# THE RISE OF INTERNET BANKING: OPPORTUNITIES AND CHALLENGES IN THE DIGITAL ERA

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DOI 10.29121/shodhkosh.v5.i4.2024.363

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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# **ABSTRACT**

India and its people are changing very quickly due to the digital age. Every day, technology offers more and more chances for people to become empowered and, as a result, to develop continuously. The technology revolution has affected every industry. India's banking sector, which is regarded as the foundation of any economy, has long been run using conventional methods (BHARGAVA, A. 2017). Automated teller machines were used to improve electronic banking, which then evolved into online banking. Customers can manage their accounts and conduct financial transactions via electronic banking from a computer or smartphone. Bill payment, electronic transfers, debit and credit cards, mobile banking, telebanking, and similar services are among the services that banks offer (Nithya, C.) . This paper focuses on different methods in payment system in online Banking Services and check the growth in using these methods. The data is collected from secondary sources. It aims to explore the ways in which technology has changed the banking industry and various opportunities and challenges faced by banking industry.

#### 1. INTRODUCTION

Banking is the backbone of the Economy. Banks today operate in a highly globalized, liberalized, privatized and a competitive environment. Information Technology is playing a significant role in improving the services in the banking industry (Goda, N.R. 2018). Indian banking industry has witnessed a tremendous developments due to sweeping changes that are taking place in the information technology. Internet Banking refers to a system allowing individual customers to perform banking activities while sitting at home, office and other locations via internet without visiting bank branch physically (Prsad, A. 2022). In Internet Banking any user with a personal computer and a browser can connect to his bank via the bank website and conduct any virtual banking function. This is also known as e-banking, sometimes known as online banking. The bank has a web-enabled centralized database for its online banking system. Every online service that the bank has approved is visible through a menu. Internet or online banking through traditional banks enable customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments and stop-payment requests, and some even offer online loan and credit card applications. Internet banking is a web-based service that enables the banks authorized customers to access their account information. It permits the customers to log on to the banks website with the help of bank's issued identification and

personal identification number (PIN). Indian banks offer following E-Banking products and services to their customers:

- Automated Teller Machines (ATMs)
- Internet Banking
- Mobile Banking
- Phone Banking
- Tele banking
- NEFT

- Electronic Clearing Services
- Electronic Clearing Cards
- Smart Cards
- Door Step Banking
- Electronic Fund Transfer
- IMPS

# 2. OBJECTIVES OF THE STUDY

- To study the growth of different channels of payment system in digital banking.
- To study the opportunities and challenges faced in E-banking.

#### 3. PRESENT STATUS OF INTERNET BANKING

Internet banking has witnessed significant growth in India over the past decade, driven by factors such as increasing internet penetration, Smartphone usage, and government initiatives promoting digital transactions. Several public and private sector banks offer internet banking services in India. Some of the prominent ones include State Bank of India (SBI), HDFC Bank, ICICI Bank, Axis Bank, and Punjab National Bank (PNB). With the proliferation of smart phones, mobile banking has become increasingly popular. Many banks offer mobile banking apps, allowing customers to perform various banking transactions conveniently on their smart phones. Internet banking plays a crucial role in facilitating digital payments in India. Customers can use internet banking platforms to transfer funds, pay bills, and recharge mobile phones, book tickets, and shop online. Banks in India have implemented robust security measures to protect customers' online transactions. These include two-factor authentication, encryption technologies, secure login processes, and regular security updates. The Government of India has introduced various initiatives to promote digital payments and financial inclusion, such as the Unified Payments Interface (UPI), Aadhaar-enabled Payment System (AePS), and the Pradhan Mantri Jan Dhan Yojana (PMJDY). The Reserve Bank of India (RBI), India's central bank, regulates internet banking and digital payments in the country. It periodically issues guidelines and mandates to ensure the safety and efficiency of online banking services. According to the RBI in its Annual Report 2023-24, Payment and settlement systems as a whole had a 44% increase in transaction volume in 2023-2024 compared to 57.8% the year before. The growth in 2023–24 was 15.8% in value terms, compared to 19.2% in 2022–23. Meanwhile, the volume of all digital payments increased by 44.3% in 2023–2024 and 58.3% the year before. On top of last year's 19.7% gain, India's worth increased by 16.4% this year.

#### 4. PAYMENT AND SETTLEMENT SYSTEMS

Payment System Indicators - Annual Turnover (April-March)												
Item	em Volume (lakh)				Value (	Rs. lakh cro	re)					
2021-22 2022-23	2023-2	4 2	021-22	2022-23	2023-24							
1 2 3	3 4		5	6	7							
A. Settlement Systems												
CCIL Operated Syste	ms	33	41	43	2,068.7	2,588.0	2,592.1					
B. Payment S	vstem											
1.Large Value Credit Transfers												
- RTGS	2,078	2,426	2,700	) 1	1,286.6	1,499.5	1,708.9					
Retail Segment (2 to 6)												
2.Credit Transfers	5,7	7,935 9,8	3,621 1	4,86,107	42	<b>27.3 550.</b> 1	1 675.4					
2.1 AePS (Fund Tran	sfers)	10	6	4	0.006	0.004	0.003					
2.2 APBS	12,573	17,834	25,88	38	1.3	2.5	3.9					

2.3 ECS Cr	-	-	-		-	-							
2.4 IMPS	46,625	56,533	60,053	41.7	55.9	65.0							
2.5 NACH Cr	18,758	19,257	16,227	12.8	15.4	15.3							
2.6 NEFT	40,407	52,847	72,640	287.3	337.2	391.4							
2.7 UPI	4,59,561	8,37,144	13,11,295	84.2	84.2 139.1								
3. Debit Transfers													
and Direct Debits	12,18	9 15,3	43 18,250	10.3	12.9	16.9							
3.1 BHIM Aadhaar Pa	ay 228	3 214	194	0.1	0.1	0.1							
3.2 ECS Dr	-	-	-	-	-	-							
3.3 NACH Dr	10,755	13,503	16,426	10.3	12.8	16.8							
3.4 NETC													
(Linked to Bank Acco	ount) 1,20	7 1,62	6 1,629	0.02	0.03	0.03							
4. Card Payments	61,78	3 63,325	58,470	17.0	21.5	24.2							
4.1 Credit Cards	22,399	29,145	35,610	9.7	14.3	18.3							
4.2 Debit Cards	39,384	34,179	22,860	7.3	7.2	5.9							
5. Prepaid Payment													
Instruments	65,783	74,667	78,775	2.8	2.9	2.8							
6. Paper-based Instruments		6,999	7,109	6,632	66.5	71.7	72.1						
Total Retail Payments													
(2+3+4+5+6)	7,24,	689 11,4	4,065 16,48	3,234 52	3.9 65	59.1 791.5							
<b>Total Payments</b>													
(1+2+3+4+5+6)	7,26,76	7 11,46	5,491 16,5	50,934 1,81	10.5 2,15	58.6 2,500.	4						
Total Digital Payments													
(1+2+3+4+5)	7,19,768	11,39,38	2 16,44,302	1,744.0	2,086	5.8 2,428	.2						
SOURCE: RBI DATA	A												

The above data has been taken from RBI Report 2023-2024. Here some of the major key facts are as follows:

- The percentage of non-cash retail payments that were digital transactions rose slightly from 99.6% to 99.8% this year. In 2023–2024, retail transaction volume and value grew by 44.1% and 20.1%, respectively.
- During 2023–2024, Real Time Gross Settlement (RTGS) transactions grew by 14% in value terms and 11.3% in volume. By the end of March 2024, 1,70,855 IFSCs of 247 member banks offered RTGS services, and 1,72,290 IFSCs (Indian Financial System Code) of 233 member banks offered National Electronic Fund Transfer (NEFT) services.
- During 2023–2024, there were 89 lakh Point of Sale (PoS) terminals, an increase of 14.3%, and 62.5 lakh Bharat QR (BQR) codes put into use, an increase of 16.1%.
- The RBI further pointed out that the overall increase in card transactions was driven by the quick development of online retail and e-commerce as well as their expanding use in tier 2 and tier 3 centers.
- In March 2024, the UPI platform processed over 13 billion transactions in a single month. By the end of March 2024, there were 34.6 core UPI QR codes, a 35% growth. Additionally, the on-device wallet UPI Lite has been growing in popularity and now handles over 10 million transactions every month.
- 22 online Payment Aggregators (PAs), two non-bank Prepaid Payment Instrument (PPI) issuers, and one operator of the Trade Receivables Discounting System (TReDS) platform received Certificates of Authorization from the Reserve Bank throughout the year. A few more were also granted in-principle authorization. According to the RBI, account aggregators have grown tenfold.
- In 2023–24, there were 36,075 fraud cases overall, up from 13,564 the year before. But in 2023–2024, the amount scammed decreased from Rs. 26,127 core in 2022–2023 to Rs. 13,930 core.

• The report states that digital payments (cards and the internet) have been the primary target of fraud. There were 29,082 card transaction scams in 2023–2024, totaling Rs.1,457 core. In contrast, there were 6,699 fraud cases totaling Rs.277 cores in 2022–2023.

# 5. OPPORTUNITIES IN INTERNET BANKING

Internet Banking provides various opportunities as follow:

#### 24\*7 SERVICES

With the help of Internet Banking a customer can avail 24 hours and 7 days bank services while sitting at home at any time.

#### CONVENIENCE

Internet Banking offers customers the convenience of accessing banking services anytime, anywhere. Without visiting bank physically. It also provides facilities in remote areas.

#### **COST EFFICIENCY**

Internet banking allows banks to reduce operational costs associated with maintaining physical branches and staff. This cost-saving opportunity can be passed on to customers in the form of lower fees or better interest rates.

#### **EXPANDED REACH**

Internet banking enables banks to reach a wider audience, including individuals who may not have easy access to traditional banking services. This can contribute to financial inclusion by providing banking services to underserved populations.

# **CUSTOMIZATION AND PERSONALIZATION**

Internet banking platforms can be tailored to individual customer preferences, offering personalized banking experiences. Customers can customize their dashboard, set up alerts, and access financial management tools to meet their specific needs.

### **INNOVATIVE SERVICES**

Internet banking opens up opportunities for banks to introduce innovative services and products, such as mobile banking apps, digital wallets, peer-to-peer payments, and robo-advisors. These services can enhance customer experience and competitiveness.

**INCREASING INTERNET USERS & COMPUTER LITERACY:** To use internet banking it is a very important or initial requirement that people should have knowledge about internet technology so that they can easily adapt the internet banking services. The fast increasing internet users in India can be a very big opportunity and the banking industry should encash this opportunity to attract more internet users to adopt internet banking services. The table shows evidence of an increasing number of internet users in India

#### 6. CHALLENGES IN INTERNET BANKING

Internet banking is in its emerging stage of development in India. Most of them are basic services only the deregulation of the Internet Banking industry coupled with the emergence of new banking technology is enabling new competitors to enter the financial services markets quickly and efficiently. However, it needs to be recognized that perception norms and an improvement in the functioning of e-banking services.

**SECURITY RISK:** The problem related to security has become one of the major concerns for banks. A large group of customers refuses to opt for e-banking facilities due to uncertainty and security concerns. According to the IAMAI Report 43% of internet users are not using internet banking in India because of security concerns. So it is a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase online banking use.

**THE TRUST FACTOR:** Trust is the biggest hurdle to online banking for most customers. Conventional banking is preferred by the customers because of a lack of trust in online security. They have a perception that online transaction is risky due to which frauds can take place. While using e-banking facilities lot of questions arises in the mind of customers such as: Did the transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers" willingness to engage in a transaction with web merchants.

**CUSTOMER AWARENESS:** Awareness among consumers about the e-banking facilities and procedures is still on the lower side in the Indian scenario. Banks are not able to disseminate proper information about the use, benefits, and facility of internet banking. Less awareness of new technologies and their benefits is among one of the most ranked barriers in the development of e-banking.

**PRIVACY RISK:** The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit consumers while opting for internet banking services. Most consumers believe that using online banking services makes them vulnerable to identity theft. According to the study consumers worry about their privacy and feel that bank may invade their privacy by utilizing their information for marketing and other secondary purposes without the consent of consumers.

**STRENGTHENING THE PUBLIC SUPPORT:** In developing countries, in the past, most e-finance initiatives have been the result of joint efforts between the private and public sectors. If the public sector does not have the necessary resources to implement the projects it is important that joint efforts between public and private sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives.

**AVAILABILITY OF PERSONNEL SERVICES**: In present times, banks are to provide several services like social banking with financial possibilities, selective up gradation, computerization and innovative mechanization, better customer services, effective managerial culture, internal supervision and control, adequate profitability, strong organization culture etc. Therefore, banks must be able to provide complete personnel service to the customers who come with expectations.

**IMPLEMENTATION OF GLOBAL TECHNOLOGY:** There is a need to have an adequate level of infrastructure and human capacity building before developing countries can adopt global technology for their local requirements. In developing countries, many consumers either do not trust or do not have access to the necessary infrastructure to be able to process e-payments.

**NON- PERFORMING ASSETS (NPA):** Non-performing assets are another challenge to the banking sector. Vehicle loans and unsecured loans increase N.P.A. which terms 50% of banks retail portfolio was also hit due to upward movement in interest rates, restrictions on collection practices, and soaring real estate prices. So that every bank has to take care of regular repayment of loans.

**COMPETITION:** The nationalized banks and commercial banks have competition from foreign and new private sector banks. Competition in the banking sector brings various challenges before the banks such as product positioning, innovative ideas, and channels, new market trends, cross-selling ad at managerial and organizational part this system needs to be managed, assets and contains risk. Banks are restricting their administrative folio by converting manpower into machine power i.e. banks are decreasing manual powers and getting maximum work done through machine power. Skilled and specialized manpower is to be utilized and result-oriented targeted staff will be appointed.

**HANDLING TECHNOLOGY:** Developing or acquiring the right technology, deploying it optimally, and then leveraging it to the maximum extent is essential to achieve and maintain high service and efficiency standards while remaining cost-effective and delivering sustainable returns to shareholders. Early adopters of technology acquire significant competitive advances Managing technology is, therefore, a key challenge for the Indian banking sector.

**CONNECTIVITY ISSUES:** In developing countries connectivity issue is the major issue. In rural areas of India ,internet connectivity is very low and speed of internet is very slow.

#### 7. CONCLUSION

Digitalization has become conclusive for the banking sector in India, which plays a major role in providing better services to customers. Internet banking is one of the most significant banking channels that allow consumers to do many transactions, either financial or non-financial through a bank's websites. The various services offered are Internet banking, SMS banking, ATMs, mobile banking, e-cheques, UPI, and debit/credit cards.

In today's world of globalization, e-banking is a significant aspect of the development of the banking sector by solving major issues, challenges faced by e-banking. The Indian banking industry can develop customer loyalty towards the

banking sector. This can be done through training and development and by making the banking process easier and familiar to the customers.

The younger generation is beginning to see the convenience and benefits of e-banking. In the years to come, e-banking will not only be an acceptable mode of banking but will be preferred mode of banking in India.

Overall, internet banking has become an integral part of India's banking ecosystem, offering convenience, accessibility, and efficiency to millions of customers across the country. However, continued efforts are required to address challenges and ensure the inclusive and secure expansion of digital financial services.

#### **CONFLICT OF INTERESTS**

None.

# **ACKNOWLEDGMENTS**

None.

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