MODULE 4

BANKING INNOVATIONS

Information technology is one of the most important facilitators for the transformation of the Indian banking industry in terms of its transactions processing as well as for various other internal systems and processes. The various technological platforms used by banks for the conduct of their day to day operations, their manner of reporting and the way in which interbank transactions and clearing is affected has evolved substantially over the years.

Innovations in Bankingin India

Over the years, the banking sector in India has seen a number of changes. Most of the banks have begun to take an innovative approach towards banking with the objective of creating more value for customers, and consequently, the banks. Some of the significant changes inthe Indian banking sector are discussed below:

1. TechnologyforValueCreation

The use of information technology in the Indian banking sector was a corollary of the liberalization process initiated in the country in the early 1990s...

2. Rural India Catching Up

With a majority of the Indian population living in rural areas, rural banking forms a vital componentofthe Indian bankingsystem.Besides,ruralbankingoperationsinIndiaarerather different from urban operations, due to the strong disparity that exists between urban andrural life, and the needs of these two sections of people.

3. Banking Beyond Banking

While traditionally, banking meant 'borrowing and lending', in the latter part of the 20th century, the word took on a different meaning altogether. Banks no longer restricted themselves to traditional banking activities, but explored newer avenues to increase business and capture new markets.

4. The Changing Face of Banking

Many analysts predict still more revolutionary changes in the banking sector in India. The chief of these are likely to be the concept of Universal Banks and the introduction of Smart Card technology.

5. The Other Side

Although the Indian banking sector has made rapid progress particularly in the number of innovations introduced, some analysts are skeptical about the efficacy and practical use of many of these services.

CORE BANKING

Core banking can be defined as a back-end system that processes banking transactions across the various branches of a bank. The system essentially includes deposit, loan and credit processing. Among the integral core banking services are floating new accounts, servicing loans, calculating interests, processing deposits and withdrawals, and customer relationship management activities.

Core banking systems are aimed at empowering existing and probable customers to have a greater freedom of their account transactions. With technological evolutions, transactions are now safer, faster and less cumbersome. The fact that these transactions can be executed remotely, from any part of the world has made core banking systems a significant aspect of banking these days.

Core banking always brings down operational costs considerably, ensuring lesser manpower requirement for execution. It also enables greater accountability of the customers. Software application based platforms make core banking systems user-friendly and more efficient. The benefits of core banking systems are multi-faceted – keeping pace with fast-evolving market, simplifying banking processes and making it more convenient for the customers, and expanding the outreach of the banks to remote places.

UNIVERSAL BANKING

Universal banking is a combination of Commercial banking, Investment banking, Development banking, Insurance and many other financial activities. It is a place where all financial products are available under one roof. So, a universal bank is a bank which offers commercial bank functions plus other functions such as Merchant Banking, Mutual Funds, Factoring, Credit cards, Housing Finance, Auto loans, Retail loans, Insurance, etc.

Universal banking is done by very large banks. These banks provide a lot of finance to many companies. So, they take part in the Corporate Governance (management) of thesecompanies. These banks have a large network of branches all over the country and all overthe world. They provide many different financial services to their clients.

Advantages of Universal Banking

Advantages of universal banking

1. **Investors' Trust :** Universal banks hold stakes (equity shares) of many companies. These companies can easily get other investors to invest in their business. This is because other investors have full confidence and faith in the Universal banks. They know that the Universal banks will closelywatch all the activities of the companies in which they hold a stake.
2. **Economics of Scale :** Universal banking results in economic efficiency. That is, it results in lower costs, higher output and better products and services. In India, RBI is in favour of universal banking because it results in economies of scale.
3. **Resource Utilisation :** Universal banks use their client's resources as per the client's ability to take a risk. If the client has a high risk taking capacity then the universal bank will advise him to make risky investments and not safe investments. Similarly, clients with a low risk taking capacity are advised to make safe investments. Today, universal banks invest their client's moneyin different types of Mutual funds and also directlyinto the share market. They also do equity research. So, theycan also manage their client's portfolios (different investments) profitably.
4. **Profitable Diversification :** Universal banks diversify their activities. So, they can use the same financial experts to provide different financial services. This saves cost for the universal bank. Even the day-to-day expenses will be saved because all financial services are provided under one roof, i.e. in the same office.
5. **Easy Marketing :** The universal banks can easily market (sell) all their financial products and services through their many branches. They can ask their existing clients to buy their other products and services. This requires less marketing efforts because of their well-established brand name. For e.g. ICICI may ask their existing bank account holders in all their branches, to take house loans, insurance, to buy their Mutual funds, etc. This is done very easily because they use one brand name (ICICI) for all their financial products and services.

6. **One-stop Shopping :** Universal banking offers all financial products and services under one roof. One-stop shopping saves a lot of time and transaction costs. It also increases the speed or flow of work. So, one-stop shopping gives benefits to both banks and their clients.

Disadvantages of Universal Banking

1. **Different Rules and Regulations :** Universal banking offers all financial products and services under one roof. However, all these products and services have to follow different rules and regulations. This creates many problems. For e.g. Mutual Funds, Insurance, Home Loans, etc. have to follow different sets of rules and regulations, but they are provided by the same bank.
2. **Effect of failure on Banking System** : Universal banking is done by very large banks. If these huge banks fail, then it will have a very big and bad effect on the banking system and the confidence of the public. For e.g. Recently, Lehman Brothers a very large universal bank failed. It had very bad effects in the USA, Europe andeven in India.
3. **Monopoly :** Universal banks are very large. So, they can easily get monopoly power in the market. This will have many harmful effects on the other banks and the public. This is also harmful to economic development of the country.
4. **Conflict of Interest :** Combining commercial and investment banking can result in conflict of interest. That is, Commercial banking versus Investment banking. Some banks may give more importance to one type of banking and give less importance to the other type of banking. However, this does not make commercial sense.

OFF SHORE BANKING

The offshore banking refers to the deposit of funds by a company or an individual in a bank that is located outside their national residence. Although the term implies that these banks are located on islands, many offshore banks are found in Cayman Islands, Bermuda, Luxembourg, the Channel Islands, Macau and Panama.

The advantage of offshore banking is that funds are tax exempt, where the banks are located. Offshore banks offer the same services as domestic banks and frequently they offer more anonymity (greater secrecy) than "onshore" banks.

E SERVICES

E-Banking or Internet Banking

Internet Banking refers to the banking services provided bythe banks over the internet. Some of these services include paying of bills, funds transfer, viewing account statement, etc.Banks also deliver their latest products and services over the internet. Internet banking is performed through a computer system or similar devices that can connect to the banking site via the internet. Nowadays, you can also use internet banking on your mobile phones using a Wi-Fi or 3G connection. With the ease of availability of cyber cafes in the cities, it has become quite popularBanking is now no more limited in going and visiting the bank in person for various purposes like depositing and withdrawing money, requesting for account statement, stop a payment, etc. You can do all these tasks and many more using the online services offered by the banks. You can also keep a track of your account transactions and balance all the time. Now getting passbooks updated to know the total account balance is a matter of past.E-banking is also called online banking and internet banking. E-banking is a result of the growing expectations of bank's customers.

The activities clients are able to carry out are can be classified to as transactional and non-transactional.

Non transactional activities

- ✓ Account balance viewing
- ✓ Viewing of previous bank transactions
- ✓ Bank statement down loading
- ✓ Check book ordering
- ✓ Viewing of images of paid cheques

Transactional activities

- ✓ Electronic funds transfer
- ✓ Bill payments and wire transfers
- ✓ Loan application and repayments
- ✓ Buying investment products

Advantages of Internet Banking

Internet Banking has several advantages over traditional one which makes operating an account simple and convenient. It allows you to conduct various transactions using the bank's website and offers several advantages. Some of the advantages of internet banking are:

1. Online account is **simple** to openand easy to operate.
2. It is quite **convenient** as you can easily pay your bills, can transfer funds between accounts,etc.

3. It is **available all the time**, i.e. 24x7. You can perform your tasks from anywhere andat any time;even in night when the bank is closed or on holidays.The only thing you need to have is an active internet connection.
4. It is **fast and efficient**. Funds get transferred from one account to the other very fast. You can also manage several accounts easily through internet banking.
5. Through Internet banking, you can keep an eye on your transactions and account balance all the time. This facility also keeps your **account safe**.
6. It also acts as a great **medium** for the banks to endorse their products and services. The services include loans, investment options, and many others.

Disadvantages of Internet Banking

Though there are many advantages of internet banking, but nothing comes without disadvantages and everything has its pros and cons; same is with internet banking. It also has some disadvantages which must be taken care of. The disadvantages of online banking include the following:

1. Understanding the usage of internet banking might be difficult for a beginner at the first go. Though there are some sites which offer a demo on how to access online accounts, but not all banks offer this facility. So, a person who is new, might face some difficulty.
2. You cannot have access to online banking if you dont have an internet connection; thus without the availability of internet access, it may not be useful.
3. Securityoftransactionsisabigissue.Youraccountinformationmightget **hacked** by unauthorized people over the internet.
4. **Password security** is a must. After receiving your password, do change it and memorize it otherwise your account may be misused by someone who gets to know your password inadvertently.
5. You cannot use it,in case;the banks server is down.
6. Another issue is that some time sit becomes difficult to note whether you transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the banks server is down.

Automated Teller Machine(ATM)

ATMs are electronic machines, which are operated by a customer himself to deposit or to withdraw cash from bank. For using an ATM, a customer has to obtain an ATM card fromhis bank. The ATM card is a plastic card, which is magnetically coded. It can be easily read by the machine.

To operate an ATM card, the customer has to inset the card in the machine. He has to enter the pass word (number). If the authentication or pass word (number) is correct, the ATM permits a customer to make entries for withdrawal or for deposit. On completion of the transaction, the customer's card is ejected from the ATM.

Advantages of Automated Teller Machines(ATMs)

1. ATM provides 24hours service

ATMs provide service round the clock.The customer can withdraw cash upto a certain a limit during any time of the day or night.

2. ATM gives convenience to bank's customers

ATMs provide convenience to the customers. Now-a-days, ATMs are located at convenient places, such as at the air ports, railway stations, etc. and not necessarily at the Bank's premises. It is to be noted that ATMs are installed off-site. ATM reduces the workload of bank's staff.

3. ATM provide service without any error

ATMsprovideservicewithouterror.Thecustomercanobtainexactamount.Thereisno human error as far as ATMs are concerned.

4. ATM is very beneficial for travellers

ATMs are of great help to travellers. They need not carry large amount of cash with them. They can withdraw cash from any city or state, across the country and even from outside the country with the help of ATM.

5. ATM may give customers new currency notes

The customer also gets brand new currency notes from ATMs. In other words, customers do not get soiled notes from ATMs.

6. ATM provides privacy in banking transactions

Mostof all, ATMs provide privacy in banking transactions of the customer.

DEBITCARDS

A debit card is a plastic card that resembles credit card. Debit cards are directly linked to a cardholder's bank account. Whenever a card holder withdraws money from an ATM

CREDITCARDS

Credit cards are considered a boon for the ready convenience they confer on the user- you don't haveto worryabout carrying enough cash when you go shoppingorto arestaurant. Just flash your card, sign and walk out. Thus the age of plastic money has finally come to India. The credit card has become a matter of status.

Acreditcardinsimplewordsisaplasticcardwhichcanbeusedassubstituteforcash.Itis widely used by people for make payment whether it is a small sum involving buying amovie ticket or big sum like purchasing some furniture or payment at hospitals. Banks issue it to their customers to enable them to purchase on credit. These cards store the information relating to customers account

Types of credit card

1. **Credit card:** It is a normal card whereby a holder is able to purchase without having to paycash immediately. Generallya limit is set with the amount of money a card holdercan spend. Interest is charged on the outstanding amount.
2. **Charge card:** Charge card is intended to serve as a convenient means of payment for goods purchased at member establishments rather than a credit facility. There is no interest charged. Eg: Andhra bank card.
3. **Instore cards:** Retailers / Companies issue the instore card. These cards have currency only at the issuers outlet for purchasing products of the issuers companies.
4. **Corporate Credit card:** These are issued to private and public limited companies. The transactions made by add-on card holders are build to the main card and debits are made to the company's account.
5. **Smart card:** A smart card technology is also widely used by bankers to market their products.

Electronic Funds Transfer (EFT)

Electronic funds transfer, often abbreviated as EFT, is a system of transferring money from one bank account directlyto another without any banknotes/coinschanginghands.EFTrefers to the computer based systems used to perform financial transactions electronically initiated through the exchange or transfer of money either within the same financial institution or across multiple institutions using an electronic terminal (ATM, Point-of-Sale, Credit Card, etc), the telephone or the computer. It is also used for both credit transfers (such as payroll payments) and debit transfers (such as mortgage payments). Transactions are processed bythe bank for payments where funds are transferred electronically from one bank account tothe billing company's bank and usually takes less than a day after the scheduled paymentdate. The cost for an EFT may vary among the commercial banks.

The growing popularity of the EFT for online bill payment is paving the way for a paperless environment where cheques, stamps, envelopes and paper bills are obsolete. The benefits of the EFT include reduced administrative costs, increased efficiency, simplified bookkeeping and greater security.

DEMAT

DEMAT Account Meaning:

A Demat account is similar to a bank account with the difference being that instead of money, it is the securities that have been deposited in electronic form. Securities are in the form of shares, bonds or debentures. As per the Depository Act, 1996, Demat Accounts are mandatory if you have more than 500 units in securities.

When opening a Demat account where physical securities are converted to electronic form, one may have a lot of questions in mind about the features and benefits of such accounts as well as the charges applicable.

1. **Various modes of access**

Since Demat accounts are electronic in nature; one can access their Demat account via the internet through smartphone or personal computer

2. **SPEED-efacility**

MadeavailablebyNSDL,thisfacilityallowsinstructionslipstobesentelectronicallyinstead of submitting paper slips to the Depository Participant. The Depositary Participants are the agents governed by Depositories through which one can operate the Demat account.

DematAdvantages

1. The biggest benefit is that you do not need to hold securities in physical form rather they are kept in electronic form and therefore the risks of losing shares due to theft, fire, flood and earthquake are eliminated.
2. One can have instant transfer of stocks from one account to another and therefore the whole process of buying and selling becomes fast which in turn increases the efficiency and effectiveness of stock market as a whole.
3. Since they are hold in electronic form there is no stamp duty on transfer of securities which reduces the transaction costs associated with buying and selling of shares.
4. Demat account is not only for equity shares but you can keep mutual funds, gold exchange traded fund, preference shares in it which makes it easier for individuals tokeep track of their investments as they do not have to check several account, they just have to check their demat account for knowing about their portfolio.
5. An individual having demat account can even trade for 1 share also which was not the case when you hold them in paper form.

Demat Disadvantages

1. The biggest limitation is that in order to have a demat account one needs to be internet savvy and therefore people who are not that literate with internet will find it hard to operatetheirdemat account and thereforetheytell theirbrokersorsub brokersto transact on behalf of them which sometimes lead to fraud and mismanagement of funds by thesub brokers.
2. Anotherlimitationisthatsincestocksaredematerialisedindividualstendtokeeplooking the stock price more often than they would have if stocks were in paper form and therefore they end up doing trading instead of investment, however this limitation is not of demat account but of individuals as they are not patient enough still many people blame it on demat account when they are asked why they are in a hurry to sale shares.

Various constituents and concepts in depository system or Players involved in dematerialization

1) Depository:

Depository is an organization or a system where securities/shares are held in electronic form. A depository is similar to a bank. The bank transfers money without handling money. A depository transfers securities/ shares without handling securities/share. A bank facilitates safe keeping of money. The depository facilitates safe keeping of securities/ shares. A bank holds funds in an account: The depository holds securities/shares in an account. The bank transfers funds between accounts on the instructions of account holders. The depository transfers securities/ shares between accounts on the instruction of account holders. The bank contacts the customer directly. The depository contacts the customer through depository participant: Transfers of shares are made through mere computerized book entry in the depository. This becomes possible because shares are dematerialized. Only those securities which are held in the form of share certificate in ones name can be dematerialized.

Depository Participant(DP):

Depository Participant (DP) is the representative of the depository. Depository participantacts as an intermediary between investors and depositories. An investor has no direct accessto the depositories. He has to trade his securities through the depository participant. The depositoryparticipants have an identitynumber for identification. It has to maintain accounts of securities of each investor. The depository participant gives intimation about holdingsfrom time to time by sending a statement of holding or giving a pass-book. If an investor desires the services of depository, he has to open an account with depository through depository participant.

According to SEBI guidelines financial institutions, banks, stock brokers can act as depository participant.

Non Performing Assets (NPA)

NPA expands to non-performing assets (NPA). Reserve Bank of India defines Non Performing Assets in India as any advance or loan that is overdue for more than 90 days.

“An asset becomes non-performing when it ceases to generate income for the bank,” said RBI in a circular form 2007.

To be more attuned to international practises, RBI implemented the 90 days overdue norm for identifying NPAs has been made applicable from the year ended March 31, 2004. Depending on how long the assets have been an NPA, there are different types of non-performing assets as well.

What is an Asset and Nonperforming Assets for a Bank?

Asset means anything that is owned. For banks, a loan is an asset because the interest we pay on these loans is one of the most significant sources of income for the bank.

When customers, retail or corporates, are not able to pay the interest, the asset becomes ‘non-performing’ for the bank because it is not earning anything for the bank. Therefore, RBI has defined NPAs as assets that stop generating income for them.

How Nonperforming Assets (NPA) Work?

Non-Performing Assets (NPAs) are loans or advances issued by banks or financial institutions that no longer bring in money for the lender since the borrower has failed to make payments on the principal and interest of the loan for at least 90 days.

A debt that has been past due and unpaid for a predetermined period is known as a non-performing asset (NPA).

When the ratio of NPAs in a bank's loan portfolio rises, its income and profitability fall, its capacity to lend falls, and the possibility of loan defaults and write-offs rise.

To address this issue, the government and the Reserve Bank of India have introduced various policies and methods to manage and reduce the amount of non-performing assets (NPAs) in the banking sector.

Types of Non Performing Assets (NPA)

Different types of non-performing assets depend on how long they remain in the NPA category.

a) Sub-Standard Assets

An asset is classified as a sub-standard asset if it remains as an NPA for a period less than or equal to 12 months.

b) Doubtful Assets

An asset is classified as a doubtful asset if it remains as an NPA for more than 12 months.

c) Loss Assets

An asset is considered a loss asset when it is “uncollectible” or has such little value that its continuance as a bankable asset is not suggested. However, some recovery value may be left in it as the asset has not been written off wholly or in parts.

NPA Provisioning

Keeping aside the technical definition, provisioning means an amount that the banks set aside from their profits or income in a particular quarter for non-performing assets, such as assets that may turn into losses in the future. It is a method by which banks provide for bad assets and maintain a healthy book of accounts.

Provisioning is done according to which category the asset belongs. The categories have been mentioned in the above section. Not only the type of asset but provisioning also depends on the type of bank. Like, Tier-I banks and Tier-II banks have different provisioning norms.

GNPA and NNPA

Banks are required to make their NPAs numbers public and to the RBI from time to time. There are primarily two metrics that help us understand any bank's NPA situation.

NPA numbers for a bank will be mentioned in the standalone financial statements of a bank.

- GNPA: GNPA stands for gross non-performing assets. GNPA is an absolute amount. It tells you the total value of gross non-performing assets for the bank in a particular quarter or financial year, as the case may be.

- NNPA: NNPA stands for net non-performing assets. NNPA subtracts the provisions made by the bank from the gross NPA. Therefore net NPA gives you the exact value of non-performing assets after the bank has made specific provisions.

NPA Ratios

NPAs can also be expressed as a percentage of total advances. It gives us an idea of how much of the total advances are not recoverable. The calculation is pretty simple:

- GNPA ratio is the ratio of the total GNPA of the total advances.
- NNPA ratio uses net NPA to determine the ratio to the total advances.

Example of NPA

State Bank of India’s quarterly results for two quarters for determining non performing assets examples through the results. NPA ratios are mentioned in standalone quarterly results.

Banks are supposed to publish their financial results on the exchanges every quarter of a fiscal year.

Securitization

Securitization is the process of taking an illiquid asset or group of assets and, through financial engineering, transforming it (or them) into an investable security.

A mortgage-backed security (MBS) is a classic example of securitization. A group of home loans are sold by the original lender to another financial institution, which turns the package of mortgages into one distinct unit that the public can invest in. Investors are then paid the interest and principal payments from these various mortgages as if they were the bank lending these different homeowners money.

Securitization, in theory, is a win-win. It lets the original lender rid itself of liabilities and make more loans, while enabling investors to play the role of lender and profit from these activities. The public doesn't always see it that way, though. Securitization has been accused of encouraging reckless borrowing and triggering one of the worst financial crises on record.

- process of transforming a group of income-producing assets into one investable security.
- Investors are paid the interest and principal payments from these securitized assets.
- Securitization increases liquidity and access to credit.
- However, the products created, asset-backed securities, have been accused of lacking transparency.
- Skeptics say securitization encourages banks and other lenders to not care about the quality of the loans that they underwrite.

How Does Securitization Work?

1. The company holding the assets, otherwise known as the originator, gathers data on the loans or income-producing assets that it no longer wants to service (they could be mortgages, personal loans, or something else). It then removes them from its balance sheets and pools them into a reference portfolio.
2. The assets in the reference portfolio are sold to an entity such as a special-purpose vehicle (SPV), which turns them into a security that the public can invest in. Each security represents a stake in the assets from the portfolio.
3. Investors buy the created securities in exchange for a specified rate of return. In most cases, the originator continues to service the loans from the reference portfolio, collecting payments from the borrowers and then passing them on, minus a fee, to the SPV or trustee. The generated cash flows are then paid to the investor.

Usually, the reference portfolio is divided up into different tranches. Each tranche, or section of the portfolio, will consist of assets that share something in common, such as similar maturity dates, and interest rates.Investors need to have a rough idea of what each asset-backed security (ABS), the end product of securitization, contains and the level of risk that they are taking on. Generally, the greater the likelihood of default, the higher the reward Any type of asset with a stable cash flow can be grouped together, securitized, and sold to investors.

Why Do Banks Use Securitization?

Securitization gives the original lender the possibility to remove the associated assets from its balance sheet, reducing liabilities and freeing up space to underwrite more loans. There are many benefits to this strategy. Other than taking a nice cut from the assets it sells, securitization lets the bank appease customer demand for credit and can help boost its credit rating.3

Diamond Hill Capital Management. “Mechanics and Benefits of Securitization.”

This method represents a cost-effective way for lenders to raise money, grow their loan book, and expand their business.