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Harshil Sharma and Shipra Aggarwal

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STUDY ON DIGITAL BANKING FINANCIAL SERVICES IN INDIA: TRENDS, OPPORTUNITIES & CHALLENGES

Mr. Harshil Sharma

Research Scholar, Department Of Commerce, Graphic Era (Deemed to be university), Dehradun;
Uttarakhand

Dr. Shipra Aggarwal

Associate professor, Department Of Commerce, Graphic Era (Deemed to be university), Dehradun;
Uttarakhand

Abstract

The rise of India's digital banking industry has been a key factor in the country's economic development. The country's banking system has strengthened the country's economy. When discussing technological developments in the banking sector, the phrase "digital banking" is used to signify and embrace the full spectrum. Economic expansion is a direct result of technological and other improvements. There have been several shifts in the banking industry as a result of technological development. Due to the proliferation of mobile phones and internet access, digital banking systems are rapidly growing in developing countries like India. These technological shifts also have an impact on the banking industry. These days, a lot of banks provide online banking services. The Indian government has made a number of changes to the digital banking system in an attempt to promote "Digital India." The goal of the initiative is to help India transition to a "digitally empowered" economy that is "Faceless, Paperless, and Cashless." Over the last several years, the financial services industry has undergone a series of significant digital transformational phases. They need and anticipate being able to do their banking 24/7, from any location. Among the most recent products and services that have contributed to the expansion of the banking industry are plastic money (Credit Cards, Debit Cards, and Smart Cards), internet banking (including electronic payment services), online investments, online trading accounts, electronic fund transfer and clearing services, branch networking, telephone banking, mobile applications, and wallet. To remain competitive, the banking industry must rapidly embrace digital technologies. This shift is being implemented to make financial services more available, competitive, and cost-effective for all Americans. Banking innovations in the present day include things like digital know your customer (KYC) processes, chatbots, fintech firms, blockchain technology, cloud banking, and biometric authentication. When it comes to the banking business, the idea of digital banking presents a number of promising new avenues. Opportunities to improve service quality and increase profitability are also made possible by the rise of digital banking. The goals of this paper are to provide an overview of the advantages and disadvantages of becoming digital in the Indian banking industry and to provide some suggestions for addressing the disadvantages.

Keywords: Digital Banking, Technology and Innovation Services, Opportunities, Challenges

Introduction

Financial institutions are essential to the functioning of the emerging Indian economy. It's one of the highest-ranking jobs in the financial sector. The banking industry in India is rapidly adopting digital technologies. The term "digital banking system" is used to refer to the proliferation of banking-related financial services available in today's banking infrastructure. The traditional banking network, which is based on a brick-and-mortar branch infrastructure, is being replaced more and more by digital channels, which include more automated client interactions at lower costs and provide customers more options in terms of service delivery (Darlington, 1999). The term "digital banking" refers to a system of electronic banking in which customers may access their money through a variety of digital channels. All of these features may be accessed via digital banking, which provides them through various digital mediums including the internet. As e-commerce grows, so does the need of online banking. Digital Mode's services are essential to the smooth operation of all forms of e-commerce, including Online Shopping, Electronic Marketing, etc. Simply put, digital banking (also known as electronic banking) is the delivery of financial services to end users through digital or electronic means. According to Daniel (1999), "electronic banking" is the delivery of financial services to end users through the Internet. Home banking and other forms of digital banking allow customers to conduct financial transactions from the convenience of their own homes (Dheenadhyayalan 2010). In the age of digital banking, financial institutions have access to instantaneous and long-term remedies for issues. The use of ATMs and electronic fund transfers by banks is on the rise as a means of standing out from the crowd. In keeping with reports from (Mobarek, 2007). To meet the needs of its customers, banks increasingly provide digital banking services that are available around the clock. The advantages of digital banking and financial services include lowering service costs and increasing access to these services for underserved populations (Ouzel 2018). Modern banking and finance services may be accessed online via the use of "digital banking," which makes advantage of available technological advances. Digital banking's primary goal is to ensure the delivery of secure financial services to consumers through the internet. Context of Interest Banking-related services are the only ones included in digital banking, which means that things like mobile money transfers, bill payments, and digital discounts are not available. Web-based banking interference and mobile banking applications are examples of digital banking. When thinking about how the banking and financial system will evolve in the future, digital technology is the single most crucial aspect (Wisdom 2012). The organization and satisfaction of the connection to financial services are shifting as a result of digital technology. Bruhn and love (2017) argue that expanding access to financial services is one of the most effective ways to combat poverty. So, there are a lot of obstacles that financial service providers have to overcome while setting up their services. The effects of digitization on banking activity and the threats it poses to financial stability are discussed by Val Verde (2017). Therefore, digitization offers a possibility to lower marginal costs while enhancing productivity in the banking and financial services industries. The rise of online banking is in no little part attributable to the accessibility and convenience of digital banking services.

Components of Digital Banking Services:

The following are some features of digital banking financial services.

1. Electronic Fund Transfer:

- In 1996, the Reserve Bank of India ordered the country's banking industry to adopt an electronic money transfer system.
- Customers and financial institutions alike can benefit from EFT since it streamlines the process of moving money across accounts at different financial institutions.

2. On-line Banking:

- On-line banking is the most recently developed segment of digital banking.
- In recent generation Electronic banking means Digital Banking services and this is the most convenient banking where customers can handle greater number of banking services.

3. Automated Teller Machine:

- ATM is a very popular digital banking service. Bank customers can withdraw money at any time from ATMs.
- ATMs can also provide cheque books, statement of accounts etc.

4. Unified Payment Interface:

- An example of a mobile app that facilitates cross-account fund transfers is Unified Payment Interface.
- The National Payments Corporation of India created this streamlined method of making mobile payments.

5. Digital Wallets:

- Digital Wallets stands for Electronic Wallets.
- To make purchases via a computer or mobile device, you may utilize what is known as a "digital wallet."

Research Objectives:

Specifically, we hoped to accomplish the following with our research:

- To study the importance & role of digitization in Indian banking financial services.
- To Look Into the Issues With Online Banking.

- As a means of better understanding the potential of India's growing digital banking industry.
- To study the recent digital banking innovation services in India.

Importance of digitization in Indian banking financial services

The convenience of digital banking for customers is a key feature of this new banking model. There is less friction involved with common financial tasks like making a purchase or checking your balance. The convenience of online banking cannot be overstated, as transferring funds between accounts or withdrawing cash from an ATM previously required physical presence at a bank. Having the option to conduct financial transactions online, and especially via mobile banking, has been a boon to those who reside in rural areas. The most fundamental banking services may be accessed with the click of a button, which is a huge boon for folks in outlying places. With the advent of online banking, people now have 24-hour access to their money. Digital banking's major goal is to facilitate online transactions like those utilized for online shopping. Consumers in one country can readily use the banking systems of another thanks to developments in digital technology. Dealing with digitally recorded transactions reduces the likelihood of human error. Digital banking applications enable actualization strategies enabled by AI and ML.

Role of digitization in Indian banking financial services

When it comes to our daily lives, a bank is not only something we run across frequently, but also something that is crucial. It is essential to invest in new resources in order to digitalize completely. The banking sector must make the adoption of digital technology a top priority. The banking industry in India was notoriously slow to adapt to the new technologies of the time. The use of online banking and other cutting-edge services has increased dramatically in recent years. Several major stakeholders in India's banking industry are working together to bring about its digital transformation.

Internet Banking

Internet banking, or online banking for short, is a digital banking platform that allows consumers to conduct a variety of monetary and non-monetary activities from the comfort of their own homes. Online banking has several advantages. This includes, among other things, its reliability and security. Online banking customers may move funds throughout their accounts easily. This has led to the development of cyber banking, which also goes by the names Internet banking, online banking, and online spending.

Magnetic Ink Character Recognition (MICR)

Recalibration of Magnetic Ink Characters. The check's numerical serial number is located on the back. Check processing times may be reduced with the aid of MICR. Bank account, check, and routing numbers are all included. Each Indian bank branch is given its own MICR Code by the RBI. The MICR line, which contains the sequence number and MICR characters, is located at the bottom of a check. The bank's routing code, the account number, and the check number all play a role. Use of MICR readers significantly lowers the risk of fraudulent check writing.

Centralized Online Real-time Exchange (CORE)

When talking about a bank, the word "core banking" refers to the bank's main computer system, which processes all monetary transactions for the bank's many locations. There are numerous ways in which banks might profit from using core banking software. Core Banking apps are critical to the day-to-day functioning of modern financial institutions. Customers can now conveniently bank "anytime, anywhere."

Real-Time Gross Settlement

Real Time Gross Settlement refers to a settlement that occurs instantly. Real-time gross settlement, or RTGS for short, is the instantaneous transfer of cash used to settle individual orders as they are being worked on (without netting). The RTGS technology allows for instantaneous, bulk transfers of funds between bank accounts. This is a risk-free means of sending money. All 365 days of the year, you can access this System whenever you like. Banks can use the RTGS service for customer transactions Monday through Friday from 09:30 to 16:00, and on Saturday and Sunday from 09:30 to 14:00 in order to settle with the RBI.

Immediate Payment System (IMPS)

Instant Money Transfer (IMPS) allows instant, secure, electronic transfers of funds between bank accounts, regardless of the time of day or night. Allows customers to manage their finances on the go by logging into their bank accounts and making transfers directly from their mobile devices. A total of four parties (the sender, the recipient, the banks, and the national financial switch) are involved in every IMPS transaction. The development of the Instant Payment System facilitated the expansion of mobile banking options. Sender, receiver, both banks, and the National Financial Switch NPCI might all play a role in a real-time funds transfer. Currently, Instant Payment System is being used in more and more areas. There are a number of ATMs, online banking services, and other methods available for making financial transactions.

National Electronic Fund Transfer

National electronic fund transfer is a mode of money transfer enables one-tone payments within India. National electronic fund transfer is operated by RBI. NEFT facility is available 24x7 throughout the year, including holidays. NEFT is a paperless facility. NEFT is one of the fastest and most secure methods to transfer money. A bank branch must be NEFT- enabled allowing transfer to transfer funds. There are following details required for NEFT such as Name of the account holder, Account number, Account name, Branch IFSC Code and Amount Details.

Electronic Clearing System (ECS)

Specifically, the term "Electronic Clearing System" refers to a method whereby monetary transactions between financial institutions can be completed electronically. This is the standard procedure used by financial institutions when sending out big sums of money for things like salary, dividend, interest, and pension payments. The Electronic Clearing System handles all of our credit and debit card transactions. A customer can use the ECS Credit system to make multiple payments out of their account simultaneously for dividends, interest, or salary. Using the ECS Debit system, a single credit to an organization can be funded by debits from multiple account holders. The National Automated Clearing House (NACH) in India is a component of the country's Electronic Clearing System since it handles financial institution-to-financial institution transactions. Payee, Payer, Payee's Bank, Payer's Bank, Clearing House, etc. are all participants in an electronic clearing payment system. .

Challenges of digital banking financial system

Problems with digital banking arise from the fact that the industry has yet to reach a stable state where it can replace traditional banking for the masses. The banking industry faces a number of both modern and historical difficulties.

(A) Traditional Challenges facing banking industry

Lack of Digital Literacy

India has a moderately high degree of literacy, yet only a small fraction of the population is comfortable using computers and the internet. People in societies that can't afford to build up their communication and computing networks are less likely to be fluent in modern technologies.

Slow Digital Transformation

Particularly slow to embrace digital innovation is the traditional banking industry. The majority of their online presence consists on the delivery of essential services including wire transfers, bill pay, and account funding.

Cash Dependent Economy

A large portion of India's population is unorganized and poor. Most Indians still prefer to transact in cash because they lack access to modern financial systems and are illiterate. the rural populace in India doesn't have a good knowledge of digital financial transactions.

Improper Customer Engagement

One of the biggest repercussions of the 2008 crisis was that a number of people lost faith in the previous financial system. Customer complaints must be addressed immediately, and the customer should be guided toward a problem-free banking experience.

Strict Regulatory Standards

Regulations established by a bank's supervisory body are the minimum requirements that any conventional bank must meet. Indian banks, for instance, must adhere to a statutory liquidity ratio in addition to the capital-asset ratio and the cash reserve ratio.

Customer's Preference for Traditional Branches

In India, you'll find a plethora of classic bank branches, all of which are very busy. The one-on-one attention and specialized service available at physical bank offices are major draws for customers.

(B) Upcoming Modern Challenges facing banking industry

Integrating Artificial Intelligence

In the banking industry, AI has first been utilized to automate risk assessment and forecast future consumer preferences. Software building blocks, such voice synthesizers, are at the heart of integrating AI systems. Main advantages of AI include fewer mistakes made by humans, accessibility around the clock, digital help, and the creation of novel products.

Payment Processing Costs

There are numerous processing fees linked with transactions. Fees for processing are paid to the financial institution or payment processor that is handling the transaction. Bank can work to decrease the costs involved by implementing technologies like block chain. In a corporate network, block chain technology is an advanced database device that facilitates transparent information sharing. Database information is stored in "blocks" that form a "chain" in a block chain database.

Competition between Banks and Fintech Companies

If banks want to stay ahead of the competition, they need to add more digital features to their brick-and-mortar branches. There has been a rapid rise in the popularity of fintech companies, which now pose a formidable threat to more

established banks. Web and mobile apps can now provide financial services such as lending, crypto currency transactions, and device sales.

Increasing Competitions

Fintech, with their unique focus on the financial services sector, are a formidable challenge. If established financial institutions like banks and credit unions want to continue their current success, they must learn from FinTechs. This makes complete sense, as their success is tied to providing a simple experience when dealing with the company.

Adoption of New Technology

Today, adapting to new technologies is a significant obstacle for financial institutions. Because of makeshift answers and antiquated procedures. Introducing novel procedures and technologies might be especially challenging for larger organizations. Artificial intelligence (AI) and chatbots are just two examples of the cutting-edge technology that is revolutionizing the financial services sector.

To examine the advantages and prospects of digital banking financial services in India.

Digital Banking also opens a variety of opportunities both for quality of service and the ability for profit.

- **Digital Banking Solutions**

The term "Digital Banking" refers to the process through which conventional banking services are digitized and made available to clients via digital media. Because of digital banking, services offered at every bank branch may be accessed at any time, from any location, through mobile devices or laptops.

- **Initiatives of Government**

Help from the government's numerous ministries and programmes has fostered a thriving startup ecosystem. Pradhan Mantri Jan Dhan Yojana and Digitalization in India are two initiatives that the Indian government has begun supporting. India's central government envisions a future in which the country's citizens are actively engaged in the economy and society via the use of digital technologies.

- **Usage Of Smart phones**

Smart phones are now practically an essential part of daily life, and may be used by anybody in either a personal or professional capacity. The bank's mobile apps put customer control at their fingertips. As a result, many

consumers rely on their mobile devices as their primary means of communication with others. Various types of social media such as Facebook, Instagram, Snapchat, Twitter, WhatsApp, etc.

- **Internet Penetration**

Penetration of the Internet in a Country measures the extent to which its citizens are online. It is computed by dividing the nation's total population by the number of residents who have internet access. India is among the top nations with the most Internet users, with 47% of the population using the Internet at least once a month. According to the World Population Review, there were 658 million Internet users in India in January 2022.

To study the recent digital banking innovation services in India.

The current digital banking innovation services are described as follows.

- **Digital KYC-**

Digital KYC is an online KYC process for non-KYC complaint customers. Digital KYC is efficient and reduces the risk fraud. KYC means know your Customer. Digital KYC is to enable the bank to have positive identification of its relationship. Fintech Companies will be carry out the KYC of its customers by digital mode.

- **Application Programming Interface**

The acronym API refers to the "Application Programming Interface" used by developers. An Application Programming Interface (API) is a communication protocol between two programmes that operates automatically and transparently to the user. An API, or Application Programming Interface, is a set of commands and routines used by computer programmes. This application provides a great benefit. The API allows businesses to share the information inside their apps.

- **Chatbot**

A chatbot is artificially intelligent computer software that may be controlled by voice or text to encourage human conversation. With a Chabot, you can provide service and assistance to your customers whenever they need it, seven days a week. Additionally, catboats are used in the Fintech industry to simplify the customer experience while searching for and applying for financial services. Chabot may help your organisations in many ways, including saving money, saving time, increasing productivity that can be measured, and improving the quality of leads you generate.

- **Biometrics**

Biometrics is the scientific study of how to identify and classify individuals based on objective characteristics such as their physical and behavioral characteristics. The term "biometric information" is used to describe data such as fingerprints and digital photos of your face. There are various examples of Biometrics such as fingerprint, Facial recognition and Voice Recognition. Biometrics is becoming increasingly important when it comes to security in digital banking.

- **Cloud Banking**

The term "cloud banking" is used to describe the process of creating a banking infrastructure to manage fundamental financial services that are performed in the cloud. In order to keep track of their customers' information and interactions, banks turn to cloud-based CRM software. The term "cloud banking" is used to describe the process of creating a banking infrastructure to manage fundamental financial services that are performed in the cloud. In order to keep track of their customers' information and interactions, banks turn to cloud-based CRM software. A Cloud banking combines digital assets like data algorithms etc.

- **Block Chain**

"Block Chain" is shorthand for a distributed ledger that may be used to record and verify transactions in a decentralized manner. Bitcoin, the first decentralized digital money, relies on the underlying technology of block chain. Data is stored in blocks that are linked together in a blockchain. All digital transactions are recorded on the Blockchain, a decentralized database that is accessible to all participants.

- **Fintech Companies**

Fintech refers to the ways in which businesses in the financial services sector have integrated technological developments into their offerings. Fintech companies' innovative business models, applications, processes, and products may have far-reaching effects on the financial services industry as a whole as a result of the technological advances that have made their development possible.

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