

Chapter : 8 (Digital Financial Tools & Application)

Digital Financial Tools

Digital financial services are accessed and delivered through digital channels, including payments, credit and saving, and so on. M-banking is the use of a mobile phone to access banking services and execute financial transaction. The government of India introduced new service sot move toward cashless economy.

Digital financial tools expand the delivery of basic financial services to the people through new technologies like Internet, mobile phones and transfer of money through new digital channels. These channels have significantly driven down the costs for customers and service providers, opening the door to provide 24 hours service for 365 days.

Banking System:-

A bank is a financial institution that accepts deposits from the public and creates a demand deposit while simultaneously making loans. Lending activities can be directly performed by the bank or indirectly through capital markets. A **banking system** is a group or network of institutions that provide financial services for us. These institutions are responsible for operating a payment system, providing loans, taking deposits, and helping with investments.

Types of Bank :-

There are two broad categories under which banks are classified in India-

SCHEDULED AND NON-SCHEDULED BANKS.

The scheduled banks include **COMMERCIAL BANKS AND COOPERATIVE BANKS**. The commercial banks include **REGIONAL RURAL BANKS, SMALL FINANCE BANK, FOREIGN BANKS, PRIVATE SECTOR BANKS, and PUBLIC SECTOR BANKS.** *PAYMENTS BANK* is a new introduction to the category.

Cooperative banks include **URBAN AND RURAL BANKS**.

SCHEDULED BANKS are the banks which are covered under the second schedule of the Reserve Bank of India Act, 1934. To qualify for being a scheduled bank, a minimum of 5 lakh paid-up capital is required on the bank's behalf. The RBI lends loan to these banks at bank rate as and when required.

COMMERCIAL BANKS are regulated and managed under the Banking Regulation Act, 1949. These are profit making banks based on their business model. Granting loans to the government, general public, and corporate and accepting deposits counts as the primary function.

There are four types of commercial banks:

PUBLIC SECTOR BANKS

These banks for more than 75% of the total banking business in the nation. They are called nationalized banks. The government holds the majority stakes at these banks. Post-merger, SBI is the largest public sector banks by volume. It also ranks amongst the top 50 banks in the world.

There are 21 nationalized banks in India, they are:

1. STATE BANK OF INDIA
2. BANK OF INDIA
3. ALLAHABAD BANK
4. BANK OF MAHARASHTRA
5. CANARA BANK
6. INDIAN OVERSEAS BANK
7. IDBI BANK
8. ORIENTAL BANK OF COMMERCE
9. CENTRAL BANK OF INDIA
10. CORPORATION BANK
11. ANDHRA BANK
12. UCO BANK
13. BANK OF BARODA
14. UNION BANK OF INDIA
15. UNITED BANK OF INDIA
16. VIJAYA BANK
17. DENA BANK
18. INDIAN BANK
19. PUNJAB & SIND BANK
20. PUNJAB NATIONAL BANK
21. SYNDICATE BANK

PRIVATE SECTOR BANKS

Private shareholders hold majority stakes in private sector banks. Reserve Bank of India lays down all the rules and regulations.

Following are the private sector banks in India:

1. HDFC BANK
2. ICICI BANK
3. AXIS BANK
4. YES BANK
5. INDUSIND BANK
6. KOTAK MAHINDRA BANK
7. DCB BANK
8. BANDHAN BANK
9. IDFC BANK
10. CITY UNION BANK
11. TAMILNAD MERCANTILE BANK
12. NAINITAL BANK
13. CATHOLIC SYRIAN BANK
14. FEDERAL BANK
15. JAMMU AND KASHMIR BANK
16. KARNATAKA BANK
17. DHANALAXMI BANK
18. SOUTH INDIAN BANK
19. LAKSHMI VILAS BANK
20. RBL BANK
21. KARUR VYSYA BANK

FOREIGN BANKS

A bank operating as a private entity in India but headquartered in a Foreign country is a foreign bank. They are governed by both the country they are located in as well the country they have headquarters in.

Some of these are:

1. CITI BANK
2. STANDARD CHARTERED BANK
3. HSBC BANK

Types of Account & Deposit:-

The major types of bank accounts are –

Savings Account

The facilities of savings account are only for savings purposes, and a bank is liable to pay interest on the funds which are deposited in the account. In India, the rate of interest for savings accounts ranges from anywhere between 4% to 7%.

Current Account

Current account mainly contains liquid deposits that are utilised for business purpose and not for savings or investments. No interest is paid on such an amount, and there are no maturity periods as well due to the continuous nature of the account.

Fixed Deposit Account

A particular sum of money is deposited in a fixed deposit account for a given duration. If deposit is taken out before the maturity date, penalties will be imposed. Fixed deposits enjoy higher interest rates. The interest rate is subjected to variation from bank to bank and also periodic revisions.

Recurring Deposit Account

In case of recurring deposit account, deposit will have to be made by the account holder at regular intervals for a specified time period. The bank will have to pay the relevant rate of interest when the amount is repaid after the fixed time period.

Now that we have refreshed our memories let us start with the topic in hand.

KYC (Know Your Customer):-

KYC full form is 'Know Your Customer.' It is a verification process that allows an institution to confirm and thereby verify the authenticity of their customer. This authenticity is to be sure of the identity and the address of the customer. To verify their identity and address, a customer of the financial service will be required to submit their KYC documentation before they begin investing in a variety of instruments like fixed deposits, mutual funds, and bank accounts through the portal of the financial institution.

Indian Currency:-

The Indian rupee (INR) is the currency of India. INR is the International Organization for Standardization currency code for the Indian rupee, for which the currency symbol is ₹.

The rupee or more specifically the Indian rupee is the official currency of the Republic of India. The issuance of the currency is controlled by the Reserve Bank of India.

There are two types of Indian currency

Bank Note:-

The Reserve Bank has the sole authority to issue banknotes in India. Reserve Bank, like other central banks the world over, changes the design of banknotes from time to time.

The Department receives notes from four currency note printing presses. Two of the currency note printing presses are owned by the Government of India and two are owned by the Reserve Bank, through its wholly owned subsidiary, the Bharatiya Reserve Bank Note Mudran Ltd. (BRBNML). The government owned presses are at Nasik (Western India) and Dewas (Central India). The other two presses are at Mysore (Southern India) and Salboni (Eastern India).

Note	Size	Color
1	97 x 63 mm	Green & Pink
5	117 x 63 mm	Green
10	123 x 63 mm	Chocolate brown
20	147 x 63 mm	Red-Orange
50	135 x 66 mm	Fluorescent blue
100	142 x 66 mm	Lavender
200	146 x 66 mm	Bright Yellow
500	150 x 66 mm	Stone Grey
2000	166 x 66 mm	Magenta

OTP (One Time Password):-

One Time Password (OTP) is also known as One Time Pin. It is a string of characters or numbers login session or transaction, on a computer system or other digital device. This prevents some forms of identity theft by making sure that a captured username/password pair cannot be used for the second time.

It is a password that is valid for only one login session or transaction, on a computer system or other digital device. OTPs avoid a number of shortcomings that are associated with traditional (static) password-based authentication.

QR Code (Quick Response Code):-

The QR code system was **invented in 1994** by the Japanese company **Denso Wave**. It is a **two-dimensional (2D)** barcode used for adding web links to a printed page. When you scan such a QR barcode using a webcam or mobile phone camera, the QR application takes you to a website, a YouTube video or some other web content. It is an easy way of sending people to a site without having to type of URL.

QR code often contain data for a **locator, identifier, or tracker** that points to a website or application. A QR code uses four standardized encoding modes (**numeric, alphanumeric, byte/binary, and kanji**) to store data efficiently. The smallest element (**black or white square grid**) of the QR code is called a module.

UPI (Unified Payment Interface):-

A Unified Payment Interface (UPI) is an instant real time payment system which allows users to transfer money between two bank accounts on a mobile. It was developed by National Payments Corporation of India facilitating inter-bank transactions. To carry out any transaction, a user will only have to use a virtual address, known as a Virtual Payment Address (VPA). UPI has been developed by the National Payments corporation of India (NPCI) and is regulated by the Reserve Bank of India (RBI).

The pilot project launch was on **11th April 2016** by **Dr. Raghuram G Rajan**, Governor, RBI at Mumbai. Per day transaction limit is up to **Rs. 1 lakh**.

It offers instant money transfer via **mobile device 24×7 for all 365 days**.

AEPS (Aadhaar Enabled Payment System):-

Aeps is a secure payment platform for financial transactions based on Unique Identification Number that enables a user for the cashless transactions. This system developed by the National Payments Corporation of India allows the user to perform necessary banking transactions like balance enquiry, cash deposit, cash withdrawal and remittances through a Business correspondent.

The following services offered by AePS are available in both inter-bank and intra-bank modes:

- Cash withdrawal
- Cash deposit
- Balance Enquiry
- Aadhaar to Aadhaar Fund Transfer
- Mini Statement

USSD (Unstructured Supplementary Service Data):-

USSD is also referred to as Quick Codes or "Feature codes". It is a communications protocol used by **GSM cellular telephones** to communicate with the mobile network operator's computers. It is a technology platform through which information can be transmitted through a **GSM network** on a basic phone and will be available on all mobile phones with SMS facility. To used USSD, users will have to dial ***99#** to get the mobile balance. This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking.

MMID (Mobile Money Identifier):-

MMID is a 7 digit number allotted by your Bank for receiving funds through IMPS. The bank will allot MMID when you register your mobile number and account number in which you wish to receive funds. If you have more than one account, you will get a separate MMID for each account. You have to share your mobile number and MMID with the remitter for receiving funds through IMPS.

BHIM (Bharat Interface for Money):-

BHIM (Bharat Interface for Money) is an Indian mobile payment App developed by the National Payments Corporation of India (NPCI), based on the Unified Payments Interface (UPI). Named after **B. R. Ambedkar** and launched on **30 December 2016**, it is intended to facilitate e-payments directly through banks and encourage cashless transactions.

The application supports all Indian banks which use UPI, which is built over the Immediate Payment Service (IMPS) infrastructure and allows the user to instantly transfer money between bank accounts of any two parties. It can be used on all mobile devices.

A user can **send upto Rs 20,000 per transaction** and a **maximum of Rs 40,000 per day** for one bank account. This limit is available per bank account linked on BHIM.

Card (Credit/Debit):-

It is a piece of plastic card that contains personal data in a machine-readable form and is used to obtain cash. Credit cards and debit cards typically look almost identical, with 16 digit card numbers, expiration dates, and personal identification number (PIN) codes.

Credit Card:-

A Credit card allows you to use money from a bank to make purchase. The card issuer pays for the purchase, and the cardholder pays the issuer at a later date. It is a convenient way of buying things, especially if you do not have cash handy.

Debit Card:-

A debit card is a plastic card or checking card or bank card that can be used instead of cash while making purchases. Debit cards are like digitized versions of cheque books; they are linked to your bank account.

E-Wallet:-

E-wallet is a type of electronic card which is used for transactions made online through a computer or a smartphone. Its utility is same as a credit or debit card. An E-wallet needs to be linked with the individual's bank account to make payments. E-wallet is a type of pre-paid account in which a user can store his/her money for any future online transaction. An E-wallet is protected with a password. With the help of an E-wallet, one can make payments for groceries, online purchases, Recharging mobile phones and flight tickets, among others.

There are 4 types of e-wallet

- Open wallets
- Semi Open
- Semi Closed
- Closed

Example:- Paytm, mobikwik, oxygen wallet, citrus wallet, itz cash , ICICI pockets, SBI buddy, HDFC payZapp, Jio money, Airtel money, freecharge, phone pay etc.

PayTm:-

Paytm, (“pay through mobile”) is an Indian multinational technology company that specializes in digital payment system, e-commerce and finance, based in Noida, India. Paytm is currently available in 11 Indian languages and offers online use-cases like mobile recharges, utility bill payments, travel, movies, and events bookings as well as in-store payments at grocery stores, fruits and vegetable shops, restaurants, parking, tolls, pharmacies and educational institutions with the Paytm QR code. As of January 2018

POS (Point of Sale):-

The **point of sale (POS)** or **point of purchase (POP)** is the time and place where a retail transaction is completed. At the point of sale, the merchant calculates the amount owed by the customer, indicates that amount, may prepare an invoice for the customer (which may be a cash register printout), and indicates the options for the customer to make payment. It is also the point at which a customer makes a payment to the merchant in exchange for goods or after provision of a service. After receiving payment, the merchant may issue a receipt for the transaction, which is usually printed but can also be dispensed with or sent electronically.

Internet Banking:-

Internet Banking is an electronic system which enables the customers to conduct transactions on a bank’s website and perform activities such as maintaining account, transferring money, and paying bills. It is safe and secure, but the only thing required is that the customer must have the Internet connection on computer or mobile.

NEFT (National Electronic Fund Transfer):-

National Electronic Funds Transfer is the most prominent inter-bank electronic funds transfer system of India, which provides a facility to bank customers to transfer the funds easily and securely on a one to one basis, which saves the time and is done via electronic messages. It is net transfer facility, executed in hourly batches.

National Electronic Funds Transfer (NEFT) is an electronic funds transfer system maintained by the **Reserve Bank of India (RBI)**. **Started in November 2005**, the setup was established and maintained by Institute for Development and Research in Banking Technology.

RTGS (Real Time Gross Settlement):-

Real time gross settlement is an inter-bank transfer system, which transfers money from one bank to another on a real time and on gross basis. It is used for high-value transactions which require an immediate clearing and is used to transfer of Rs. 2 lakhs and above. **Real Time Gross Settlement (RTGS) System went live on March 26, 2004.**

IMPS (Immediate Payment Service):-

Immediate payment service is an instant payment inter-bank electronic funds transfer system in India. It offers the inter-bank electronic fund transfer service through mobile phone. It is managed by the NPCI and is built upon the existing National Financial Switch network.

Immediate Payment Service is an instant payment inter-bank electronic funds transfer system in India. IMPS offers an inter-bank electronic fund transfer service through mobile phones. The service is available 24×7 throughout the year including bank holidays.

SWIFT (Society for Worldwide Interbank Financial Telecommunication):-

The Society for Worldwide Interbank Financial Telecommunication (Swift) is a global network connecting banks to communicate messages about activities like money transfer in a safe and secure way. Swift assigns each bank an eight- or 11-character long code, known as the bank identifier. Banks, Securities Dealers, Clearing Houses, Exchanges, and Corporate Business Houses are some of the users of the SWIFT network.

Online Bill Payment:-

The use of online payment system began in the 1960s. It was used mainly among financial and banking institutions. It is a service that allows you to manage and pay bills electronically on a monthly basis such as power bills, car payments or credit card payment, or they can be one-time payments to companies or even individuals.

IFSC (Indian Financial System Code):-

IFSC is an alpha-numeric code that uniquely identifies a bank branch participating in the NEFT system. This is an 11 digit code with the first 4 alpha characters representing the bank, and the last 6 characters representing the branch. The 5th character is 0 (zero). IFSC is used by the NEFT system to identify the originating/destination banks/branches and also to route the messages appropriately to the concerned banks/branches.

PMJDY (Pradhan Mantri Jan Dhan Yojna):-

The PMJDY is a National Mission for Financial inclusion to ensure that every individual in the country has access the financial services. These would include access to banking, saving accounts, Remittance, Credit, Insurance, and Pension in a affordable manner. The scheme was launched earlier this year by Indian Prime Minister. A lot of accounts have been opened thus far under the scheme. He had announced this scheme on his first Independence Day speech on 15 August 2014.

Social Security Schemes:-

Indian government has launched following social security schemes.

PMSBY (Pradhan Mantri Suraksha Bima Yojana):-

This insurance scheme was launched on may 9, 2015 which says that a person will be given **Rs 2 lakh for accidental death**. In case of **partial disability a person will be given Rs 1 lakh**. This scheme is available for people whose **age is between 18 to 70 years**.

PMJJBY (Pradhan Mantri Jeevan Jyoti Bima Yojana):-

This is also an insurance scheme which gives a **life insurance of Rs 2 lakh** with a premium of Rs 330 per year.

APY (Atal Pension Yojana):-

The scheme looks to provide monthly pension to subscribers from 60 years of age. The scheme mainly focuses on workers in the unorganized sector and is open to Indian citizens who are between 18-40 years of age.

PMMY (Pradhan Mantri Mudra Yojana):-

Under the scheme, Pradhan Mantri Mudra Yojana three categories of interventions has been named which includes.

- **Shishu:-** Loan up to INR 50000
- **Kishore:-** Loan ranging from IRN 50000 to 5 lakh
- **Tarun:-** Loan above INR 5 lakh and below INR 10 lakh

PPF (Public Provident Fund):-

The Public Provident Fund is a savings-cum-tax-saving instrument in India, introduced by the National Savings Institute of the Ministry of Finance in 1968. The aim of the scheme is to mobilize small savings by offering an investment with reasonable returns combined with income tax benefits.

ATM (Automated Teller Machine):-

An **automated teller machine (ATM)** is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. Anyone with a credit card or debit card can access cash at most ATMs.

Loan:-

A loan is the lending of money by one or more individuals, organizations, or other entities to other individuals, organizations etc. The recipient (i.e., the borrower) incurs a debt and is usually liable to pay interest on that debt until it is repaid as well as to repay the principal amount borrowed.

There are many types of loans

- Home Loan
- Personal Loan
- Education Loan

Insurance:-

Insurance is a **contract (policy) in which an insurer indemnifies another against losses from specific contingencies or perils.** ... Life, health, homeowners, and auto are the most common forms of insurance. The core components that make up most insurance policies are the deductible, policy limit, and premium.

Aadhaar Card:-

Aadhaar is a 12 digit individual identification number issued by the Unique Identification Authority of India on behalf of the Government of India. The data is collected by the Unique Identification Authority of India (UIDAI), a statutory authority established in January 2009 by the government of India, under the jurisdiction of the Ministry of Electronics and Information Technology.

PAN Card (Permanent Account Number):-

A permanent account number is a ten-character alphanumeric identifier, issued in the form of a laminated "PAN card", by the Indian Income Tax Department, to any "person" who applies for it or to whom the department allots the number without an application. It can also be obtained in the form of a PDF file.

Cheque

A cheque is a bill of exchange in which one party orders the bank to transfer the money to the bank account of another party. It is a negotiable instrument that is covered under the Negotiable Instruments Act, 1881. There are three parties involved in the transaction – the drawer is the person who writes the cheque, the drawee is the bank that has to transfer the funds and the payee is the person in whose name the cheque has been issued. A cheque can be issued against a savings account or a current account.

Types of Cheques

- **Bearer Cheque:** This type of cheque is payable to the person who presents it to the bank for payment. It does not require any identification, and anyone can cash it.
- **Order Cheque:** An order cheque is payable only to the person named on the cheque. The payee must endorse the cheque by signing the back of it before depositing or cashing it.
- **Crossed Cheque:** A crossed cheque has two parallel lines across its face. This provides additional security against fraud and theft.
- **Post-Dated Cheque:** A post-dated cheque has a future date on it, and it cannot be cashed until that date arrives. This type of cheque is commonly used for payments that are scheduled in the future, such as rent or loan repayments.
- **Traveller's Cheque:** A traveller's cheque is a type of cheque that can be used as a form of payment when travelling. They are issued by banks or other financial institutions and can be replaced if lost or stolen.
- **Self Cheque:** A self-cheque is a cheque that is written by the account holder to themselves.

Validity of a cheque

A cheque is **valid for a period of 3 months** after the date of issue of cheque (the date is indicated on the top right-hand corner of the cheque).