

Challenges and Opportunities of Digital Payment System in Retail Banking with reference to Indian Banking Sector

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Abstract

The objective of the paper is to know the retail banking in Indian scenario and the paradigm shift in its operating activities with the advent of information technology. The demographic change has a significant influence in creating awareness about the various avenues towards payment and settlement system. Technology is a boon to the bankers and customers at large where the bankers can focus on generating revenue to the bank, whereas customers can benefit from ease of carrying out the transactions without any hassle, reducing the dependence on the bankers for withdrawals and time deposits and taking up various agency and utility services with the introduction of Digital Payment System. The retail banking has penetrated the Indian financial market post demonetization with the flagship programme of Jan Dhan Yojana aimed at Financial inclusion- to bring all the unbanked people to the common platform to carry on banking transaction and bring lot of transparency, mobilizing savings and investment, thereby contributing to the capital formation for the smooth functioning of the economic activities in the economy.

Keywords: Retail banking, Technology, Digital Payment System, Jan Dhan Yojana

Introduction

The banking industry in India has seen a transformational change from 1945 i.e, Pre- independence to the present era. Finance is the life blood of every economic activity, banks act as an intermediary between the surplus funds i.e, savings and the one who is in need of through the process of lending and contributes significantly to the capital formation of sectors broadly classified as Primary, Secondary and Tertiary sectors.

Retail Banking has penetrated the financial market greatly with the concept of 'Financial inclusion' with the announcement of Jan Dhan Yojana, a Zero balance account for the unbanked person to bring every citizen of India to the common platform of banking transaction. As per the data of 2023, 48.02 crore beneficiaries banked so far Rs 1, 85,446.51 crore balance in beneficiaries accounts, 6,55 lakh Bank Mitras, delivering branchless banking services in the country (pmjdy.gov.in). There is a gradual shift in the loan disbursement from large to medium, small, micro with the change in the demographic pattern of the country like India, where 50% of population is below the age of 25 and more than 65% below the age of 35. The advent of technology enabled appropriate delivery channel for mass banking and driving towards financial inclusion.

Financial Inclusion

The previous literature has given considerable emphasis on the concept of financial exclusion where it prevents the individuals and social groups to gain access to the formal financial system. The rural population of India was estimated to be 506 million by the year 2022 as per the statistical data(Statista.com)where majority of the rural people is excluded from the formal banking system. The Government of India committee defines Financial inclusion as the process to ensure providing access to financial services to the vulnerable and low income groups in the form of credit and mobilizing the savings at an affordable cost (Rangarajan committee, 2008).

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Table 1.1 Details of various Banks in the services of opening PMJDY accounts

Bank Name/Type	No. of Beneficiaries @ Rural/ Semiurban Centre Bank Branches	No. of Beneficiaries @ Urban Metro Centre Bank Branches	No. of Rural Urban Female Beneficiaries	No. of Total Beneficiaries	Deposits in Accounts (in Crore)	No. of Rupay Debit Cards issued to beneficiaries
PSB	23.67	14.11	20.79	37.77	143939.87	28.03
RRB	7.67	1.24	5.13	8.90	36338.56	3.44
Private Sector Bank	0.69	0.65	0.72	1.34	5168.57	1.11
Grand Total	32.02	16.00	26.64	48.02	185446.51	32.57

Source : Progress report of PMJDY; <https://pmjdy.gov.in/account> (Data upto 25/1/2023)

Interpretation : From the above table it is clear that majority of the PMJDY accounts are opened by Public Sector banks making it mandatory to have a SB account to the unbanked individuals contributing to 78.65% of total beneficiaries, followed by RRB i.e, 18.5%.

Retail Banking in Indian Scenario

India has experienced a rapid growth in retail banking. Retail banking has been facilitated by growth in banking technology and automation of the banking process. Indian retail banking segments are housing loans, consumption loans for purchase of durables, auto loans, credit cards and educational loans. The Report on Trend and Progress of India, (2003-04) has shown that the loan values of these retail lending range between Rs. 20,000 to Rs. 100 lakh, which are generally for the duration of five to seven years with housing loans granted for duration of 15 years. Retail lending turned to be key profit driver for banks with retail portfolio constituting 21.5 percent of the total outstanding advances as in March 2004. Retailing makes ample business sense in the banking sector and has much scope in India. Retail loan constitutes less than 7 percent of the GDP in India and about 35% for other Asian economies. Retail banking in India is still growing and it is estimated that the growth number would get exaggerated.

Objectives

1. To know the Concept of retail banking in Indian Scenario
2. To explain the significance of retail distribution channels
3. To analyse the impact of technology on retail banking
4. To understand the recent trends in payment and settlement system

Research Methodology

The present research is based on secondary data with reference to review of research papers in different journals related to financial inclusion, retail banking, third party payment banks, digital payment system, books on retail banking, and published RBI reports on the website.

Technology and Retail Banking

Technology has brought tremendous change in the way of carrying out business activities. Digitalization, mobile banking, technical innovation has eased the process of remittance and settlement system. Banks, today have forced to adopt new ways to enhance the revenue generation and increase the customer share wallet. Banks operating in India have adopted the change in demographic profile of the customers which contributes majorly of young working population which becomes easy to adopt and adapt the change by contributing directly towards the economic growth of the nation.

The convenient banking in the form of debit card, credit card, internet banking, anywhere banking has attracted many customers to the platform of retail banking. This has reduced long queues for cash withdrawal, no barrier of banking hours and banking holiday by introducing 24*7 banking services to ease the way of carrying economic activities without any hindrance in cashflow. The technological innovations have created different modes towards the traditional function of acceptance of deposits and withdrawals, agency and utility services.

Digital Payment System

There has been a paradigm shift from the traditional banking model with the adoption and access of information technology. With the increase in the standard of living of individuals among urban and rural areas, every individual today has switched from a keypad to Smartphone with internet connectivity which has enabled every customer to carry out maximum transaction on their mobile phone through mobile banking and has saved time and energy visiting the branch in person.

The promise of lower transaction costs increased sales productivity and more convenient service has lured banks into setting up new delivery channels. The banking organization is seeking ways to increase automated access to a wider range of products. New methods of accessing financial services, developing new products and services and using new delivery channels are explored which can enable organizations to reduce cost, maximize return on existing investments, acquire and build more customers/product ratio to effectively retain customers. In India, banks are yet to exploit the delivery channels to the maximum extent that technology permits. Customers continue to access retail banks by walking into their local branch. The technological advancement has led to increase in off-site and on-site delivery channels, which brings new product development speed of transaction processing and reduction in transaction cost. Following are the different modes of carrying out payment and settlement mechanism.

Card Payments – Debit and Credit Card

Today a debit card or credit card is synonyms to a bank account. This has lead to the sufficient cash flow at POS terminals at times when the customer is not able to handle liquid cash.

Credit card option gives access to the liquid cash in case of deficit amount to continue with the economic activities of purchases with the banks providing the provision of timely credit and not lead to the postponement of purchase of product or availing services.

Internet Banking

An emerging trend in delivery channels offers significant cost advantage to banks. A net based transaction costs the bank around Rs. 4 and costs per transaction are even lower than those of an ATM. Internet Banking is in an incipient stage in India and faces challenges, psychological, legal technological, and socio-economic factors, lack of critical mass of early adopters, lack of strong trust environment, slowness in adoption of internet and its access are some of the impediments in adoption of internet banking in India.

Real Time Gross Settlement System (RTGS)

The creation of a new department i.e, Department of Payment and Settlement Systems by the RBI in the 2005 to focus exclusively on payment and settlement system set the stage for a new era in the history of payment systems in the country. An individual who wants to transfer an amount of Rs 2,00,000 and above can avail the facility of an RTGS which processes on individual basis and the amount is settled to the beneficiary account within a span of half an hour of account processing. This is made simple with the respective official apps of the respective banks thereby save time and energy with an edge of fast settlement.

National Electronic Funds Transfer – NEFT

For the smooth flow of retail transaction with an amount of less than Rs 200000 can be processed with an option of NEFT which is accessible to all the account holders to easy the transaction of transfer to the beneficiary account. NEFT involves batch processing of transaction which comparatively takes considerable time in settling the account.

Immediate Payment Service

To transfer the funds on real time basis, IMPS provides a robust electronic fund transfer service that could be accessed on multiple channels like Mobile, Internet, ATM, SMS. IMPS is an emphatic service which allow transferring of funds instantly within banks across India which is not only safe but also economical.

Unified Payments Interface – UPI

NPCI conducted a pilot launch with 21 member banks. It is a system that allows multiple bank accounts into a single mobile application by merging several bank features. It caters to the requirement of collect request and payment that is required as per the convenience with the use of smartphone by entering the recipients mobile number.

Mobile wallet

This is a way to store the digital cash by linking the bank details or plastic card to carry out the transactions. This facility is available through the like Gpay, Phone pay, Jio money etc to replace the physical wallet.

Mobile Banking

With the shift from keypad to Smartphone which is worth with a strong internet connectivity has paid the way to carry out major of the banking transactions like time deposits, fund transfer, statement of bank account, balance check has reduced the physical movement of account holders to the bank branches. This facility is available with the customised apps designed for individual bank which assures ease of transactions to the customers.

Aadhaar Enabled Payment System

It is a payment service that allows the account holder to perform basic banking services like balance enquiry, cash withdrawal, remittance using aadhar authentication. The inputs required are the Bank name, aadhar number and finger print captured during enrollment. It uses Aadhaar data for the authentication. Like UPI and USSD, this is another initiative by the NPCI.

Table 3.1 Service wise division of Digital Payment system for the Week of February 8, 2023

Data for the day	RTGS		NEFT		UPI	
	Vol (lakhs)	Val (Crores)	Vol (lakhs)	Val (Crores)	Vol (lakhs)	Val (Crores)
Feb 1	8.51	582286.79	293.57	151958.58	2889.81	5807.13
Feb 2	8.23	579472.61	176.89	116752.81	2804.49	53349.07
Feb 3	8.25	592482.81	198.58	116718.11	2742.31	48928.42
Feb 4	6.87	186856.62	155.30	77998.41	2835.93	50154.95
Feb 5	0.68	6662.70	74.10	11667.34	2724.50	39708.70
Feb 6	9.11	608496.83	196.22	127546.90	2721.49	49382.48
Feb 7	8.71	499954.12	232.50	124610.21	2802.30	51094.93

Source: RBI weekly Published reports

Interpretation: The above table focuses on the transactions carried out using the different modes of digital payment system.

- RTGS the transfer larger value above Rs2,00,000 contributing Rs 30,56,212.48 value of transactions with individuals preferring to settle the amount easily on real time basis without any delay.
- NEFT is the next preferred mode for the retail transactions, contributing to Rs 20,94,551.78 cr for the week for settlement within the national boundaries of a nation.
- UPI is contributing to a value of Rs 2,98,425.68 cr for quick and immediate settlement.

Table 3.2 Details showing the volume and value transactions of IMPS and AEPS

Data for the day	IMPS		AEPS	
	Vol (lakhs)	Val (Crores)	Vol (lakhs)	Val (Crores)
Feb-01	186.95	23410	0.3	15.65
Feb-02	180.3	21153	0.3	14.88
Feb-03	169.13	19282	198.58	13.51
Feb-04	175.81	18619	155.3	12.14
Feb-05	152	12129	74.1	11.9
Feb-06	171.88	19666	196.22	14.6
Feb-07	156.02	17988	232.5	13.8

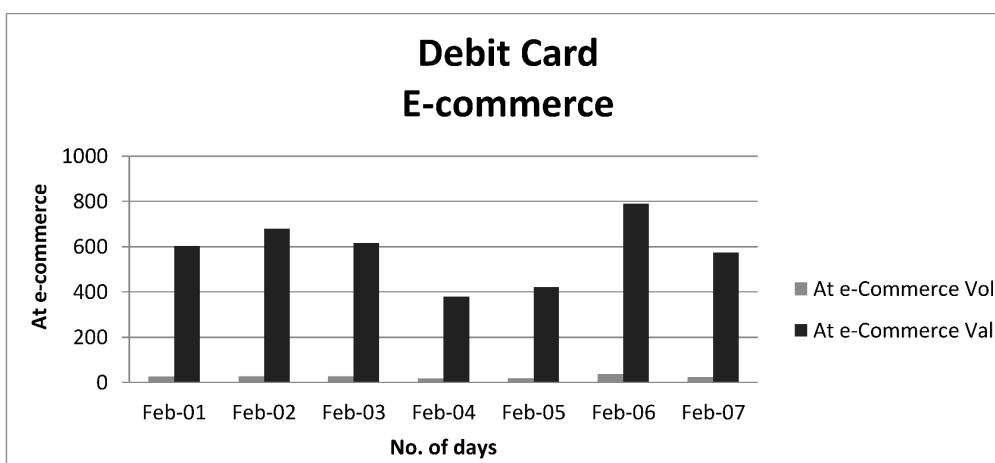
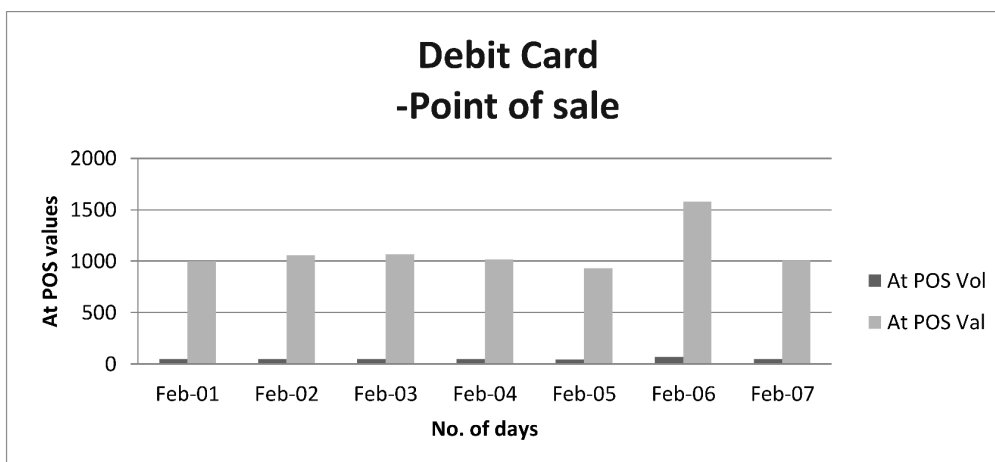
Source: RBI weekly Published reports

Interpretation: The above table compares mode of digital payment for IMPS and Aeps. IMPS is the highest preferred mode of payment and settlement for retail transactions amounting to Rs 1,32,247cr on weekly basis in comparison with Aeps leading to less awareness about its usage on the part of individuals contributing to Rs 96.48 cr.

Table 3.3 Table showing the usage of Debit Card at POS and E-Commerce Transactions.

Debit Card				
Data for the day	At POS		At e-Commerce	
	Vol (lakhs)	Val (Crores)	Vol (lakhs)	Val (Crores)
Feb 1	45.99	999.63	24.90	601.88
Feb 2	48.67	1056.85	27.60	679.24
Feb 3	48.70	1068.16	26.87	616.03
Feb 4	47.36	1017.92	17.92	378.19
Feb 5	43.25	933.38	19.65	421.87
Feb 6	71.41	1581.38	37.64	788.79
Feb 7	47.70	1009.53	24.63	572.97

Source: RBI weekly Published reports

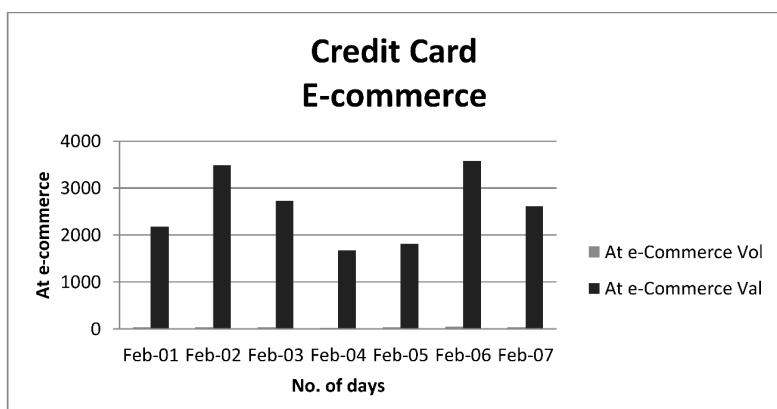
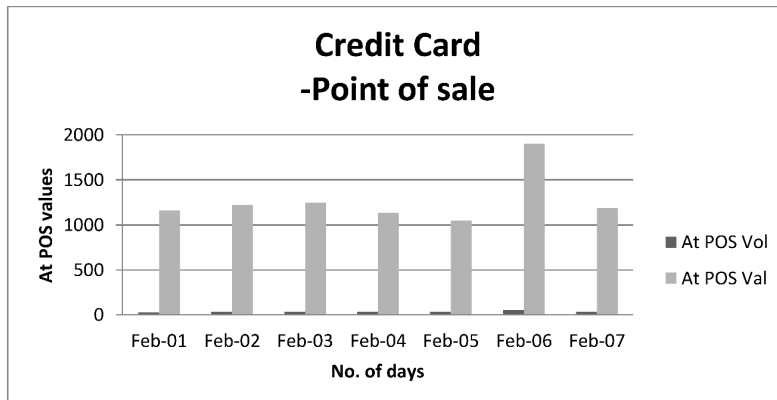


Interpretation: The above table reveals the usage of debit card for POS and E-Commerce Transactions. The POS contributes to a total value of Rs 7,666.85 against Rs 4058.97 for e-commerce transaction. Customers prefer to settle the transaction on the point of sale to a greater extent than e-commerce sites for online payment.

Table 3.4 Table showing the usage of Credit Card at POS and E-Commerce transactions

Data for the day	Credit Card At POS		Credit Card At e-Commerce	
	Vol (lakhs)	Val (Crores)	Vol (lakhs)	Val (Crores)
Feb-01	29.79	1160.3	35.91	2173.7
Feb-02	31.15	1224.8	39.86	3485.2
Feb-03	31.82	1247.5	39.05	2725.8
Feb-04	31.64	1133.3	24.3	1671.4
Feb-05	31.97	1051	37.77	1806.9
Feb-06	50.6	1903.1	52.57	3572.2
Feb-07	31.06	1188.7	36.97	2610.2

Source: RBI weekly Published reports



Interpretation: The above table reveals the usage of credit card for POS and E-Commerce Transactions. E-Commerce transactions contribute to Rs 18045.04 against POS contributes to a total value of Rs 8908.7. Customers prefer credit card for e-commerce transactions as the discounts received for purchase and rewards points are higher than for POS.

Challenges and Opportunities of Digital Payment System

With the increase in the positive demographic change in the population of India, wherein majority of the population belong to the middle income group, young working population, increase in financial literacy rate, technology adaptability has a bright future towards growth of digital payment and retail banking. At the same time, technology is a threat giving rise to the major problems in the country, where individuals fall prey to their hard-earned money.

Cybercrime

Technology is a boon at the same time, it has lead to increase in the cybercrime since large numbers of people are going digital, fraudsters are using innovative ways to dupe vulnerable consumers. Cybercrimes like Phishing, Malware, OTP frauds, fake UPI link are witnessing surge with increase in contactless payments.

Technically unsound

With the fear of losing money by giving access of bank details to the payment apps, people do not take an initiative to use digital mode because of lack of sound technical knowledge in operating the apps for the transactions and feel that traditional approach is very safe.

Overspending

It is difficult to keep a track on the spending on the part of people with no physical limitation in carrying out hard cash and end up spending more than what is required at present which could affect on the savings pattern of individuals.

Overdependence on internet connectivity

Almost all the digital payment system needs a strong connectivity of internet for the smooth, fast processing and execution of the transaction. At times the bank server causes hindrance for fund transfer and other payment processing.

Public WIFI

At times, services rendered free of cost could be a major threat in losing money virtually through a direct debit from the account by the fraudsters. The public wifi is like an open book which gives easy access to everyone without any secured password leading to gateway for bank details of account holder.

Opportunities

Cashless Economy

India's 2/3rd population reside in the rural areas and play a significant role in the growth and development of the economy. Government has taken initiatives towards the digital payment system to the rural segment with the increase awareness and educating them will roll out a greater portion to made the country a cashless economy.

Corruption

To account for every hard earned money of the public, digital payment system traces the flow of money among the people. Government has taken initiatives to make sure every transaction takes the formal route of money transfer and eradicating the physical movement for large amount of paper to eradicate towards corruption free economy.

Innovation

There is no end to ease the process of payment and settlement mechanism by adding new features and upgrading it on timely basis to make it more easier and convenient to the people, attract them to the platform of digital payment system.

Conclusion

The study reveals that there is vast opportunity as well as challenges for retail banking in India. It has been found that due to technological innovation and significant change in demographic profile of consumers, there is huge market potential lying ahead. As there is increasingly challenging business environment, retail banking in India requires competitive tools, product development and differentiation, business process reengineering, micro planning, marketing prudent pricing, customization, technological up gradation, mobile banking, cost reduction and cross selling. Higher electronic transaction volumes will boost profits. Banks can use current infrastructure. Another method is better risk management. Technology is in place to make this happens a new infrastructure, supporting single point authorization and sophisticated decision making techniques. Today, retail banking has a wide scope with its contribution to the banking industry, GDP and employment generation of the economy.

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