) **Rising Income:** With growing income in urban as well as rural areas demand for tech related products such as PCs/ Mobiles/Laptops is on rise. All this augurs well for the banking industry to roll out customized tech products and services tailor made for the rural areas.
- c) **Cost Control:** Migrating the customers towards tech products and alternate delivery channel platforms would also offer the cost advantage in terms of reducing the cost/transaction as well as administration costs of banks.

What Next?

E-banking/ M-banking has become a necessary survival tool which is fundamentally changing the banking landscape countywide. Today, with a touch of the screen the customers are able to access various products and services, thereby saving them from the bother of visiting places in person. This is affording the option of choosing the low cost service providers according to their specific needs. At the same time technology is allowing the banks to rollout newer products and services, improve the operating efficiency, raise the staff productivity, seamlessly expand their reach globally and complete on a global platform. However the banks should anticipate and factor in the concerns, expectations and needs of customers while developing products and services on these new age alternate channels.

As the modernisation continues banking channels come into the main stream. Banks have continuously innovated to stay ahead of the curve. M-wallet, virtual cards, plastic money are some of the new products which will drive the growth in the banking industry in the days ahead. However, the increased usage of technology in the mainstream banking also exposes the banks to higher risks and banks will have to develop vigorous, reliable and fail-proof infrastructure to safeguard the interests of the customers. Use of biometrics, encryption and digital technologies will help the banks to improve the reliability and safety of their services. Some banks are already in discussion to introduce biometrics as an option for authentication in some of the mobiles, the day is not far when mobile banking transactions will be authenticated based on Touch ID and biometrics rather than User ID and password as is the case now.

It is evident that in the days ahead, banking products and services are poised for taking a tech leap forward to not only stay in sync with the next gen customers but also to fulfil their ambitions and aspirations. The challenge would, however, be to simultaneously remain their neighbourhood banker with humane core.

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