



## RESEARCH ARTICLE

# A STUDY ON "AN OVERVIEW OF DIGITAL FINANCIAL SERVICES IN INDIA: CONCEPT, INITIATIVES AND ITS ADVANTAGES"

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### ABSTRACT

Digital financial services have significant potential to provide a range of affordable, convenient and secure banking services to poor people in developing countries. With the number of smartphone users in India expected to increase to 450 million by 2023, every financial institution is convinced that online delivery of services is the way forward. Technology-led innovation in financial services is needed to enable rapid, large-scale, and positive change. The digital India initiative can easily connect the different groups of society and can help to achieve the objective of financial inclusion through digital banking. The impact of mobility goes much more than facilitating on-the-go online transactions. Mobility powered digital commerce has the potential to give a big boost to financial inclusion, throwing open banking facilities to people hitherto cut off from the same. At a macro level, it can propel growth, boosting the economy and the GDP of the country itself. This paper depicts that digital financial services are driving financial inclusion and improving financial health with digital technology. There is an urgent need to create awareness among the citizens, especially in rural and semi-urban areas regarding basics of digital finance services.

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## INTRODUCTION

With the phenomenal developments in the field of digital revolution taking off at an exponential pace, in recent times, most of the industries, including banking and financial services sectors, have been influenced in some way or the other. The advent of new technology usually leads to innovation in industry. Regardless of the sector, new technology is almost always adopted to make tasks easier and more efficient, and this applies to the financial sector as well. Advancements such as credit cards and ATMs have fundamentally changed the process of banking and finance. This digital revolution, also known as 'the Internet economy', is expected to generate new market growth opportunities, jobs and become the biggest business opportunity for businesses in the next 30 to 40 years. Digital channels like m-banking are likely to provide better coverage and more cost-effective services to the unbanked population of India. Internet revolution is a global phenomenon and going by the current growth statistics, India expects a spurt in the internet penetration in coming years particularly in the electronic commerce. The emergence of smartphones is enhancing mobiles from a simple communication device to a full-fledged payment device. Enablers like Jan Dhan, Aadhaar, mobile penetration, and more recently, demonetization have created favorable conditions for large scale adoption of digital payment systems in India. The new age technologies are helping the economy to achieve the desired result by providing value added services at an affordable cost.

### Objectives

- To understand the concept of digital financial services.
- To know the types of digital financial services.
- To identify the Government initiatives towards digital financial services.
- To study the advantages of digital financial services.

## RESEARCH METHODOLOGY

The study is based on the secondary data collected from different journals, magazines, research articles, periodicals, and websites.

## LITERATURE REVIEW

Mukherjee (2011) the author discussed the role of Information and Communication Technology (ICT) to bring development in the rural sector. The rural dominated economies are striving for the growth and development. The ICT has started playing an important role in each segment of the society. It has a link with the financial services, receiving government benefits and many more. The nature of the requirement becomes more sophisticated because of which customer preference also changes drastically.

**Gupta Etal (2013):** The authors described the ICT based payment system in the Indian banking sector. It also helps to make process simpler and cost effective. Services like withdrawing money, opening bank accounts, transferring money from one account to another also becomes possible with the help of these facilities. Access to capital becomes easier. The timely availability of fund helps the business groups to generate cash for business requirement in a hassle-free manner.

**Pallab Sikdar and Munish Makkad (2013):** Studies the benefits it provides from the point of view of bank's customers as well the banking organization. Internet banking, a major constituent of e-banking framework, has changed the dynamics of commercial banking worldwide by virtually bringing the entire banking set-up at the doorstep of a common banking customer.

**Gurpreet Kaur (2015):** Studies the effect of digital India initiative on the concept of financial inclusion. The digital India initiative can easily connect the different groups of society and can help to achieve the objective of financial inclusion through digital banking.

**Dr. N. Sundaram and M. Sriram (2016):** Discusses reviews on financial inclusion in the Indian perspective, discussed by different researchers all over the world and to highlight the awareness level of financial inclusion, digital financial inclusion and barriers confronted to financial access.

**Suresh Aaluri, Dr. M. SrinivasaNarayana, Dr. P. Vijay Kumar (2016):** Studies the trends in banking sector for financial inclusion, regulation, technology in India. The recent initiatives taken by Government of India boost to promote financial inclusion and surely leading to the position where all Indians have their bank accounts, using Information Technology enabled services.

**Digital Finance:** Digital finance can be defined as financial services delivered over digital infrastructure-including mobile and internet—with low use of cash and traditional bank branches. Using this particular mode of transaction entails less use of cash and utility of traditional bank branches. Computers, mobile phones, or cards used over point-of-sale (POS) devices that connect individuals and businesses to a digitized national payments substructure, enabling seamless transactions across all parties.

**Digital Financial Services:** The broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance are known as digital financial services. The Digital Financial Services (DFS) concept includes mobile financial services. In this context, the term "digital channels" refers to the internet, mobile phones (both smartphones and digital feature phones), ATMs (Automated Teller Machines), POS (Point-of-Sale) terminals, NFC (Near Field Communication)-enabled devices, chips, electronically enabled cards, biometric devices, tablets, phablets and any other digital system. There are three key components of any such digital financial services: a digital transactional platform, retail agents, and the use by customers and agents of a device, usually a mobile phone, to transact via the platform. It's a means by which unbanked population is increasingly gaining access to financial services through digital channels. Banks, microfinance institutions, mobile operators, and third-party providers are leveraging mobile phones, point-of-sale devices, along with networks of small-scale agents, to offer basic financial services at greater convenience, scale and lower cost than traditional banking allows. A digital transactional platform enables a customer to use a device to make or receive payments and transfers and to store value electronically with a bank or nonbank permitted to store electronic value. Retail agents armed with a digital device connected to communications infrastructure to transmit and receive transaction details enable customers to convert cash into electronically stored value and to transform stored value back into cash. Depending on applicable regulation and the arrangement with the principal financial institution, agents may also perform other functions. The customer device can be digital (e.g., mobile phone) that is a means of transmitting data and information or

an instrument (e.g., payment card) that connects to a digital device (e.g., POS terminal).

#### **Digital Financial Products And Services Provided To Users Include:**

1. **Transaction Accounts:** Used for safe keeping of funds. They include both bank accounts and e-money accounts.
2. **Payment Services:** Ability to transfer money into or out of an account like remittances, transfers, merchant payments, bill payments etc.
3. **Savings Accounts:** It allows customers to set aside some funds in storage for intended later use.
4. **Investment Services:** It allows individuals or businesses to invest for future financial return.
5. **Loans:** It is a service which extends credit to individuals or businesses like microfinance, secured lending etc.
6. **Insurance Services:** Services that enable individuals and businesses to protect lives and assets.

#### **The major types of Digital Financial Services are as follows**

- Cards
- Unstructured Supplementary Service Data
- Aadhaar Enable Payment System
- Unified Payments Interface
- E-Wallet

**Cards:** These are usually issued by banks and can be classified based on their issuance, usage and payment by the card holder. There are three types of cards. These are:

**Debit cards:** These are issued by the bank where we have an account. These are linked to the bank account. Debit cards are issued to account holders (current/savings/overdraft) and any expenditure made is immediately debited to user's account. User can use this card to withdraw cash up to the limit present in his/her bank account.

**Credit cards:** These are issued by banks/other entities approved by RBI (Reserve Bank of India) These can be used domestically and internationally (provided it is enabled for international use). Unlike debit cards, in case of credit cards, a customer can also withdraw beyond the amount of money present in his/her bank account. But there is a limit for each credit card up to which extra money can be withdrawn. Also, there is a time limit up to which the extra money withdrawn should be paid back. This amount of money is paid back to the bank along with interest charges as applied by the issuer of card, in case of delays beyond the specified period.

**Prepaid Cards:** These are pre-loaded from a customer's bank account. These can be used for limited amount of transaction. These can be recharged like mobile recharge and are safe to use.

**USSD (Unstructured Supplementary Service Data):** It is a service which aims to take banking services to every common man in the country. The service allows every customer to access banking services with a single number irrespective of the telecom service provider, make of the mobile handset or the region. It is offered through a National Unified USSD Platform (NUUP) on a short code \*99#. It can be used for payments up to ₹ 5000 per day per customer. USSD has two types of services. These are:

#### **Non- Financial Services:**

- Balance Enquiry-User can check the available balance of the bank account
- Linked to the mobile number.
- Mini Statement-User can generate mini account statement for the bank account linked to the mobile number.
- Know MMID (Mobile Money Identifier)-User can know the MMID allotted by the bank to the account during mobile banking registration.

- Generate/Change M-PIN-User can Generate/Change the M-PIN (Mobile PIN) which is like a password and used for authenticating financial transactions.

### Financial Services

- 1 Fund Transfer using Mobile No. and MMID-User can transfer funds by using MMID and Mobile number of the Beneficiary.
- 2 Fund Transfer using IFSC and Account No.-User can transfer fund by inputting IFS code and Account number of the Beneficiary.

**AEPS (Aadhaar Enabled Payment System):** It is a payment service empowering a bank customer to use Aadhaar as his/her identity to access his/her respective Aadhaar enabled bank account and perform basic banking transactions. It allows bank-to-bank transaction at PoS (MicroATM) with the help of Banking Correspondent (BC) The user has to seed his/her account with their Aadhaar number at bank or with the help of BC. User can do as many transactions at any AEPS point without any PIN or password.

Types of banking transactions with Aadhaar Enable Payment System:

- Balance Enquiry
- Cash Withdrawal
- Cash Deposit
- Aadhaar to Aadhaar Funds Transfer
- Purchase at Fair Price Shops with AEPS

**UPI (Unified Payments Interface):** Unified Payments Interface is a system for instant, electronic payments through user's smart phone. It is an advanced version of Immediate Payment Service (IMPS) which was used to transfer money between bank accounts. Like IMPS, UPI will facilitate round-the-clock funds transfer service.

- It authenticates the identity of the user like a debit card does using the phone as a tool instead of a separate card.
- It works 24x7, 365 days.

**E-Wallet:** Electronic wallet is a type of electronic card which is used for transactions made online through a computer or a smartphone. The utility of e-wallet is same as a credit or debit card. An e-wallet needs to be linked with the individual's bank account to make payments. The main objective of e-Wallet is to make paperless money transaction easier. E-wallets are classified as Prepaid Payment Instruments (PPIs) per Indian regulation. PPIs are payment instruments that facilitate the purchase of goods and services, including funds transfer, against the value stored in them. PPIs can be issued as smart cards, magnetic stripe cards, internet accounts, internet wallets, mobile accounts, mobile wallets, paper vouchers, and any such instrument that can be used to access the pre-paid amount. A mobile wallet is the digital equivalent to the physical wallet that we have in our pockets today. It is a vault to store digitized valuables for authorization. It is an online platform which allows a user to undertake various transactions without physical money transactions. It provides mobile-based financial services to the unbanked and those living in the remote geographical locations.

### Government Initiatives Towards Digital Financial Services:

#### For Infrastructure:

**IRCTC (Indian Railway Catering and Tourism Corporation) CONNECT:** In order to cater to the growing demand of passengers, to make the ticketing application more user-friendly and faster, IRCTC Connect was developed. The new app with several add-on features is based on the next generation e-ticketing system. Synchronized with the ticketing website, the app facilitates search and book train tickets, check existing reservations or cancel them, and get upcoming journey alerts. IRCTC e-Wallet is a scheme under which user can deposit money in advance with IRCTC and can be used as payment option along with other payment options available on IRCTC

for paying money at the time of booking tickets. IRCTC e-Wallet scheme provides the following advantages:

- Hassle-free and secure transactions.
- Saving booking time by eliminating payment approval cycle.
- Benefit of saving Payment Gateway charges per ticket.
- Manage account online and top up online.
- Dependency on a specific bank is reduced, as when any of the provided banks go offline, passengers can still book tickets from their IRCTC e-Wallet account.

**Direct Benefit Transfer (DBT):** DBT was initiated with the aim to reform Government delivery system by re-engineering the existing process in welfare schemes for simpler and faster flow of information/funds and to ensure accurate targeting of the beneficiaries, deduplication and reduction of fraud. DBT will bring efficiency, effectiveness, transparency and accountability in the Government system and infuse confidence of citizen in the governance.

**Aadhaar:** Aadhaar identity platform is one of the key pillars of 'Digital India', wherein every resident of the country is provided with a unique identity or Aadhaar number. The largest biometrics-based identification system in the world, Aadhaar is a strategic policy tool for social and financial inclusion, public sector delivery reforms, managing fiscal budgets, increase convenience and promote hassle-free people-centric governance. It is unique and robust enough to eliminate duplicate or fake identities and may be used as a basis/primary identifier to roll out several Government welfare schemes and programmes for effective service delivery thereby promoting transparency and good governance.

#### For Services:

**Un-Reserved Ticket through Mobile Application-UTS App (Unreserved Ticketing System):** To promote paperless economy, Indian Railways has launched its new UTS on mobile application. This official android mobile ticketing app enables booking unreserved paperless journey ticket, issue/renew season ticket and platform ticket. The app has introduced two modes of booking mobile tickets-Paper Ticket and Paperless Ticket.

**BHIM (Bharat Interface for Money):** BHIM is an app that makes payment transactions simple, easy and quick using UPI. It enables direct bank to bank payments instantly and collect money using a Mobile number or Payment address. This app is currently available on Android and it is downloadable from Google Play store, for smart phones.

#### For Empowerment

**Pradhan Mantri Gramin Digital Saksharta Abhiyaan:** This Scheme empowers the citizens in rural areas by training them to operate computer or digital access devices (like tablets, smart phones etc.), send and receive e-mails, browse Internet, access Government services, search for information, undertake digital payment etc. and hence enable them to use the Information Technology and related applications especially Digital Payments to actively participate in the process of nation building. The Scheme aims to bridge the digital divide, specifically targeting the rural population including the marginalized sections of society like Scheduled Castes (SC)/Scheduled Tribes (ST), Minorities, Below Poverty Line (BPL), women and differently-abled persons and minorities.

**Paygov India:** Ministry of Electronics and Information Technology along with NSDL Database Management Ltd (NDML) created a common infrastructure that can be used by Center/States/Departments to offer various services through their National/State portals with a facility to make online payment using net banking, credit cards and debit cards.

**PAHAL DBTL (Pratyaksh Hanstantrit Labh Direct Benefit Transfer of LPG):** This scheme aims to reduce diversion and eliminate

duplicate or bogus LPG connections. Under the PAHAL scheme, LPG cylinders are sold at market rates and entitled consumers get the subsidy directly into their bank accounts. This is done either through an Aadhaar linkage or a bank account linkage.

**DigiDhan ABHIYAAN:** The initiative plans to enable citizens and merchants to undertake real time digital transactions through the DIGIDHAN Bazaar. Through organizing DigiDhanMela's across the country, it aims to handhold users in downloading, installing and using various digital payment systems for carrying out digital transactions.

**Aadhar Enabled Payment System (AEPS):** 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. It is a payment service empowering a bank customer to use Aadhaar as his/her identity to access his/her respective Aadhaar enabled bank account and perform basic banking transactions like balance enquiry, cash deposit, cash withdrawal, remittances through a Business Correspondent.

**Advantages of Digital Financial Services:** Digitization of financial transactions extends the traditional mobility benefits to finance, facilitating anywhere, anytime transactions, and flexibility in sending and receiving payments. More than computer-based Internet penetration and broadband extension, the record growth of smartphones and the 4G network rollout made e-tailing popular even in secondary cities and towns across the country.

**More affordable:** Digital payments are making financial services more universally affordable, accessible and therefore, have the opportunity to drive financial inclusion and financial health for billions worldwide. The digitization of money, the rapid expansion of internet access, and the adoption of mobile phones, have created the perfect conditions to make it affordable to save, spend, give and borrow.

**Secure:** Money held in a digital transaction account is secure, and people have assurance that money will go only to the designated recipient, with a record of transaction.

**Convenient:** These services are highly accessible and easy to sign up for and to use.

**Catalyst for the provision and use of a diverse set of other financial services:** It includes credit, insurance, savings, and financial education, money-transfer services, microloans, and insurance.

**Creates an interoperable ecosystem and revenue sharing business models:** Mobile and internet banking can improve the financial inclusion in the country and can create win-win situation for all parties in the value-chain.

**24x7 Availability:** Enables consumers with the facility to make or receive a payment at any time of day or night, any day of the week.

**Eco-friendly:** The digitization will help in maintaining the database and records on a digital medium which will reduce the effort of cumbersome paperwork along with the paper too.

**Maintains payments history record:** One of the best benefits which an individual gets is the track of the transactional record. Even doing small transactions at a merchant will get recorded and can be used for the referential purpose in future, if needed.

**Potential Channels:** Digital modes of enhancing financial inclusion for women by targeting self-help groups (SHGs) could be one potential channel for accelerating and promoting digital financial inclusion in India.

**Digital transactional platforms:** It enable customers to make or receive payments and transfers and to store value electronically by making the use of devices that transmit and receive transaction data and connect to a bank or non-bank permitted to store electronic value.

**Access to formal financial services:** Payments, transfers, savings, credit, insurance, securities, etc. Migration to account-based services

typically expands over time as customers gain familiarity with and trust in a digital transactional platform. Government-to-person payments, such as conditional cash transfers, that can enable digital stored-value accounts may provide a path for the financially excluded into the financial system.

**Reduces risks:** It reduces risks of loss, theft, and other financial misconducts posed by cash-based transactions, as well as the reduced costs associated with transacting in cash and using informal providers.

## CONCLUSION

With the digital shift in core business, finance needs to enable and drive the change. A holistic cooperation between consumers and Government can be the road-map to reap true potential of digital finance and financial inclusion. The application of technology can improve the payment facility more smooth and transparent. The ambitious flagship Scheme DIGITAL INDIA also has one pillar as digital financing as its target. The potential of digital finance is huge. Financial independence will give empowerment to women and weaker sections of society, which is imbedded motive of financial inclusion and digital finance. Adopting digitization in financial services and including most of population in the net of banking will help in growth and development of country. With several digital financial instruments in the market, the consumer now has more choice than ever.

## REFERENCES

- Aastha Gupta, Munish Gupta 2013. Electronic Mode of Payment—A Study of Indian Banking System, *International Journal of Enterprise Computing and Business Systems*, ISSN (Online): 2230-8849, Vol. 2 Issue. 2
- Dr. N. Sundaram and M. Sriram (2016); Financial Inclusion in India: A Review, *International Journal of Applied Engineering Research*, ISSN 0973-4562, Vol. 11, No. 3, pp 1575-1578.
- Gurpreet Kaur (2015); Financial Inclusion and Digital India, *International Journal of Business Management*, ISSN 2349-3402, Vol. 2 (2).
- Handbook on Facilitating Digital Financial Inclusion, Awareness and Access through CSCs.  
<http://www.businesstoday.in/opinion/columns/digital-evolution-in-india/story/259227.html>  
<http://www.cgap.org/blog/what-digital-financial-inclusion-and-why-does-it-matter>  
<http://www.digitalindia.gov.in/>  
<http://www.moneycontrol.com/news/business/personal-finance/6-ways-you-can-benefit-from-digital-payments-through-mobile-banking-2365415.html>  
<http://www.thehindubusinessline.com/money-and-banking/digital-payments-are-making-financial-services-more-affordable/article9966719.ece>  
<http://www.worldbank.org/en/news/feature/2014/04/10/digital-finance-empowering-poor-new-technologies>  
<http://www.worldbank.org/en/topic/financialinclusion/publication/digital-financial-inclusion>  
<https://economictimes.indiatimes.com/news/economy/finance/e-commerce-sector-rides-on-digital-india-note-ban/articleshow/62308250.cms>
- PallabSikdar and MunishMakkad (2013); Internet Banking in India—A Perspective on Benefits and Challenges Involved, *International Journal of Engineering, Business and Enterprise Applications*, Vol. 5 (1), June-August, 2013, pp. 15-23
- Suresh Aaluri, Dr.M.SrinivasaNarayana, Dr. P. Vijay Kumar (2016); A Study on Financial Inclusion Initiatives and Progress with reference to Indian Banking Industry in digital era, *International Journal of Research in Finance and Marketing*, ISSN (o) 2231-5985, Vol. 6, Issue. 10, pp. 125-134
- Sushmita Mukherjee (2011); Application of ICT In Rural Development: Opportunities and Challenges, *Global Media Journal—Indian Edition*, ISSN 2249-5835, Vol. 2, No.2