

**International Conference – 2025: Developed India @ 2047****Charting Multidisciplinary and Multi-Institutional Pathways for Inclusive Growth and Global Leadership held on 4th & 5th April, 2025****Organised by: IQAC - Gossner College, Ranchi**

Digital Financial Services in India

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Abstract

Poor people in developing nations could benefit greatly from a variety of convenient, safe, and reasonably priced banking services offered by digital financial services. By 2022, there will be 450 million smartphone users in India, and all financial institutions believe that online service delivery is the way to go. For financial services to experience quick, significant, and constructive transformation, technology-led innovation is required. The goal of financial inclusion through digital banking can be accomplished with the aid of the digital India program, which can readily link the various segments of society. Mobility has an impact that extends far beyond making online purchases easier while on the road.

Using digital technology, this article illustrates how digital financial services are promoting financial inclusion and enhancing financial wellness. This article lists the various barriers and difficulties that still stand in the way of creating a society that is inclusive of all people using technology. This article discusses the evolution of financial inclusion made possible by e-commerce. In order to create a digitally inclusive ecosystem and to increase the success and accessibility of India's next wave of digital financial inclusion, it breaks down the trends and the major players that support them, identifies adoption barriers, and offers solutions. We stress the importance of communication and openness among all significant stakeholders. A digital financial inclusion environment that encourages access to and usage of financial services in e-commerce markets can be created by policymakers and regulators. Raising public understanding of the fundamentals of digital finance services is desperately needed, particularly in rural and semi-urban areas.

Keywords: *Technology, Innovation, Financial Inclusion, Digital, and Awareness.*

Introduction

Digital financial services (DFS) in India have transformed the way people access, manage, and use financial services. Over the past decade, India has seen a remarkable shift in its financial landscape, moving from traditional brick-and-mortar banking to digital platforms that enable convenient, secure, and cost-effective financial transactions. This transformation has been powered by technological advancements, regulatory initiatives, and a rapidly growing internet user base. Internet-based financial services have shown to be an effective instrument for financial inclusion, granting previously disadvantaged individuals access to a diverse range of financial goods and services.

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The emergence of electronic monetary services in India dates back to the early 2000s, when the government and financial institutions recognized the ability of technology for enhancing financial service delivery. However, digital financial services did not gain traction until the Pradhan Mantri Jan Dhan Yojana (PMJDY) was implemented in 2014, along with the introduction of the Digital India program. The government's aim for financial inclusion, together with the increasing adoption of cellphones, internet access, and mobile networks, provided an environment ideal to DFS expansion.

The turning point came with the demonetization of high-value currency notes in 2016. This sudden and drastic measure by the government acted as a catalyst for the widespread adoption of online payments and other financial services. People were forced to turn to digital modes of transactions, accelerating the uptake of services like mobile wallets, UPI (Unified Payments Interface), and internet banking.

The impact of virtual finance on financial system reliability & stability is the focus area of this study. Financial entities, governing bodies, and authorities consistently advocate for financial inclusion via online platforms. However, despite these wide promoting initiatives, digital financial inclusion is not progressing as predicted or as it should be due to consumer ideology, which is one of the major roadblocks to the achievement of an e-commerce enabled economy or financial inclusion. This article sought to assess the various programs and initiatives and to what degree they have been successful, as well as to sort out some consumer ideology as barriers in the way of digital financial inclusion. The rise of e-commerce has resulted in an expansion in the number of digital financial services available to businesses and individuals. Services are increasingly being offered by non-profit organizations including electronic payments, credit financing, and insurance at the POS, this tendency known as E-commerce Enabling Financial Inclusion or Digital Financial Inclusion. The Government of India has always prioritized financial inclusion in its economic strategies.

Initiatives like Jan Dhan, Aadhaar-Mobile, and Digital India have changed the game by ensuring that India's underbanked population has equal and economical access to financial services, hence lowering income disparity. While e-commerce has been quite successful in creating demand for digital financial goods and services for microenterprises and individuals at the bottom of the economic pyramid. Recent evolution in both the public and commercial sectors has fueled India's growth of online payments.

Objectives

1. To comprehend the idea of online monetary services.
2. To be aware of the many kinds of online monetary services.
3. To determine the government's efforts in online monetary services.
4. To research the benefits of online monetary services.

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The secondary data gathered from many journals, publications, research studies, newsletters, and web pages served as the foundation for the study.

Literature Review

Mukherjee (2011), The author discussed how information and communication technology, or ICT, could support the growth of the rural economy. The rural-based economies are striving for growth and development. ICT has started to have a big impact on all aspects of society. It has access to financial services in addition to government benefits. Client preferences also alter significantly as a result of the needs becoming more sophisticated.

Pallab Sikdar and Munish Makkad (2013), assesses the benefits it provides from the viewpoints of the financial institution and its clientele. Online banking, a fundamental element of the e-banking structure, has fundamentally transformed the dynamics of worldwide commercial banking by effectively placing the whole financial system at the fingertips of the typical customer.

Gurpreet Kaur (2015) investigates the impact of the digital India project on the concept of financial inclusion. With the help of the digital India initiative, which can easily connect the different facets of society, the objective of financial inclusion through digital banking may be achieved.

Dr. N. Sundaram and M. Sriram (2016) highlight knowledge of financial inclusion, virtual currencies, and financial access issues. It comprises global expert talks and Indian monetary inclusion evaluations.

Suresh Aaluri, Dr. M. Srinivasa Narayana, Dr. P. Vijay Kumar (2016), in their study, analyze the technological, regulatory, and financial inclusion advancements in India's banking sector. The Indian government has recently taken action to promote financial inclusion, which will surely result in the day when all Indians have bank accounts and utilize the services that information technology has made possible.

Digital Finance: is financial services supplied using digital infrastructure, such as mobile and internet, with little currency or bank offices. Cash and bank locations are less needed with this transaction technique. Computers, mobile phones, and cards can be used as point-of-sale (POS) devices to connect companies and consumers to a digital national transactions infrastructure and streamline transactions.

Digital Financial Services: Digital financial services encompass a wide range of monetary services that can be accessed and provided via digital means, such as credit, savings, remittances, insurance, and payments. Mobile financial services are part of the Digital Financial Services (DFS) concept. Web browsing, mobile phones, electronic feature phones, ATMs, POS terminals, NFC (Near Field Communication)-enabled devices, chips, digitally enabled cards, fingerprint readers, tablets, and any other digital system are all considered "digital channels" in this context.



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A digital commercial platform, retailing agents, and the usage of a device—typically a mobile phone—by clients and agents to conduct transactions via the platform are the three main elements of any such digital banking service. It is one way that those without banks is increasingly using digital channels to acquire financial services. Cellphones, point-of-sale devices, and networks of small-scale agents are being used by banks, microfinance organizations, mobile carriers, and third-party providers to deliver basic financial services at a lower cost, with more ease, and on a larger scale than traditional banking enables. Customers can use a digital transactional system to store value virtually with a bank or nonbank that is authorized to hold electronic value, as well as to send and receive money using a device. With the use of a digital device that is connected to a communications infrastructure, retail agents can send and receive transaction details, allowing clients to change cash into digitally stored value and back again. Agents may also carry out additional tasks, contingent on the relevant regulations and the agreement with the primary financial institution.

User-Facing Digital Financial Products and Services Include

1. **Transaction Accounts:** used to store money safely. They consist of both e-money and accounts with banks.
2. **Payment Services:** The capacity to transmit money across accounts, including charges, exchanges, transfers, and merchant payouts.
3. **Savings Accounts:** Customers can save some money to use later by putting it in reserve.
4. **Services for Investment:** It enables people or companies to make investments for potential future profits.
5. **Loans:** This type of service, which includes bonded lending and microfinance, gives loans to people or enterprises.

Digital Financial Services May Be Broadly Classified into The Following Categories

Debit Cards: The financial institution where we hold an account is the one that issues these. The bank account is connected to these. Current, savings, and overdraft account holders are given debit cards, and any purchases made with them are promptly deducted from their accounts. This card allows the user to take out funds up to the amount that is available in their bank account.

Credit Cards: These are issued by financial institutions and other entities that have been approved by the Reserve Bank of India (RBI). When using them, it is possible to use them both domestically and internationally (provided that international usage is enabled). Users of credit cards, as opposed to those who use debit cards, have the ability to withdraw a greater amount of money than can be found in their bank accounts. On the other hand, the maximum amount that may be withdrawn from a credit card is contingent upon the card's maximum limit. Furthermore, there is a deadline for the repayment of the additional monies that were taken out of the financial institution. This cash is refunded to the bank together with any interest costs that have been levied by the card issuer in the event that there are delays that last for a longer period than the permitted duration.

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Prepaid Cards: All of these are preloaded from the customer's bank account. Limited transactions may be executed with these. These devices are secure to operate and can be recharged similarly to mobile devices.

Digital Payments: Digital payments constitute the fundamental framework of DFS in India. Throughout the years, there has been a significant transition in the country from transactions involving cash to electronic payments. The government has implemented a range of electronic payment systems such as Unified Payments Interface (UPI), IMPS (Immediate Payment Service), and Aadhaar Enabled Payment Systems (AEPS), enhancing the efficiency, speed, and security of digital transactions. The introduction of UPI in 2016 by the National Payments Corporation of India (NPCI) marked a significant advancement, enabling users to transfer funds instantly via their mobile devices, circumventing conventional banking methods. UPI has evolved into a highly utilized digital payment system in India, facilitating millions of transactions on a daily basis.

Mobile Wallets and Prepaid Payment Instruments (PPIs): Mobile wallets, such as Paytm, PhonePe, Google Pay, and others, have become a popular mode of digital payments in India. These wallets let users to keep money online, make settlements, and even send monies to others. PPIs have played an important role in providing financial services to those who formerly had access to traditional banking institutions.

The ease of recharging mobile phones, paying for goods and services, and transferring funds through these apps has contributed to the massive growth of digital financial services.

Banking and Financial Inclusion: The digitization of banking activities has also played an important role in increasing financial inclusion. The government's emphasis on carrying unbanked people into the financial system through initiatives such as Jan Dhan Accounts, combined with the growing number of banking services on cellphones, has enabled millions of people in isolated and rural regions to gain access to previously unavailable banking services.

Insurance and Wealth Management: Digital platforms have also made it easier for individuals to purchase insurance policies and engage in wealth management services. InsurTech startups and platforms like Policybazaar and Coverfox have revolutionized the way insurance is sold and bought, with customers able to compare different policies, buy them online, and manage claims digitally. Similarly, digital platforms have enabled easier access to investment products, such as mutual funds, through apps like Groww, Zerodha, and Upstox. These platforms have democratized wealth management services, allowing small investors to participate in the financial markets.

The Aadhaar Enabled Payment System (AEPS) is a payment service that allows customers of banks to use their Aadhaar-linked bank accounts and perform fundamental banking transactions using Aadhaar for identification. The Financial Correspondent (FC) facilitates bank-to-bank payments at Points of Sale (MicroATM). The user is required to employ their Aadhar number to link their

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account at the bank or with the aid of a Business Correspondent. Any AEPS point permits users to execute an unlimited number of purchases without necessitating a password or PIN.

UPI (Unified Payments Interface): A technology called the Unified Payments Interface allows users to make instantaneous electronic payments using their smartphones. It is a more sophisticated form of the Immediate Payment Service (IMPS), which was once utilized for interbank money transfers. Similar to IMPS, UPI would provide 24-hour money transfer services.

E-Wallet: A particular kind of electronic card called an electronic wallet is used for online purchases made via a computer or smartphone. E-wallets serve the same purpose as credit or debit cards. To make payments, a person's bank account must be connected to an e-wallet. The primary goal of e-wallets is to facilitate transactions using paper money. A mobile wallet is a digital counterpart of the wallet that we currently carry in our pockets. It is a secure location to store permitted digital content. Users can utilize this internet platform to execute a variety of payments without the need for cash. It provides mobile-based financial services to persons who are unbanked or live in remote locations.

Government Campaigns Regarding Digital Financial Services

The IRCTC Connect connection was established to address the growing demand from passengers by enhancing the effectiveness and accessibility of the ticketing application. The new software is built upon the forthcoming e-ticketing framework, which offers a variety of add-on possibilities. The application enables users to search for and reserve rail tickets, verify or revoke existing reservations, and receive notifications regarding upcoming trips. It is in accordance with the booking website.

Direct Benefit Transfer (DBT): DBT was started with the intention of reforming the government system for distribution by restructuring the current welfare scheme processes for a quicker and easier flow of cash and information, as well as to guarantee precise beneficiary targeting, deduplication, and fraud reduction. DBT will improve the government system's efficacy, efficiency, accountability, and openness while boosting public trust in the government.

Un-Reserved Ticket Through Mobile Application-UTS App (Unreserved Ticketing System): Indian Railways has introduced its new UTS mobile application to encourage the paperless economy. This authorized Android mobile ticketing app allows you to issue/renew season tickets, platform tickets, and unreserved paperless travel tickets. The app has made it possible to book mobile tickets using both paper and paperless methods.

Pradhan Mantri Gramin Digital Saksharta Abhiyaan: By teaching them how to use computers or digital access devices (such as smartphones, tablets, etc.), send and receive emails, browse the Internet, access government services, look up information, make digital payments, and more, this program empowers rural residents and enables them to use information technology and related applications—particularly digital payments—to actively contribute to the process of nation-building. The program's goal is to close the digital divide, with a focus on the rural populace, which includes



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underprivileged groups like as women, people with disabilities, Scheduled Castes (SC) and Scheduled Tribes (ST), minorities, and those living below the poverty line (BPL).

Paygov India: A collaborative infrastructure was developed by the Ministry of Technology and Communications in collaboration with NSDL Database Management Ltd (NDML). This infrastructure can be utilized by Centers, nations, and Divisions to provide a variety of services through their respective national and state portals. One of these services is the capability to make payments via the internet using debit and credit cards, and internet banking.

DigiDhan ABHIYAAN: The DIGIDHAN Bazaar aims to allow real-time electronic payments between residents and companies. It aims to assist customers in getting, setting up, and using a range of digital payment methods for completing electronic payments by hosting DigiDhan Melas around the country.

Benefits of Virtual Financial Facilities

The benefits of traditional mobility are extended to the financial sector by digitizing financial transactions, which allows for flexible payment methods and anywhere, at any time transactions. Even in secondary cities and towns around the nation, e-tailing has become more popular due to the record growth of cellphones and the installation of 4G networks than computerized internet access and broadband extension.

Reasonable: Financial services are becoming more widely available and affordable thanks to digital payments, which could promote financial inclusion and financial well-being for billions of people globally. It is now cheap to save, spend, give, and borrow thanks to the automation of money, the quick growth of internet access, and the widespread use of mobile phones.

Secure: With an outline of the transaction, consumers may be sure that money kept in an electronic account is safe and will only be sent to the intended recipient.

24x7 Availability: gives customers the option to send or receive money at any time of day or night, seven days a week.

Maintains Payments History Record: The transactional history is one of the biggest advantages that a person can have. Even little transactions made at a vendor will be noted and may be used as references in the future, if necessary.

Digital Transactional Platforms: Through the use of tools that send and get transaction data and interface to a bank or non-bank authorized to store electronic value, it allows clients to make or receive payments, transfers, and electronic value storage.

Reduces Risks: It lowers the expenses of using informal suppliers and conducting business in cash, as well as the dangers of theft, loss, and other financial errors that come with cash-based transactions.



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The Future of Digital Financial Services in India: With ongoing technological improvements, a favorable regulatory framework, and rising internet usage, DFS in India appears to have a bright future. Financial inclusion will increase as more individuals become entitled to these services as digital literacy rises and rural infrastructure is reinforced. The future of DFS in India will be shaped by emerging technologies like 5G, blockchain, and artificial intelligence, which will make it possible to provide even more individualized, effective, and safe services. Additionally, it is anticipated that India's whole financial ecosystem would grow more diverse and inclusive as more individuals use digital financial services.

Conclusion

Millions of Indians now have access to a vast array of financial services and goods thanks to digital financial services, which have completely changed the country's financial landscape. DFS has the ability to significantly promote financial inclusion and economic expansion through the use of technology, government efforts, and growing financial literacy. But maintaining this pace and making sure that the advantages of DFS are felt by all facets of society will require tackling obstacles including the digital divide, computer security, and regulatory concerns. The probable future of electronic banking is bright as India continues to embrace the digital revolution, providing new prospects for people, companies, and the economy at large.

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