# A Study On Technology In Retail Banking In India

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### **Abstract**

Technology and retail banking in the same fabric. Technology is the foundation on which retail banking has spread its arms worldwide. Technology initiatives were adopted by different banks had implemented through in house resources for development while some other banks had done it through outsourced model. Scalability and sustainability are the two issues in these models. These models offer various customer analytic solutions for the banks to help in customer identification, need mapping and offering the right products and services.

Keywords: Technology, Retail banking, India and IT.

### Introduction

Technology today has become synonymous with banking and Indian banks have put in place a fairly strong infrastructure to leverage its benefits. IT has made a visible change in the functioning of banks and banking operations. Banks have been benefited immensely due to scaling up of business and growth in volumes. The journey has been beneficial for the customers too, with improvement in quality of customer service. IT capital expense to total IT expense ratio indicates the importance of IT in retail banking business.

# Objectives of the study

- 1. To study Technology in retail banking in India.
- **2.** To study various models adapted by the banking sector in India.
- **3.** To evaluate the performance and various challenges in retail banking.

# **Research Methodology**

The type of research is a descriptive research design. It includes surveys and fact findings. The major purpose of descriptive research design as it exists at present. Most of the data collected from the secondary source books journals and some websites.

#### **Review of literature**

Indian retail banking space available from various sources as per details below were reviewed to have an understanding of the practices and strategies.

- Research Reports on different facets of Retail Banking across the globe by renowned consulting agencies, Universities and domain players in the technology space.
- **2.** Reports in Journals carrying special reports of banking in general and retail banking in particular.
- 3. Articles in different Journals, Business / Financial Papers covering the different facets of retail banking across the globe and India and also Annual Reports of public and private sector banks in India.

## Implementation of IT in financial inclusion:

Leveraging technology is helping build economies of scale and bringing down transaction costs. In addition, the government's support in terms of electronic transfer of benefits is also adding to the viability of the initiatives. The financial inclusion initiatives of banks have gathered sufficient momentum with substantial growth in no frill accounts, and SHG JLG linkages.

While a large part of the technology investments in FI is being done by the BC service providers, banks have also invested substantially in expanding transaction handling capability of IT infrastructure.

# **Business and operating model**

The enrollment of BCs has grown significantly with huge number of BCs enrolled, while the linkage of SHGs grew at a slower pace, other than these predominant models banks are also deploying other models like mobile vans, kiosks and ultra small branches.

## **Direct Benefit Transfer (DBT)**

DBT is expected to add to the viability of FI initiatives by providing banks with a good amount of float funds but multiple challenges remain in terms of operationalizing the scheme, these are expected to be smoothed out as the operations mature. The direct benefit transfer was launched on January 1, 2013 and currently covers schemes like national child labor project, student scholarship and LPG subsidy.

Banks across the spectrum, both public and private, have implemented the DBT scheme for transfer of funds to the beneficiaries. The banks have integrated with NPCI to provide the following services-

- National Automated clearing house (NACH)
- Aadhaar Enabled Payment (AEPs)
- Aadhaar Payment Bridge system (APBs)

# Mobile banking

Despite the rise in M-banking transactions in India, banks are yet to fully exploit this technology even for their existing customers. The current penetration is low compared to the number of bank accounts and the vast mobile subscriber base of more than 900 million it's a start situation but today every one where adapted the mobile banking, situation changed.

# Mobile banking can be classified as follows

- Mobile banking application like custom application, mobile browser to provide mobile banking service to various/tablet platforms like IOs, android in high end phones with good processing capabilities.
- Services like USSD to the low and segment in java based phones with limited data processing capabilities.

There have been various developments over the past year in the mobile banking space including new strategic partnership models(like between banks and telcos) and products/services(interbank mobile payment systems(IMPS), national unified USSD platform (NUUP), etc) emerging in the Indian markets. M — Banking has lowered some of the key barriers to financial inclusion in India by reducing start-up costs and service prices.

## Key developments and initiatives taken in mobile banking

The apex bank and NPCL are taking initiatives to develop solutions across the mobile banking space to reduce the burden on ATMs and other channels.

## Following are some initiatives taken

# IMPS – an emerging, convenient remittance systems

An IMPS is a mobile banking based remittance system which is interbank in nature and is owned and operated by the national payment corporation of India (NPCI). IMPS facilitates access to bank accounts and transfer of funds between the customers of different banks on a 24/7 basis. It can be P2A and P2P.

# **NUUP**

National unified USSD platform (NUUP), launched by national payments corporation of India(NPCI) and offered on a short code\*99#, is a service which would take banking services to every common man in the country. The service was launched in November 2012. The service would allow every banking customer to access banking services with a single number across all banks – irrespective of the telecom service provider, mobile handset make or region.

Currently the service is live with 23 banks and two telcos viz, BSNL AND MTNL.

The maximum limit of fund transfer per customer on NUUP is rs.5000/- per day.

### Benefits of NUUP to the customers

- Works on basic voice connectivity unlike an application, GPRS connectivity is not required.
- II. The customer need not download any application on the phone.
- III. Question and answer driven interaction easy to understand.

# Benefits of NUUP to the banks

- \*99# service can be used at BC POS terminals to serve the rural populace.
- Access to all telecom service providers through a single integration with NPCL.
- Easier adoption of mobile banking due to simpler process of using the service and technology.

Easier to promote a single code \*99# for banking services across all banks.

#### M - KCC Mobile based Kisan Credit Card

The smart card linked, mobile base and Aadhaar enabled KCC, popularly known as m- KCC, was launched in July 2012 and is seen as an example of harnessing the latest technology for user friendly applications in this case for financial inclusion of farmers.

# **Electronic payments**

The Indian payment system, which is primarily cash dominant, is now switching at a faster pace from paper to electronic mode. The share of electronic payments in noncash payments has shown an upward trend. The electronic payment system primarily comprises real time gross settlement, electronic clearing services, credit and debit payments and electronic fund transfers/national electronic fund transfer (NEFT). India is currently the 13th largest non cash payments market in the world, but has the potential to grow significantly. Electronic payment volumes have been growing by more than 10% a year as reserve bank of India and national payments corporation of India continue to drive infrastructure improvements and development of regulations (e,g. mpayments, the Rupay domestic cards scheme, and a biometric authentication card system that is currently being rolled out).

# **Key trends/Opportunities for Electronic payments**

- ♣ One of the recent initiatives taken by the regulators has been the decision to permit nonbank entities to launch the white Lable ATMs(WLAs), thereby increasing ATM penetration across the country. The sponsor bank will be responsible for cash management and customer grievance redressal. WLA is set to boost electronic payments with penetration in rural and semi urban areas.
- The e-commerce and m-commerce platforms are poised for a big stride in the coming years. To promote electronic payments for mass audience, NPCI has launched Rupay pay secure solution for Rupay cardholders to make online payments for various services such as reservations, bookings, ticketing, shopping, utility bill payments etc. in a secured manner.

Unstructured supplementary services data(USSD) that is being attempted for fund transfer through IMPS across mobile network operations (MNOs) by NPCI, will help in penetrating the untapped segment and boost electronic payments.

## Initiatives taken by NPCL to boost e – payments:

To promote electronic payment, NPCI which functions as a hub in all electronic retail payments systems has launched multiple products and services.

- ♣ Immediate payment service (IMPS)
- ♣ National automated clearing house (NACH)
- Aadhaar Enabled payments system (AEPS)
- Aadhaar payment Bridge (APB)
- Creation of 24 / 7 Remittance system.

# **Customer Management Business Intelligence**

From CRM to customer Experience Engineering

The past 2 decades in large CRM projects – however, most of these monolithic CRM projects were characterized by inside out thinking and IT driven – thus doomed to sub optimal ROI. In parallel, customers have – with increasing rapidity – moved on and embraced the newer age technologies like web, mobility and of course social media. Thus the power shifted from the bank to customers – who now collaborated, commented and consolidated their product/brand choice even before stepping in to the branch.

Having understood the above reality most banks are today attempting to define their "Customers Experience" initiatives. Thus the concept of "Single Customer" view which was earlier considered to be holy grail of marketing by most banks while valuable, is just data rather than insight.

# **Customer Experience components**

- Understanding customer needs
- Aligning the channels of communication and distribution
- Mapping the customer lifecycle
- Mapping the customer journey
- Aligning the organization

## **IT for Business Optimization**

Optimization typically seeks to assign values to set of variables that lead to an optimal value of a function it seeks to find an alternative with the most cost effective or highest achievable performance under the given constraints. IT assets and resources in the near future will have to answer the question of whether they re delivering optimal level of performance. While it is difficult to measure the direct impact, banks will have to think of ways of defining and tracking performance metrics. The metrics will have to start with measuring productivity of IT assets such as Return on Investment (ROI) and marginal ROI to efficiency measures (like cycle time, response time, utilization) and performance effectiveness measures like coverage, outcome, quality, satisfaction etc). In achieving these objectives banks will have to integrate people, processes and technology to deliver superior customer service.

#### Conclusion

IT today become integral to the business of banking; it is difficult to envision one without the other. However as with other resources it has costs attached to it and with substantial investments in IT infrastructure business leaders have to seek answers to whether the infrastructure is being used optimally. The overall and marginal value that IT delivers in terms of business impact, be it growth or profitability or any other parameter, will become increasingly important. Technology should be customer centric to device optimal benefits and banks will have equally focus on customer retention increasing the share of wallet rather than only the acquisition. With increased due of technology also come increased risk of security breaches. Banks will have to be on their toes with real time alert systems and governance polices to manage the threats for early detection and damage control in addition, banks will need to focus on operations performance improvement, including training, workflow automations and business process re-engineering, to simplify process flows for increased return from technology.