A STUDY ON NEW INNOVATIONS IN E-BANKING IN INDIA

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ABSTRACT

The banking sector in India has been a number of changes. Most of the banks have begun to take an innovative approach towards E-banking with the objective of creating value for customers in the banks. E-banking in India has already undergone a huge transformation in the last few years. This research paper focuses on highlight new innovation take place in Indian E-banking. The various innovations in E-banking are BHIM, AEPS, UPI, IMPS and USSD. The paper also highlights the features and benefits in E-banking.

Keywords: BHIM, AEPS, UPI, IMPS, USSD

INTRODUCTION

Banking in India has been a long journey. A number of changes take place in Indian Banking Sector. This includes the traditional banking practices from the time of Britishers to the reforms period, nationalization to privatization of banks and now offline banking to online banking. Therefore, Banking in India has been a long journey.

In the 1990s the banking sector in India takes action toward technology and innovation, that’s why all the banks start the E-banking services. Now a day’s all banks try to rich at their customers with e-banking. Banks provides its products and services to the customers at any place by way of e-banking. So, various banks as well as government try to find new innovative system for e-banking.

E-BANKING

Finland was the first country in the world to have taken a lead in e-banking. In India, E-banking was initiated by ICICI bank as early as 1997. E-banking is defined as “Delivery of banks services to a customer at his office or home by using electronic technology can be termed as E-banking. Reserve Bank of India (2001), Internet plays important role between banks and customers to receive and delivered information, this form of banking is described as Internet (electronic) banking.”

E-Banking offers various services like ATMs, Credit cards, Debit cards, Smart cards, Electronic Funds Transfer (EFT) system, Mobile banking, Internet banking, UPI, USSD, Bank Apps, IMPS, BHIM, AEPS

OBJECTIVES OF THE STUDY

1. The main purpose of the study is to highlight the new innovations in e-banking in India.
2. To highlight the features and services of new innovations in E-banking.
3. To highlight the benefits of new innovations to the various group of society.
RESEARCH METHODOLOGY:

Research Design

Descriptive Research Design is used for the study.

Data Collection

The research is mainly based on secondary data. Data has been collected from different sources like scholarly articles, annual reports, magazines, books, journals, newsletters, and various web sites.

LITERATURE REVIEW

Jitendra K. Sharma (2017) has studied the innovation in banking sector and its impact on customer satisfaction. The researcher has selected SBI and ICICI bank of Bhopal city for the study purpose. The objective of the study is to know the customer satisfaction after computerization of operation of largest branches of SBI and ICICI bank in Bhopal. Using structured questionnaire containing 28 closed ended statements the researcher has collected the data from 200 respondents who have been visiting banks for at least five years. The researcher has used Z-test for the testing hypothesis and concluded that private sector banks have been performing better than the public sector banks. The researcher also suggested that the public sector banks have to focus more on creating better marketing mix, expansion of various activities and reducing cost.

S. Praveen (2014) has reviewed the overview of Modern banking services in Indian. The study purely based on secondary data. The researcher has discussed the current services in Indian banking industry, like Cards, Insurance, Demat Services, Online Services, NRI Banking, Money Transfer, Corporate Banking, Corporate Net Banking, Cash Management, SME Services, E-Payment Services, RTGS, EFT, POS, ECS, EDI, etc.

Chavan (2013) described the benefits and challenges of Internet banking in an emerging economy. It observed that online banking is now replacing the traditional banking practice. It showed that online banking has a lot of benefits which add value to customers’ satisfaction in terms of better quality of service offerings and at the same time enable the banks gain advantage over the competitors. It also discussed some challenges in an emerging economy.

Gupta & Mishra (2012) examined the new emerging trends of E-banking in Indian banking industry. The study found that there are many challenges faced by banks in E-banking and there are many opportunities available with the banks. It concluded that banking sector will need to develop a new business model by building management and customer services. It also suggested that banks should contribute intensive efforts to render better services to their customers.

NEW INNOVATIONS IN BANKING SECTOR

There are so many new innovation take place in the financial sector in recent years as banks realized the requirement of digital technologies to meet fast-changing demands from customers. Following are the few new innovations in banking sector:

BHARAT INTERFACE FOR MONEY (BHIM)

BHIM is an application which gives you various options like, simple, easy and quick payment transactions using Unified Payments Interface (UPI). You can easily make direct bank to bank payments directly and collect money with just Mobile number or Payment address.

Service offered is as below:

1. Send Money
2. Request Money
3. Scan & Pay
Distinctive features of BHIM

The special features of BHIM are as follows:

1. QR code based scan & pay alternative available, create your own QR code option is also on hand
2. Alternative to save your beneficiaries for future references
3. See your transaction history and Request Balance anytime
4. Create and reset UPI PIN
5. Report Issue and call Bank services are set to lodge complaints
6. FAQ segment is created in the app to respond all the queries reg. BHIM
7. Accessible in 2 languages English and Hindi

Benefits of BHIM:

The benefits of BHIM are given below:

1. Single App for transfer and getting money and making commercial payments
2. Go cashless everyplace anytime
3. Added safety of one click 2 factor authentication
4. Seamless funds collection through single identifiers, reduced risks, actual time
5. Mobile no. or Name used to make VIRTUAL PAYMENT ADDRESS (VPA)
6. Best option for Cash on Delivery hassle
7. Send and collect using VIRTUAL PAYMENT ADDRESS (VPA) or A/c no & IFSC
8. Payments throughout one app in your preferred language.
9. 24X7, 365 days instant money transfer

Transfer Limits

1. Upper limit per transaction is Rs. 10,000 per transaction
2. Highest limit per day is Rs. 20,000
3. There is limit of 20 transactions for single account per bank.

Charges for using BHIM

The charges for BHIM are depending on the mobile operator for first SMS. For *99# service the charges are Rs.0.50/- for per transaction. It is up to bank’s policy to levy any charges on the customers for using BHIM. From NPCI there is no charges charge from the client.

AADHAAR ENABLED PAYMENT SYSTEM

In order to advance speed track Financial Inclusion in the nation, Two operational Group were created by RBI on MicroATM standards and Central Infrastructure & Connectivity for Aadhaar based financial inclusion transactions with members on behalf of RBI, Unique Identification Authority of
India, NPCI, Institute for Development and Research in Banking Technology and some special invitees representing banks and research institutions. The operational group on MicroATM standards & Central Infrastructure & Connectivity has submitted its information to RBI. As a part of the working group it was proposed to conduct a Lab level Proof of concept (PoC), integrating the authentication & encryption standards of UIDAI, to test the efficacy of MicroATM standards and transactions using Aadhaar before they are put to actual use. The PoC was successfully demonstrated at various venues. AEPS is a bank led model which allows online interoperable financial inclusion transaction at PoS (MicroATM) through the Business correspondent of any bank using the Aadhaar authentication.

The four Aadhaar enabled basic types of banking transactions are as follows:

1. Balance Enquiry
2. Cash Withdrawal
3. Cash Deposit
4. Aadhaar to Aadhaar Funds Transfer

The benefits of Aadhaar Enabled Payment (AEP) System:
The benefits of AEP system are as follows:

1. Eliminates inordinate delays, multiple channels & paper-work involved in the existing system.
2. Transfers benefits & subsidies in a seamless & timely manner and directly into the Aadhaar Enabled Bank Account.
3. In case of change in bank account, customer is not required to convey the bank account details or change in bank details to the Government Department or Agency.
4. Customer not required to open multiple bank accounts for receiving benefits and subsidies of various social welfare schemes – Customer just need to open one account and seed his/her Aadhaar number in the bank account to start receiving benefits and subsidies directly into his/her Aadhaar Enabled Bank Account.

UNIFIED PAYMENTS INTERFACE (UPI)
UPI is an instant payment system. This is created by the National Payments Corporation of India (NPCI). UPI is built above the IMPS infrastructure which gives you to immediately transfer money between any two parties' bank accounts. Unified Payments Interface (UPI) is a system in which with help of one mobile application you can operate numerous bank accounts, inclusion several seamless fund routing & commercial payments into one hood.

For the first time National Payments Corporation of India conducted a pilot launch with 21 member banks. The pilot launch was on 11th April 2016 by Dr. Raghuram G Rajan, Governor, from 25th August, 2016 onwards banks have in steps forward to upload their UPI enabled Apps on Google Play store.

Unique features
The unique features of UPI are as follows:

1. It provides immediate money transfer through mobile device round the clock 24*7 and 365 days.
2. With the help of Single mobile application you can accesses different bank accounts.
3. One the important feature of UPI is that Virtual address of the client for Pull & Push provides for more security with the customer not required to enter the details such as Card no, Account Bill Sharing with friends.
4. Remove the hassle of Cash on Delivery, running to an ATM or rendering exact amount.
5. Facilities of Merchant Payment with Single Application or In-App Payments for different purposes.
6. For different purposes, arrangement of PUSH and PULL Payments
7. Helpful for Utility Bill Payments, Over the Counter Payments and Barcode (Scan and Pay) based payments, etc.
8. Donations, Collections, Disbursements Scalable.
9. Raising Complaint from Mobile App directly.

**UPI - Benefits to the Ecosystem participants**

The benefits of UPI to the various participants are given below:

**Benefits for banks**
1. Single click Two Factor authentication
2. Universal Application for transaction
3. Leveraging existing infrastructure
4. Safer, Secured and Innovative
5. Payment basis Single/ Unique Identifier
6. Enable seamless merchant transactions

**Benefits for end Customers**
1. Round the clock availability
2. Single Application for accessing different bank accounts
3. Use of Virtual ID is more secure, no credential sharing
4. Single click authentication
5. Raise Complaint from Mobile App directly

**Benefits for Merchants**
1. Seamless fund collection from customers - single identifiers
2. No risk of storing customer’s virtual address like in Cards
3. Tap customers not having credit/debit cards
4. Suitable for e-Com & m-Com transaction
5. Resolves the COD collection problem
6. Single click 2FA facility to the customer - seamless Pull
7. In-App Payments (IAP)

**Steps for Registration**

Process or steps for registration as given below, by following these steps you can get all the benefits of UPI application.

- Step-1: User downloads the UPI application from the App Store / Banks website
Step-2: User creates his/her profile by entering details like name, virtual id (payment address), password etc.

Step-3: User goes to “Add/Link/Manage Bank Account” option and links the bank and account number with the virtual id

Step-4: User selects the bank account from which he/she wants to initiate the transaction

Step -5: User clicks one of the option -
   a. Mobile Banking Registration/Generate MPIN
   b. Change M-PIN

The different channels for transferring funds using UPI are:

1. Transfer through Virtual ID
2. Account Number + IFSC
3. Mobile Number + MMID
4. Aadhaar Number
5. Collect / Pull money basis Virtual ID

IMMEDIATE PAYMENT SERVICE (IMPS)

In August 2010, NPCI conducted a pilot study on the mobile payment system with the help of some banks like SBI, BOI, UBI and ICICI. Than after, the banks Axis and HDFC bank joined this league during the September to November 2010 respectively. Immediate Payment Service (IMPS) publics launch happened by Smt. Shyamala Gopinath in November 2010 at Mumbai and this service is now available to the Indian public.

An IMP provides an instant, 24X7, interbank electronic fund transfer service with help of mobile phones.

Objectives of IMPS

The main objectives of IMPS are as follows:

- To enable bank customers to use mobile instruments as a channel for accessing their banks accounts.
- To fulfill the goal of Reserve Bank of India (RBI) in electronification of retail payments.
- To build the foundation for a full range of mobile based Banking services.

The participants for IMPS will be as follows

Benefits of IMPS

The benefits of IMPS are given below:

1. IMPS is instant domestic fund transfer system
2. It is available for 365 X 24 X 7
3. IMPS is safe and secure
4. It is easily accessible
5. IMPS is cost effective
6. It is available on Mobile, Internet and ATM
7. Multiple transfer input options to choose from, for initiating transactions, such as IFSC /MMID/ Account no./AADHAAR no.
8. Multiple access mechanism to choose from

SERVICE

*99# service was dedicated to the nation by the Honorable Prime Minister of India Shri Narendra Modi on 28th August 2014 as element of PMJDY.*99# service has been launched for receive the banking services to each common man across the country. Banking clients can benefit this service by dialing *99#, across all Telecom Service Providers (TSPs) on their mobile phone and transact through an interactive menu displayed on the mobile screen. Today, 43 leading banks offered *99# service and can be available in 12 different languages together with Hindi & English. *99# service is a special interoperable direct to consumer service that brings ecosystem partners such as Banks & TSPs (Telecom Service Providers).

Features

The special features of *99# services are as follows:
1. Standardized Menu for Banks and Customers Facilitates interoperable mobile banking transactions
2. Capability to reach 960 million mobile phone users
3. Works across all handsets & GSM service providers
4. Works on both Basic phones as well as Smartphone Works without GPRS and service available while roaming as well
5. Multilingual options (Available in 12 languages including English & Hindi)

Benefits:

The benefits of *99# service to the various participants is as follows:
1. Simplicity User required to just dial a short code
2. Convenient Simple and easy to use service
3. Round the Clock Availability Works 24*7*365
4. Easy Accessibility No internet connection required.
5. Presently, following Financial, Non-financial and Value Added Services (VAS) are accessible through *99# service.

Financial Services

The special financial services available at *99# are as follows:
1. Fund Transfer (P2P)
2. Fund Transfer (P2A)
3. Fund Transfer (P2U)

Non-Financial Services

Some of non-financial services available at *99# are given below:
1. Know MMID
2. MPIN
3. Generate MPIN
4. Change MPIN
5. Change MPIN
6. Generate OTP
7. Balance Enquiry
8. Mini Statement

Value Added Services
There is *99*99# value added service

CONCLUSION
In the past few years, the Indian banking sector has completely transformed because of various innovations has took place in E-banking. Like BHIM, AEPS, UPI, IMPS, USSD. These are accelerating the growth of the banking system, because it’s easy to use and simple to understand. Today most of the banks are providing these types of services to their customers for the better comfort. With the help of this kind of innovation, a common man can enjoys the banking facilities with or without having internet facility in their cell phone.

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