CHAPTER 1: COMPUTER OPERATING SYSTEM & APPLICATIONS

1.1 Introduction

Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several industries are associated with information technology, including computer hardware, software, electronics, semiconductors, internet, telecom equipment, and e-commerce.

1.2 Knowing Computer

A computer is an electronic device that manipulates information, or "data". It has the ability to store, retrieve, and process data. You can use a computer to type documents, send email, and browse the internet. You can also use it to handle spreadsheets, accounting, database management, presentations, games, and more. In simple terms, a computer is an electronic device that performs diverse operations with the help of instructions to process the information in order to achieve the desired results.

Due to its memory, high speed and perfection, its application can be extended to almost infinite levels. Millions of complex calculations can be done in mere fraction of time. Difficult decisions can be made with accuracy for comparatively little cost. Computers are widely seen as instruments for future progress and as tools to achieve substantiality by way of improved access to information by means of video conferencing and e-mail.

When reading the above definitions you may find some common behaviors of computers such as;

- It is a man-made machine
- It accepts instructions of a human given in a sequential manner
- As per the given instructions, it performs some calculations and does changes for the information fed by human
- Releases or produces an output that is useful to the user

Since the computer is a man-made digital electronic device, it has a physical structure with several parts like the monitor, processor, mouse, and key board which are tangible. These are called Hardware. The sets of instructions which are also called computer programs installed in

the computer are called Software. These software tell the hardware what to do and how to do to accomplish some tasks expected by the user to get done by the computer.

1.2.1 Characteristics of a Computer

The computer's dominance lies in its special characteristics such as speed, reliability, accuracy, versatility, diligence, storage capacity, etc.

Speed:

A computer can perform tasks very fast. Today's computers, according to their class, can perform from 4 MIPS (Millions of instructions per second) to 100 MIPS. Inside the computer the information signal travels at incredible electronic speed. When data, instructions, and information flow along these circuits, they travel at close to the speed of light. This allows billions of operations to be carried out in a single second.

Accuracy:

The accuracy of a computer is consistently high and the degree of accuracy of a particular computer depends upon its design. In fact, this quality of the computers make them indispensable in various fields such as Scientific Research, Space Research, Weather Predictions and many other areas where precision of a high order is required. Errors can occur in a computer, but these are mainly due to human mistakes. The accuracy of the computer is best achieved by programming them in the most efficient manner. When it comes to very complex mathematical or scientific problem the computer's accuracy has no substitute.

Reliability:

The computers give very accurate results with predetermined values. They correct and modify the parameters automatically, giving suitable signals. They give formatted results with high degree of precisions. The high reliability of the components enables the computer to produce consistent results.

Versatility:

The computers have the capacity to perform completely different type of work. For example, they are capable of performing wide ranging tasks such as construction of a payroll, inventory management in a factory, hotel billing, hospital management, banking applications and any imaginable task in every walk of life. The computers are flexible enough to adapt to any type of work and outputs according to what is fed and instructed.

Diligence:

Unlike human beings, a computer is free from boredom, tiredness, lack of concentration, etc. hence a computer can work for hours without making any errors or complaints. Even if ten million calculations have to be performed, a computer will perform the ten millionth calculations with exactly the same accuracy and speed as the first one. But when a human being

is asked to do the same job this consistency cannot be achieved. Thus for those who want consistent and continuous standard output, computer's 'diligence' is of great help.

Storage Capacity:

The computer has an in-built memory where it can store a large amount of data. This is called Primary Storage. This Primary Storage has a limited capacity but it is very important as the processing unit of the computer can act directly only on instructions and data on the primary storage. But, you can also store data in secondary storage devices such as floppy disks, compact disc and magnetic tape, which can be kept outside your computer and can be carried to other computers. These are called Secondary Storage. Before the computer can process the data stored in Secondary storage devices, the data must be moved from secondary storage device to primary storage.

1.2.2 Limitations of a Computer

Despite of various features, computer does have the following limitations.

No Decision–making power:

A Computer lacks the quality of decision making. Programs can be designed for a computer to arrive at decisions. But such decisions will be procedural, without taking into consideration the prevailing situation.
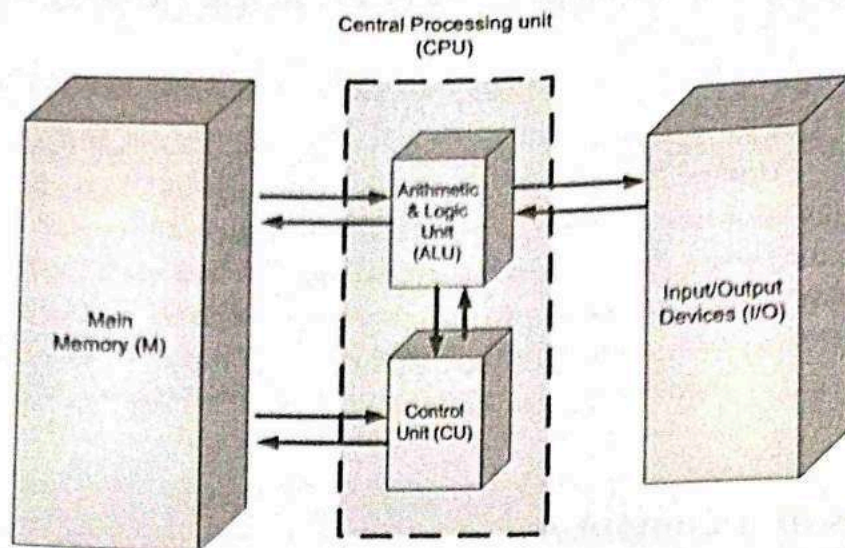
No Intelligence:

Computer is a dumb machine and it cannot do any work without instruction from the user. It performs the instructions at wonderful speed and with accuracy. It is you to decide what you want to do and in what sequence. So a computer cannot take its own decision as a normal Human being can.

No Feeling:

Computers do not have emotions. They have no feelings and no instincts because they are machines. Although human beings have succeeded in building a memory for the computer, a computer does not possess the equivalent of a human brain. Based on our feelings, taste, knowledge and experience, we often make certain judgments in our day-to-day life, but computers cannot make such judgments on their own. Their judgment is based on the instructions given to them in the form of programs by someone.

1.2.3 Components of Hardware

Central Processing unit
(CPU)

Arithmetic
& Logic
Unit
(ALU)

Control
Unit (CU)

Main
Memory (M)

Input/Output
Devices (I/O)

Basic Computer Architecture and the organization

A. Input Unit: This unit accepts instructions and data

B. Output Unit: This unit communicates the results to the user

C. Storage Unit (Main memory): This unit stores temporary and final results.

D. Central Processing Unit (CPU): This unit performs processing of instructions and data inside the computer.

Input Unit:

A computer executes instructions and processes data into information and stores the information for future use. Input devices are used to enter instructions and data into the computer.

- **Data:**

  Data is a collection of unorganized facts that can include words, numbers, pictures, sounds, and videos. A computer manipulates and processes data into information, which is useful.

- **Program:**

  A program is a series of instructions that tells a computer how to perform the tasks necessary to process data into information. Programs are kept on storage media such as a floppy disk (not used now), hard disk, CD-ROM, or DVD-ROM. Programs respond to commands issued by the user.
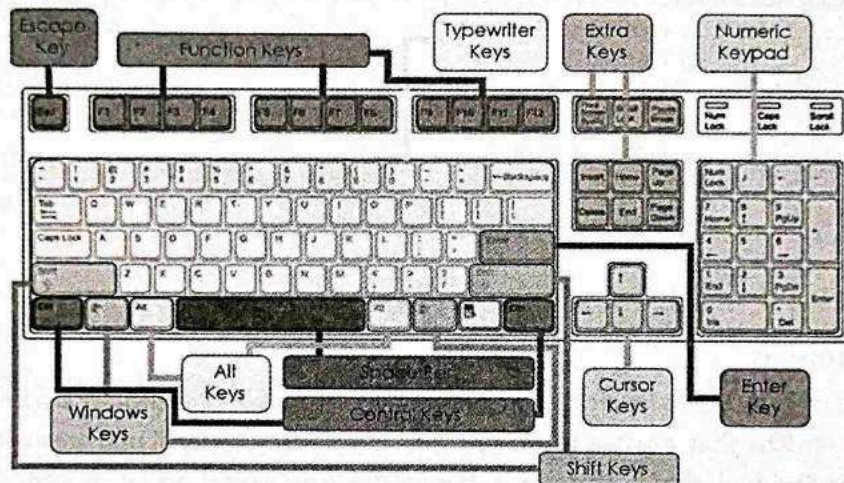
- **Command:**

  A Command is an instruction given to a computer program. Commands can be issued by typing keywords or pressing special keys on the keyboard. A keyword is a specific word, phrase, or code that a program understands as an instruction. Today, most programs have a graphical user interface (GUI) that uses icons, buttons, and other graphical objects to issue commands. However, GUI is the most user friendly way to issue commands.

- **User Response:**

  A User Response is an instruction which is given by you to the computer by replying to a question posed by a computer program. For example, 'Do you want to save the changes you made?' Based on the response given by the user, the program performs certain actions. In this example, if the answer was 'Yes', then the program saves all changes you made to the file on the storage device.

- **Keyboard:**

  The keyboard is the main input device for most computers. It is a text based input device that allows the user to input alphanumeric characters and some other special characters. The keyboard consists a set of keys mounted on a board. Each key or button acts as an electronic switch corresponding to a symbol.

- **Mouse:**

  A mouse is another standard PC input device that is used to point to and click objects on the screen. Most mice have two buttons that can be pressed to execute commands. Some mice have a wheel that allows users to scroll and zoom without using the mouse buttons. The latest mice on the market use light, instead of ball, to detect movement. These devices are called optical mice, and there are many different types available. Some have cables that must be plugged into your computer and others are wireless.
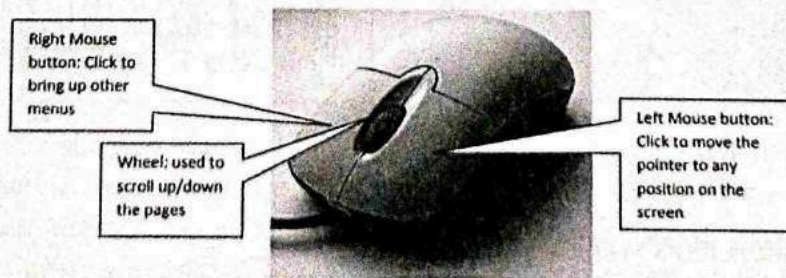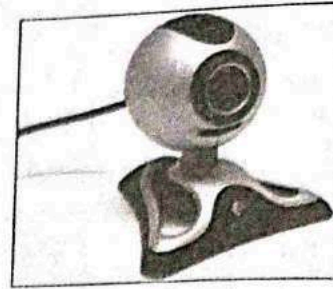

Some other input devices include touch pads, joystick, light pens, microphones and webcams.
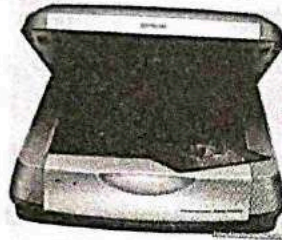
Joystick   Light Pen   Webcam

- **Scanner:**

Scanner is an image acquisition device connected to the computer, which captures either an image of a text document or a picture and transfers it into bits of information, which a computer can understand and manipulate.

Scanners

- **Bar code reader:**

A bar code reader uses laser beams to read bar codes. The Bar code is a trip of vertical bars of varying widths that creates a unique reference for the particular item. Groups of bars represent individual digits and most bar codes are made up of 12–13 digits. The last number is a check digit and it is used to verify that the number has been scanned in correctly. The computer applies a set of calculations to the individual digits and the answer should equal to the last check digit. Bar code reader uses a visible red light to scan the bar code and it is interpreted through a decoder.
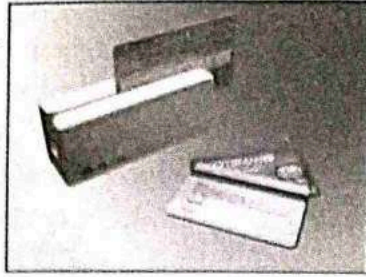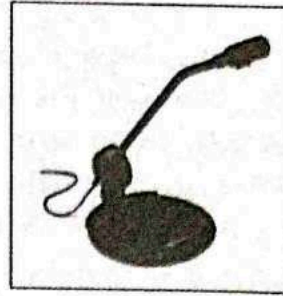

Hand-held bar code reader

780863 185779

Sample barcode

Following figures show some input devices.

Hand-held bar code reader   Sample barcode

Output Unit:

Output is data that has been processed into a useful form called information. The results of the data processed by the computer are available in electronic signals. The output unit converts these signals into a form which could be easily understood by us. Computers generate several types of output, depending on the hardware and software being used and the requirements of the user. You may choose to display or view this output on a monitor, print it on a paper using a printer, or listen to it through speakers or a headset.

- **Text:**

  Text consists of characters that are used to create words, sentences and paragraphs. A character can be a letter, number, punctuation mark, or any other symbol that requires one bite of computer storage space.

- **Graphics:**

  Graphics are digital representations of non–text information such as drawings, charts, pictures and photographs. Graphics also can be animated, giving them the illusion of motion. Animations are created by displaying a series of still images in rapid sequence.

- **Audio:**

  Audio is Music, speech, or any other sound. You might have learnt at school that sound waves, such as the human voice or music are analog. To store such sounds, a computer converts the sounds from a continuous analog signal into a digital format.

- **Video:**

  Video consists of images that are played back at speeds that give the appearance of full motion. Video often is captured with a video input device such as video camera or VCR. Most video signals are analog; however, most of the modern video devices record the video images digitally.

- **Monitor:**

  The monitor displays the output to the user visually. Therefore it is also called the Visual Display Unit (VDU) or simply the screen. The monitor looks like a television, but they often have higher resolutions than a normal television. The technology used with monitors is expanding rapidly and there are types of monitors that differ in the technology of visualizing the output to the user. They are Cathode Ray Tube (CRT) monitors, Liquid Crystal Display (LCD) and Light Emitting Displays (LED).
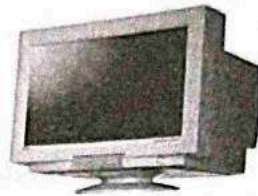
CRT Monitor   LCD Monitor

- **Printer:**

  Printer is the most commonly used output device. It is used to prepare permanent documents in human – readable form i.e. hard copy. There are several types of printers that are designed for different types of applications. Printers are of two types–impact and non-impact. Impact printers use the familiar typewriter approach of hammering a typeface against paper and inked ribbon. Non- impact printers do not hit or impact a ribbon to print. They use thermal, electrostatic, chemical and inkjet technologies.

Ink Jet Printer   Dot Matrix Printer   Thermal Printer

Laser Printers

- **Storage Unit:**

  Storage is non-volatile which means that items in storage remains even when power is removed from the computer. A storage device is the mechanism used to record and retrieve items to and from a storage medium. A storage medium is the physical material on which the items are kept.

There are two types of storage devices;

a. Primary storage device
b. Secondary storage device

A. Primary Storage Device

- **Random Access Memory (RAM):**

  Primary storage is usually referred to as Random Access Memory [RAM] because it is possible to randomly select and use any location of this memory to directly store and retrieve data and instructions. It can also be referred to as read/write memory because information can be 'read' from a RAM chip also be 'written' into it.

- **Read Only Memory (ROM):**

  A Read Only Memory (ROM) is one in which information is permanently stored. The information from the memory can only be read and it is not possible to write fresh information into it. This is the reason why it is called ROM. When the power supply is switched off, the information stored inside ROM is not lost as it is in the case of a RAM chip. ROMs are mainly used by computer manufacturers for storing the micro programs so that they cannot be modified by the users.

B. Secondary Storage Device

- **Floppy Disk:**

  A floppy disk is a data storage medium that is composed of a disk of thin flexible floppy magnetic storage medium encased in a rectangular plastic shell. Data recorded on a floppy disk is read and stored in a computer's memory by a device called a floppy disk drive (FDD).

Floppy Disk

A hard disk drive is the device used to store large amounts of digital information in computers and related equipment. Hard disk drives are used to store operating systems, software and working data. These are suitable for any application which requires very fast access to data for both reading and writing to.
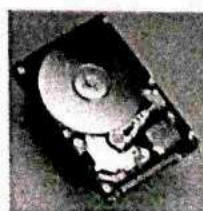
Optical backing storage – CD & DVD

CDs tend to be used for large files (but smaller than 1 GB) which are too big for a floppy disc to hold such as music and general animation. DVDs are used to hold very large files (several GBs) such as movie films. Both CDs and DVDs are portable i.e. they can be transported from one computer to another. Both can be used to store computer data
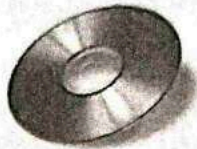
Magnetic Tapes

When storing large amounts of data, tape can be substantially less expensive than disk or other data storage options. Tape storage has always been used with large computer systems. Since tape is a sequential, and not a random- access media, a tape drive has to wind through a tape to locate a specific bit of data. This makes accessing data slow so tape is mainly used for system backups and regular archiving of files and records.

Memory sticks/Pen drives

USB flash drives are typically removable and rewritable, much smaller than a floppy disk. Storage capacities typically range from 64 MB to 512 GB. USB flash drives offer potential advantages over other portable storage devices, particularly the floppy disk. They have a more compact shape, operate faster, hold much more data, have a more durable design, and operate more reliably due to their lack of moving parts. The device is recognized automatically when we connect it to the computer. Flash drives are widely used to transport files and backup data from computer to computer.

Flash memory cards

A memory card or flash memory card is a solid-state electronic flash memory data storage device used with digital cameras, handheld and Mobile computers, telephones, music players, video game consoles, and other electronics. Nowadays, most new PCs have built-in slots for a variety of memory cards; Memory Stick, Compact Flash, SD, etc.

1.3 Basics of Operating Systems

A computer knows and understands only the machine language, i.e. 0s and 1s. But human beings are comfortable only with the human languages (humans can work with machine language, but it is tedious). Hence a communication pathway is required between human and computer. Operating system acts as the communication pathway. A computer without operating system is like a flashlight without battery.
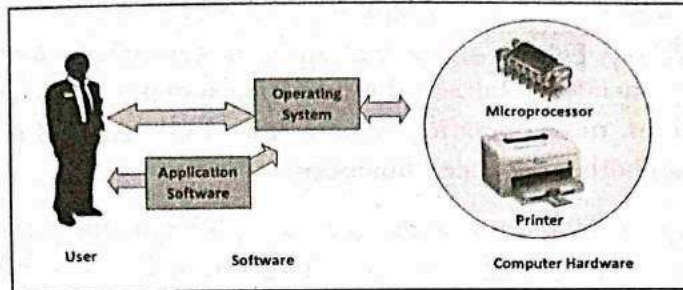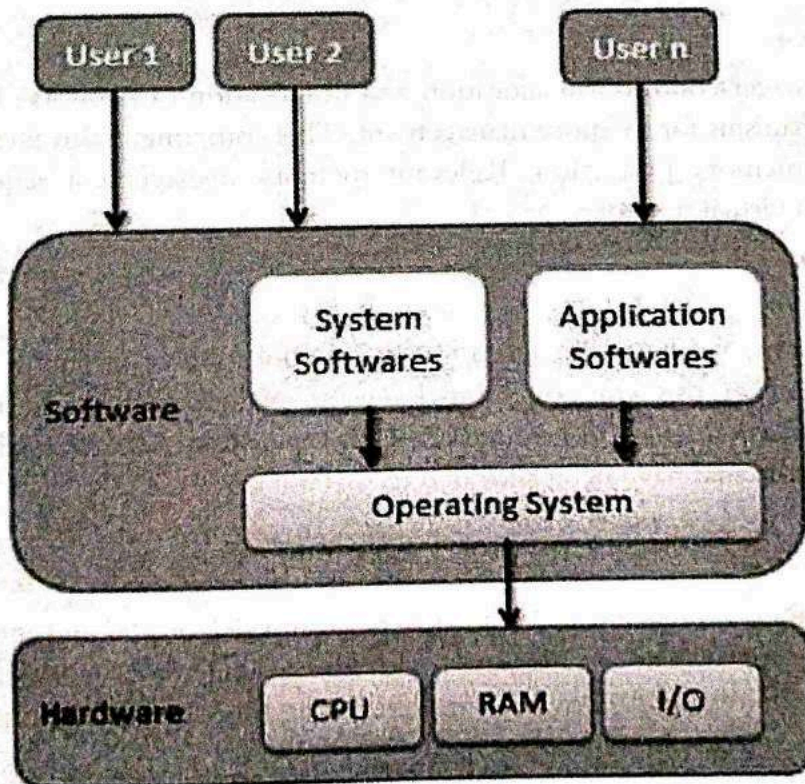

Operating System – An interface between user and hardware

1.3.1 Definition

A program that acts as an intermediary between a user of a computer and the computer hardware. Operating System goals;

- Execute user programs and make solving user problems easier
- Make the computer system convenient to use
- Use the computer hardware in an efficient manner

1.3.2 Functions of Operating Systems

The most important functional components of the operating systems are:

- Process Manager
- Memory Manager
- Resource Manager
- File Manager
- Device Manager

These components are actually modules of the operating system and are strongly related. Apart from these basic functions, most operating systems have some type. of network management, security management, and other advanced functions.

Process Manager

It can be considered as the most important component of the operating system. It carries out several issues such as creating, suspending, executing, terminating and destroying processes.

With multiprogramming, several active processes are stored and kept in memory at the same time. If there is only one CPU in the system, then only one process can be in execution at a given time; the other processes are waiting for CPU service. The decision regarding which process to execute next is taken by the scheduler. The dispatcher allocates the CPU to a process and deallocates the CPU from another process. This switching of the CPU from one process to another process is called context switching and is considered overhead time.

Memory Manager

The memory manager controls the allocation and deallocation of memory. It imposes certain policies and mechanisms for memory management. This component also includes policies and mechanisms for memory protection. Relevant memory management schemes are paging, segmentation, and virtual memory.

Resource Manager

The resource manager facilitates the allocation and deallocation of resources to the requesting processes. Functions of this component include the maintenance of resource tables with information such as the number of resources of each type that are available and the number of resources of each type that have been allocated to specific processes.

File Manager

The file manager allows users and processes to create and delete files and directories. In most modern operating systems, files are associated with mass storage devices such as magnetic tapes and disks. Data can be read and/or written to a file using functions such as open file, read data from file, write data to file, and close file.

Device Manager

For the various devices in the computer system, the device manager provides an appropriate level of abstraction to handle system devices. For every device type, a device driver program is included in the OS. The device manager operates in combination with the resource manager and file manager.

1.3.3 Categories of Operating Systems

The operating systems can be classified into one of the following categories, based on how user programs are processed:

Batch Systems

A set of jobs is submitted in sequence for processing. These systems have a relatively long average turnaround period (interval from job arrival time to completion time) for jobs.

Interactive Systems

This support interactive computing for users connected to the computer system via communication lines. The most common type of operating system that support interactive computing is time-sharing. The below figure illustrates the general structure of a time-sharing system. A time-sharing system is an example of a multiuser system, which means that multiple users are accessing the system at the same time.
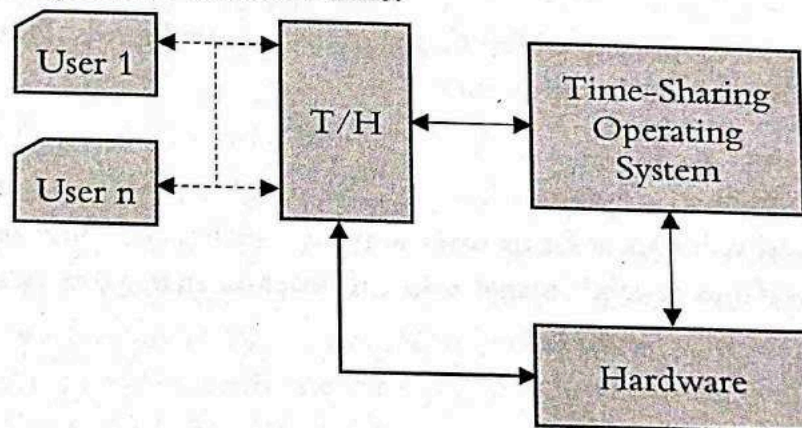
Figure. General structure of a time-sharing system

Real-time Systems

This support application programs with very tight timing constraints.

Hybrid Systems

This support batch and interactive computing.

The most general classification of operating systems is regarding the application environment and includes the following categories:

General purpose

Used mainly to develop programs and execute these on most types of platforms.

Application-dependent

They are designed for a special purpose. An example of this type is a real-time operating system that controls a power plant for the generation of electricity.

Systems can also be classified as being single user or multiuser. In single-user systems, the single user has access to all resources of the system all the time. In multiuser systems, several users request access to the resources of the system simultaneously.

1.3.4 Windows Features

Most PCs run on an operating system called Windows. Here we deal with the Windows 7 professional version of the Windows operating system. The operating system is what allows you as the user to access the information in the computer. To understand how to use a computer, it is important to know several features of the Windows system.

Desktop

The desktop is the area you see when the computer is not running applications. It consists of the icons on top of it, as well as the Start button and other features. The desktop can be used to temporarily store information or to move around documents and windows.

Icon

Icons are little pictures that represent different programs or saved items. Double-clicking on the icon accesses the information icons represent.

Window

Each application opened will appear in its own window, or its own little section of the screen. Windows can be moved and resized so that you can operate many different applications at the same time.

Dialogue Box

When you ask the computer to do certain commands, such as to save your work, the computer will need more information from you, and this will appear in a dialogue box. These boxes contain options and commands for the computer to execute.

Start Menu

In the lower left-hand corner of the Windows screen is the Start button. When you click on the button a menu will appear, which we will call the Start menu. This menu gives you access to all the different parts and functions of the computer.

Task Bar

At the very bottom of the screen is a horizontal bar called the task bar (below Figure). This bar contains (from left to right) the Start button, shortcuts to various programs, minimized programs, and another section of shortcuts that includes sound volume, printers and the time.

Figure. Task Bar

Tab Menu

Tab menus, which are often present in dialogue boxes, are menus that represent many different "pages" of information. To access each "page," click on the tab at the top of the dialogue box.

1.3.5 Start Up, Shut Down

Start Up

First of all, you will need to turn the computer on. Do this by pushing the power button on the front of the computer unit. The computer takes a few minutes to start up, so be patient.

Shutdown

To shut down, click with your mouse on the button in the lower left-hand corner of the screen labelled Start. On the menu that pops up, you have multiple options for exiting your windows computer. Options are Shut Down, Switch User, Log Off, Lock, Restart, Sleep and Hibernate. Choose the Shutdown button in the lower right hand corner to turn the computer off. To switch to another user, press the arrow next to the Shutdown button and click Switch user. To Log off of the computer, click the arrow next to the Shutdown button and click Log Off. If you would rather just lock the computer, blocking anyone else from using the computer without your password, choose Lock.
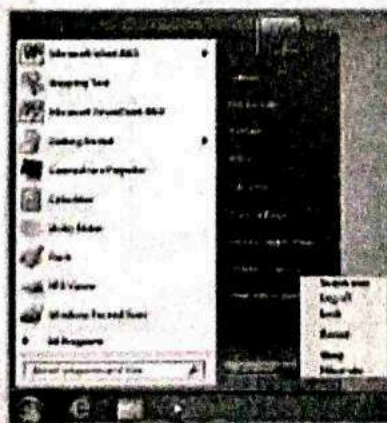

Figure. Shutdown Menu

Stand By

When a computer is left alone for a while, it goes into "sleep" or "stand by" mode to save energy. In stand by mode, the computer slows down its inner processes because they are not being used. The computer also blacks out the monitor. If you wish to use a computer and the monitor is dark, check to see if it is in stand by before you try to start it up. Usually, the computer has a green light on or near the power button that signifies that it is on, but in stand by mode. To "wake it up," move the mouse or hit a key on the keyboard. In about 8–10 seconds the computer will wake up and be fully functional. If you do not realize that the computer is in stand by and you try to turn it on with the power button, the computer will wake up and a dialogue box will appear, but it will not damage the computer.

1.3.6 Opening and Closing an Application

To Open an Application you have two options:

1. Open the Start Menu and click on the name of the application.
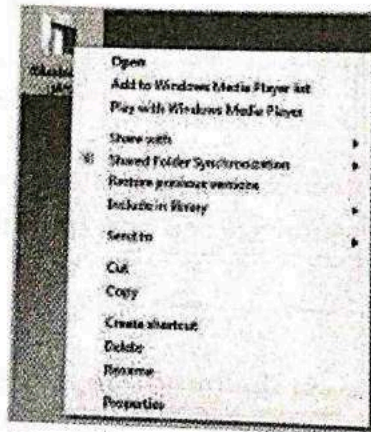2. Find the icon for the application and either double click it or right click and choose Open.

Figure. Open Applications

To Close an Application:

1. Most applications can be closed by going under File menu and selecting Quit or Exit. If no file menu is available, click on the "X" button in the upper right–hand corner of the application's window.
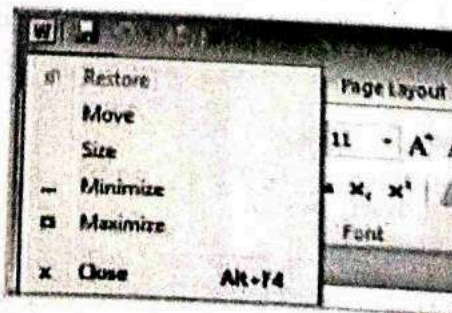

Figure. Close Applications

1.3.7 Manipulating Windows

The sizes of the windows on your screen can be changed so that more windows are visible. Following is a list of common features that can be implemented on all windows.

Maximize

This function allows you to concentrate on one application by making its window cover the entire screen.

Minimize

This function allows you to keep an application running, but remove it from the desktop area so that other applications can be accessed. The minimized program becomes a bar at the bottom of the screen, and can be accessed by clicking on the bar.

Resize

If an application window is not maximized, it can be resized so that more or less of the content can be seen. If you move your mouse pointer to one of the edges of the window, it will become a two-way arrow. At this point, hold down the left mouse button and drag the perimeter of the window in or out. When you release the mouse button, the window will resize to your specifications.

Close

This function closes and exits the application you are running. However, if you are running an application such as Microsoft Word, the window of each document will have a close button, and clicking this button will only close that particular document, and not the entire program. It is important to always save your work before using the close feature, as any unsaved changes will be lost.
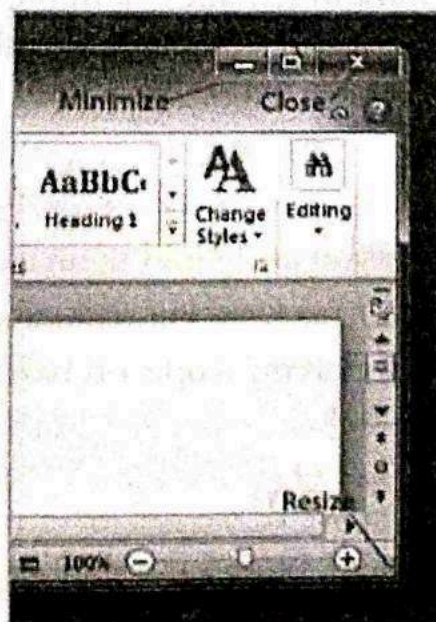

Figure. Manipulating Windows

1.3.8 Saving

Saving material onto a disk stores that material so that it can be accessed again. Any work you do on the computer should be saved, including papers and other assignments. Although you may be working in different applications, the saving procedure is generally the same.

1. Insert a disk into the correct disk drive.
2. Go under the File menu in the application, and choose "Save As."
3. When the Save As dialogue box appears, click the arrow button next to the Save In box. This will cause a menu of save options to appear.
4. To save on your removable disk, choose either the Zip Drive.
5. Type in a filename that will identify your document at the bottom of the box.
6. Click the Save button located in the lower right-hand corner of the box.
7. To resave work as you continue, you only need to click on the save icon or go under File > Save.
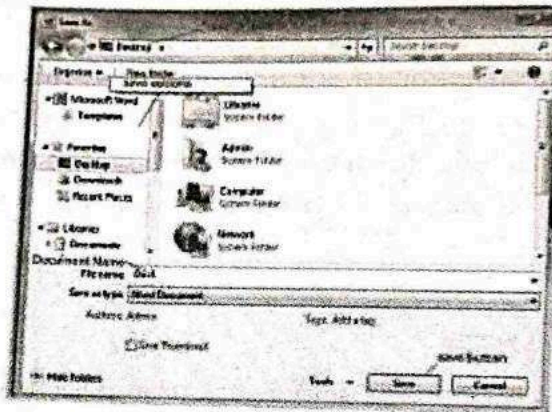
Figure. Save Dialog Box

Tips For Saving

- Save often. This is by far the most important step in the saving procedure. The more you save, the less chance you have of losing any of your hard work. Errors and freeze-ups can occur, and unsaved work will be lost. Also, always save before printing because this is the time when many errors occur.

- Use specific filenames. When naming your saved works, label them with detailed names so for easier identification when you go to find them again.

- Back up your saved works. Disks have been known not to not certain saved works because of errors. Make sure you save important works on two disks so that if one disk fails, you have a backup copy on another disk.

1.3.9 Printing

Most labs have one or two printers that are shared by many computers in the lab. As with saving, most applications print in a similar fashion. Follow these steps to print your work.

1. Save your work. Computers sometimes freeze when you ask them to print, and all of your work may be lost.
2. Go under the File menu to Print.

3. When the dialogue box appears, check to make sure that the printer listed is the printer in the lab you are in. If it is not, click on the arrow to the right of the printer name and choose the correct printer.

4. Choose how many copies you would like printed.

5. Decide if you only want a portion of the work to be printed and choose the number of pages to print.

6. Click OK.
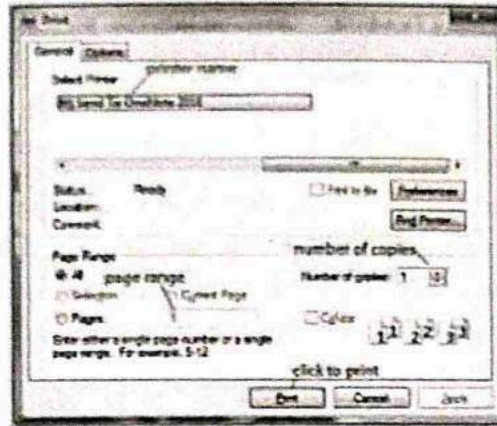
Figure. Print Dialog Box

1.3.10 Deleting Files

If you choose to delete an item from your disk or from the computer's hard drive, you will need to access the Recycle Bin. It is important to remember that you may only delete items from the hard drive that you have created. To delete an item from a disk or the hard drive, use the following steps.

1. If it is on a removable disk, first insert the disk into the correct drive. Next double-click on the My Computer icon on the Desktop. Choose the drive that the item is located on by double clicking the appropriate drive icon. Open the file that the item is located in.

2. Left-click on the item that you wish to delete and hold the button down.

3. Drag the item out of the window it is in and place it over the Recycle Bin located on the Desktop.

4. When the Recycle Bin is highlighted, release the button. The item should disappear from the drive.

5. When the dialogue box appears asking you if you are sure you want to delete this item, click Yes.

Figure. Delete Files

When you deposit items in the Recycle Bin, they will not be permanently removed computers memory without you telling it to do so. If you decide you still want something, double-click on the Recycle Bin and drag the item back out. To permanent an item from the computer, right-click on the Recycle Bin and choose Empty Rec Remember, once you empty the Recycle Bin, the items inside will be permanently era the computer's memory.

Figure. Empty Recycling Bin

1.3.11 Start Menu

In the bottom left-hand corner of the Windows screen is a button with the windows icon button displays a menu that gives you access to many of the computer's features. Once th menu is opened, all you have to do is highlight what you want and more options will a Here we will discuss the many features and uses of the Start menu from top to bottom.

Figure. The Start Menu

Figure. Delete Files

When you deposit items in the Recycle Bin, they will not be permanently removed from the computers memory without you telling it to do so. If you decide you still want to keep something, double-click on the Recycle Bin and drag the item back out. To permanently erase an item from the computer, right-click on the Recycle Bin and choose Empty Recycle Bin. Remember, once you empty the Recycle Bin, the items inside will be permanently erased from the computer's memory.
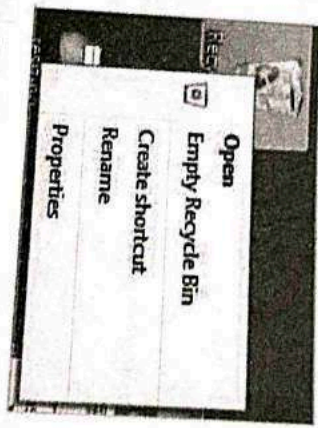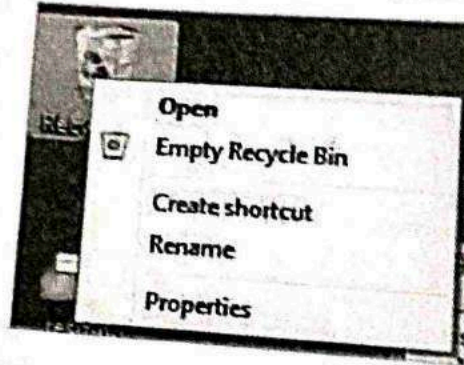
Figure. Empty Recycling Bin

1.3.11 Start Menu

In the bottom left-hand corner of the Windows screen is a button with the windows icon. This button displays a menu that gives you access to many of the computer's features. Once the Start menu is opened, all you have to do is highlight what you want and more options will appear. Here we will discuss the many features and uses of the Start menu from top to bottom.

Figure. The Start Menu

New Office Document

This feature acts as a shortcut for opening a new document in Microsoft Office. You can choose from a variety of document formats.

Open Office Document

This feature acts as a shortcut for accessing a saved document or file.

Windows Catalog

This item opens Internet Explorer to a site in which you can purchase products built for Windows systems.

Windows Update

This item opens Internet Explorer to a site in which you can download updates for your Windows operating system.

Programs

This prompt will open another menu filled with more options. These options are all programs that the computer can run. To see what the Programs menu has to offer, refer to the Programs page.

Documents

This item allows you to temporarily store saved works.

Settings

This menu contains access to the Control Panel as well as your Network Connections; Printers and Faxes; and Taskbar and Start Menu. Through these options you can customize the appearance and functions of your computer.

Search

This menu allows you to find anything on the computer or the internet.

Help and Support

This feature will open the Windows Help and Support Menu.

Run

This item allows you to run programs located on a disk, CD, or on the internet.

Log Off

This allows you to log off the computer. (It is not important for use in your own home or in a computer lab).

Turn Off Computer
When this phrase is clicked, the Shut Down menu will appear, allowing you to hibernate, shut down, or restart the computer.

1.4 Computer Applications

The term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer. Applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system. The application programs are designed and developed to run in a System Software which is an Operating system. An Operating System is system software that enables al the applications programs to run and execute various tasks in a Computer system. The GUI based applications carries out various tasks in a Computer like creating documents, playing games, browsing and many more.

Application Software Overview

Application software's are the end-user programs designed to enhance the productivity in various fields of work. The applications are used for creating documents, spreadsheets, databases, and publications, doing online research, sending email, designing graphics, running businesses, and also playing games. Application software's are designed to perform a specific task and can be as simple as a calculator application or as complex as a word processing application. The applications are designed with built-in functions and properties so to easily carry out all the operations. One of the most popular and widely used applications is Microsoft word processor where you can do calculations, copy, paste, delete, and add colors and pictures, change the appearance by using its built-in properties. Not only Word processor applications but there are several other productivity programs like Graphical software, Photo studio, Antivirus and many more that are packed as an Application software.

Application software cannot run itself as it requires system software for executing the programs. System software like Windows, Mac, Linux and many more helps the application software's to run and execute in a Computer. As a Computer needs an Operating system, an Operating system needs Application software's, so without applications the computer is nothing but a blank page. Since the system software's also integrates some built-in application programs when installed on a computer that can be used. But there are several applications like Microsoft Office which is a complete suite of programs that includes Excel, Power point, Access etc, Graphic suites like Adobe Creative suite with various applications for creating and editing images, Audio master suite for sound production, Video editing applications, Security software's and most importantly Web-browser which is also application software.

Application Software can be divided into two broad categories are System Software and Applications Software.

System Software is a program designed to manage all the hardware resources and also runs the applications programs in a Computer. It is mainly of two types are the Operating system and

utility software that is installed with the Operating system. The Operating system and utility programs are written in such a way to function independently because they are not user oriented. It always runs in the background and executes all the operations in a Computer. But there are some system software's that are used by the end-users like a Device manager which is found on Control panel.

Operating systems like Windows, Mac, Linux, and UNIX are the best examples that manage all the programs in a Computer. Since there are other systems software's that help the OS to perform all the tasks like BIOS (Basic Input/output system) that manages data flow between OS and other attached devices such as keyboard, mouse, hard drives etc. Boot program loads the Operating system to RAM, an Assembler takes basic instructions and converts them to machine language to perform operations and a Device manager controls all the devices attached to Computer. The utility software's like disk derangement, system restore, compilers and debuggers are also installed on the Operating system software.

Application Software is a program or a group of program designed for the end-user to perform a specific task in a Computer. The user directly interacts with the application programs for performing a task in a system. Some of the applications software's are browsers, e-mail clients, word processors, spreadsheet, database programs and many more that has various built-in functions to be used. Furthermore the Applications Software's are also broadly categorized for better productivity. Some of them are:

- *Application suites* are packed with multiple programs with user interfaces, features and functions to interact with the users. Some of them are Microsoft Office, Adobe Creativity suite, Security suite, Gaming apps and many more.

- *Enterprise Software* labels the organization requirements and also manages data flow in a huge environment. It may be an automated billing system, e-mail marketing, business intelligence and Content management.

- *Enterprise Infrastructure Software* provides the capabilities required to support enterprise software systems. It is mainly used for businesses, society or Organization for network security, surveillance system, transportation, sewage, communication, electricity and water that need high investment for the systems.

- *Educational Software* includes all the contents of different subjects that can be used by a student or any individuals. There are several websites providing educational software about various topics and vast database makes it an easy to use application.

- *Multimedia Software* is used for development of media in our day to day life. There are various audio, video and image editing tools, printing media that can be used to maximize the growth of a business.

- *Content Access Software* is used to access the contents in a website for publishing digital contents and entertainment.

- *Information Software* is used for addressing the needs of an individual by creating and managing information for individual projects within the department. It may be the word processors, spreadsheets, e-mail or blog clients etc.

1.5 Word Processing

Word Processor is an essential tool for the creation of documents. It help you to create the professional quality documents .You can type and format the text ,correct the errors and preview your work before taking the print out or distribute a document to others.

1.5.1 Launching Word

Step 1: Click the Start button in the bottom left hand corner of your screen.
Step 2: Choose Programs or all programs (depends on your operating system).
Step 3: Click the Microsoft office folder.
Step 4: Click Microsoft Office Word 2007.
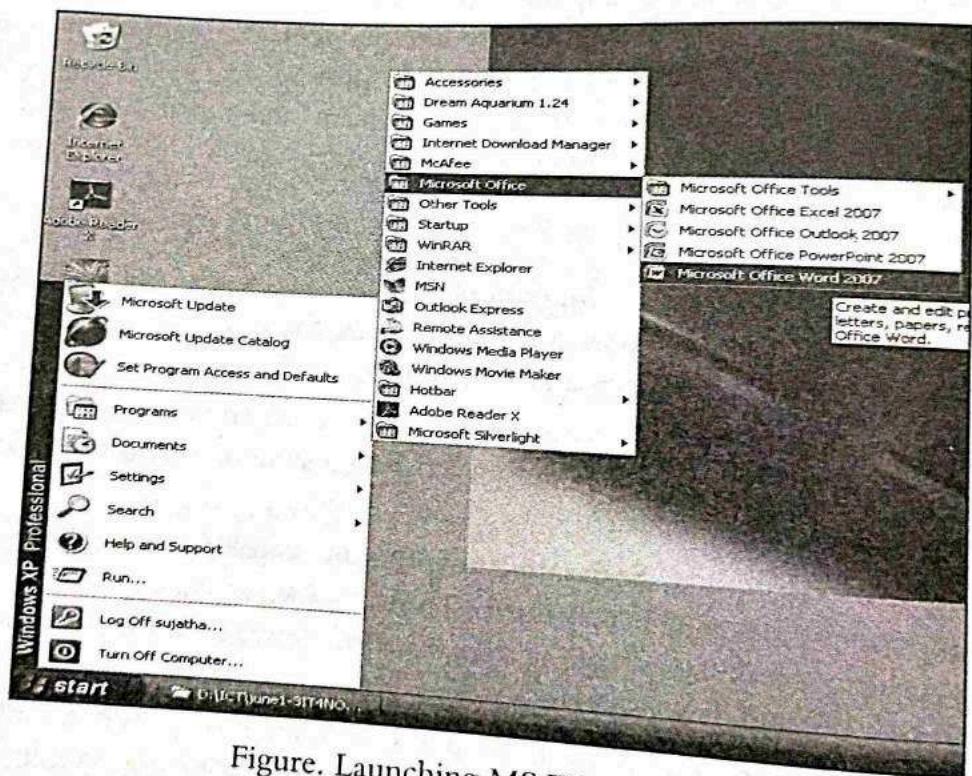
Figure. Launching MS Word 2007

1.5.2 Word Processing Basics

Menu Bar

You can click on any of these items (Home, Insert, Page Layout, References, Mailings, Review, View) to view a list of commands. The menu bar has been disbanded. Most of its functions, however, still remain, scattered among the tabs on the Ribbon. The Ribbon is designed to help you quickly find the commands that you need to complete a task. Commands are organized in logical groups, which are collected together under tabs.

Scroll Bar

Drag these vertical and horizontal scroll bars to view more of your document.

Tool Bar

Toolbars are customized by word, so you may not find all the options listed here. Several buttons may or may not appear immediately in your version of Word. Word includes many built-in toolbars that you can show and hide as needed. By default, the standard tool bar and the formatting tool bar are side by side below the menu bar.

1. Office Button
2. Quick Access Toolbar
3. Menu Bar
4. Ribbon
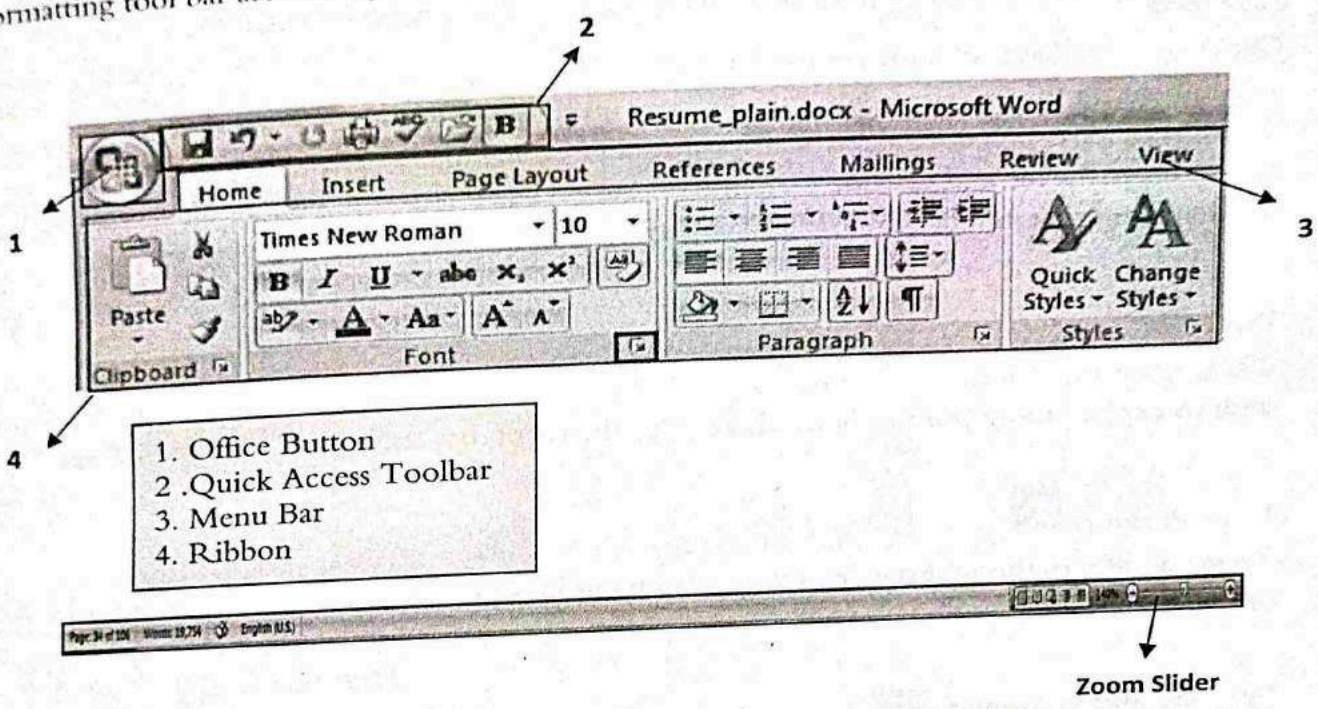
Figure. Screenshot of MS Word application

1.5.3 The Quick access Toolbar
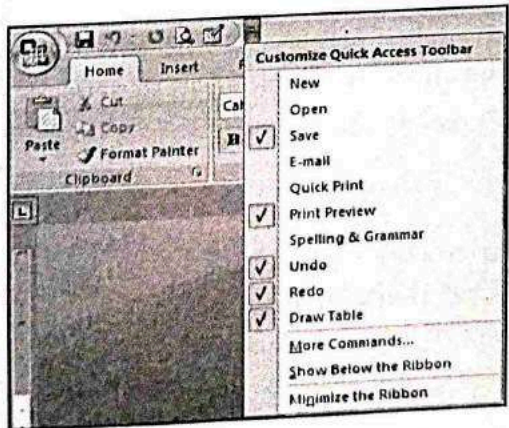
Figure. Quick Access Toolbar

New Blank Document

To begin a new document, click on the New Blank Document icon, shaped like a blank sheet of paper.

Open

Clicking on this icon opens up a previously saved document on your computer.

Save

Clicking on the Save icon to save the document you are currently working on. If you are saving a document for the first time, you can click on this button. However, if you want to save a new file from a preexisting document, then you must go to the menu bar and select "File" >> "Save As" and give the file a new name. When working on any document, you should be sure to save frequently, so that you do not lose any work.

Print

Clicking on the Print icon automatically prints the document currently active in Word. If you wish to explore more print options, then go to the menu bar and select "File" >> "Print."

Print Preview

To get an idea of the appearance of your document in print before you actually print it out, you can click on this icon to view your document from a zoom-out distance.

Spelling and Grammar

Clicking begins a review of your document in search of spelling and grammatical errors that may need to be corrected.

Copy

Copy the current selection to the clipboard, which can then be paste elsewhere in the document, or into a completely separate program/document.

Paste

Clicking on the Paste button inserts the text that has been most recently added to the Clipboard (the text would have been added there by Cutting or Copying). With Paste, you can either insert the copied text into a document or replace selected text.

Insert Hyperlink

You can make links to a particular web site, web page or some other kind of online file in your Word document. Using the Insert Hyperlink button, you can turn selected text into hyperlinks.

When the icon is clicked, a window will appear and it will allow you to insert the URL (web address) of the web page you want to link to. You can type in the URL yourself or insert a pre-existing bookmark. On inserting the link, the link in your Word document can be clicked and the web page will open up in a web browser.

1.5.4 Opening a document

To open the document to view, edit, or print, you must first open up that file in Word. You can open a file by clicking on the "Open" folder icon (with a picture of a folder) located in the standard toolbar. Alternatively, you can use the menu bar and navigate to Office Button>> Open... (Shortcut: Ctrl+O).
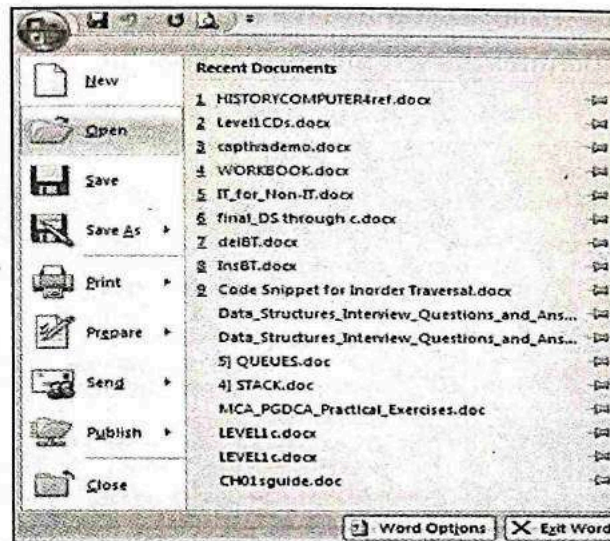
Figure. Opening a document

1.5.5 Saving a document

When you are working with any sort of media in any software, you should be sure to save your work often. In Word, there are numerous options for saving documents in a variety of file types. To save a new, unsaved document, you can click on the Save icon, shaped like a disk located on the standard toolbar. Or, you can go to the menu bar and select Office Button >>Save... (shortcut: Ctrl+S).
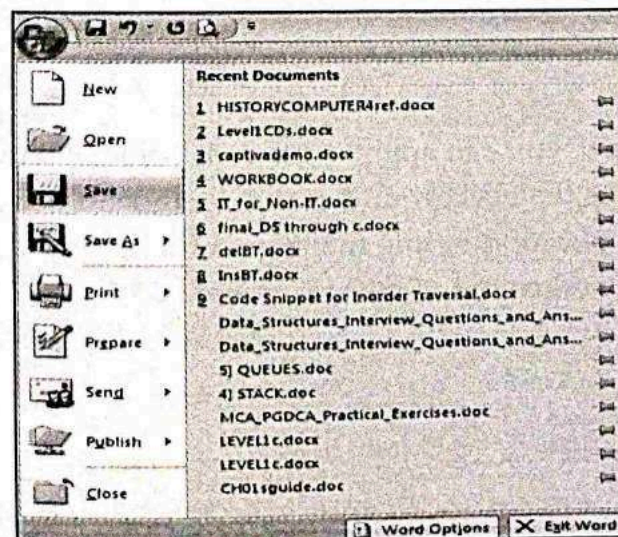
A dialog box will appear and it will offer you a number of options. To save the document in the desired location on your computer, locate and select the folder on your computer. Give your document a name in the file name text box. While you can give your document long names, make sure you save it with a name you can remember. Please note that it is good practice not to use spaces or special characters in file names. For example, a long file name may look like this: expos_sample_paper1.docx

To save a completely new document using previously existing (and opened) text, you use the Save As option. Open the document that you wish to save as an entirely new file, go to the menu bar, and click on Office Button>> Save as. In the file name text box, give your document a new name. Using this option allows you to save multiple versions (with different file names) or different extension of a document based on one original file.
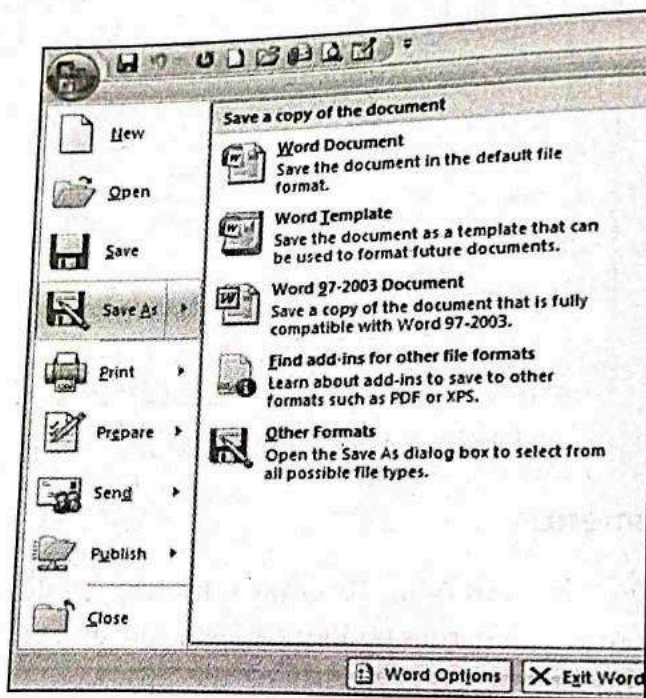
Figure. Saving document with different format

1.5.6 Formatting the text

Set the Background

Using the Background feature, you can apply a different color or a texture to the background of your document. To change the background of the document, click on Page Layout from the menu bar at the top of the application. Using the Page color option, you can select any COLOR or FILL EFFECTS for the background of the document.
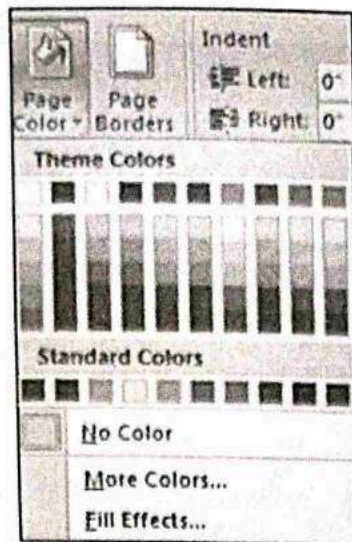
Figure. Choosing the page color

Setting Borders

You can add a border to any Paragraph or each page in a document.

1. Open a document in Office Word 2007. If you want to add a border to a paragraph or text, select it. Typically, borders are added as a final change after writing a document.

2. On the Page Layout tab in the Page Background group, click Page Borders.

3. In the Borders and Shading dialog box, do one of the following:

   - To add a paragraph or text border, click the Borders tab.

   - To add a page border, click the Page Border tab.

     o Under Setting, click the type of border you want.

     o In the center section, modify the line style, border color, and width. You can even click Art to add a design to a page border.

     o Check Preview to see how the border will look. Click the buttons to add or remove borders along the sides, top, and bottom.

     o Click Apply to, and select the parts of the document that you want the border to enclose, such as Text, Paragraph, or Section. Then, click OK.
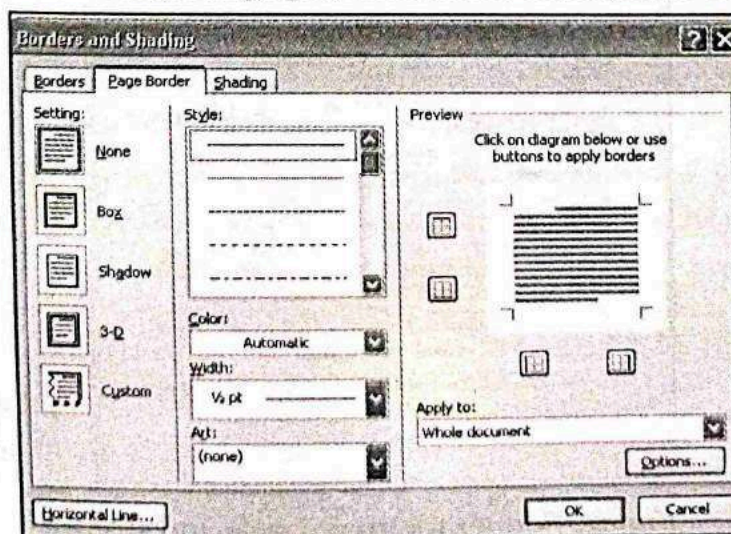
Figure. Setting text borders

Margins

You can set customized margins for the entire page or a selected box of text. To set the Top, Bottom, Left and Right margins for your page, click on Page Layout and Select Margins. To change the margins for part of the document, select the text, and then set the margins you want. In the dialog box for the Apply to drop-down option, click SELECTED TEXT.
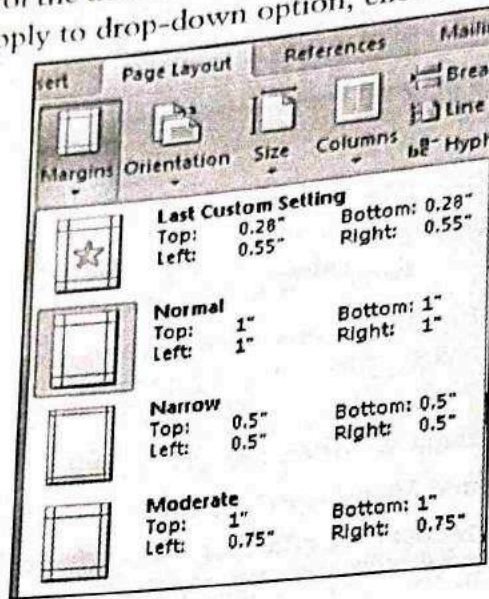
Figure. Setting margins

Fonts

You can change the look and feel of your document by changing the font size and the font type. You can highlight a particular section or heading by changing the font color and font style. To change the font properties for a particular section of text, select the particular text with your mouse. Then click on FORMAT and select FONT. A dialog box opens which will give you the option to change the Font Size, Font Style (Bold, Italic and Underlined), Font (Times New Roman, Verdana etc.) and Font Color.
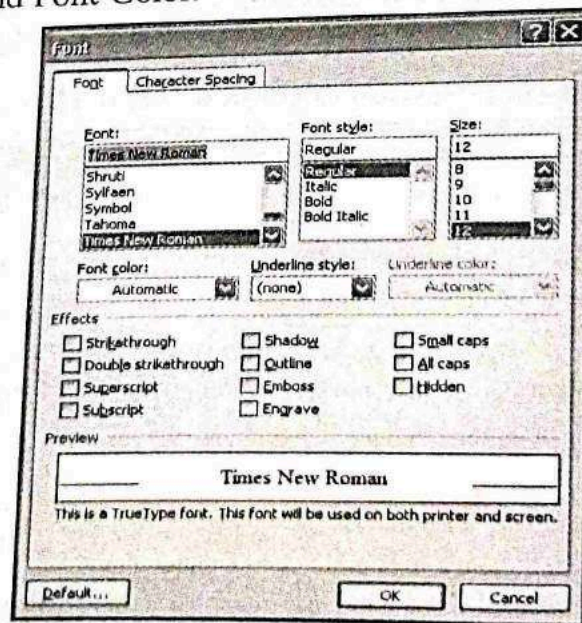
Figure. Setting font type, style and size
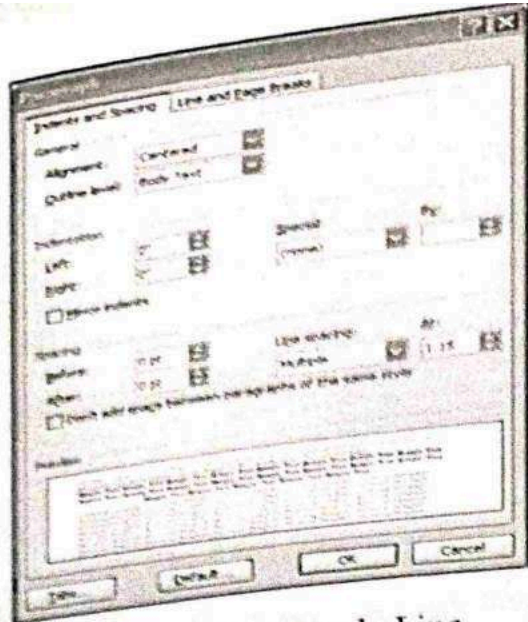
Figure. Setting Single Line
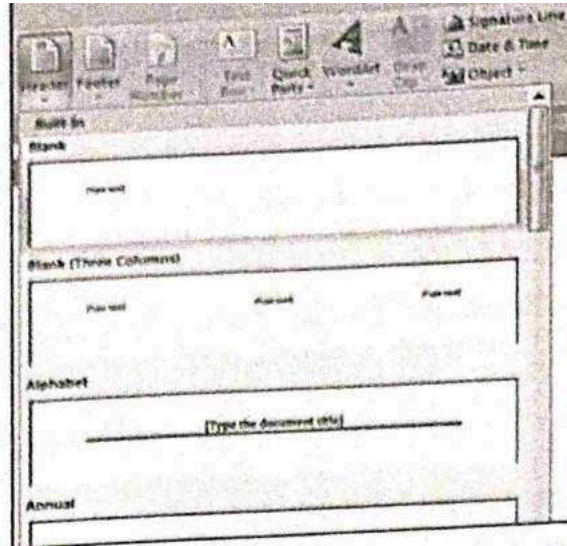
Figure. Header and Footer

Line Spacing

You can change the spacing between the lines or the spacing before or after each paragraph to make the particular text easily readable. All documents are generally single-spaced. If you want to change the spacing on the Documents, click on FORMAT and select PARAGRAPH. The dialog box which appears has a section on Spacing where you select the line spacing as "Single", "1.5 lines" or "Double" from the drop-down menu.

Header

To include a header click on Insert and select HEADER AND FOOTER. This highlights the area of the Header where you can type in the name of your project. To insert page numbers, use the toolbox (pop-up window) which appears along with the header. This toolbox has options to insert the page number, date, time etc.

Footer

Now to edit the footer, again use the Toolbox and click on the icon, which switches between the Header and Footer. Once the footer area is highlighted, you can enter your name and other relevant information in the footer.

The content of the header and footer appear on all the pages of your document and are common for all the pages in the document. If you want a different header and footer for your first page, select the page Setup icon from the Design Tab. Select the Layout tab on the window as shown in the figure on the next page and check the option "Different First Page".

Now you have a different Header and Footer for the first page and you can easily omit including the page number on the first page of your document.
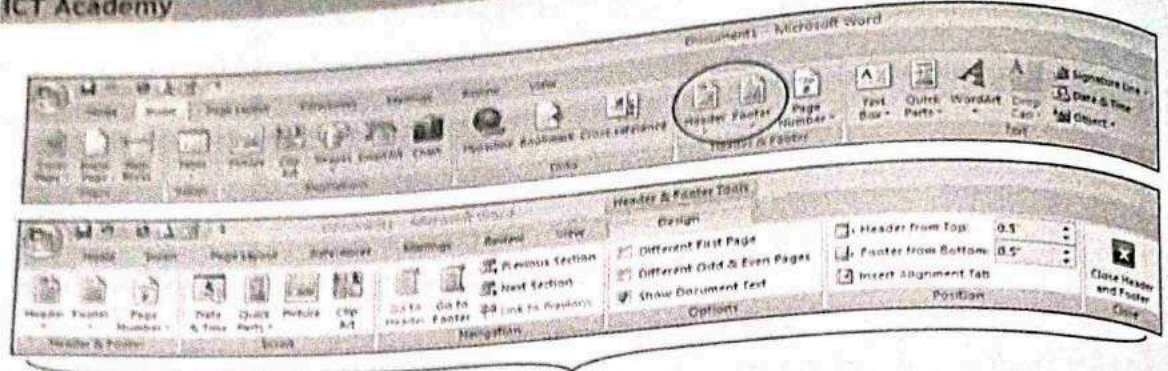
Figure. Header & Footer tools

Footnotes and Endnotes

Footnotes and endnotes are used to elaborate, comment on, or reference/cite sources in a document.

Footnotes

Footnotes are comments, which appear at the bottom of the page. To insert footnotes, first place your cursor at the reference point (position from which you want to refer to the footnote). Now click on REFERENCES Tab. This produces the FOOTNOTE option. A window pops up where you can select the option Insert Footnote button. This inserts a reference number at the reference point and moves the cursor to the bottom of the page where you can actually type the comment.
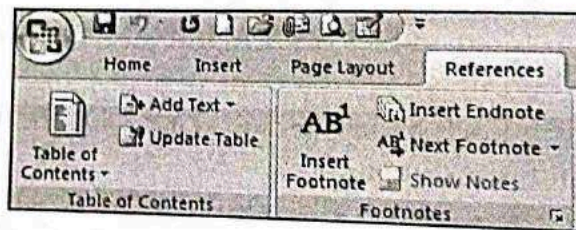
Figure. Inserting Footnote and Endnote

Endnotes

Endnotes are inserted at the end of the entire document. They are typically used to cite references in academic papers.

To insert Endnotes, first place your cursor at the reference point (position from which you want to refer to the footnote). Now click REFERENCE Tab. This produces the FOOTNOTE option. A window pops up where you can select the option Endnote. This inserts a reference number at the reference point and moves the cursor to the bottom of the document where you can actually type the reference or comment.

Correcting Spelling and Grammar

Once your document is ready, you can check your grammar on the document by using this feature. Click the Review Menu and select Spelling and Grammar. This opens a window, which highlights any spelling or grammatical errors in the document.
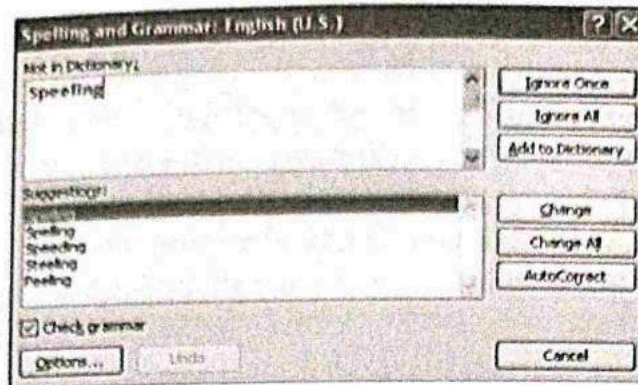
Figure. Spelling and Grammar

Word Count

To count the number of words in your Document, Click on Review tab and select WORD COUNT. This opens a small window displaying the number of words in your document.
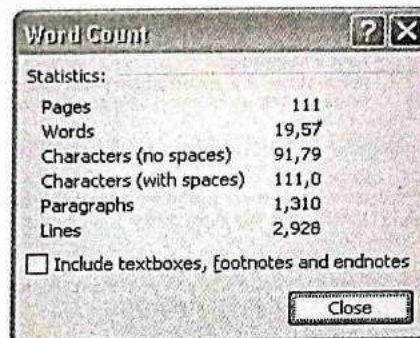
Figure. Counting Words

Previewing and Printing

It is always best to preview your document before printing so that you are sure about the layout and know how your printed document will look. To preview your document, click on Office Button in the menu and select PRINT PREVIEW. To print your document, click on Office Button in the menu and select PRINT.
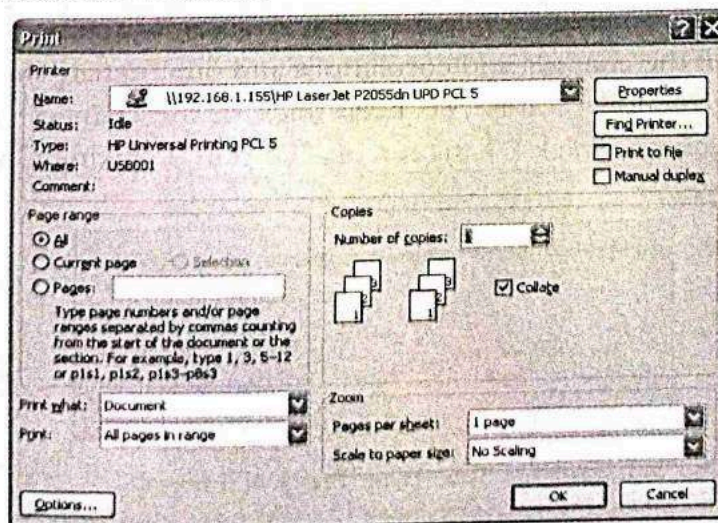
Figure. Printing the pages

Page Break and Section Break

Page breaks are used to position the text following the cursor on the next page. This is especially useful when you want to begin a new sub-topic on a new page without hitting the ENTER/RETURN key several times .Sections are used when you want to change properties such as line numbering, number of columns, or headers and footers i.e. to vary the layout of a document within a page or between pages. For example, formatting a section as a single column for the introduction of a report, and then formatting the following section as two columns for the report's body text. To insert a section break or a page break, position your cursor at the end (last character) of the section or page. Next, click on Page Layout and select PAGE BREAK. Now select either PAGE BREAK or the Column Break.
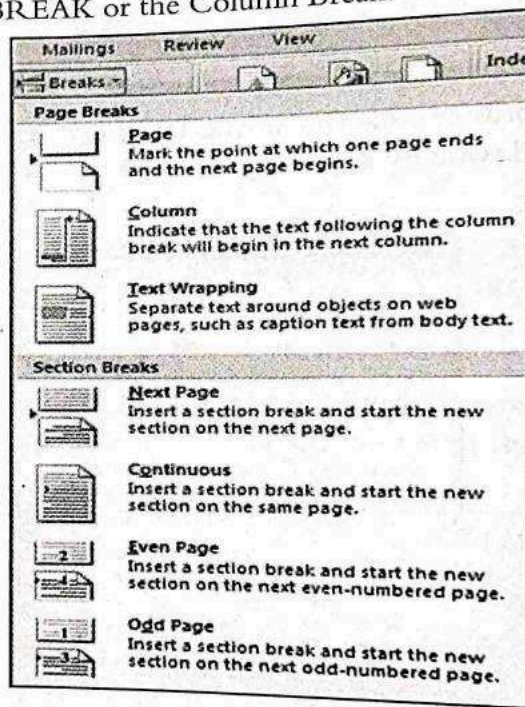
Figure. Setting the Page Breaks

Tracking Changes

This tool helps multiple people editing a document without overwriting the original document. This feature will track all the changes and corrections and differentiate the corrections made by different users by using multiple colors .To keep track of the changes you'll be making to a document, you must click on Track Changes icon. To start Tracking Changes: Click Review Tab on the Ribbon.
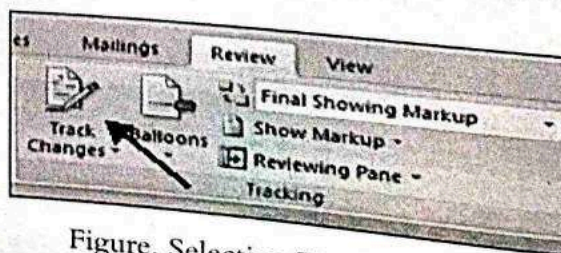
Figure. Selecting Track Changes

The tracker keeps track of every character deleted as well as every character inserted. It also keeps track of basic formatting changes. You will be able to track changes using some icons, which are present on the Standard Toolbar.

Once you receive a document with highlighted changes, you can go over each change and decide whether to retain or reverse the change. Select the "Accept Change" or "Reject Change" option to accept or reject changes.
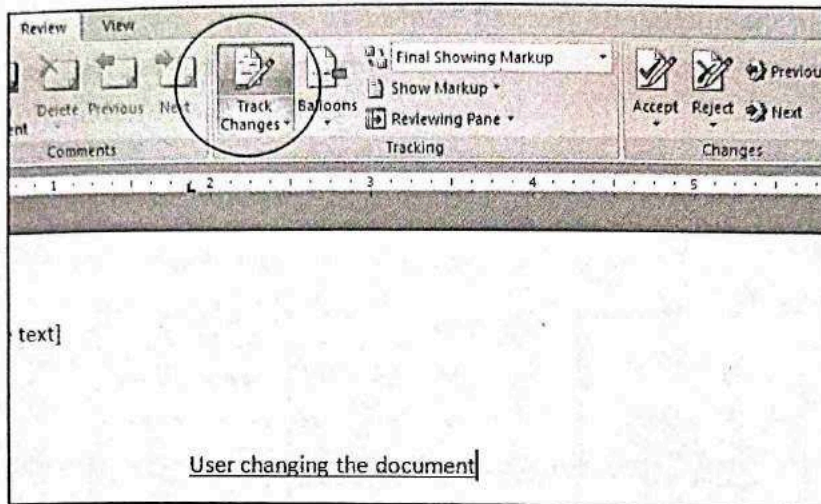
Figure. Editing the document using Track changes

You can also make use of the icons in the standard toolbar to accept or reject changes and stop tracking.

Format Painter

If you do not know what formatting has been used on a particular part of the text, which you wish to replicate in some other part of the document, you can use the Format Painter on the Standard toolbar to apply some basic graphic formatting, such as borders, fills, and text formatting. First, select the part of the text with the desired formatting. Then click on the Paintbrush icon in the Standard toolbar at the top of the application (This saves the formatting of the source text). Next, with the cursor, select the text for which you want to change formatting. (This will apply the saved format to the destination text).
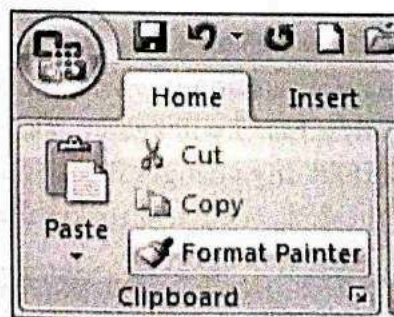
Figure. Using Format Painter

1.5.7 Table Manipulation

Tables are used to display data in a table format. To create a table, click on INSERT Tab and then select TABLE. To create a table:

- Place the cursor on the page where you want the new table.
- Click the Insert Tab of the Ribbon.
- Click the Tables Button on the Tables Group. You can create a table one of four ways:
  - Highlight the number of row and columns.
  - Click Insert Table and enter the number of rows and columns.
  - Click the Draw Table; create your table by clicking and entering the rows and columns.
  - Click Quick Tables and choose a table.
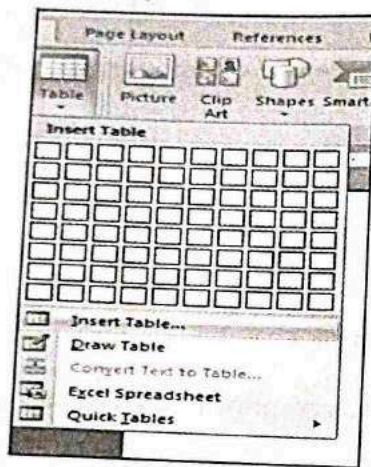
Figure. Inserting Table
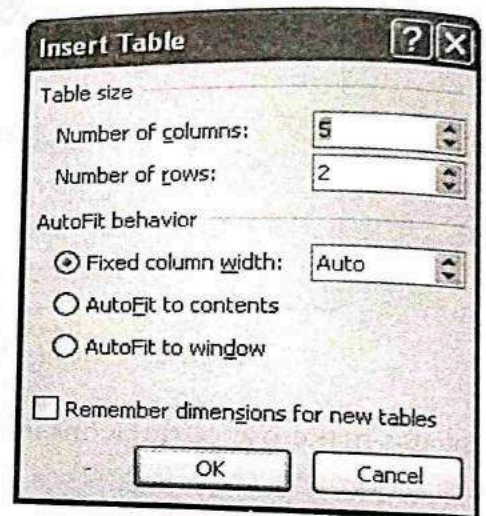
Figure. Changing the Table Size

1.6 Using Spreadsheet

1.6.1 Elements of Electronics Spreadsheet

Excel is a computerized spreadsheet, which is an important business tool that helps you to make the report and analyze the information. Each workbook consists of individual worksheets, or sheets. Excel spreadsheet supports all types of calculations; it is much more flexible than a paper spreadsheet.

Spreadsheets allow you to organize information in rows and tables (which create cells), with the added bonus of automatic mathematics. Excel will keep track of numbers you place in cells, and if you define cells to refer to each other, any changes made in one cell will be reflected in these referring cells. It sounds a bit complicated, but Excel makes it all a breeze.

Launching Excel

Step1: Click the Start button in the bottom left hand corner of the screen.

Step2: Choose Programs or all programs (depends on your operating system).

Step3: Click the Microsoft Office folder.

Step4: Click Microsoft Office Excel 2007.
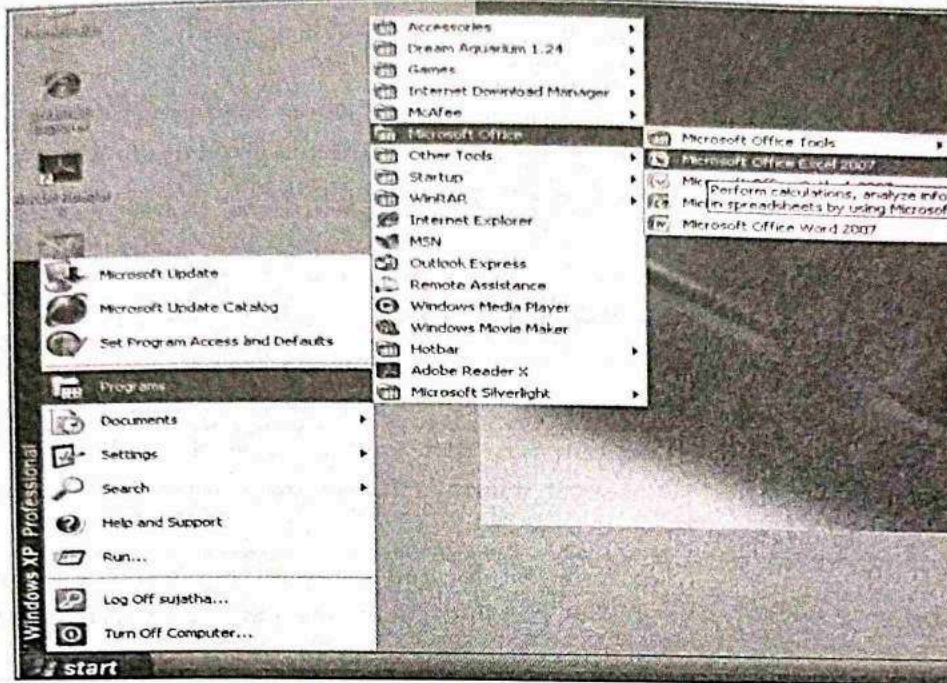
Figure. Launching MS Excel 2007

Opening Excel

Microsoft Excel will automatically open with a blank spreadsheet spanning many columns and rows. You will notice a number of toolbars with many more options included.
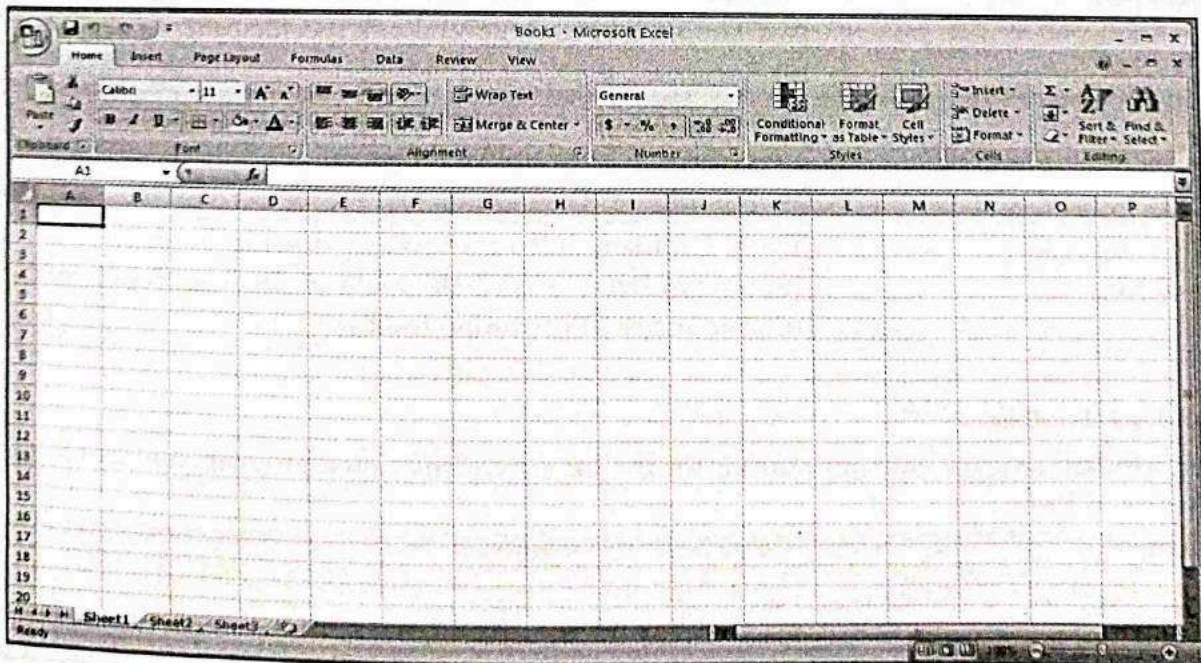
Figure. Opening an existing sheet

Table. Window Components and Descriptions

Excel Window Components	Description
Active cell	The cell in which you are currently working. A dark border out lining the cell identifies the active cell.
Column headings	The letters that appear along the top of the worksheet window. Columns are listed alphabetically from A to IV (a total of 256 possible columns).
Formula Bar	The bar located immediately below the toolbars that displays the contents of the active cell. As you type or edit data, the changes appear in the Formula bar.
Name box	The box that displays the cell reference, or column and row location, of the active cell in the workbook window.
Row headings	The numbers that appear along the left side of the worksheet window. Rows are numbered consecutively from 1 to 65,536.
Select All button	Square button located at the intersection of the column and row headings that you click to select the entire contents of the worksheet.
Sheet Labs	Tabs located at the bottom of each worksheet in the workbook that displays the names of the sheets. To move between worksheets, click the appropriate sheet tab.
Task pane	The pane that provides access to frequently used tasks. When you start Excel, the Getting Started task pane appears. The task pane disappears once you open a workbook. There are several task specific panes available in Excel.
Tab scrolling buttons	Series of buttons located to the left of the sheet tabs that you can click to move between worksheets in the workbook.
Tool bar	Excel has many different toolbars that can be displayed on-screen but the default toolbars are the Standard toolbar and the Formatting toolbar.

Standard Toolbar

The Standard toolbars contains buttons for the most frequently used program commands, such as Save and Print.

Table. Commands and Descriptions

New	Create a new, blank spreadsheet
Open	Open a previously saved spreadsheet
Save	Save your current spreadsheet
Permission	Microsoft has enabled Information Rights Management (IRM) within the new version of Word, which can help protect sensitive documents from being copied or forwarded. Click this for more information and options
Print	Prints the current document
Print Preview	Preview the potential print of the current document
Research	Microsoft has enabled Information Rights Management (IRM) within the new version of Excel, which can help protect sensitive documents from being copied or forwarded. Click this for more information and options
Copy	Copies the current selection to the clipboard, which can then be pasted elsewhere in the document
Paste	Takes the current clipboard contents and inserts them
Undo	Undoes the last action in the document, reverting "back" a step in time
Insert Hyperlink	Inserts a hyperlink to an Internet location
Auto Sum	A drop-down menu of available mathematical operations to perform
Sort Ascending	Sorts the current selection in ascending order
Chart Wizard	Opens the "Chart Wizard," which will walk you through the creation of a Chart / diagram using the currently selected information
Microsoft Excel Help	Brings up the Excel Help window, which will allow you to type in a key-word for more information, or click anything on screen to directly bring up further information on that subject
More Options	There are a variety of extra options you can call or add to the toolbar, such as Spell Check, Sort Descending, Cut, Redo, etc. By clicking the triangle, you can access these options; at the same time, you can drag this toolbar outwards more to make more available space for these options directly on the toolbar

Formatting Toolbar

The Formatting tool bar contains buttons used to format the appearance of the workbook, such as Bold and Italics.

Figure. Formatting Toolbar

Table. Formatting Commands and Descriptions

Font Style	Change the font of the selected cell(s)
Size	Change the font size of the selection
Bold	Put the selection in bold face
Italics	Italicize the selection
Underline	Underline the selection
Align Left	Align the current selection to the left
Center	Align the current selection to the center
Align Right	Align the current selection to the right
Merge & Center	Combine two selected cells into one new cell that spans the width of both and center the contents of this new cell
Currency Style	Change the style in which currency is displayed
Percent Style	Change the style in which percent are displayed
Decrease Indent	Decrease the indent of a cell by approximately one character
Border	Add or alter the style of borders to format a cell
Fill Color	Select a color to fill the background of a cell
Font Color	Select a color to apply to a selection of text

You now have a basic understanding of the toolbars, but still have a huge window of cells in front of you. What can you do with them? Cells can contain text, numbers, or formulas. To refer to a particular cell, you call it by its column letter, and then by its row letter. For example, the cell in the uppermost left corner would be "A1." The current cell(s) will always be listed in the "Name Box," which appears on the left below the toolbars.
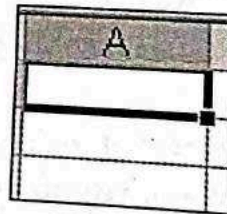
Figure. Selecting a cell

Navigating the Spreadsheet

You can use the "Up," "Down," "Left," "Right," to move (one cell at a time) throughout the spreadsheet. You can also simply click the cursor into a cell). The "tab" button will move one cell to the right. The "Enter" button will confirm the entered information and move one cell down. If you enter text or numbers that span further than the column allows, simply place your cursor on the line dividing two columns next to their respective letters, and drag to the right or left until the desired width is achieved. You can also double-click this dividing line to have Excel automatically choose the best width.
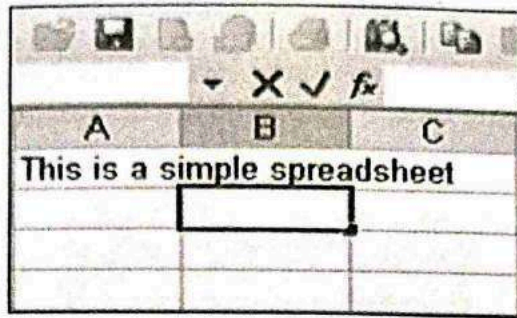
Figure. Moving over the spreadsheet

A Simple Spreadsheet

This is what a basic spreadsheet may look like, keeping track of the grades for five students. As you will notice, numbers automatically align to the right, while text automatically aligns to the left. Room has been allowed at the top and the left for column and row headings, which have been placed in bold.

	A	B	C	D
1	NAME	ENGLISH	TAMIL	MATHS
2	Sheela	80	90	87
3	Sathya	89	89	90
4	Siva	78	90	98

Figure. A Mark Table

1.6.2 Manipulation of Cells

Merging Cells

If you want to type a heading across the top of a table of data, it can be quite difficult to line it up in the centre. Luckily, Excel has a solution. You can merge the cells across which you want the heading, centering it at the same time.

To merge cells:

- Select the cells to be merged.
- Click the merge and centre button from the formatting toolbar.
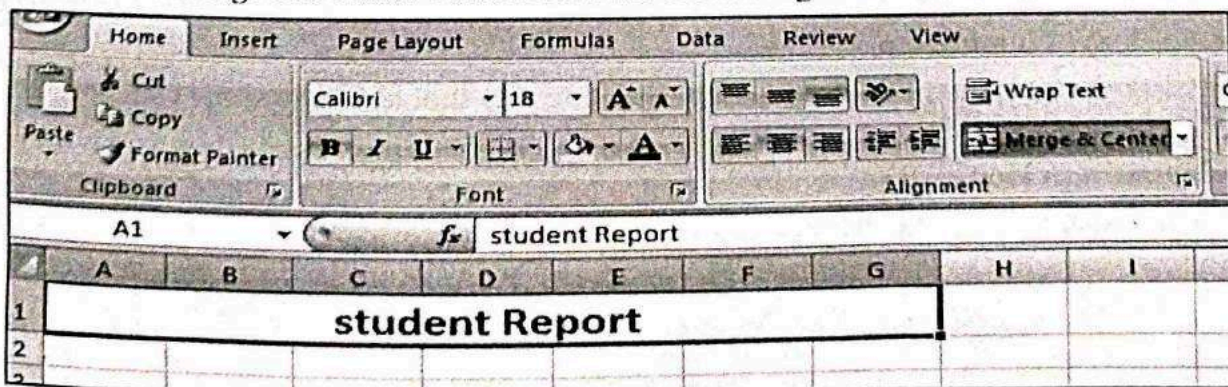
Figure. Merging 2 or more cells

To unmerge cells:

- Select the cells to be unmerged.
- Click the merge and centre button again which will unmerge the cells selected.
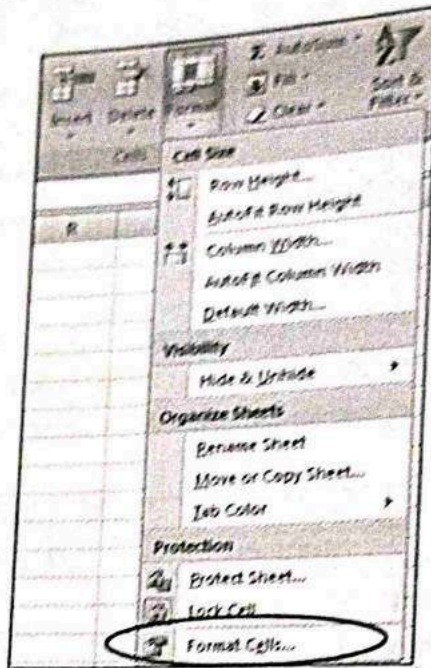
Figure. Format cells

Formatting Numbers

The Numbers tab gives you the ability to display data that Excel stores numerically in lots of different ways. The Formatting toolbar gives you buttons for applying only very few of the vast selection of number format that Excel contains. The options that you see on the tab vary depending on which category of format you select. Generally speaking, Excel will display a sample based on the contents of the active cell and the default option within the category you selected. You can then pick from a list of format codes until the sample is displayed the way you want it.

- Select the cells you want to format.
- Choose Home Tab from the menu bar and click Format
- option->format cells.
- Click the *Number tab.*
- Click the category of formatting your numeric data should use from the *Category* list.
- Select the relevant options that appear until the Sample data looks the way you want your numbers to look.
- Click *OK* to close the dialog and apply the format.
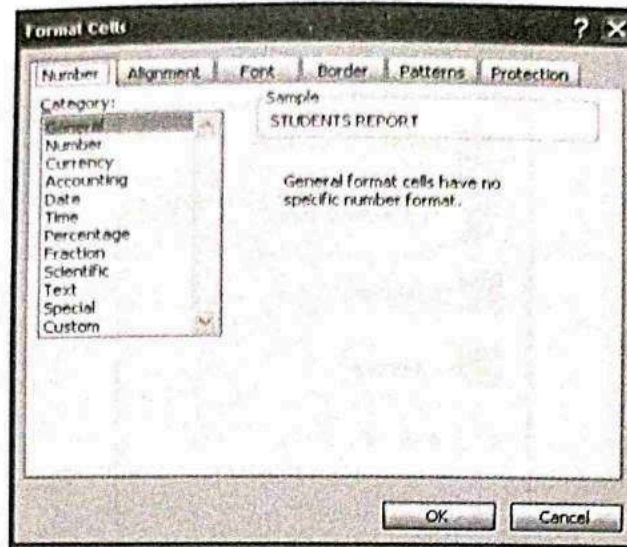
Figure. Changing the Number format

Custom Number formats

There are occasions when you want numeric data to display in a way that Excel does not have a format for. When this happens, you can create a custom format.

- Select the cells you want to format.
- Choose Format from the tool bar.
- Click the **Number** tab.
- Choose the Custom category (the last option on the Category list).
- The dialog box will change to show you a list of Type format codes.
- Scroll down the Type list until you find a code similar to the one you want to format your data with.

Conditional Formatting

You can make Excel format cells in certain ways according to whether their data meets a condition. For example, in a table of numbers, you might want to display numbers over 100 in red, numbers below 50 in green and anything in-between in blue. You can use conditional formats to achieve this.

Choose -> Home tab -> Styles -> Conditional Formatting.

To apply conditional formatting,
- Data Bars: A data bar helps you the value of a cell relative to other cells.
- Color scales: Color scales are visual guides that help you understand data distribution and variation.
- Icon Sets: Use an icon set to annotate and classify data into three to five categories separated by a threshold value.
- Rules: you can use a logical formula to specify the formatting criteria.
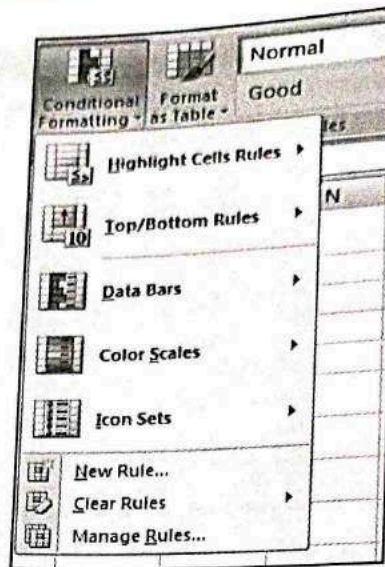
Figure. Choosing the conditions
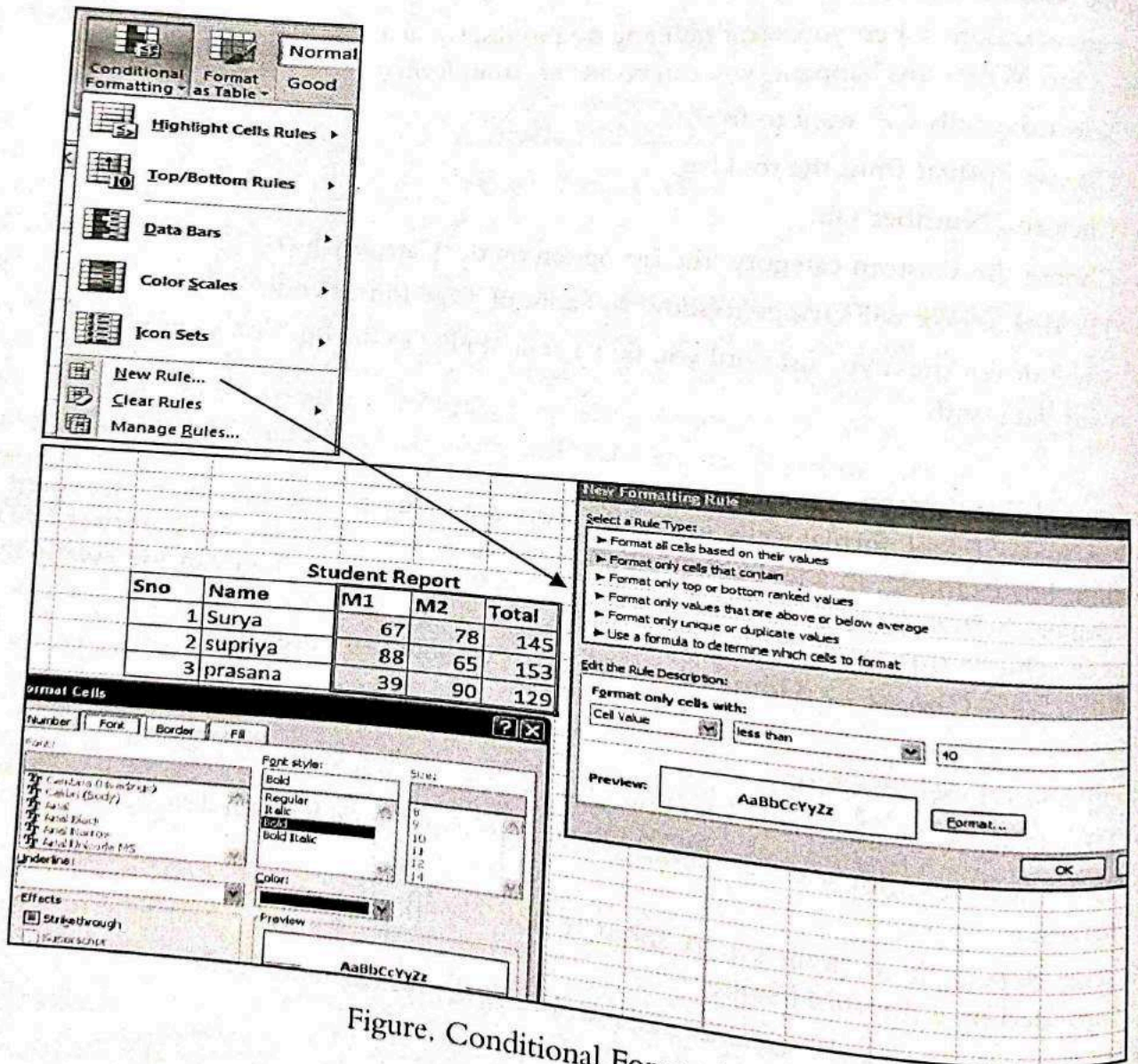
Figure. Conditional Formatting

Freeze Panes

When you want certain rows or columns to remain static on screen while you scroll down or across data on a worksheet, you can use freeze panes.

Choose *view tab* select Freeze Panes

- Select the cell below and to the right of the cells you want to freeze.
- Choose Window from the menu bar then click, Freeze panes.
- You will see solid lines appear below and to the right of the frozen rows and columns.

Unfreeze Panes

- Select freeze panes you will see the unfreeze options in the box.
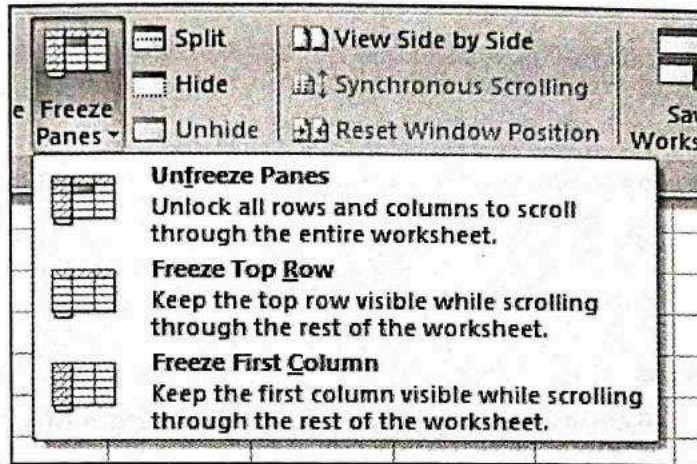
Figure. Unfreeze panes

Moving and Coping

Sometimes, you may want to drag an item to a different worksheet within the workbook.

To move and copy to another worksheet,

- Select the cells to move or copy.
- Position the mouse over the selection border.
- Hold down the [ALT] key as you drag the cells ([ALT] [CTRL] if you are copying).
- Drag down over the sheet tab that you want to put the cells on and Excel will jump to that sheet. Continue dragging until you are in the location on the selected sheet that you want the cells in.
- Release the mouse then the keyboard.

Hide Rows and Columns

You can choose not to display certain rows and columns on your screen. Hiding them also prevents them from printing.

To hide columns,

- Select the column you want to hide by clicking on the column letter, or if you want to hide multiple columns, highlight them.

- Click the right mouse button anywhere over the selection to display the shortcut menu.
- Choose Hide.

To hide rows,

- Select the row you want to hide by clicking on the row number, or if you want to hide multiple rows, highlight them.
- Click the right mouse button anywhere over the selection to display the shortcut menu.
- Choose Hide.

To unhide columns and rows,

- Select the columns or rows either side of the hidden ones by dragging over the column letters or row numbers with the selection pointer.
- Position the mouse over the row or column intersection between the selected rows or columns.
- Double-click.

Insert Rows and Columns

You may find that you need to insert a new, blank row where there isn't a blank row any more. To insert a new blank row, place your cursor directly below where you would like a new row. Select Home tab >>Insert -> Rows. To insert a new column, place the cursor in a cell directly to the right of where you would like the column. Select Insert>> Columns.
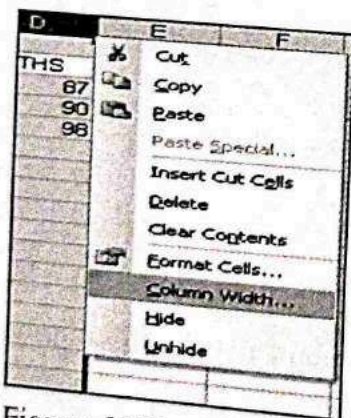
Figure. Hiding the cells
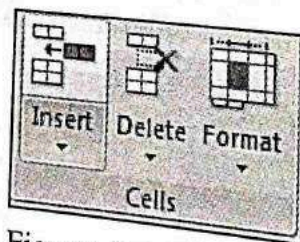
Figure. Inserting a row
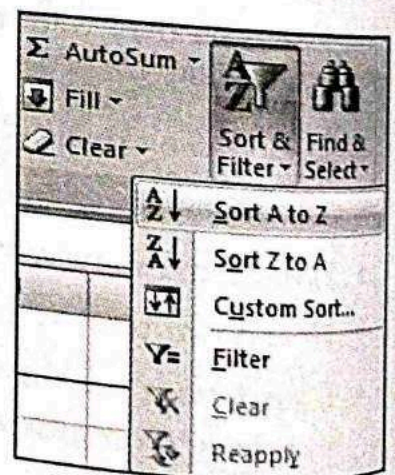
Figure. Sorting the data

Sorting

One of Excel's powerful features is its ability to sort, while retaining the relationships among information. For example, let us take our student grade as an example. What if we wanted to sort the grades in descending order? First, let's select the information we want to. Now let's select the "Sort" option from the "Data" menu. A new window will appear asking how you would like to sort the information.

1.6.3 Formula and Function

Formulae

In a spreadsheet application, at a very basic level, values are often added, subtracted, multiplied and divided. Excel recognizes formulae because an equal's sign precedes them (=).When entering basic formulae, the mathematical operators defining the operation to be carried out are as follows:

Addition	+
Subtraction	-
Multiplication	*
Division	/
Exponentiation	^

Figure. Symbols for Mathematical Operations

You will find all of these mathematical operators ranged across the top and down the right hand side of the numeric keypad.

Typing Formulae

You enter formulae by typing them in the cell where you want the formula's result to appear. When you confirm entry of a formula, Excel will display the result on the worksheet, but the underlying calculation appears on the Formula bar.

To enter a formula,

- Move to the cell where you want to enter the formula.
- Type an equal's sign (=).
- Type the formula (e.g. d2*e2).
- Press [ENTER] to confirm the entry.

SUM	▼ ✕ ✓ *fx* =B1+C1+D1				
A	B	C	D	E	
	STUDENTS REPORT				
NAME	ENGLISH	TAMIL	MATHS	TOTAL	
Sheela	80	90	87	=B1+C1+D1	
Sathya	89	89	90		
Siva	78	90	98		

Figure. Typing the formula

Excel automatically recalculates formulae. If you change one of the cells referenced in your formula, as soon as you press [ENTER] to confirm the changed value, your formula result will update.

Filling Formulae

Having entered an initial formula in the first cell of a column or row, you often find that you want to generate results for the other cells in that column or row. There is a variety of ways that you can get Excel to copy a formula so that it generates results for other cells in a column or row.

The Fill Handle

The fill handle used to filling formulae.

- Move to the cell that has the formula that you want to fill.
- Position your mouse pointer over the fill handle. It will change to a black plus.
- Drag the black plus down, up, left or right over the cells where you want your copied formula to generate results. You will see an outline around those cells.
- Release the mouse when the outline includes all the cells where you want results.
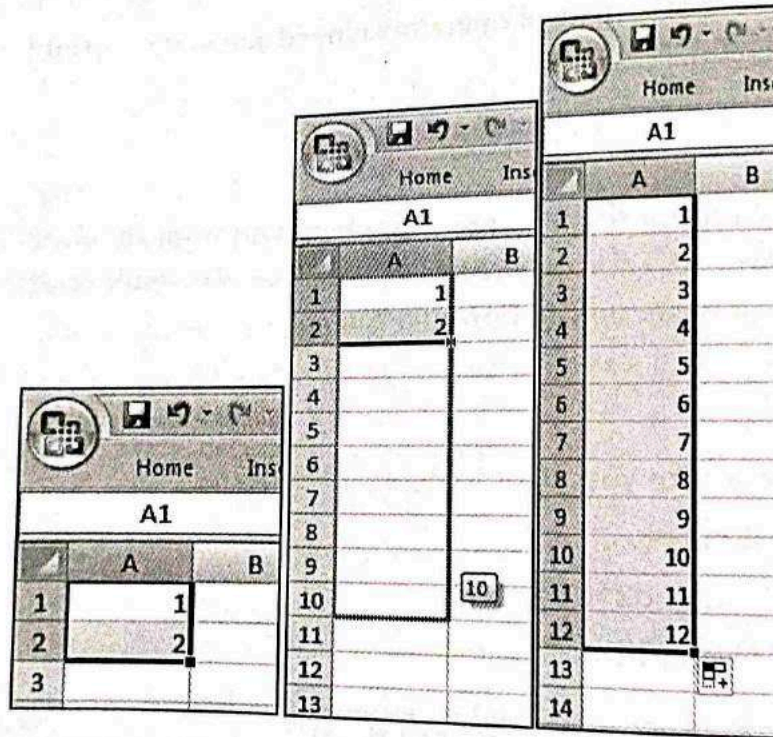
Figure. Fill handle

1.6.4 Functions

Having mastered how to set up your own custom formulae, you will be able to carry out any calculations you wish. However, some calculations are complicated or involve referring to lots of cells making entry tedious and time consuming. For example, you could construct a formula to generate a total at the bottom of a column like this:

$$=D2+D3+D4+D5$$

The above formula would work, but if there were 400 cells to total and not just 4, you would get bored with entering the individual cell references. When formulae become unwieldy or complex, Excel comes to the rescue with its own built-in formulae known as *functions*.

$$=SUM (D2:D10)$$

The name of the selected function tells Excel what you want to do and the arguments generally tell Excel where the data is that you want to calculate.

To insert a function:

- Select the cell into which you insert your function
- From the Formulas ribbon, go to the function library tab and click on the Insert Function button

Autosum

One of the most useful functions is the SUM function. This function allows you to create totals for groups of cells. Because generating total is so frequently done, Excel has included a button on the standard toolbar that will put the SUM function in the selected cell to obtain a total instantly.

Function Box

There are some functions that are accessed more than others and for that reason, Excel gives you a slightly quicker method for entering them than the Paste function dialog. The Function box, groups the most commonly used functions for quick and easy access.

To enter a function using the Function box,

- Type the equals sign (=) on the formula bar (or directly into your cell). Excel displays the function box to the left of the Formula bar.
- Click the drop-down list arrow to the right of the function box to display a list of function names.
- Select the function you require by clicking its name from the list.
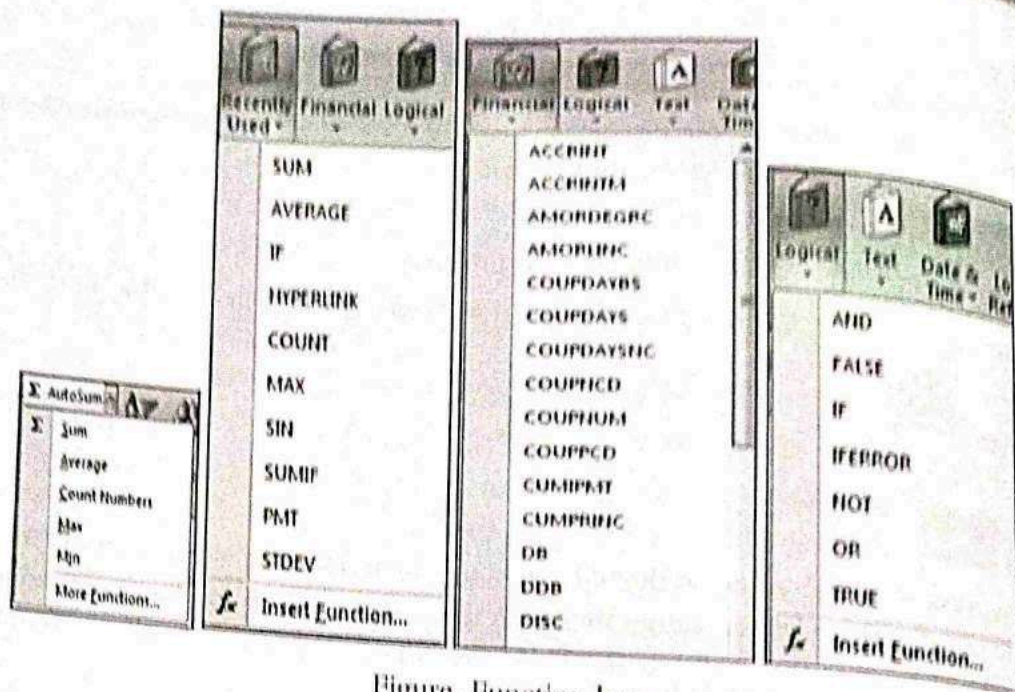
Figure. Function box

Counting and Totaling Cells Conditionally

A condition is simply a test that you can ask Excel to carry out the result of which will determine the result of the function.

Use SUMIF()

You can use this function to say to Excel, "Only total the numbers in the Total column where the entry in the Customer column is Viking Supplies". The syntax of the SUMIF() function is given below:

=SUMIF(range,criteria,sum_range)

- Range is the range of cells you want to test.
- Criteria are the criteria in the form of a number, expression, or text that defines which cells will be added. For example, criteria can be expressed as 32, "32", ">32", "apples".
- Sum range is the actual cells to sum. The cells in sum range are summed only if their corresponding cells in range match the criteria. If sum range is omitted, the cells in range are summed.

Use COUNTIF

The COUNTIF function allows you to count those cells that meet a certain condition. The function syntax is as follows:

=COUNTIF(range,criteria)

- Range is the range of cells from which you want to count cells.
- A criterion is the criteria in the form of a number, expression, or text that defines which cells will be counted. For example, criteria can be expressed as 32, "32", ">32", "apples".

Chart Wizard

Excel allows you to create basic – to – intermediate charts based off of information and data within your spreadsheets. Let's create a column chart from the student grade data from before. First, highlight the data.

Charts allow you to present information contained in the worksheet in a graphic format. Excel offers many types of charts including Column, Line, Pie, Bar, Area, Scatter and more. To view the charts available click the Insert Tab on the Ribbon.

Create a Chart

To create a chart,

- Select the cells that contain the data you want to use in the chart.
- Click the Insert tab on the Ribbon.
- Click the type of Chart you want to create.
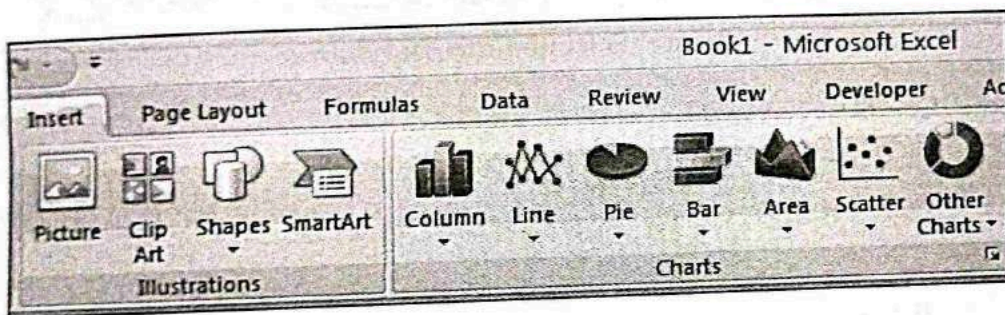
Figure. Insert charts

Modify a Chart

Once you have created a chart you can do several things to modify the chart.

To move the chart,

- Click the Chart and Drag it another location on the same worksheet, or
- Click the Move Chart button on the Design tab.
- Choose the desired location (either a new sheet or a current sheet in the workbook).
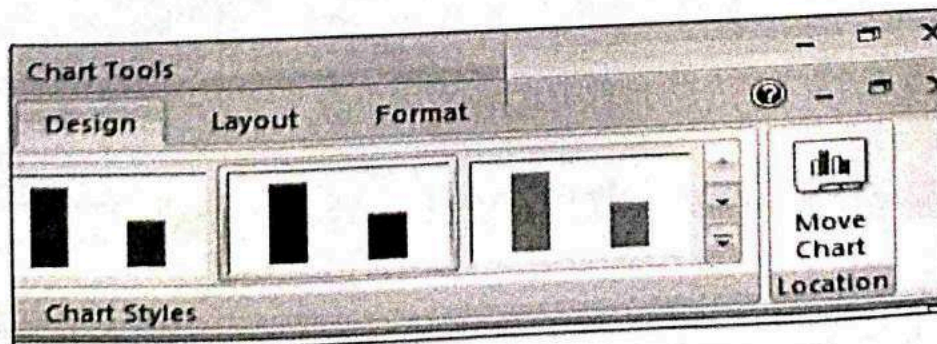
Figure. Choosing the chart style

To change the data included in the chart:

- Click the Chart.
- Click the Select Data button on the Design tab.
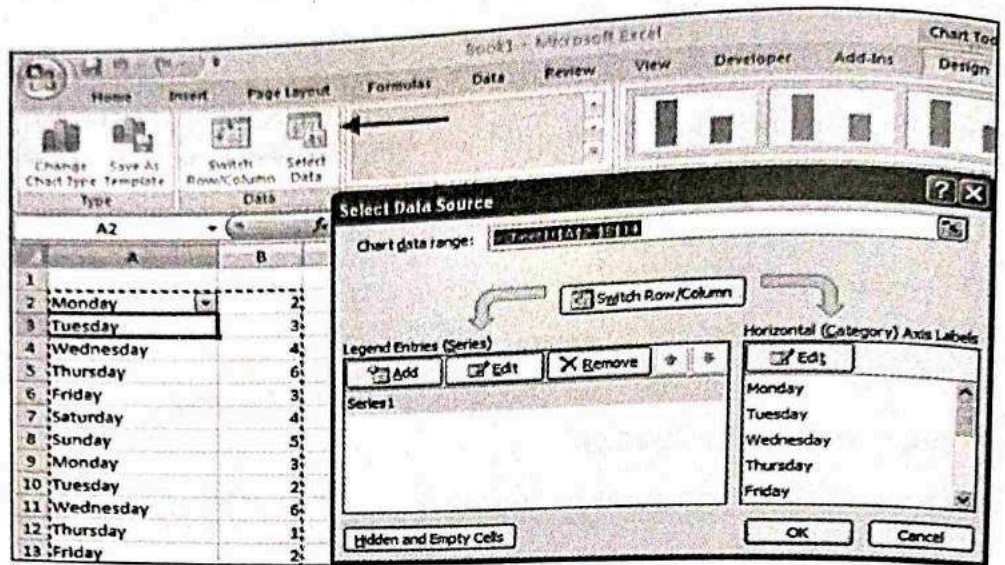
Figure. Selecting the data source

To reverse the data displayed in the rows and columns,

- Click the Chart.
- Click the Switch Row/Column button on the Design tab.

To modify the labels and titles,

- Click the Chart.
- On the Layout tab, click the Chart Title or the Data Labels button.
- Change the Title and click Enter.
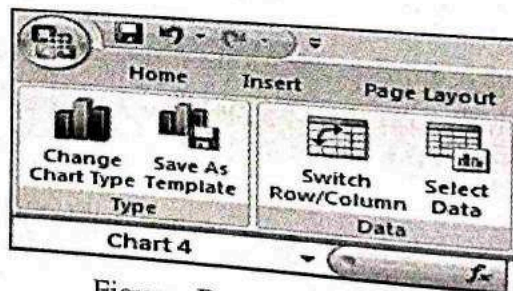
Figure. Reverse the data
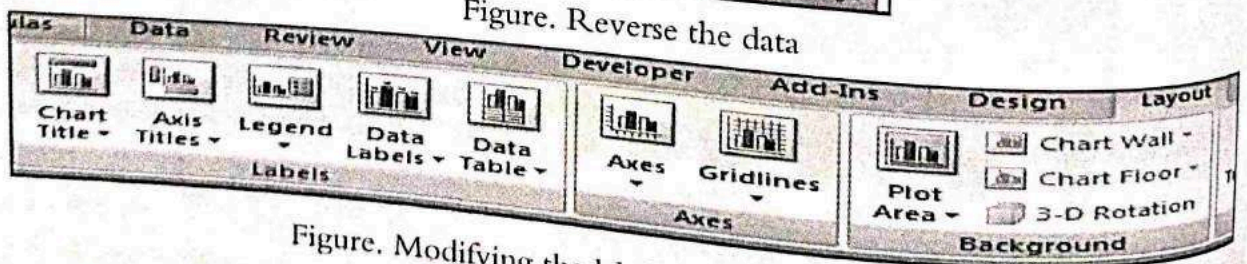
Figure. Modifying the labels and titles of the chart

Chart Tools

The Chart Tools appear on the Ribbon when you click on the chart. The tools are located on three tabs: Design, Layout, and Format. Within the Design tab you can control the chart type, layout, styles, and location.
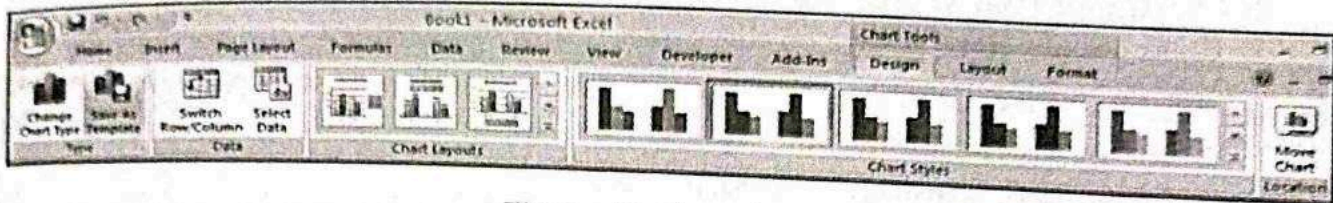
Figure. Design tab

Within the Layout tab you can control inserting pictures, shapes and text boxes, labels, axes, background, and analysis.
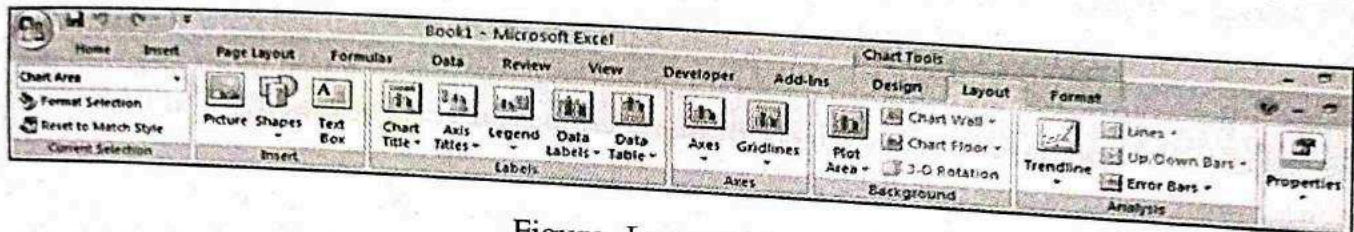
Figure. Layout tab

Within the Format tab you can modify shape styles, word styles and size of the chart.
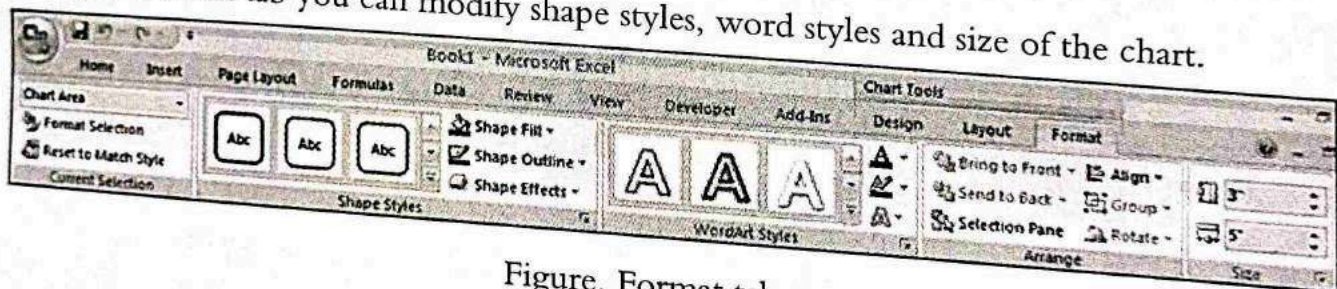
Figure. Format tab

Copy a Chart to Word,
- Select the chart.
- Click Copy on the Home tab.
- Go to the Word document where you want the chart located.
- Click Paste on the Home tab

Activity:

ICT ACADEMY CAREER+

Step 1: Visit www.sfdc.co/ictcareers

Step 2: Use any of your Google/Facebook/LinkedIn/Email to "SIGN UP" by clicking the button at top right corner on the screen.

Step 3: Fill all Profile details as requested and mention organization/institution as "ICT Academy - <your Institution Name>", which will make you eligible for more rewards and recognitions from ICT Academy India.

Step 4: Click on "FOLLOW" button of the trail "ICT ACADEMY CAREER+".

Step 5: Learn each Module in the Trail to obtain all your badges.

Note: On completion of all modules of this trail, you shall be eligible to participate in ICT Academy rewards and recognition program including free passes to attend expert hands-on workshops & conferences, win gadgets through your points, get featured as top learner with highest points etc.

CHAPTER 3: RETAIL SECTOR

3.1 Introduction

India, being one of the most attractive emerging markets, is experiencing a radical change in its retail industry. Rapid development of retailing in India has led to expansion of organised retail stores both in metros and in smaller cities. The Indian retail industry has emerged as one of the most dynamic and fast-paced industries due to the entry of several new players. It accounts for over 10 per cent of the country's Gross Domestic Product (GDP) and around 8 per cent of the employment. India is the world's fifth-largest global destination in the retail space.

Many practitioners and exports believe that this industry is mostly concerned with making good deals, putting high pressure on suppliers, and selling at competitive prices. However, over the last few years, the world of retailing has changed dramatically. Retail operations of companies like Carrefour, Tesco, Wal-Mart, METRO Group and many more, have greatly increased in complexity and sophistication. Similar developments in retail industry in India are inevitable with rising of major retail houses like Future Group, Reliance Retail, Shoppers' Stop, and Maxx Retail etc. Retailing leads other sectors in customer data capture, data warehousing and analyses. Retailing, specifically online retailing, is still the main commercial application area of the Internet and is at the front line of the globalization of business.

Indian Retail Industry has immense potential as India has the second largest population with affluent middle class, rapid urbanisation and solid growth of internet.

3.1.1 Market Size

India's retail market is expected to grow at a Compound Annual Growth Rate (CAGR) of 10 per cent to US$ 1.6 trillion by 2026 from US$ 641 billion in 2016. While the overall retail market is expected to grow at 12 per cent per annum, modern trade would expand twice as fast at 20 per cent per annum and traditional trade at 10 per cent. Indian retail market is divided into "Organised Retail Market" which is valued at $60 billion which is only 9 per cent of the total sector and "Unorganised Retail Market constitutes the rest 91 per cent of the sector.

India's Business to Business (B2B) e-commerce market is expected to reach US$ 700 billion by 2020. Online retail is expected to be at par with the physical stores in the next five years.

India's total potential of Business to Consumer (B2C) is estimated to be US$ 26 billion, of which $3 billion can be achieved in the next three years from 16 product categories, according to a study by Federation of Indian Chambers of Commerce and Industry (FICCI) and Indian Institute of Foreign Trade (IIFT).

India has replaced China as the most promising markets for retail expansion, supported by expanding economy, coupled with booming consumption rates, urbanizing population and growing middle class.

India is expected to become the world's fastest growing e-commerce market, driven by robust investment in the sector and rapid increase in the number of internet users. Various agencies have high expectations about growth of Indian e-commerce markets. Indian e-commerce sales are expected to reach US$ 120 billion by 2020 from US$ 30 billion in FY2016. Further, India's e-commerce market is expected to reach US$ 220 billion in terms of gross merchandise value (GMV) and 530 million shoppers by 2025, led by faster speeds on reliable telecom networks, faster adoption of online services and better variety as well as convenience.

India's direct selling industry is expected to reach a size of Rs. 23,654 crore (US$ 3.54 billion) by FY2019-20, as per a joint report by India Direct Selling Association (IDSA) and PHD.

Indian exports of locally made retail and lifestyle products grew at a CAGR of 10 per cent from 2013 to 2016. The size of modern retail in India is expected to double to Rs. 171,800 crore (US$ 25.7 billion) from Rs 87,100 crore (US$ 13 billion) in three years driven by omni-channel retail.

3.1.2 Investment Scenario

The Indian retail trading has received Foreign Direct Investment (FDI) equity inflows totalling US$1.04 billion during April 2000 – June 2017, according to the Department of Industrial Policies and Promotion (DIPP).

With the rising need for consumer goods in different sectors including consumer electronics and home appliances, many companies have invested in the Indian retail space in the past few months.

- US-based footwear company, Skechers, is planning to add 400–500 more exclusive outlets in India over the next five years and also to launch its apparel and accessories collection, as it increases its operations in India.
- Paytm Ecommerce Pvt is planning its first major sale on the Paytm mall for the upcoming festive season and will invest Rs 1,000 crore (US$ 156.14 million) for promotion, cash backs, and marketing.
- Investments by private equity firms in Indian retail sector reached US$ 200 million in the first half of 2017, with seven new global brands entering India during the period.
- Japanese low-cost retail chain, Miniso, opened its first store in India in August 2017 and is targeting revenue of Rs 10,000 crore (US$ 1.56 billion) over two years by reaching a count of 210 stores by the end of 2018 and 800 by 2019.
- IKEA, the Netherlands-based furniture company, has purchased 14 acres of land in Bengaluru for setting up its third retail outlet in the country.

- Future Group, a consumer goods company in India has entered into a joint venture with Khimji Ramdas Group in UAE for selling garments in Oman with both the companies having invested US$ 11.7 million each. The joint venture will first launch four to five stores in Oman and gradually increase the count to 17 to 18.

- Amazon India plans to double its storage capacity in India by adding 14 new warehouses by June 2017, aimed at maintaining rapid growth in sales and catering to the remote parts of India.

- Bang and Olufsen, Danish stereo and speaker system maker, has plans of setting up about eight to ten standalone satellite stores by the end of FY 2017-18 in cities like Kolkata, Hyderabad, Ahmedabad, among others.

- Walmart, global retail giant, plans to open 50 new cash-and-carry stores in India over the next three to four years and locate half of the stores in Uttar Pradesh and Uttarakhand while creating over 40,000 jobs in the two states.

- Global e-commerce giant, Amazon is planning to enter the Indian food retailing sector by investing US$ 515 million in the next five years, as per Mr Harsimrat Kaur Badal, Minister of Food Processing Industries, Government of India.

- US apparel retail major Gap Inc, has tied up with Arvind Group's fashion portal NNNow.com to sell its products online, which will help the retailer expand its presence beyond metros and tier-I cities.

- Hamleys, has stated that India is one of the most important markets for Hamleys globally, and outlined plans of opening six more stores, taking its total store count in the country to 32 by the end of March 2017.

- Roche Bobois Group, outlined plans of opening new stores in cities like Hyderabad, Chennai, Pune, Kolkata and Ahmedabad, in order to make India one of its top five markets by 2022.

- A joint venture between Dutch asset manager APG Asset Management and real estate asset platform Virtuous Retail, has acquired a portfolio of three shopping malls for US$ 300 million, and has committed an additional US$ 150 million as equity capital to expand the portfolio.

- Future Consumer Ltd has formed a joint venture (JV) with UK's largest wholesaler, Booker Group, with an investment of Rs 50 crore (US$ 7.5 million), to set up 60-70 cash-and-carry stores in India in the next 3-4 years.

- Adidas India Private Limited, outlined plans of opening around 30-40 big flagship stores across Delhi, Mumbai and Bengaluru, by 2020.

- Mad Over Donuts (MoD), outlined plans of expanding its operations in India by opening nine new MOD stores in Hyderabad and Chennai by March 2017.

- Switzerland's luxury retail brand Bally, plans to re-enter the Indian market in a joint venture with Reliance Brands Ltd, by opening its first store in New Delhi in March 2017, and thereafter aiming to expand to four stores in Delhi, Mumbai, Kolkata and Chennai over the next 3 to 4 years.

- Future Group, a consumer goods company in India has entered into a joint venture with Khimji Ramdas Group in UAE for selling garments in Oman with both the companies having invested US$ 11.7 million each. The joint venture will first launch four to five stores in Oman and gradually increase the count to 17 to 18.

- Amazon India plans to double its storage capacity in India by adding 14 new warehouses by June 2017, aimed at maintaining rapid growth in sales and catering to the remote parts of India.

- Bang and Olufsen, Danish stereo and speaker system maker, has plans of setting up about eight to ten standalone satellite stores by the end of FY 2017-18 in cities like Kolkata, Hyderabad, Ahmedabad, among others.

- Walmart, global retail giant, plans to open 50 new cash-and-carry stores in India over the next three to four years and locate half of the stores in Uttar Pradesh and Uttarakhand while creating over 40,000 jobs in the two states.

- Global e-commerce giant, Amazon is planning to enter the Indian food retailing sector by investing US$ 515 million in the next five years, as per Mr Harsimrat Kaur Badal, Minister of Food Processing Industries, Government of India.

- US apparel retail major Gap Inc, has tied up with Arvind Group's fashion portal NNNow.com to sell its products online, which will help the retailer expand its presence beyond metros and tier-I cities.

- Hamleys, has stated that India is one of the most important markets for Hamleys globally, and outlined plans of opening six more stores, taking its total store count in the country to 32 by the end of March 2017.

- Roche Bobois Group, outlined plans of opening new stores in cities like Hyderabad, Chennai, Pune, Kolkata and Ahmedabad, in order to make India one of its top five markets by 2022.

- A joint venture between Dutch asset manager APG Asset Management and real estate asset platform Virtuous Retail, has acquired a portfolio of three shopping malls for US$ 300 million, and has committed an additional US$ 150 million as equity capital to expand the portfolio.

- Future Consumer Ltd has formed a joint venture (JV) with UK's largest wholesaler, Booker Group, with an investment of Rs 50 crore (US$ 7.5 million), to set up 60-70 cash-and-carry stores in India in the next 3-4 years.

- Adidas India Private Limited, outlined plans of opening around 30-40 big flagship stores across Delhi, Mumbai and Bengaluru, by 2020.

- Mad Over Donuts (MoD), outlined plans of expanding its operations in India by opening nine new MOD stores in Hyderabad and Chennai by March 2017.

- Switzerland's luxury retail brand Bally, plans to re-enter the Indian market in a joint venture with Reliance Brands Ltd, by opening its first store in New Delhi in March 2017, and thereafter aiming to expand to four stores in Delhi, Mumbai, Kolkata and Chennai over the next 3 to 4 years.

- Urban Ladder, an online furniture store, is in advanced talks to raise around US$ 25 million from existing investors Kalaari Capital, SAIF Partners and Sequoia Capital, along with one new investor, which will be used to fund its expansion plans.
- Hennes & Mauritz (H&M), the Sweden-based clothing retailer, is in advanced talks with Mumbai-based Prakhhyat Infraprojects Pvt Ltd to lease around 275,000 square feet of space at Bhiwandi, Maharashtra, to set up its first warehousing hub in India.
- Future Group has partnered with UK clothing and hardware retailer Laura Ashley to make and sell merchandise as well as wholesale distribution in India.
- Parle Agro Pvt Ltd is launching Frooti Fizz, a succession of the original Mango Frooti, which will be retailed across 1.2 million outlets in the country as it targets increasing its annual revenue from Rs 2,800 crore (US$ 0.42 billion) to Rs 5,000 crore (US$ 0.75 billion) by 2018.

3.1.3 Advantage India

Robust Demand

- Healthy economic growth, changing demographic profile, increasing disposable income, changing consumer tastes and preferences are driving growth in the organised retail market in India
- Rapid urbanisation with increasing purchasing power has led to growing demand

Innovation in Financing

- Collective efforts of financial houses and banks with retailers are enabling consumers to go for durable products with easy credit
- In January 2016, Bank of India announced reduction in rate of interest on retail loan offered by the bank

Increasing Investments

- Foreign retailers are continuously entering the Indian market
- Cumulative FDI inflow in retail for March 2017 stood at US$ 988.56 million;
- 100 per cent cash and carry operations are gaining significance in India with Thailand's Siam Makro being the latest entrant in this space, following Metro, Walmart and Booker

Policy Support

- About 51 per cent FDI in multi-brand retail
- FDI of up to 100 per cent in single-brand retail and for cash and carry (wholesale) trading and exports
- Introduction of Goods and Service Tax (GST) as a single unified tax system from next fiscal year
- To provide a level-playing field to stakeholders, the government is planning to synchronise policies of retail, FMCG and e-commerce

3.1.4 Government Initiatives

The Government of India has taken various initiatives to improve the retail industry in India.

- The Government of India may change the Foreign Direct Investment (FDI) rules in food processing, in a bid to permit e-commerce companies and foreign retailers to sell Made in India consumer products.

- Government of India has allowed 100 per cent Foreign Direct Investment (FDI) in online retail of goods and services through the automatic route, thereby providing clarity on the existing businesses of e-commerce companies operating in India.

3.2 Types of Stores

It is in retailing that very drastic variations have happened during the last two decades. Some institutions have disappeared whereas newer ones have been added. This process of deletion/addition still lasts in fresher forms. There are large-scale retailing shops together with very small units, both working simultaneously. They have from hawkers and peddlers, who have no permanent place, to well-organized, settled retail shops like chain stores, departmental stores, etc.

Department Stores

A department store is a set-up which proposals wide range of goods to the end-users under one roof. In a department store, the customers can get almost all the products they aspire to shop at one place only. Department stores provide a wide range of options to the consumers and thus fulfill all their shopping needs.

Discount Stores

Discount stores also offer a huge variety of products to the end-users but at a discounted rate. The discount stores usually offer a limited range and the quality in certain cases might be a little inferior as compared to the department stores.

Wal-Mart presently operates more than 1300 discount stores in United States. In India Visual Mega Mart comes under discount store.

Supermarket

A retail store which usually sells food goods and household items, properly placed and organized in specific departments is called a supermarket. A supermarket is an advanced form of the small grocery stores and caters to the household needs of the consumer. The various food products (meat, vegetables, dairy products, juices etc.) are all properly displayed at their respective departments to catch the attention of the customers and for them to pick any merchandise dependent on their choice and need.

Warehouse Stores

A retail format which sells limited stock in bulk at a reduced rate is called as warehouse store. Warehouse supplies do not bother much about the interiors of the store and the products are not properly displayed.

Malls

Many retail stores working at one place form a mall. A mall would contain of several retail outlets each selling their own merchandise but at a common platform.

Specialty Stores

As the name suggests, Specialty store would specialize in a particular product and would not sell anything else apart from the specific range. Speciality stores sell only selective items of one particular brand to the consumers and primarily focus on high customer satisfaction.

3.3 Types of Merchandising

Merchandising is the practice and process of displaying and selling products to customers. Whether digital or in-store, retailers use merchandising to influence customer intent and reach their sales goals.

In both brick-and-mortar and digital stores, a variety of merchandising techniques are used to arrange products, communicate their value, and create an optimal customer experience. Many disciplines fit under the umbrella of merchandising, and there are a variety of merchandising types.

Retail Merchandising

Retail Merchandising refers to the various activities which contribute to the sale of products to the consumers for their end use. Every retail store has its own line of merchandise to offer to the customers. The display of the merchandise plays an important role in attracting the customers into the store and prompting them to purchase as well. Merchandising helps in the attractive display of the products at the store in order to increase their sale and generate revenues for the retail store. Merchandising helps in the sensible presentation of the products available for sale to entice the customers and make them a brand loyalist.

The display of merchandise at the store plays an important role in attracting the customers into the store. The display of the products at the retail store goes a long way in influencing the buying behaviour of the consumers. The presentation of the products is essential to create that first impression in the minds of the consumers.

Cross Merchandising

Cross merchandising mentions to the display of conflicting and unrelated products together to earn additional incomes for the store. Products from different categories are kept together at one place for the customers to find a relation among them and pick up all.

According to cross merchandising:

- Unrelated products are displayed together.
- The retailer makes profits by linking products which are not related in any sense and belong to different categories.

- Cross Merchandising helps the customers to know about the various options which would complement their product.
- Cross Merchandising makes shopping a pleasurable experience as it saves customer's precious time.

The customer at the first instance can't really decide what all he needs apart from the products he has already purchased. Through cross merchandising, the retailer smartly tries his level best to convince the customers to buy additional products apart from his existing list.

Cross merchandising will typically labour best if you have marketing signage that makes it very clear to your shoppers what the intent of the three items are. As an example, imagine a beautifully displayed end cap containing the above mentioned organic cereal, soy milk, and bananas. Add in a nice sign or banner which might read "Start Your Day with the Right Breakfast". Just that simple sentence can have a major impact on the movement of these items. Even though it may seem obvious that this promotion is all about breakfast foods, by actually putting the word "breakfast" visually in front of your customers, you have made the intent of the display clear and understandable, and therefore easier to shop.

Visual Merchandising

The art of growing the sale of products by efficiently and sensibly showing them at the retail outlet is called as visual merchandising. Visual merchandising refers to the artistic display of the merchandise to attract the potential buyers, prompt them to buy and eventually increase the sales of the store. In simpler words, visual merchandising is the art of displaying the merchandise to influence the consumer's buying behaviour.

The store must offer an encouraging ambience to the customers for them to enjoy their shopping. The position of the products in the store has an important role in motivating the consumers to buy them. Sensible display of the merchandise goes a long way in influencing the buying decision of the individual.

The end-user will never notice somewhat which is not well organized: instead stacked or thrown in heaps.

Proper Space, lighting, placing of dummies, colour of the walls, type of furniture, music, fragrance of the store all help in increasing the sale of the products.

Why Visual Merchandising?
- Visual Merchandising helps the consumers to easily find out what they are looking for.
- It helps the customers to know about the latest trends in fashion.
- The customer without any help can actually decide what he intends to buy.
- It increases the sales of the store and results in increased level of customer satisfaction.

- The customers can quickly decide what all they need and thus visual merchandising makes shopping a pleasant experience.
- Visual merchandising gives the store its unique image and makes it distinct from others.

How can we make visual merchandising happen?

- Lighting is one of the critical features of visual merchandising. Lighting rises the visibility of the merchandise kept in the stock. The store should be adequately lit and well ventilated. Avoid harsh lighting as it blinds the customers who walk into the store.
- The retailer must be extremely cautious about the color of the paint he chooses for his store. The paint color can actually set the mood of the customers. The wall colors must be well coordinated with the carpet, floor tiles or the furniture's kept at the store. Dark colors make the room feel small and congested as compared to light and subtle colors.
- The store must always smell good. Foul smell irritates the consumers and he would walk out of the store in no time. Use room fresheners 'or aromatic sticks for a pleasant environment.
- The merchandise must be properly placed in display racks or shelves according to size and gender. Put necessary labels (size labels) on the shelves as it help the customers to locate the products easily. Make sure the product do not falls off the shelves as it gives a messy look.
- Don't play blaring music at the store. It acts as a hindrance to effective communication and the retailer can never understand what the buyer actually intends to buy.
- Select the theme of the store according to the season. Red should be the dominating color during Christmas or Valentine's Day as the color symbolizes love, fun and frolic. A white theme would look out of place during the season of love. Don't keep unnecessary furniture as it gives a cluttered look to the store.

The main goal of display is to showcase the products within the overall display area. Customers give three to five seconds of their attention to window display. The retailer's visual message should be conveyed to the customer in that short period of time. It should not be like an unsuccessful TV advertisement, where the product is forgotten altogether and only the concept of the commercial remains in the mind of the viewer. The arrangement of window display should go with the product and should not suppress them to make it discernible to the eye.

3.4 Store Operations

Store operations are the universal term for the teams that are accountable for the smooth running of the retail business in store. From the sales assistants to store or general managers, the majority of retail jobs fall under this department. Store operations are the general term for the teams that are responsible for the smooth running of the retail business in-store.

Whatever rank people start at, hard-working individuals in operations are rewarded with fast development and early responsibility, which makes it one of the most exciting and vibrant places

to work. Showing potential here could get one to the top quickly. The majority of the roles engross excellent organisation and dealing with customers, so first-rate communication and people skills are of paramount importance. Store Operations is the frontline and the face of any retail business.

It is where sales are made and lost and those working in these departments create the understanding that shoppers remember – both good and bad. As the cutting edge of retail, Store Operations is the breaking ground for all graduate recruitment programmes, the place where trainee managers learn the tricks of the trade and what is most very important to all retailers; the art of selling and giving the customers an exciting and fulfilling shopping experience.

3.4.1 Store Appearance

The store must offer an optimistic ambience to the customers for them to enjoy their shopping and leave with a smile.

- The store should not give a chaotic look.
- The products should be properly arranged on the shelves according to their sizes and patterns. Make sure products do not fall off the shelves.
- There should be no foul odor in the store as it irritates the customers.
- The floor, ceiling, carpet, walls and even the mannequins should not have unwanted spots.
- Never dump unnecessary packing boxes, hangers or clothes in the dressing room. Keep it clean.
- Making sure the customers are well attended.
- Not allowing the customers to carry eatables inside the store.

3.4.2 Store Security

The maintenance of a store is not that easy when goods and products worth millions are maintained in a store. The Security for a store and its maintenance is of paramount importance.

- The commodities should not be displayed at the entry or exit of the store.
- Not allowing the customers to carry more than three dresses at one time to the trial room.
- Installation of CCTV's and cameras to keep a close observation on the customers.
- Each and every merchandise should have a security tag.
- Asking the store helpers to submit carry bags at the security.
- Making sure the sales representative handle the products carefully.
- Clothes should not be having unwanted stains or dust marks as they lose appeal and fail to impress the customers.
- Installing a generator for power backup and to avoid unnecessary black outs.
- Keeping expensive products in closed cabinets.
- Instructing the children not to touch breakable products.
- The customers should have a sense of feeling safe inside the store.

3.4.3 Make It Difficult for Retail Theft to Happen

- Instruct employees to be the first line of defence by greeting or acknowledging every customer who enters their department.
- Provide personal customer service to as many customers as possible.
- Instruct floor personnel to make frequent eye contact with customers who wish to browse on their own.
- Assign zones for staff coverage so that floor personnel don't leave vulnerable areas unattended.
- Instruct floor personnel to make a pleasant comment to every customer about the items being taken into the fitting room, so that the customer is aware of what is expected to be either returned or purchased.
- Always maintain 100 percent compliance when placing security tags on vulnerable merchandise. Install added security measures in "blind spots" around the store (e.g., bright lighting, security mirrors, anti-shoplifting signs, and camera).
- Lower displays around the cash register that block the cashier's view of the selling floor. If your store is large in size, improve retail security by making frequent announcements over the public address (PA) system, such as "Security to area 4," even if your store doesn't have security personnel or an area 4.
- Issue a criminal trespass warning to all known shoplifters who you want to be prohibited (by law) from entering your store again. Let shoplifters know, by work and deed, that your store prosecutes all offenders.

3.4.4 Inventory and Stock Management

- The retailer must ensure to management of inventory to avoid being "out of stock".
- Every retail chain should have its own storehouse to stock the merchandise.
- Taking adequate steps to prevent loss of inventory and stock.
- Store Operations is the life blood of a retail business and this is where our customers are where it all happens! Keeping this in mind.
- A store manager's job is managing resources such as people, merchandise, finances and promotions to deliver optimal customer service levels. This job is about interacting with customers and employees. It requires someone who can plan, organise, delegate and adapt to constantly changing circumstances and demands.
- Store management is about being hands on always, constantly leading and directing store operations from the floor where it's all happening. Ensuring that each store achieves trading standards also means putting in hours before the customers arrive and after the store has closed. And of course this happens seven days a week!

3.4.5 Store Organization

The organizational structure of a retail store will vary by the size and type of the business. Most tasks involved with operating a retail business will be the same. However, small or independent

retail stores may combine many sectors together under one division, while larger stores create various divisions for each particular function along with many layers of management.

For example, the small specialty shop may have all of its employees under one category called Store Operations. A large department store may have a complete staff consisting of a manager, assistant manager and sales associates for its Sporting Goods department, Home and Garden, Bed and Bath, and each additional department.

In order to define the store's organization, start by specifying all tasks that need to be performed. Then divide those responsibilities among various individuals or channels. Group and classify each task into a job with a title and description. The final step is to develop an organizational chart.

3.4.6 Importance of Store Organization

Store Layout

Why is good layout so important? Is it not sufficient to offer a well-adjusted product range at a good price in the right place? Surveys have shown that one of the most important criteria for customer satisfaction is the ease with which the customer finds his way in the store. Besides, the customer expects to be led along the main departments of the store. Therefore a good layout is a matter of customer satisfaction.

Of course, there are also commercial factors that argue in favour of the importance of a good layout. A good layout provides you with the opportunity of influencing store turnover. The appropriate shelf layout, the arrangement of the product range or a well-thought out spot for special offers all have a direct effect on turnover. So a good layout may very well create a boom in a store's turnover!

Finally, of course, the layout also has an organisational component. Each store has its own best solution for logistics problems. This applies especially to stores with a fast turnover of goods, stores that sell products that are difficult to market or products that take up a large amount of space etc. Defining specific conditions is an absolute necessity for the sale of goods that require a certain (sales) ambiance. And, finally, it is important to keep both customers and sales employees satisfied.

Purposes of the Store Layout

A good store layout serves many purposes, such as for instance customer flow, the prevention of shoplifting and logistics. The main purposes are discussed in greater detail below.

- **Customer flow**

  One of the main purposes of the layout is undoubtedly to create smooth customer flow through the store. To achieve this, it is important to create the right balance between fast and smooth (customer) flow on the one hand and provision of space on the other.

Creating smooth (customer) flow is necessary in stores that have a high frequency customer visits. Well-organised routing and sufficiently wide aisles can achieve this.

The danger of too smooth a customer flow is the speed. If the customer is accustomed walking through a store at a certain pace, it is important to slow down this spee deliberately, effectively and gradually. This can be achieved by means of certain 'tools does not need to involve a different layout of the available space. It can also accomplished by a special product range or eye catchers in the store.

A customer needs some time to decide to buy a product. The purchase of goods fr particular product ranges is determined by ambiance. For instance, a customer does n want to be disturbed by other customers when a choice has to be made between two ty of lingerie.

- Prevention

The layout also has a preventive task. The more poorly organised a store, the m opportunities shoplifters have to take advantage of the unclear situation! When developi the layout, precautions can be taken that make it more difficult for shoplifters to st goods.

Examples of this are: not to install the shelves as a poorly organised maze, adjusting th height of the shelves or placing theft-sensitive goods within sight of sales employees. The are just a few examples. At any rate, both preventive precautions and a deterrent poli can reduce the risk of a negative cash balance.

- Logistics

You will also want to keep logistics under control. Studies show that the so-called 'fin 50 yards' are the highest cost item of the logistics chain. This is where the turnover rat highest and so are the proportionally increasing staffing costs.

A good layout cannot completely reduce these costs, but it can make them mo controllable. Short supply routes, wide aisles where necessary and adjusting the wareho build-up to the store are important factors that can result in an improvement of the co structure.

- Other functions

Naturally, a good layout has other purposes as well. In accordance with the principle th first impressions count, the layout can either attract customers or put them off. A lay can provide solutions or it can complicate matters. A logical product layout will he customers make a decision to purchase, whereas an illogical order creates confusion a dissatisfaction.

Depending on the business type and the sales formula, there is an ever-growing need increased flexibility. Product ranges change more and more frequently and you want to be a

to respond rapidly to seasonal changes. A good layout allows for this. Flexibility is key where the need for space, margin in the market and presentation are concerned.

3.5 Retail Advertising

Advertising is how a company encourages individuals to purchase their products, services or ideas. An advertisement (or "ad" for short) is everything that pulls good attention towards these things. It is usually designed by an advertising assistance for an identified sponsor, and performed through a variety of media. Ads appear on television, as well as radio, newspapers, magazines and as billboards in streets and cities.

Purpose of advertising

The basic goal of advertising is to create awareness in the attentions of people, about the availability of products and services and impact them to buy the same. The ultimate aim is to enhance the sales of the organization. Some of the Purposes of advertising are:

- Communicates information: One of the most important purposes of advertising is to convey or communicate the information to others. In the modern day world, where science and technology contributes to new innovations and inventions, every now and then new goods and invention of the existing goods and services are entering into the market. If their use or knowledge is restricted to a limited amount of people, social advancements cannot take place. Consumers are, therefore, provided the facts about new products and services which enter the market, through advertising. Besides, the request for existing products and services has to be maintained as well as enhanced with the help of advertising. The ultimate purpose is to improve sales either by creating or increasing demand for goods and services.

- Makes ground for personal selling: Since the main purpose of promotion is to create and withstand demand for products or services and expand the market, the prospective buyers automatically become interested to buy such products and services. In this way, advertising supports the efforts of the sales force of an organization and creates ground for the salesmen to approach the prospective buyers.

- Educates people: Advertising serves another significant purpose of educating people about products and services. As consumers are not conscious of the use of several products and services, advertisements provide passable knowledge to the people at large about the usage and utility of several products and services.

- Builds goodwill: Advertising helps the purpose of promoting friendliness for the organization. Many advertisements aim at impressing the consumers that the firm is patriotic, progressive, imaginative and very much worried with quality. This creates goodwill in the minds of the general public about the firm. This goes a long way in creating a favourable impression about the organization on the prospective buyers.

- Creates image for the product or service: Another significant purpose of promotion is to create an image both for the product as well as for the organization. This is done by emphasizing the characteristic features of the products or services through advertisements.

81

Similarly, the reputation and goodwill of the organization can also be emphasiz[...]
advertisements.

- Counters competition: In the present day competitive marketing environment, a[...]
cannot escape the responsibility of expense on advertising. To counter the compet[...]
advertisement campaign, every firm has to undertake ad of its own. There[...]
competitive forces compel firms to spend on advertising.

Promoting a brand is more significant than opening a store. It is vital to create brand aware[...]
for the customers to know about the brand's presence. The retailer must strive hard[...]
communicate the USPs (Unique selling Proposition) of the brand to impact the buying beha[...]
of the customers. In simpler words, advertisements help the end–users to know to which br[...]
a particular product fits. Advertisements play a crucial role in promoting a brand and creating[...]
awareness amongst the masses. They help in creating an image of a particular product or bra[...]
in the minds of the potential customers. Such a mechanism is also called Brand Positioning.

- The retailer through various ways of advertising strives hard to promote his brand amon[...]
the multitudes for them to visit the store more frequently.
- Advertisements fascinate the customers into the store. They act as a promoter in bringi[...]
the customers to the store.

Advertisements have taglines to create awareness of a product or service in the most effecti[...]
way.

- The tagline has to be crisp and remarkable to create the desired impact.
- The tagline should not be long-lasting else the effect gets nullified.
- It has to be catchy.
- It should be simple to memorize.

3.6 Integrated Marketing Communication (IMC)

Integrated marketing communications (IMC) is a method used by organizations to brand and[...]
coordinate their communication efforts. The American Association of Advertising Agencies[...]
defines IMC as "a comprehensive plan that evaluates the strategic roles of a variety of[...]
communication disciplines and combines these disciplines to provide clarity, consistency and[...]
maximum communication impact." The primary idea behind an IMC strategy is to create a[...]
unified experience for consumers across different aspects of the marketing mix. The brand's core[...]
image and messaging are reinforced as each marketing communication channel works together[...]
as parts of a unified whole rather than in isolation.

3.6.1 Traditional Marketing vs. IMC

Prior to the rise of integrated marketing communications during the 1990s, mass[...]
communications-the practice of communicating information to large segments of the populatio[...]
through television, radio, and other media-dominated marketing. Marketing was a one-way[...]

feed. Advertisers advertised their offerings and value propositions with little regard for the diverse needs, tastes, and values of consumers.

Often, this "one size fits all" approach was costly and unhelpful due to the lack of tools for measuring results in terms of sales. But as methods for collecting and analyzing consumer data through single-source technology such as store scanners improved, marketers were progressively able to correlate promotional activities with consumer purchasing patterns. Companies also began to downsize their operations and expand marketing tasks within their organizations. Advertising agencies were also expected to understand and provide all marketing functions, not just advertising, for their clients.

Today, corporate marketing budgets are allocated toward trade promotions, consumer promotions, branding, public relations, and advertising. The allocation of communication budgets away from mass media and traditional advertising has raised the importance of IMC importance for effective marketing. Now, marketing is viewed more as a two-way conversation between marketers and consumers.

3.6.2 Benefits of IMC

- **Develops faith:** When it comes to advertising, customers are generally on the doubting side of the fence (in the vein of 'it's too good to be true'). By integrating your messages and keeping them consistent you will build faith with your intended audience and they will be more possible to give you the benefit of the doubt and click on the very enticing link that you have provided them with.

- **Takes away the misunderstanding:** It is very easy to get in your own way, and if you are sending out marketing emails covering a bit of something here and bit of something else there, it is very easy for customers to miss the point you are trying to make.

- **It is more effective:** When you integrate your campaign it will be more effective. By communicating constantly via a variety of channels, you are reinforcing your communication which, in turn, makes your message more powerful. The uniformity of your message will raise make awareness and trust, and will lead to the customer thinking of you first when they are ready to buy or make a reference to a friend or colleague.

- **Increased efficiency:** Integrating your campaign will help you to modernize your process. Once you have definite on the single pronged approach that will be implemented across your various channels, you will find that you have a much less complicated campaign to run. Instead of needing to create various resources for different spins of the campaign, you can utilize the same imagery and messages throughout and cut down on planning, meetings and resource.

- **You will save money:** Photography, graphics and content are costly to a business. By integrating your campaign you will eliminate the need for repetition, as when you integrate, you share across channels and this will save you both money and valuable time.

- **You will increase morale:** An integrated campaign can do a lot of good in terms of building trust in your brand and increasing revenue, but it can also help your business

within. When you run an integrated campaign your team has to pull together, share tale and stay on top of communication to ensure consistency. Not only will the gre consequences of the campaign up team morale, but the work done to integrate across th multiple channels will also have turned them into a well-oiled machine ready to champio the next campaign.

3.6.3 Management of IMC in Retail

Integrated marketing communication is a method to promote products and services (brad promotion) where numerous modes of marketing are integrated so that similar message goes t the customers. According to integrated marketing communication, all aspects of marketing communication work together to promote brands more effectually among end-users and al for better results. Brands are sponsored through advertising, sales promotions, banner, hoardings, public relations, social networking sites and so on simultaneously to increase brad awareness among potential end-users.'

One of the most effective ways to promote brands is through actual communication Organizations need to communicate well with not only the potential clients but also existing clients. Communicating efficiently not only strengthens relationship with your clients but also gives organizations an advantage over competitors. Remember, effective communication enables message and relevant information to reach the recipients in the anticipated manner. Why would a customer invest in your brand if he/she is not aware of the product's features and benefits? The unique selling points of brands need to be communicated well to the end-users by effectively integrating various brand promotion tools.

Following are the various ways which enable organizations to communicate effectively with customers.

- Advertising
- Online Promotions
- Direct Marketing
- Hoardings, Banners
- PR Activities
- Internet Emails and so on.

Marketers need to promote two way communications with customers. The feedback customers is vital and should be monitored regularly, if you really wish to survive in the lo run. Your customers must be able to reach you suitably for them to develop a sense attachment and loyalty towards your brand.

Various modes of brand communication need to be managed effectively so that similar mess reaches customers. For Example if your advertisement says your products are eco-friendly, th bill boards, and banners must also share the same message. The integration needs to be do smartly and effectively

- The first step towards managing integrated marketing communication is to identify the target audience. You need to understand, who are the customers would actually benefit from your products. Understand their needs and expectations.

- The second step is to know what you intend to communicate. No brand promotion tools would help unless and until you are really sure of what you want to share with your potential and existing customers.

- Carefully design your message. Check the content of the message, message structure, format, spellings and so on.

- The next step is to identify the various channels of communication. You need to be really careful while selecting the channel of communication so that the right message goes to the right customer at the right place and right time.

- Allocate right resources for brand promotion. Decide how much can you spend on various marketing and promotional activities. A marketer needs to wisely assign budgets for various promotional activities such as advertising, PR activities, banners and so on.

- The most crucial step is to measure the results of integrated marketing communication. Find out whether the combination of all marketing tools has actually helped you reach a wider audience and promote your brands more effectively.

3.7 Sales Promotion

Sales promotion aims to provide a short-term boost to sales. While a frank price cut is one option, sales raise looks for alternatives that are more cost-effective - costing less to implement but providing a bigger increase in sales. Another category of sales promotion focuses on outlets where your product is sold. Visual merchandising shows aim to make your product more visible, encouraging consumers to make an impulse purchase or to choose your brand rather than a competitor. As well as point-of-sale displays, merchandising options include encouraging retailers to devote more shelf space to your goods or offering specially packaged products.

Sales promotions are often mixed up with advertising. For instance, a television advertisement mentioning a contest awarding winners with a free trip to a Caribbean island may give the contest the appearance of advertising. While the distribution of the marketer's message through television media is certainly labeled as advertising, what is contained in the message, namely the contest, is considered a sales promotion.

Sales are the lifeblood of a business-without sales there would be no trade in the first place; therefore it is very vital that if a business wants to succeed, it should have a sales promotion strategy in mind. The primary objective of a sales promotion is to improve a company's sales by forecasting and modifying your target customer's purchasing behavior and patterns. Sales promotion is very important as it not only helps to boost sales but it also helps a business to draw new clients while at the same time retaining older ones.

A business can promote itself through and effective sales promotion because it says something about work and helps the business to identify themselves. They can be a low-cost way of

increasing awareness, of reaching new buyers or extending the buying choices of existing audiences. As a vital part of any promotional campaign they should be planned from the beginning.

While sales promotions can often be done cheaply, there should always be a line item for the activity in the budget, no matter how small because the support can in turn increase the efficiency and impact of the sales promotion. Sales promotions often involve working with other organizations. This could help in building mutually beneficial relationships, leading to sponsorships.

Sales promotions can be one of the best tools for retaining customers and increasing your share of their wallet. The promotions can encourage customers to try your product or company, increase their frequency or quantity of purchases, they can help you build your database, cross sell and extend and reinforce your brand. Loyalty programs can be an effective sales promotion tool and allow you to track and measure your results.

Imaginatively and carefully planned sales promotions can deliver long-term benefits to an organization. Often not surprisingly, they look like last minute panic measures and that can signal failure, not success. One well-planned, far-reaching promotion is better than heaps of little one-offs that bear no relation to the overall strategy. As the term implies — the ultimate goal is sales or transactions. However, promotions can be planned to increase sales over a long period within a specific market segment, so it is not always about immediate results.

The issue of sales promotion has been receiving increasing attention from both advertising and marketing professionals and academicians. This increase of attention can be explained by two major interrelated factors: first, the nature of sales promotions – it brings certain measurable (as opposed to advertising) impact on sales, which attracts many marketing managers; it also has been proven by time to be the effective collection of techniques to increase sales.

3.7.1 Objectives

The main objective of sales promotion is to bring about a modification in the demand pattern of products and services. Basically, sales promotion has three specific objectives.

- First, it is meant to provide important marketing information to the potential buyers.
- The second objective is to convince and influence the potential buyers through persuasive measures.
- Thirdly, sales promotion is meant to act as a powerful tool of competition.

Some of the other objectives are:

- To introduce new products or services: Sales promotion is often used to motivate potential consumers to try new products and services. Dealers are also induced to introduce new products and services in the market. Usually, free samples are provided through dealers during such outline. Similarly, discounts in cash or goods may also be offered to dealers.

86

to stock new products or deal with new services. Free samples, trade discounts, cash discounts are basically sales promotion measures.

- **To attract new customers:** Sales promotion measures also play a significant role in attracting new customers for an organization. Usually, new customers are those persons that are won away from other firms. Samples, gifts, prizes, etc. are used to encourage consumers to try a new brand or shift their patronage to new dealers.

- **To induce existing customers to buy more:** Sales promotion devices are most often used to induce the existing customers of a firm to buy more. Product development, offering three products at the cost of two, discount coupons, are some of the sales promotion devices used by firms to motivate the existing buyers to buy more of a specific product.

- **Helps the firm to remain competitive:** Most of the companies undertake sales promotion activities in order to remain in the competitive market. Therefore, in the modern competitive world no firm can escape the responsibility of undertaking sales promotion activities.

- **To increase sales in off-seasons:** Many products like air-coolers, fans, refrigerators, air-conditioners, cold drinks, room heaters, etc. have seasonal demand. Manufacturers and dealers dealing with such type of goods make every effort to maintain a stable demand throughout the year. In other words, firms try to encourage the purchase of such goods in off-seasons also. That is the main reason behind discounts and off-season price reductions of such items in the market during slack seasons.

- **To add to the stock of the dealers:** Dealers like wholesalers and retailers usually deal with a variety of goods. Their selling activity becomes easier when the manufacturer supplements their efforts by sales promotion measures. When a product or service is well supported by sales promotion, dealers are automatically induced to have more of such items.

3.7.2 Limitations

Sales promotion is a powerful and effective method to produce immediate short period positive results; it is not a remedy for a bad product or bad advertising. In fact, a promotion is speed up the killing of a bad product. Some of them are listed below:

- Increased price sensitivity: Frequently promoted brands in the product category, especially on the basis of value, make consumers and traders more price sensitive not only for the promoted brands but for other brands as well in the similar product category. Consumers wait for the promotion deals to be announced and then purchase the product. This is true even for brands where brand loyalty exists. Customers wait and time their purchases to coincide with promotional offers on their preferred brands.

- Quality image may become tarnished: If the promotions in a product category have been rare, or the product occurs to be of high involvement category, the campaigns could have a negative effect about its quality image. Consumers may start doubting that perhaps the product has not been selling well, the quality of the product is true compared to the price or the product is likely to be discontinued because it has become outdated.

- Dealers forward buy and divert stocks: In case of deals for the trade, many dealers forward buy, in excess of their inventory requirements. This is particularly happens if a product is low bulk, much in demand and the inventory holding costs are favorably low. This is true both for wholesalers as well as retailers. Forward buying of excessive stocks on deals of quantity discounts can lead to diversion of some of the stocks in non-deal areas. Forward buying of excessive stocks on deals or quantity discounts can lead to diversion of some of the stocks in non- deal areas.
- Short-term orientation: Sales promotions are generally for a short duration. This gives a boost to sales for a short period. This short-term orientation may sometimes have negative effects on long-term future of the organization. Promotions mostly build short-term sale volume that is not maintained.

Heavy use of sales promotion, in certain product categories, may be responsible for causing brand quality image dilution.

The argument given in favor is that companies should develop superior products or service which are better than competitors and consumer should be convinced through appropriate and focused advertising about the superiority of the product and its image.

This will result in lasting brand identities reflecting consumer values. Then there will be no need to offer any extra benefits; only the lasting brand image will keep customers loyal to the brand.

3.7.3 Tools

Advertising, promotions, social media and public relations all support marketing strategies using different and specific methods. Sales advertisings are temporary deals, events and ways of communicating with potential customers to motivate them to spend, or spend more. Adapting a diversity of common sales promotions to your situation helps you upsurge your revenues and profits.

Some of the tolls which we can use for sales promotion strategy are:

- **Free Sample:** It often takes more than advertising to break consumers' brand loyalty especially if they have been using a product or shopping at a specific store for years. One reason is the worry that trying somewhat new will result in a waste of money if they don't like the new product. Offering customers a chance to try your product or service risk-free is a common method of breaking brand loyalty and converting competitors' customers into your customers.
- **Rebates:** Instead of offering consumers a discount on the price they'll pay for your product, offer a rebate, which is a monetary amount consumers receive later, generally in the form of a check you send via mail. This allows you to gather customer information and create a mailing list, a benefit you can't get simply through a point-of-sale discount.

- **Buy One, Get One Free:** Consumers love a good deal, and they love freebies even more. Offering a free product if the consumer purchases one is a time-honored sales promotion that works for several reasons. If your margins are high enough, you might be able to cover your costs for both products at your selling price for one. This type of promotion allows you to double the amount of time the consumer uses your product, potentially leading to a better experience and an affinity for your product. This strategy also can help you decrease your dependence on costly, free-sample giveaways.

- **Point-of-Purchase Display:** To stimulate impulse buys or to remind regular clients not to leave the store without an exact product, marketers have used in-store displays for generations. These are signs, racks or other physical promotional pieces that stand out from their surroundings while touting a particular product or offer.

- **Loss Leaders and Discounts:** As with free samples or buy-one-get-one-free promotions, loss leaders make goods or services available below the seller's cost. Some large retail chains use loss leaders to lure consumers into their stores, hoping that they will buy other products while they are in the store. Supermarkets are well known for marking down a staple, such as milk or bread, to entice consumers into the store, marking up the prices of other staples such as eggs or orange juice to even out the promotion financially. Some eateries offer entrée or sandwiches as loss leaders because they make enough profits on additional sales of soups, salads, fries, drinks and desserts to turn a profit. Loss leaders often have a dual goal of generating a profit and getting consumers into a store to stimulate future sales. Discounts are markdowns on products or services that help reduce slow-moving product or temporarily spike sales.

3.8 Enterprise Resource Planning (ERP)

It is defined as the ability to deliver an integrated suite of business applications. ERP tools share a common process and data model, covering broad and deep operational end-to-end processes, such as those found in finance, HR, distribution, manufacturing, service and the supply chain.

ERP applications automate and support a range of administrative and operational business processes across multiple industries, including line of business, customer-facing, administrative and the asset management aspects of an enterprise. However, ERP deployments tend to come at a significant price, and the business benefits are difficult to justify and understand.

Look for business benefits in four areas:

- IT cost savings,
- Business process efficiency,
- As a business process platform for process standardization and
- As a catalyst for business innovation.

Most enterprises focus on the first two areas, because they are the easiest to quantify; however, the latter two areas often have the most significant impact on the enterprise.

With the right enterprise resource planning software, all your business processes come together for easy collaboration and rapid decision-making to enhance your team's overall productivity.

Leverage integrated systems for:

- Financial management: Gain control over your assets, cash flow, and accounting.
- Supply chain and operations management: Streamline your purchasing, manufacturing, inventory, and sales order processing.
- Customer relationship management: Improve customer service, and increase cross-sell and upsell opportunities.
- Project management: Get what you need to deliver work on time and on budget with better billing and project monitoring.
- Human resources management: Get help attracting and retaining good employees with tools to help hire, manage, and pay your team.
- Business intelligence: Make smart decisions with easy-to-use reporting, analysis, and business intelligence tools.

3.9 Supply Chain Management

Supply Chain Management is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers (Harland, 1996). Supply Chain Management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption (supply chain).

Supply chain management (SCM) is a process used by companies to ensure that their supply chain is efficient and cost-effective. A supply chain is the collection of steps that a company takes to transform raw components into the final product. The following are five basic components of SCM.

1) Plan
2) Develop (Source)
3) Make
4) Deliver
5) Return

- Plan: The first stage in supply chain management is known as plan. A plan or strategy must be developed to address how a given good or service will meet the needs of the customers. A significant portion of the strategy should focus on planning a profitable supply chain. This is the strategic portion of SCM. Companies need a strategy for managing all the resources that go toward meeting customer demand for their product or service. A big piece of SCM planning is developing a set of metrics to monitor the supply chain so that it is efficient, costs less and delivers high quality and value to customers.

- **Develop (Source):** Develop is the next stage in supply chain management .It involves building a strong relationship with suppliers of the raw materials needed in making the product the company delivers. This phase involves not only identifying reliable suppliers but also planning methods for shipping, delivery, and payment.

  Companies must choose suppliers to deliver the goods and services they need to create their product. Therefore, supply chain managers must develop a set of pricing, delivery and payment processes with suppliers and create metrics for monitoring and improving the relationships. And then, SCM managers can put together processes for managing their goods and services inventory, including receiving and verifying shipments, transferring them to the manufacturing facilities and authorizing supplier payments.

- **Make:** At the third stage, make, the product is manufactured, tested, packaged, and scheduled for delivery. This is the manufacturing step. Supply chain managers schedule the activities necessary for production, testing, packaging and preparation for delivery. This is the most metric-intensive portion of the supply chain – one where companies are able to measure quality levels, production output and worker productivity.

- **Deliver:** Then, at the logistics phase, customer orders are received and delivery of the goods is planned. This fourth stage of supply chain management stage is aptly named deliver.

  This is the part that many SCM insiders refer to as logistics, where companies coordinate the receipt of orders from customers, develop a network of warehouses, pick carriers to get products to customers and set up an invoicing system to receive payments.

- **Return:** The final stage of supply chain management is called return. As the name suggests, during this stage, customers may return defective products. The company will also address customer questions in this stage. This can be a problematic part of the supply chain for many companies. Supply chain planners have to create a responsive and flexible network for receiving defective and excess products back from their customers and supporting customers who have problems with delivered products.

To ensure that the supply chain is operating as efficient as possible and generating the highest level of customer satisfaction at the lowest cost, companies have adopted Supply Chain Management processes and associated technology. Supply Chain Management has three levels of activities that different parts of the company will focus on: strategic; tactical; and operational.

Strategic

At this level, company management will be looking to high level strategic decisions concerning the whole organization, such as the size and location of manufacturing sites, partnerships with suppliers, products to be manufactured and sales markets.

Strategic activities include building relationships with suppliers and customers, and integrating information technology (IT) within the supply chain.

Tactical

Tactical decisions focus on adopting measures that will produce cost benefits su industry best practices, developing a purchasing strategy with favoured suppliers, wo logistics companies to develop cost effect transportation and developing warehouse s reduce the cost of storing inventory.

Studying competitors and making decisions regarding production and delivery would the tactical category.

Operational

Decisions at this level are made each day in businesses that affect how the products m the supply chain. Operational decisions involve making schedule changes to pri purchasing agreements with suppliers, taking orders from customers and moving prod warehouse.

The operational category includes the daily management of the supply chain, includ making of production schedules.

3.9.1 What is the relationship between ERP, CRM and SCM?

Many SCM applications are reliant upon the kind of information that is stored inside en resource planning (ERP) software and, in some cases, to some customer rela management (CRM) packages.

Theoretically a company could assemble the information it needs to feed the SCM app from legacy systems (for most companies this means Excel spreadsheets spread out all o place), but it can be nightmarish to try to get that information flowing on a fast, reliab from all the areas of the company.

ERP is the battering ram that integrates all that information in a single application, an applications benefit from having a single major source to go to for up-to-date informati

Most CIOs who have tried to install SCM applications say they are glad they did ERP They call the ERP projects "putting your information house in order." Of course, expensive and difficult, so you may want to explore ways to feed your SCM applica information they need without doing ERP first.

These days, most ERP vendors have SCM modules, so doing an ERP project may be kill two birds with one stone. In addition, the rise and importance of CRM system companies today puts even more pressure on a company to integrate all of its enterp software packages. Companies will need to decide if these products meet their need need a more specialized system.

Applications that simply automate the logistics aspects of SCM are less dependent upon gathering information from around the company, so they tend to be independent of the ERP decision. But chances are, companies will need to have these applications communicate with ERP in some fashion.

It's important to pay attention to the software's ability to integrate with the Internet and with ERP applications because the Internet will drive demand for integrated information. For example, if a company wants to build a private website for communicating with their customers and suppliers, the company will want to pull information from ERP and supply chain applications together to present updated information about orders, payments, manufacturing status and delivery.

3.9.2 Key Features of Supply Chain Management

Supply chain softwares are robust, feature-rich technology softwares that enhance operations from end-to-end.

Today's popular supply chain software can help companies achieve and maintain a competitive edge by empowering them to streamline and enhance their most important supply chain operations from start to finish. With supply chain software in place, organizations can maximize cost-efficiency, increase productivity, and give their bottom line a big boost.

This functionality is designed to fully automate and support supply chain processes from end-to-end, and includes:

Inventory Management

With a supply chain package, companies can significantly improve the way they track and manage their supplies of raw materials and components needed for production, finished goods to satisfy open sales orders, and spare parts required for field service and support. This eliminates excess and waste, frees up valuable real estate for other important purposes, and minimizes related storage costs.

Order Management

Supply chain software can dramatically accelerate the execution of the entire order-to-delivery cycle by helping companies to more productively generate and track sales orders. Supply chain also enables the dynamic scheduling of supplier deliveries to more effectively meet demand, and more rapid creation of pricing and product configurations.

Procurement

All activities and tasks associated with sourcing, purchasing, and payables can be fully automated and streamlined across a company's entire supplier network with a supply chain software package. As a result, businesses can build stronger relationships with vendors, better access and

manage their performance, and improve negotiations to leverage volume or bulk other cost-cutting measures.

Logistics

As companies expand globally, their supply chains become more and more complex the coordination of the numerous warehouses and transportation channels invol challenging endeavour without supply chain software in place. With supply chain can improve on-time delivery performance and boost customer satisfaction by complete visibility into how finished goods are stored and distributed, regardless of t of facilities or partners that participate.

Forecasting and Planning

With supply chain software, organizations can more accurately anticipate customer de plan their procurement and production processes accordingly. As a result, they unnecessary purchases of raw-materials, eliminate manufacturing over-runs, and pr need to store excess finished goods, or slash prices to move products off of warehouse

Return Management

Supply chain software can simplify and accelerate the inspection and handling of defe broken goods - on both the buy and sell side of the business - and automate the proce claims with suppliers and distributors, as well as insurance companies.

Many supply chain offerings also include add-on options or modules designed to enhance activities. Through these features, support is provided for a variety of important process as contract management, product lifecycle management, capital asset management, and m

Advantages of SCM

Supply chain software provides numerous advantages to organizations, empowering th improve operations from end-to-end.

Key Benefits of Supply Chain Management Software:
- Improve Your Supply Chain Network
- Minimized Delays
- Enhanced Collaboration
- Reduced Costs

Disadvantages of SCM

The biggest disadvantage of global supply chain management is the heavy investment i money, and resources needed to implement and overlook the supply chain.

3.10 Job Roles

Here's an overview of some of the top retail jobs, including what the job entails, the qualifications needed to get hired, and the median earnings.

- **Buyer**

  Buyers and purchasing agents buy the products sold in retail stores. They are responsible for evaluating vendors, negotiating prices, ordering, and arranging delivery schedules. One of the perks is getting to attend trade shows to check out what's new. At large retailers, buyers work out of corporate headquarters. Smaller organizations may have an in-house buyer.

- **Cashier**

  This isn't the best paying retail job, but it's one where there are no formal educational requirements for new hires. You can apply online at most major retailers, and on the job training is provided. Opportunities are available at department stores, grocery stores, gas stations, and other retail establishments. Positions are plentiful, with 2.8 million people employed as cashiers in 2015. Many positions are part-time, though some employers offer benefits.

- **Customer Service Representative**

  There are many different customer service roles in retail. The job could be working at the customer service desk handling returns and payments, providing product information and pricing to customers, or responding to inquiries about availability and delivery.

- **Demonstrator/Product Promoter**

  Demonstrators and product promoters share information on new products, and products which are being promoted. Depending on where you work, you could be giving away food or beverage samples, suggesting makeup options to customers, sharing information on products in the store, or otherwise getting customers to notice the product you're pitching.

- **Department Manager**

  A department manager is responsible for one section of a retail store. For example, grocery stores have managers for produce, frozen food, meat and seafood, and dairy. This job could be a promotion from a stock or associate job, or the employer could recruit candidates with experience in that department.

- **District Manager**

  District Managers handle a group of stores, usually within a geographic territory. They supervise operations and manage the stores within their region.

- **IT Coordinator**

  Retail IT Coordinators provide operations and user support for retailers. Responsibilities may include hardware, software, mobile, messaging, and server support. IT Coordinators troubleshoot and resolve issues, and upgrade and maintain store systems.

- **Human Resources Manager/Training Manager**

  Human Resources Managers are responsible for recruiting, hiring, training, and employee relations. Depending on the retailer, this role could be either a store or corporate position.

- **Logistics Coordinator**

Retail Logistics Coordinators get the products to the store. They keep track of inventory, order stock, allocate merchandise to stores, manage the organization of stock rooms, and ensure timely shipping and delivery to maintain stocked shelves and racks.

- **Loss Prevention Associate**

Loss Prevention Associates are hired to prevent shoplifting. Employees are required to follow the organization's loss control policies and cash handling procedures. Responsibilities may include greeting customers, checking bags and tags, and inspecting store alarms and locks.

- **Manager Trainee/Leadership Development Associate**

Many retailers have management training programs. Some are designed for college graduates to rotate through different areas of the retail business as an introduction to starting a career with the company. Others are focused on training employees who are being promoted from within.

- **Marketing Coordinator**

Retail Marketing Coordinator job responsibilities will vary significantly based on your employer. If you're working for a small retailer, you may handle everything from print advertising to social media engagement. At a large employer, your role may be more streamlined.

- **Online Merchandiser**

This is a retail job that pays well and lets you skip being on the sales floor. Online Merchandisers are responsible for digital merchandising of the products on the company website. The ability to measure customer interest, determine sales strategy, decide on product promotion, and analyze data are all requirements.

- **Optical/Fashion Stylist**

Stylists help optical clients choose frames, suggest clothes to customers, manage fitting rooms, and drive sales. These positions are available in eyewear stores, high-end department stores, and specialty clothing and accessory stores.

- **Order Processor**

Order Processors work for retailers that sell big-ticket items like cars, furniture, and appliances. They receive and process orders, track orders, handle customer and vendor inquiries, and coordinate shipments and deliveries.

- **Pharmacy Technician**

Pharmacy technicians work in drug stores and pharmacies within large retail stores. They receive and process prescriptions. The job involves data entry, printing labels, stocking shelves, preparing and packaging medications. Strong customer service skills are important for this role.

- **Retail Merchandiser**

Retail Merchandisers set up and maintain displays, including featured and seasonal products. Some merchandisers work for the store, while others work for the product manufacturer.

- **Sales Associate**

This is a high employment occupation, with 4.3 million retail salespersons employed in the U.S. in 2015, and 7 percent expected growth between 2014-2024. It isn't a high paying job when you look at the average hourly rate, but there may be an opportunity to earn commission. That can add up when you're selling high ticket items like furniture, appliances, or automobiles.

- **Store Manager**

The Store Manager is responsible for the day-to-day operations of the store including inventory, customer service, productivity, promotions, and profitability. The role may include hiring, scheduling, training, and managing employees.

- **Team Leader/Assistant Manager**

A retail Assistant Manager helps the Store Manager with day-to-day operations. Depending on the size of the store, job responsibilities may include oversight of a specific area of the store or assisting with general management.

CHAPTER 4: BFSI SECTOR

4.1 Banking Sector

As per the Reserve Bank of India (RBI), India's banking sector is sufficiently capitalised and well-regulated. The financial and economic conditions in the country are far superior to any other country in the world. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well.

Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry.

In August 2017, Global rating agency Moody's announced that its outlook for the Indian banking system was stable.

4.1.1 Market Size

The Indian banking system consists of 27 public sector banks, 26 private sector banks, 46 foreign banks, 56 regional rural banks, 1,574 urban cooperative banks and 93,913 rural cooperative banks, in addition to cooperative credit institutions. Public-sector banks control more than 70 per cent of the banking system assets, thereby leaving a comparatively smaller share for its private peers. Banks are also encouraging their customers to manage their finances using mobile phones.

ICRA estimates that credit growth in India's banking sector would be at 7-8 per cent in FY 2017-18.

4.1.2 Investments

Key investments and developments in India's banking industry include:

- International Finance Corp, (IFC), a member of the World Bank Group, has invested Rs 130 crore (US$ 20 million) in, Avas Financiers Ltd, which will provide housing loans to low-income consumers in rural and semi-urban areas of India.
- The Reserve Bank of India (RBI) has proposed to allow banks to invest in real estate investment trusts (REITs) and infrastructure investment trusts (InvITs) which is expected to benefit both real estate and banking sector in diversifying investor base and investment avenues respectively.
- The Canada Pension Plan Investment Board (CPPIB) and the Caisse de Depot Quebec (CDPQ) have acquired a 1.5 per cent stake in Kotak Mahindra Bank from Executive vice-chairman and Managing director, Kotak Mahindra Bank, for a total consideration of Rs 2,254 crore (US$ 350.0 million).

- Fullerton India Credit Co Ltd, a non-banking finance company (NBFC), has raised Rs 500 crore (US$ 75 million) through masala bonds, to support its onward lending and other financing activities.

- The Insurance Regulatory and Development Authority of India (IRDA) has allowed insurers to invest up to 10 per cent in additional tier 1 (AT1) bonds, that are issued by banks to augment their tier 1 capital, in order to expand the pool of eligible investors for the banks.

- Qatar's Doha Bank plans to apply to the Qatar Central Bank and Reserve Bank of India for permission to establish a local subsidiary in India, with the vision to create a retail branch network in India.

- Fairfax Financial Holdings, a Canada-based financial services firm, has received an approval from the RBI to acquire a majority 51 per cent stake in Kerala-based Catholic Syrian Bank for Rs 1,000 crore (US$ 150 million), which will be the first takeover of an Indian bank by a non-banking financial entity, after RBI tweaked ownership norms.

- IndiaPost has received the final license from RBI to start its payment bank operations, thus becoming the third entity in India after Bharti Airtel and Paytm to receive payment bank license from RBI.

- Microfinance firm Ujjivan Financial Services Ltd has announced starting of banking services across its branches under the name of Ujjivan Small Finance Bank Ltd, thus becoming the largest among five small banks which are scheduled to start their operations or have already started.

4.1.3 What is banking?

A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it. Oxford Dictionary defines a bank as "an establishment for custody of money, which it pays out on customer's order."

Characteristics / Features of a Bank

1. Dealing in Money

   Bank is a financial institution which deals with other people's money i.e. money given by depositors.

2. Individual / Firm / Company

   A bank may be a person, firm or a company. A banking company means a company which is in the business of banking.

3. Acceptance of Deposit

   A bank accepts money from the people in the form of deposits which are usually repayable on demand or after the expiry of a fixed period. It gives safety to the deposits of its customers. It also acts as a custodian of funds of its customers.

4. Giving Advances

   A bank lends out money in the form of loans to those who require it for different purposes.

5. Payment and Withdrawal

    A bank provides easy payment and withdrawal facility to its customers in the form of cheques and drafts; it also brings bank money in circulation. This money is in the form of cheques, drafts, etc.

6. Agency and Utility Services

    A bank provides various banking facilities to its customers. They include general utility services and agency services.

7. Profit and Service Orientation

    A bank is a profit seeking institution having service oriented approach.

8. Ever increasing functions

    Banking is an evolutionary concept. There is continuous expansion and diversification as regards the functions, services and activities of a bank.

9. Connecting Link

    A bank acts as a connecting link between borrowers and lenders of money. Banks collect money from those who have surplus money and give the same to those who are in need of money.

10. Banking Business

    A bank's main activity should be to do business of banking which should not be subsidiary to any other business.

11. Name Identity

    A bank should always add the word "bank" to its name to enable people to know that it is a bank and that it is dealing in money.

4.1.4 Types of Banks

There are various types of banks which operate in our country to meet the financial requirements of different categories of people engaged in agriculture, business, profession, etc. On the basis of functions, the banking institutions in India may be divided into the following types:
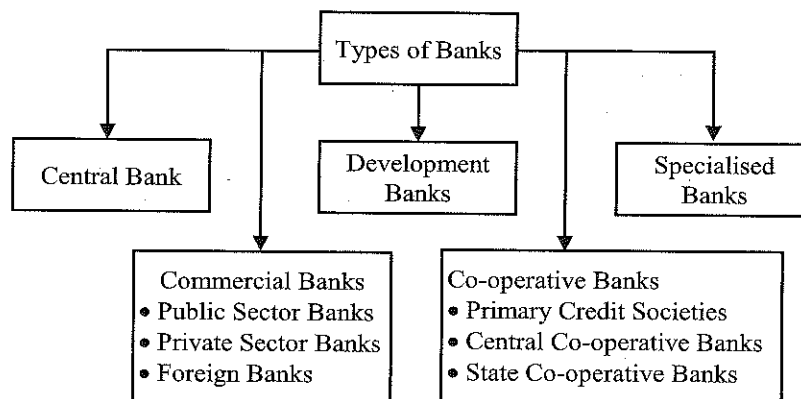
A. Central Bank

A bank which is entrusted with the functions of guiding and regulating the banking system of a country is known as its Central bank. Such a bank does not deal with the general public. It acts

essentially as Government's banker, maintain deposit accounts of all other banks and advances money to other banks, when needed. The Central Bank provides guidance to other banks whenever they face any problem. It is therefore known as the banker's bank. The Reserve Bank of India is the central bank of our country.

The Central Bank maintains record of Government revenue and expenditure under various heads. It also advises the Government on monetary and credit policies and decides on the interest rates for bank deposits and bank loans. In addition, foreign exchange rates are also determined by the central bank.

Another important function of the Central Bank is the issuance of currency notes, regulating their circulation in the country by different methods. No other bank than the Central Bank can issue currency.

B. Commercial Banks

Commercial Banks are banking institutions that accept deposits and grant short-term loans and advances to their customers. In addition to giving short-term loans, commercial banks also give medium-term and long-term loan to business enterprises. Now-a-days some of the commercial banks are also providing housing loan on a long-term basis to individuals.

Types of Commercial Banks
- Public Sector Banks

    These are banks where majority stake is held by the Government of India or Reserve Bank of India. Examples of public sector banks are: State Bank of India, Corporation Bank, Bank of Baroda and Dena Bank, etc.

- Private Sectors Banks

    In case of private sector banks majority of share capital of the bank is held by private individuals. These banks are registered as companies with limited liability. For example: The Jammu and Kashmir Bank Ltd., Bank of Rajasthan Ltd., Development Credit Bank Ltd, Lord Krishna Bank Ltd., Bharat Overseas Bank Ltd., Global Trust Bank, Vysya Bank, etc.

- Foreign Banks

    These banks are registered and have their headquarters in a foreign country but operate their branches in our country. Some of the foreign banks operating in our country are Hong Kong and Shanghai Banking Corporation (HSBC), Citibank, American Express Bank, Standard & Chartered Bank, Grindlay's Bank, etc. The number of foreign banks operating in our country has increased since the financial sector reforms of 1991.

C. Development Banks

Business often requires medium and long-term capital for purchase of machinery and equipment, for using latest technology, or for expansion and modernization. Such financial assistance is provided by Development Banks. They also undertake other development measures

like subscribing to the shares and debentures issued by companies, in case of under subscription of the issue by the public. Industrial Finance Corporation of India (IFCI) and State Financial Corporations (SFCs) are examples of development banks in India.

D. Co-operative Banks

People who come together to jointly serve their common interest often form a co–operative society under the Co-operative Societies Act. When a co-operative society engages itself in banking business it is called a Co-operative Bank. The society has to obtain a licence from the Reserve Bank of India before starting banking business. Any co-operative bank as a society is to function under the overall supervision of the Registrar, Co-operative Societies of the State. As regards banking business, the society must follow the guidelines set and issued by the Reserve Bank of India.

Types of Co-operative Banks

* Primary Credit Societies

  These are formed at the village or town level with borrower and non-borrower members residing in one locality. The operations of each society are restricted to a small area so that the members know each other and are able to watch over the activities of all members to prevent frauds.

* Central Co-operative Banks

  These banks operate at the district level having some of the primary credit societies belonging to the same district as their members. These banks provide loans to their members (i.e., primary credit societies) and function as a link between the primary credit societies and state co-operative banks.

* State Co-operative Banks

  These are the apex (highest level) co-operative banks in all the states of the country. They mobilise funds and help in its proper channelisation among various sectors. The money reaches the individual borrowers from the state co-operative banks through the central co-operative banks and the primary credit societies.

E. Specialised Banks

There are some banks, which cater to the requirements and provide overall support for setting up business in specific areas of activity. EXIM Bank, SIDBI and NABARD are examples of such banks. They engage themselves in some specific area or activity and thus, are called specialised banks.

* Export Import Bank of India (EXIM Bank)

  If anyone wants to set up a business for exporting products abroad or importing products from foreign countries for sale in our country, EXIM bank can provide the required support and assistance. The bank grants loans to exporters and importers and also provides information about the international market. It gives guidance about the opportunities for export or import, the risks involved in it and the competition to be faced, etc.

- **Small Industries Development Bank of India (SIDBI)**

  If anyone wants to establish a small-scale business unit or industry, loan on easy terms can be available through SIDBI. It also finances modernisation of small-scale industrial units, use of new technology and market activities. The aim and focus of SIDBI is to promote, finance and develop small-scale industries.

- **National Bank for Agricultural and Rural Development (NABARD)**

  It is a central or apex institution for financing agricultural and rural sectors. If a person is engaged in agriculture or other activities like handloom weaving, fishing, etc. NABARD can provide credit, both short-term and long-term, through regional rural banks. It provides financial assistance, especially, to co-operative credit, in the field of agriculture, small-scale industries, cottage and village industries handicrafts and allied economic activities in rural areas.

4.1.5 Functions of Bank

According to section 6 of the Banking Regulation Act, 1949, the primary functions of a bank are: acceptance of deposits and lending of funds. For centuries, banks have borrowed and lent money to business, trade, and people, charging interest on loans and paying interest on deposits. These two functions are the core activities of banking. Besides these two functions, a commercial bank performs a variety of other functions which can be categorized in two broad categories namely (a) Agency or Representative functions (b) General Utility functions.

A. Agency or Representative Functions

- Collection and Payment of Various Items: Banks carry out the standing instructions of customers for making payments; including subscriptions, insurance premium, rent, electricity and telephone bills, etc.

- Undertake government business like payment of pension, collection of direct tax (e.g. income tax) and indirect tax like excise duty.

- Letter of Reference: Banks buy and sell foreign exchange and thus promote international trade. This function is normally discharged by Foreign Exchange Banks.

- Purchase and Sale of Securities: Underwrite and deal in stock, funds, shares, debentures, etc.

- Government's Agent: Act as agents for any government or local authority or any other person or persons; also carry on agency business of any description including the clearing and forwarding of goods, giving of receipts and discharges, and otherwise acting as an attorney on behalf of customers, but excluding the business of a managing Agent or Secretary and treasurer of a company.

- Purchase and Sale of Foreign Exchange: Banks buy and sell foreign exchange and thus promote international trade. This function is normally discharged by Foreign Exchange Banks.

- Trustee and Executor: Banks also act as trustees and executors of the property of their customers on their advice.

104

- Remittance of Money: Banks also remit money from one place to the other through bank drafts or mail or telegraphic transfers.

B. General Utility Functions

- Locker facility: Banks provide locker facilities to their customers. People can keep their gold or silver jewellery or other important documents in these lockers. Their annual rent is very nominal.

- Business Information and Statistics: Being familiar with the economic situation of the country, the banks give advice to their customers on financial matters on the basis of business information and statistical data collected by them.

- Help in Transportation of Goods: Big businessmen or industrialists after consigning goods to their retailers send the Railway Receipt to the bank. The retailers get this receipt from the bank on payment of the value of the consignment to it. Having obtained the Railway Receipt from the bank they get delivery of the consignment from the Railway Goods Office. In this way banks help in the transportation of goods from the production centers to the consumption centers.

- Acting as a Referee: If desired by the customer, the bank can be a referee i.e. who could be referred by the third parties for seeking information regarding the financial position of the customer.

- Issuing Letters of Credit: Bankers in a way by issuing letters of credit certify the credit worthiness of the customers. Letters of credit are very popular in foreign trade.

- Acting as Underwriter: Banks also underwrite the securities issued by the government and corporate bodies for commission. The name of a bank as an underwriter encourages investors to have faith in the security.

- Issuing of Traveller's Cheques and Credit Cards: Banks have been rendering great service by issuing traveller's cheques, which enable a person to travel without fear of theft or loss of money. Now, some banks have started credit card system, under which a credit card holder is allowed to avail credit from the listed outlets without any additional cost or effort. Thus a credit card holder need not carry or handle cash all the time.

- Issuing Gift Cheques: Certain banks issue gift cheques of various denominations e.g some Indian banks issue gift cheques of the denomination of Rs. 101, 501, 1001 etc. These are generally issued free of charge or a very nominal fee is charged.

- Dealing in Foreign Exchange: Major branches of commercial banks also transact business of foreign exchange. Commercial banks are the main authorized dealers of foreign exchange in India.

- Merchant Banking Services: Commercial banks also render merchant banking services to the customers. They help in availing loans from non-banking financial institutions.

4.1.6 Types of Bank Accounts

With the advancement in banking technology, many banks are offering tailor made products to suit individual needs. While accounts may differ from bank to bank their purpose remain the

same. Many banks have different products on the basis of customer's age, income and gender. Here are a few different kind of bank accounts.

A. Savings Account

Basic Savings Bank Deposit Accounts (BSBDA)

- This account will be considered as normal banking service.
- For this account, maintenance of minimum balance is not required.
- ATM card/ ATM cum Debit card, Rupay card will be given for the account holders.
- There are going to be no limit on the number of deposits that can be made in a month but, account holders will be allowed most of 4 withdrawals in a month, which includes ATM withdrawals also.
- The above facilities will be given without any charge. There will be no charge levied for non-operation/ activation of in-operative basic saving bank deposit account.
- For this account, overdraft facility will be provided up to Rs. 5000/-.

Basic Saving bank Deposit Accounts Small scheme (BSBDS)

- These are accounts with relaxed KYC, with a minimum document requirement of self-attested address proof & photograph.
- Total credit should not exceed 1Lakh rupees in a year.
- Maximum balance should not exceed Rs. 50,000/- at any time.
- Cash withdrawals & transfers must not exceed Rs.10, 000/- in a month.
- Remittance from foreign account cannot be credited to this account without completing normal KYC formalities.
- This account can be opened only at Core Banking Solution linked branches of banks or at such branches, where it is possible to manually monitor the fulfillments of the conditions.

B. Regular Savings Bank Account

- Any resident individual- single accounts, two or more individuals in joint accounts, Associations, clubs etc., are eligible for this account.
- Modest credit option available to the depositor.
- Two free cheque books will be issued per year.
- Internet banking facility will be provided without any charge.
- Balance enquiry, NEFT, Bill payment, Mobile recharge etc., are provided through mobile phones.
- Students can open this account with zero balance by providing the required documents.

C. Current Account

- Any resident individual- single accounts, two or more individuals in joint accounts, Associations, Limited companies, Religious Institutions, Educational Institutions, Charitable Institutions, clubs etc., are eligible for this account.
- Payments can be done unlimited number of times.
- Funds can be remitted from any part of the country to the corresponding account.
- Overdraft facility will be available.
- Internet banking facility is available.

D. Recurring Deposit Account (Cumulative Deposit Scheme)

- Any resident individual- single accounts, two or more individuals in joint accounts, Associations, clubs, Institutions/Agencies specifically permitted by the RBI etc., are eligible to open this account in single/joint names.
- Periodic/Monthly installments can be for any amount starting from as low as Rs.50/- onwards.
- Account can be opened for any period ranging from 6 months to 120 months, in multiple of 1 month.
- The amount selected for installment at the start of the scheme will be payable every month.
- The number of installments once fixed, cannot be altered.
- Approved rate of interest is compounded every quarter.
- The amount after maturity will be paid to customers one month after the deposit of the last installment.
- Pass book will be given to the depositor.
- TDS will be applicable on the interest, as per the latest changes in the Income Tax Act on cumulative deposits also.

E. Fixed Deposit Account

Short Deposit Receipt

- Banks accepts deposits from customers varying from 7 days to a maximum of 10 years.
- The period of 7 days & above but not exceeding 179 days deposits is classified as 'Short Deposits'.
- The minimum amount that can be deposited under this scheme is Rs. 5 lakh for a period of 7-14 days.

Fixed Deposit Receipt

- Any resident individual- single accounts, two or more individuals in joint accounts, Associations, Minors, societies, clubs etc., are eligible for this account.
- The minimum FDR in metro & Urban branches is Rs. 10,000/- & in rural & semi urban & for Senior citizens is Rs.5000/- .

- For the subsidy kept under the government sponsored schemes, Margin money, earnest money & court attached/ordered deposits, minimum amount criteria will not be applicable.
- Depositors may ask for repayment of their deposits before maturity. Repayment of amount before maturity is allowable.
- Interest rate differs from bank to bank depending upon the tenure of the deposits & as when the bank changes the rate.
- Additional interest of 0.50% is offered for senior citizens on deposits placed for a year & above.

F. Demat Account

- An individual, Non-Resident Indian, Foreign Institutional Investor, Foreign National, Corporate, Trusts, Clearing Houses, Financial Institution, Clearing Member, Mutual Funds, Banks and Other Depository Account.
- For opening this account, an individual has to fill a form, submit a photo of the applicant along with a photocopy of Voter ID/ Passport/ Aadhar card/ Driving License & Demat account number will be provided to the applicant immediately after the completion of processing of the application.
- Facilities provided under this account are- Opening & maintaining of Demat accounts, Dematerialization, Rematerialization, Purchases, sales, Pledging & Unpledging, safe custody.

G. NRI Account

- NRO (Non-Resident Ordinary Rupees) Account
- NRE (Non-Resident External Rupees) Account
- FCNR (Foreign Currency Non-Resident) Account

Specifics	NRO	NRE	FCNR
Account Opening	Any Individual resident outside India	NRIs / PIOs / OCIs (Individuals / entities of Bangladesh / Pakistan require prior approval of RBI	NRIs / PIOs / OCIs (Individuals / entities of Bangladesh / Pakistan require prior approval of RBI
Joint Account	In the names of two or more non-resident individuals. With a local close relative on 'former or survivor basis'	In the names of two or more non-resident individuals. With a local close relative on 'former or survivor basis'	In the names of two or more non-resident individuals. With a local close relative on 'former or survivor basis'
Money in which	Indian Rupees	Indian Rupees	US dollar, pound sterling, Yen, Euro,

account is denominated			Australian dollar & Canadian dollar
Nomination	Allowable	Allowable	Allowable
Account Type	Savings, Current, Fixed, Recurring deposit	Savings, Current, Fixed, Recurring deposit	Term Deposit only
Interest Rate	Banks are allowed to determine interest rates for Deposits	Banks are allowed to determine interest rates for Deposits	Banks are allowed to determine interest rates for Deposits
Fixed deposits – period	As applicable to resident accounts	Min – 1 year Max – 10 years	Not less than 1 year and not more than 5 years
Income Tax	TDS on Interest received on NRO deposits to be deducted at 30.90%	Not Taxable	Not Taxable
Repatriability	Not Repatriable	Repatriable	Repatriable
Loans in India 1)To account holder 2)To third parties	1) Permitted 2) Permitted	Without any financial ceiling on the loan amount subject to standard margin requirements	Without any financial ceiling on the loan amount subject to standard margin requirements
Loans in Abroad 1)To account holder 2)To third parties	1) Not Permitted 2) Not Permitted	Without any financial ceiling on the loan amount subject to standard margin requirements	1) Without any financial ceiling on the loan amount subject to standard margin requirements 2) Not Permitted
Foreign Currency loans India 1)To Account holder 2)To third parties	1) Not Permitted 2) Not Permitted	1) Not Permitted 2) Not Permitted	1) Permitted 2) Not Permitted

4.1.7 E-banking (Electronic Banking)

With advancement in information and communication technology, banking services are also made available through computer. Now, in most of the branches you see computers being used to record banking transactions. Information about the balance in your deposit account can be known through computers. In most banks now a days human or manual teller counter is being replaced by the Automated Teller Machine (ATM). Banking activity carried on through computers and other electronic means of communication is called 'electronic banking' or 'e-banking'.

- **Automated Teller Machine**

  Banks have now installed their own Automated Teller Machine (ATM) throughout the country at convenient locations. By using this, customers can deposit or withdraw money from their own account any time.

- **Debit card**

  Banks are now providing Debit Cards to their customers having saving or current account in the banks. The customers can use this card for purchasing goods and services at different places in lieu of cash. The amount paid through debit card is automatically debited (deducted) from the customers' account

- **Credit card**

  Credit cards are issued by the bank to persons who may or may not have an account in the bank. Just like debit cards, credit cards are used to make payments for purchase, so that the individual does not have to carry cash. Banks allow certain credit period to the credit cardholder to make payment of the credit amount. Interest is charged if a cardholder is not able to pay back the credit extended to him within a stipulated period. This interest rate is generally quite high.

- **Net Banking**

  With the extensive use of computer and Internet, banks have now started transactions over Internet. The customer having an account in the bank can log into the bank's website and access his bank account. He can make payments for bills, give instructions for money transfers, fixed deposits and collection of bill, etc.

- **Phone Banking**

  In case of phone banking, a customer of the bank having an account can get information of his account, make banking transactions like, fixed deposits, money transfers, demand draft, collection and payment of bills, etc. by using telephone.

  As more and more people are now using mobile phones, phone banking is possible through mobile phones. In mobile phone a customer can receive and send messages (SMS) from and to the bank in addition to all the functions possible through phone banking.

4.1.8 Government Initiatives

- Under Pradhan Mantri Jan Dhan Yojana (PMJDY), the total number of accounts opened since January 2015 increased 135 per cent to 295.2 million as of August 16, 2017.

- Minister of Finance, Government of India, introduced 'The Banking Regulation (Amendment) Bill,2017', which will replace the Banking Regulation (Amendment) Ordinance, 2017, to allow the Reserve Bank of India (RBI) to guide banks for resolving the problems of stressed assets.

- Finance Minister has proposed various measures to quicken India's transition to a cashless economy, including a ban on cash transactions over Rs 200,000 (US$ 3,100), tax incentives for creation of a cashless infrastructure, promoting greater usage of non–cash modes of payments, and making Aadhaar-based payments more widespread.

- The Government of India has announced demonetisation of high denomination bank notes of Rs 1000 and Rs 500, with effect from November 08, 2016, in order to eliminate

black money and the growing menace of fake Indian currency notes, thereby creating opportunities for improvement in economic growth.

- The RBI has cut its key repo rate by 25 basis points to 6.25 per cent, in order to boost growth as according to RBI, the inflation momentum has moderated because of a normal monsoon.

The government and the regulator have undertaken several measures to strengthen the Indian banking sector.

- Government of India has decided to amend Section 35 A of the Banking Regulation Act that will allow the Reserve Bank of India (RBI) to direct banks for the recovery of non-performing assets (NPAs)

- The Reserve Bank of India (RBI) has proactively instructed banks to increase their levels of provision on the loans provided to the telecom sector as a prudent measure, which will help to shore up provisions for future recognition of any non-performing assets arising out of the sector.

- The RBI has allowed banks in India to raise funds through issuance of rupee-denominated bonds overseas, also called masala bonds, within the current limit of Rs 2,44,323 crore (US$ 36.6 billion) set for foreign investment in corporate bonds.

- The Ministry of Labour and Employment has successfully opened around 3,840,863 bank accounts as on December 26, 2016, for workers especially in the unorganised sector, as part of its campaign to promote and ensure cashless transfer of wages to workers.

- The National Bank for Agriculture and Rural Development (NABARD) plans to provide around 200,000 point-of-sale (PoS) machines in 100,000 villages and distribute RuPay cards to over 34 million farmers across India, to enable farmers to undertake cashless transactions.

- The Government of India's indigenous digital payments application, BHIM (Bharat Interface for Money), has recorded 18 million downloads since its launch on December 30, 2016, according to Chief Executive Officer, NITI Aayog.

- The Ministry of Finance has lowered the threshold for making electronic payments to suppliers, contractors or institutions from Rs 10,000 (US$ 150) to Rs 5,000 (US$ 75), in order to attain the goal of complete digitisation of government payments.

4.2 Financial Services

India has a diversified financial sector undergoing rapid expansion, both in terms of strong growth of existing financial services firms and new entities entering the market. The sector comprises commercial banks, insurance companies, non-banking financial companies, co-operatives, pension funds, mutual funds and other smaller financial entities. The banking regulator has allowed new entities such as payments banks to be created recently thereby adding to the types of entities operating in the sector. However, the financial sector in India is predominantly a banking sector with commercial banks accounting for more than 64 per cent of the total assets held by the financial system.

111

- The Taiwan Futures Exchange (TAIFEX) has launched the TAIFEX Nifty 50, a new Taiwan dollar denominated futures contract that will track the National Stock Exchange's (NSE) Nifty 50 index, thereby providing international investors with more efficient access to the Indian capital market.

- Warburg Pincus LLC, the US-based private equity firm, plans to invest around US$ 75 million in series C round of funding to buy a significant stake in Capital Float, an online credit platform.

- Asset management company Rising Straits Capital plans to raise US$ 100 million to capitalise its real estate-focused non-banking financial company (NBFC) named Rising Straits Finance Co. Pvt. Ltd, which is expected to start lending from 2017 to regular residential and office projects, and also to logistics, hospitality and healthcare sectors.

- US-based private equity (PE) firm Advent International has acquired a minority stake of 40 per cent in ASK Group, a leading investment and wealth management company, in a deal worth US$ 130 million.

- Avendus Capital plans to start its structured finance business with a dedicated fund of size Rs 500 crore (US$ 73 million), which will be primarily raised from domestic investors, and will aim for investments in growth companies, mid-market companies and opportunities to provide structured debt or private financing.

- Baring Private Equity Asia (BPEA) is raising a new India-dedicated credit fund of Rs 500 crore (US$ 75 million) with an option of retaining extra money collected than initially planned up to Rs 250 crore (US$ 37.5 million). BPEA also plans to raise a US$ 500 million new offshore credit fund.

- Fino Paytech, a technology solution provider, plans to launch its payment bank operations soon to provide basic banking services through 400 branches across 30 cities located in Maharashtra, Madhya Pradesh, Uttar Pradesh and Bihar.

- Payism Technologies India Pvt. Ltd, a cash and cashless transactions facilitator, plans to raise approximately US$ 25 million in growth equity capital for expansion purpose.

- True North, a private equity firm, plans to acquire a majority stake in Home First Finance Co. India Pvt. Ltd (HFFC), a private housing finance company, for US$ 100 million, which will be utilised for geographic expansion and customer acquisition in affordable housing segment.

- Institute for Financial Management and Research (IFMR) Investment Managers Pvt. Ltd has launched two credit funds named IFMR FImpact Long Term Credit Fund and IFMR FImpact Medium Term Opportunities Fund, which focuses on investing in the financial inclusion space by aiming to raise Rs 850 crore (US$ 127.50 million) through these funds.

4.2.3 Government Initiatives

- In the Union Budget 2017-18, the Government of India has announced a few key reforms like abolishment of Foreign Investment Promotion Board in 2017-18, Introduce bill for curbing illicit deposit schemes, Establish a Computer Emergency Response Team for financial sector (CERT-Fin) and set aside Rs 10,000 crore (US$ 1.5 billion) towards recapitalisation of banks.

- The subscriber base under the Atal Pension Yojana (APY) scheme reached 5.3 million. Of the total subscribers, 97.5 per cent are contributing to the scheme every month, 0.8 per cent every quarter and 1.7 per cent every six months.

- Union Minister of Finance, Government of India has launched the Operation Clean Money Portal, in an attempt to create a tax compliant society as well as a transparent tax administration.

- The Government of India is likely to allow 100 per cent foreign direct investment (FDI) in cash and ATM management companies, since they are not required to comply with the Private Securities Agencies Regulations Act (PSARA).

- Securities Exchange Board of India (SEBI) has permitted the security exchanges to launch options contracts in the commodity market, which would provide a new cost effective hedging tool to the farmers and others market participants.

- SEBI expects to reduce the minimum investment by accredited investors in alternative investment funds (AIFs) to Rs 25 lakh (US$ 38,816.68) from Rs 1 crore (US$ 155,266.72) currently, to boost investments.

- SEBI plans to tighten the norms governing various market participants in order to strengthen scrutiny, improve transparency and mitigate liquidity risks from algorithmic trading.

- SEBI has relaxed norms for registered foreign portfolio investors (FPIs) in India, allowing them to operate through the International Financial Services Centre (IFSC) without undergoing any additional documentation or prior approval process.

- The Reserve Bank of India (RBI) has extended the access of its Unified Payment Interface (UPI) platform to digital wallets like Paytm and Mobikwik, as a move towards India's digitisation campaign.

- The RBI has introduced trading in interest rate options (IRO), effective from January 31, 2017, which will provide another avenue to market participants to hedge and speculate on interest rate risk.

- SEBI plans to allow investors to make mutual funds transactions worth up to Rs 50,000 (US$ 750) a month through digital wallets, as part of its efforts to digitise the distribution processes for all financial products. It also plans to allow immediate credit to customer's bank accounts on liquid mutual funds redemption to attract retail customers as well as boost inflows.

- Union Minister of Law & Justice and Information Technology, has launched a free Doordarshan DTH channel called DigiShala, which will help people understand the use of unified payments interface (UPI), USSD, aadhaar-enabled payments system, electronic wallets, debit and credit cards, thereby promoting various modes of digital payments.

- The Government of India has relaxed norms for small merchants with a turnover of up to Rs 2 crore (US$ 300,000), allowing them to pay 6 per cent of deemed profit in tax instead of 8 per cent of total turnover or gross receipts received through banking channels or digital means for FY 2016-17, in a bid to encourage cashless transactions in the country.

- The lending target has been fixed at Rs 244,000 crore (US$ 36.46 billion) for 2017-18.

Unit – IV

4.3 Insurance Sector

The insurance industry of India consists of 57 insurance companies of which 24 are in life insurance business and 33 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. Apart from that, among the non-life insurers there are six public sector insurers. In addition to these, there is sole national re-insurer, namely, General Insurance Corporation of India (GIC Re). Other stakeholders in Indian Insurance market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims.

Out of 33 non-life insurance companies, five private sector insurers are registered to underwrite policies exclusively in health, personal accident and travel insurance segments. They are Star Health and Allied Insurance Company Ltd, Apollo Munich Health Insurance Company Ltd, Max Bupa Health Insurance Company Ltd, Religare Health Insurance Company Ltd and Cigna TTK Health Insurance Company Ltd. There are two more specialised insurers belonging to public sector, namely, Export Credit Guarantee Corporation of India for Credit Insurance and Agriculture Insurance Company Ltd for crop insurance.

Though LIC continues to dominate the Insurance sector in India, the introduction of the new private insurers will see a vibrant expansion and growth of both life and non-life sectors in 2017. The demands for new insurance policies with pocket-friendly premiums are sky high. Since the domestic economy cannot grow drastically, the insurance sector in India is controlled for a strong growth.

With the increase in income and exponential growth of purchasing power as well as household savings, the insurance sector in India would introduce emerging trends like product innovation, multi-distribution, better claims management and regulatory trends in the Indian market.

The government also strives hard to provide insurance to individuals in a below poverty line by introducing schemes like the

- Pradhan Mantri Suraksha Bima Yojana (PMSBY),
- Rashtriya Swasthya Bima Yojana (RSBY) and
- Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY).

Introduction of these schemes would help the lower and lower-middle income categories to utilize the new policies with lower premiums in India.

With several regulatory changes in the insurance sector in India, the future looks pretty awesome and promising for the life insurance industry. This would further lead to a change in the way insurers take care of the business and engage proactively with its genuine buyers.

Some demographic factors like the growing insurance awareness of the insurance, retirement planning, growing middle class and young insurable crowd will substantially increase the growth of the Insurance sector in India.

4.3.1 Market Size

Government's policy of insuring the uninsured has gradually pushed insurance penetration in the country and proliferation of insurance schemes are expected to catapult this key ratio beyond 4 per cent mark by the end of this year, reveals the ASSOCHAM.

The number of lives covered under Health Insurance policies during 2015-16 was 36 crore which is approximately 30 per cent of India's total population. The number has seen an increase every subsequent year as 28.80 crore people had the policy in the previous fiscal.

During June 2016 to May 2017 period, the life insurance industry recorded a new premium income of Rs 1.87 trillion (US$ 29.03 billion. The life insurance industry reported 9 per cent increase in overall annual premium equivalent in April-November 2016. In the period, overall annual premium equivalent (APE)- a measure to normalise policy premium into the equivalent of regular annual premium – including individual and group business for private players was up 16 per cent to Rs 1,25,563 crore (US$ 18.76 billion) and Life Insurance Corporation up 4 per cent to Rs 1,50,456 crore (US$ 22.48).

4.3.2 Investments

The following are some of the major investments and developments in the Indian insurance sector.

- New India Assurance filed the prospectus for initial public offering (IPO) in which it will sale a total stake of 14.56 per cent to raise around Rs 7000 crore ($1.07 Billion) and it plans to use the capital raised for supporting growth of its business and maintaining solvency levels.
- New York Life Insurance Company, the largest life insurance company in the US, has invested INR 121 crore (US$ 18.15 million) in Max Ventures and Industries Ltd for a 22.52 per cent stake, which will be used by Max for investing in new focus areas of education and real estate.
- New York Life Investments, the global asset management division of New York Life, along with other investors like Jacob Ballas, will own a significant minority ownership in Centrum Capital by being one of the leading global investors in buying the available 30 per cent stake worth US$ 50 million of Centrum Capital.
- Aviva Plc, the UK-based Insurance company, has acquired an additional 23 per cent stake in Aviva Life Insurance Company India from the joint venture (JV) partner Dabur Invest Corporation for Rs 940 crore (US$ 141.3 million), thereby increasing their stake to 49 per cent in the company.

117

4.3.3 Advantage India

Strong Demand

- Growing interest in insurance among people; innovative products and distribution channels aiding growth
- Increasing demand for insurance offshoring
- Growing use of internet has started increasing demand

Attractive Opportunities

- Life insurance in low-income urban areas
- Health insurance, pension segment
- Strong growth potential for microinsurance, especially from rural areas

Policy Support

- Tax incentives on insurance products
- Passing of Insurance Bill gives IRDA flexibility to frame regulations
- Clarity on rules for insurance IPOs would infuse liquidity in the industry
- Repeated attempts to make the sector more lucrative for foreign participants

Increasing Investments

- As of March 2016, rising participation by private players led to increase in their market share in the life insurance market, with the market share reaching 29.6% in FY16 from 2% in FY03
- Increase in FDI limit to 49% from 26%, as proposed in 2012, will further fuel investments

118
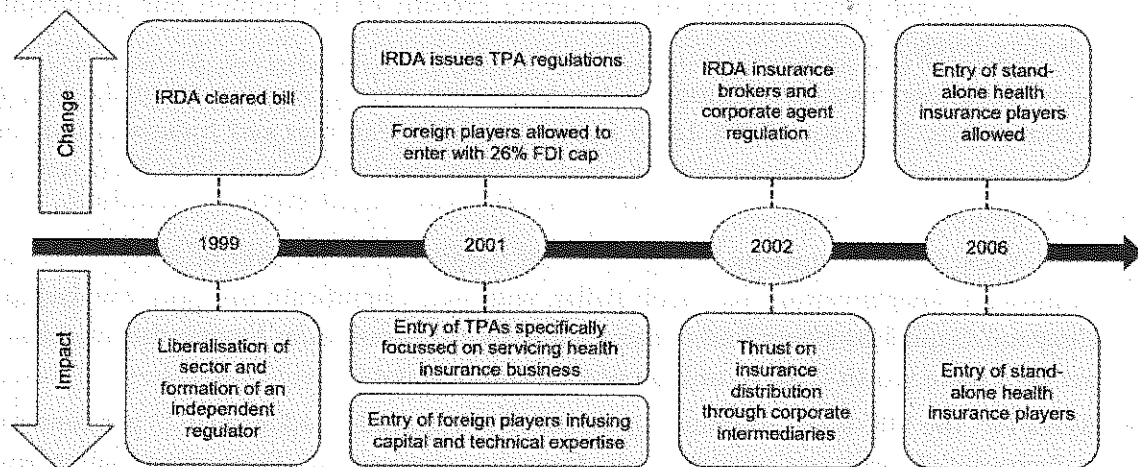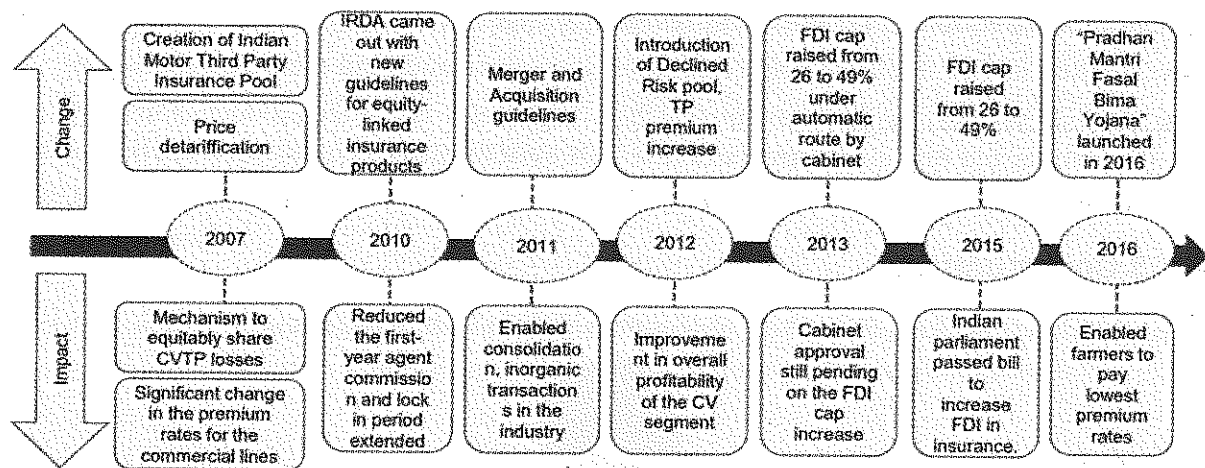
Figure. Key Regulatory Changes (Source: KPMG, TechSci Research)

4.3.4 Policy Measures

Tax Incentives

- Insurance products are covered under the exempt, exempt, exempt (EEE) method of taxation. This translates to an effective tax benefit of approximately 30% on select investments (including life insurance premiums) every financial year

- In 2015, Tax deduction under Health Insurance Scheme has been increased to US$ 409.43 from US$ 245.66 and for senor citizens tax deduction has been increased to US$ 491.32

Union Budget 2015-16

- The Insurance (Amendment) Bill 2015 is expected to empower IRDA to introduce regulations for promoting sustainable growth, providing the flexibility to frame regulations and increase the FDI limit to 49%.

- The government has also extended Rashtriya Swasthya Bima Yojana (RSBY) to cover unorganised sector workers in hazardous mining and associated industries

- In 2015, under National Insurance Scheme PM Suraksha Bima Yojana has been introduced. Under new scheme up to INR 2 Lakh life insurance cover will be provided with a premium of INR 12 per day

- As per Union Budget 2016-17, USD840.21 million has been allocated to "Prime Minister Fasal Bima Yojna".

Life Insurance companies allowed to go public

- IRDA recently allowed life insurance companies that have completed 10 years of operations to raise capital through Initial Public Offerings (IPOs)

- Companies will be able to raise capital if they have embedded value of twice the paid up equity capital

Approval of Increase in FDI limit and revival package

- Increase in FDI limit will help companies raise capital and fund their expansion plans
- Revival package by government will help companies get faster product clearances, tax incentives and ease in investment norms. FDI limit for insurance company has been raised from 26% to 49 percent, providing safeguard and ownership control to Indian owners

4.3.5 Opportunities

India's Insurance market offers a host of opportunities across business lines.
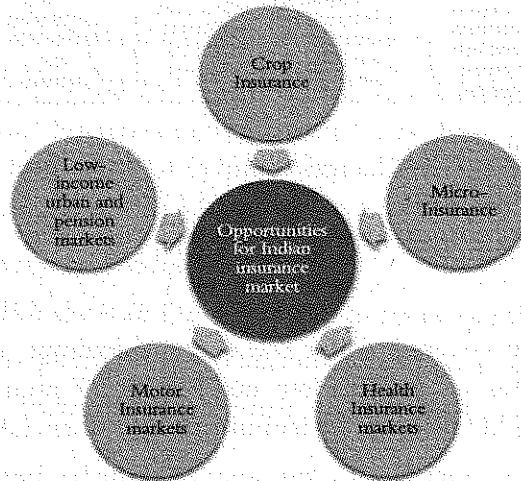
Low-income Urban and Pension Markets

- Increasing life expectancy, favourable savings and greater employment in the private sector will fuel demand for pension plans
- Proposed new pension bill by government will further provide new opportunities to insurers
- There is scope to introduce new-generation pension products such as Variable Annuity and Inflation Indexed Annuity. Although the pace has declined, the number of enrolments in the Jan Suraksha scheme has risen to 132 million. The Jan Suraksha scheme includes a personal accident cover, term insurance, and a pension plan.
- By 2030, India will have around 180 million people in the age bracket of 60+ years
- In 2015, three schemes related to insurance and pension, Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana and Atal Pension Yojana were launched. The number of policies in the Pradhan Mantri Suraksha Bima Yojana, a part of the Jan Suraksha scheme, reached 98 million on November 24, 2016.
- As on October 2015, Indian Retirement system was ranked last in the global pension index which witnessed a fall in value from 43.5 in 2014 to 40.3 in 2015

Strong potential in Crop Insurance

- Crop insurance market in India is the largest in the world, covering around 30 million farmers

- To provide crop insurance to farmers, Government has launched various schemes like National Agriculture Insurance Scheme (NAIS), Modified National Agriculture Insurance Scheme (MNAIS) and Weather-based Crop Insurance Scheme (WBCIS)
- Total sum insured under crop insurance is US$ 836.6 million
- Government of India plans to increase the coverage to 50 million during the 12th Five-Year Plan

Micro-insurance: Tapping India's Rural Wealth

The business environment in India's micro-insurance sector supports healthy growth

- Macro Level

    IRDA drafted microinsurance guidelines in 2010, which contain numerous favourable measures such as

    o Lower threshold limits for agents' commissions

    o Rural areas must account for 7% of new life insurance policies in the first year of firm's operation and rise to 20% over the next 10 years

- Intermediate Level

    In order to reduce microinsurance distribution costs, IRDA proposed microinsurance schemes to supplement existing government insurance schemes

    The number of regional rural banks and NGOs operating in the rural sector will aid distribution of microinsurance products

- Micro Level

    The annual income growth rate in rural India is expected to increase to 3.6%over 2010–30 from2.8%during 1990–2010

    About 5 million people currently have microinsurance, while the entire market is expected to be in the range of 140–300 million

Health Insurance Markets

- Only 1.5–2% of total healthcare expenditure in India is currently covered by insurance providers
- From 13.3% of the total non-life insurance premium in FY07, health insurance contributed 27.43% in FY15
- Total health insurance premiums increased from US$ 733.1 million in FY07 to US$ 3,069.97 million in FY15, witnessing growth at a CAGR of 19.60%
- In FY17 (Up to June 2016) gross direct premium income underwritten under health insurance is USD1.17 billion
- Absence of a government-funded health insurance makes the market attractive for private players
- IRDA recommended the government to reduce capital requirements for stand-alone health insurance companies from US$ 21 million to US$ 10 million
- Introduction of health insurance portability expected to boost the orderly growth of the health insurance sector

- Increasing penetration of health insurance likely to be driven by government-sponsored initiatives such as RSBY and ESIC
- In FY15, population covered under health insurance through government sponsored schemes reached 351 million
- Government-sponsored programmes expected to provide coverage to nearly 380 million people by 2020
- Private insurance coverage is estimated to grow by nearly 15%annually till 2020
- Health insurance coverage to cross 630 million people by 2015
- In July 2016, IRDA issued Health Insurance Regulations, 2016. These regulations replace the Health Insurance Regulations, 2013. As per these new norms, companies will provide better data disclosure, pilot products, coverage in younger years, etc.
- As per the latest data, only 18 per cent of people in urban areas are covered under any kind of health insurance scheme
- Rashtriya Swasthya Bima Yojana (RSBY) is a centrally sponsored scheme to provide health insurance to Below Poverty Line (BPL) families and 11 other defined categories of unorganized workers, namely building and other construction workers, licensed railway porters, street vendors, MGNREGA workers, etc.

Motor Insurance Markets

- Strong growth in the automotive industry over the next decade will be a key driver of motor insurance
- Proposed IRDA draft envisages a 10–80%rise in premium rates for the erstwhile loss-making third–party motor insurance
- In FY16, number of commercial vehicles and passenger vehicles sold in the country were recorded at 0.8 million and 3.4 million respectively, while the number of 2&3 wheelers sold were 19.76 million
- In FY15, Motor and Health sector constituted 67.70 percent of the non–life insurance market

4.3.6 Government Initiatives

The Union Budget of 2017-18 has made the following provisions for the Insurance Sector:

- The Budget has made provisions for paying huge subsidies in the premiums of Pradhan Mantri Fasal Bima Yojana (PMFBY) and the number of beneficiaries will increase to 50 per cent in the next two years from the present level of 20 per cent. As part of PMFBY, Rs 9,000 crore (US$ 1.35 billion) has been allocated for crop insurance in 2017-18.
- By providing tax relief to citizens earning up to Rs 5 lakh (US$ 7500), the government will be able to increase the number of taxpayers. Life insurers will be able to sell them insurance products, to further reduce their tax burden in future. As many of these people were understating their incomes, they were not able to get adequate insurance cover.
- Demand for insurance products may rise as people's preference shifts from formal investment products post demonetisation.

- The Budget has attempted to hasten the implementation of the Digital India initiative. As people in rural areas become more tech savvy, they will use digital channels of insurers to buy policies.

The Government of India has taken a number of initiatives to boost the insurance industry. Some of them are as follows:

- Government of India launches Pradhan Mantri Vaya Vandana Yojana, a pension scheme which will provide guaranteed 8 per cent annual return to all the senior citizen above 60 years of age for a policy tenure of 10 years.

- The Union Cabinet has approved the public listing of five Government-owned general insurance companies and reducing the Government's stake to 75 per cent from 100 per cent, which is expected to bring higher levels of transparency and accountability, and enable the companies to raise resources from the capital market to meet their fund requirements.

- The Insurance Regulatory and Development Authority of India (IRDAI) plans to issue redesigned initial public offering (IPO) guidelines for insurance companies in India, which are to looking to divest equity through the IPO route.

- IRDAI has allowed insurers to invest up to 10 per cent in additional tier 1 (AT1) bonds that are issued by banks to augment their tier 1 capital, in order to expand the pool of eligible investors for the banks.

4.3.7 Advantages and uniqueness of India's Life Insurance Sector

Life insurance products in India enjoy generous tax breaks. This could be one of the reasons India recorded a higher penetration rate (2.7%).

Life Insurance Taxability in India

Particulars	India
Deductibility	Individuals can deduct premiums paid, subject to the overall maximum limit of INR 150,000 (per person/per year) under Section 80C of the Income Tax Act. For a policy taken on or before 31 Mar, 2012, premium is fully deductible up to 20% of the sum assured. For a policy taken after 31 Mar 2012, premium is fully deductible up to 10% of the sum assured.
Interest Build-up	Not Taxable
Proceeds during lifetime	Not taxable provided the policy's premium meets the deductibility condition, else excluding the death benefit, all other receivables (maturity, surrender) will be taxable as per the individual tax slabs in respective years. Insurers also have to deduct a 2% tax at source if the amount paid on a policy, including bonus exceeds INR100, 000 in a financial year, if the policy's premium did not meet the deductibility condition.
Proceeds on death	Not Taxable

4.4 Job Roles

- **Financial Analyst**

  Financial analysts advise individual bank clients and businesses on investments. For example, they might advise clients on stocks and bonds they can invest in to grow their pension plans or retirement portfolios. Although they generally work in offices, they may be required to work long hours. According to the U.S. Department of Labor's Bureau of Labor Statistics, employers usually require financial analysts to have a bachelor's degree in subjects like accounting, finance, statistics or economics.

- **Bank Teller**

  A high school diploma is required to get hired as a bank teller. Bank tellers are often among the first people that customers see when they enter a bank. In addition to processing customer transactions (e.g. loan payments, savings deposits), bank tellers answer questions, including explaining bank products like loans and certificates of deposit to customers. Strong customer service skills are needed to succeed as a bank teller.

- **Loan Officer**

  Employers generally require loan officers who work with individual customers to have a high school diploma. Loan officers who work with businesses or commercial clients must generally have a bachelor's degree, according to the statistics bureau. Depending on their employer, loan officers may receive on-the-job training after they are hired. They complete functions like meeting with customers to review their financial history and fill out and process loan applications.

- **Financial Manager**

  Financial managers must have at least a bachelor's degree and must generally have five or more years of experience working in other financial services roles (e.g. accountant, loan officer). Types of work they perform for a bank include developing and reviewing financial reports and budgets and managing and auditing an organization's profits and losses. They may also supervise accountants and financial analysts.

- **Financial Analyst**

  As a financial analyst, you help businesses or individuals make investment decisions. Typically you need at least a bachelor's degree, but a master's degree if preferred.

- **Personal financial advisors**

  Personal financial advisors help individuals manage their money to meet their short and long-term goals. From planning for retirement to figuring out how to pay for college, advisors identify different options and help individuals make the most of their money, such as through special tax exemptions or incentives.

- **Accountants**

  One of the most well-known financial positions, accountants analyze, plan and evaluate business expenses and income. Many have a bachelor's degree only, but a master's is useful too.

- **Auditors**

  Auditors review accounting records on behalf of clients, looking for discrepancies or losses.

- **Loan Officers**

  Loan officers help people identify and apply for loans, from mortgages to personal loans. They evaluate the candidates' job history, income and overall credit worthiness. Loan officers typically have a background and education in finance or economics.

- **Collectors**

  While collectors tend to get a bad reputation, they play a pivotal role for companies. They manage accounts and keep track of bills and attempt to collect on past due invoices. Many collector positions require just a high school diploma, but a bachelor's degree is welcome.

- **Bank Tellers**

  As a bank teller, you cash checks, accept deposits and process account withdrawals. Most bank tellers have a high school diploma or a college degree in finance or economics.

- **Treasurers**

  Treasurers manage an organization's finances, objectives and goals. They maintain the organization's budget and oversee investment strategies and major expenditures. Most treasurer position require advanced degrees, such as a master's or PhD.

- **Buyers**

  Buyers are procurers for companies, purchasing inventory or goods and negotiating the best rates.

- **Budget Analysts**

  Budget analysts evaluate company budgets, identifying areas of surplus or loss. They help the company create a new comprehensive budget that will guide company efforts going forward.

- **Forecasters**

  Company or financial forecasters use algorithms and programs to project product or company performance in the future based on certain factors, such as company competition or layoffs.

- **Actuaries**

  Insurance business is all about probabilities and assumptions on occurrence of peril insured against and adequacy of premium to cover losses. Actuaries are involved in the development of insurance products and their pricing. They also help in monitoring solvency and valuation of the liabilities.

- **Chartered Accountants and Finance Professionals**

  Insurance accounts and valuation of assets and liabilities to assess solvency on an ongoing basis underline the need for Chartered Accountants and other financial professionals in insurance companies. Maintenance of mandatory level of investments and spreading them as per policy requirements so as to ensure safety, liquidity and profitability is a challenge in insurance business making it an attractive profession for finance professionals.

- **Risk Managers**

  Insurance is covering the financial risk of individuals and businesses. The risk managers are usually engineers who have in-depth knowledge of perception of magnitude of risk,

safety, hazards and loss minimisation in case of occurrence of an event resulting in a claim. This is a highly specialised field.

- **Legal Professionals**

  Insurance, being a contract between insured and insurer, interpretation of clauses, terms and conditions of coverage assumes a lot of significance in claim handling. Rejected or fraudulent claims often lead to litigation. Certificate of Compliance with regulatory requirements by a legal officer is essential before any new product is filed for regulatory approval. Thus, insurance industry has a large requirement of legal experts for the drafting and interpretation of policy conditions, dispute resolution and handling litigation emanating out of business especially claims.

- **Capital market professionals** like bond traders, financial risk managers, traders, research professionals and business analysts play a key role in investment of policyholder funds so that they meet the requirements of safety, liquidity and return on investments to protect policy holders' funds and increase profitability within the regulatory framework.

- **Human Resource Experts**

  The insurance companies have to be professionally run and the work force should be adequately trained, posted appropriately and kept motivated for continued performance. The large contingent of agents who are associated with insurers also pose a challenge from the HR front to ensure their training and to keep them motivated so as to prevent attrition. These requirements on an ongoing basis make the role of HR professionals important in insurance industry.

- **Marketing and Advertising Specialists**

  Insurance is described generally as a product which is sold rather than purchased. This is largely because insurance is aimed at protection from risk and not necessarily for returns as in the case of saving or investment products. Marketing of insurance products, therefore, assumes great importance for greater expansion of insurance business. The increasing use of social media, internet and electronic media has brought in a quantum change in approaches to marketing which was largely through print media. Integrating the various marketing media for a successful marketing campaign requires advertising and marketing skills making insurance an attractive field for marketing and advertisement specialists.

- **Compliance Officials and Company Secretaries**

  Familiarity with the laws and regulations of the country and rules/guidelines prevailing specific to each kind of business which is insured makes insurance an attractive field for industry specific compliance experts.

- **I T Professionals**

  Most of the operations of insurance companies are performed using computers and across networks, which are essential and integral to any forward looking and customer oriented business organization. Therefore, there is a continuing need for IT professionals even in insurance sector to have seamless flow of information through various operational systems in delivering efficient service to the customers.

- **Underwriters**

    Underwriters examine the proposal for insurance and assess the risk sought to be covered to decide whether to provide insurance or not and if so, the rate of providing insurance as per the underwriting policy of the company.

- **Medical Professionals**

    Of late, health insurance is emerging as the most important segment in insurance sector. Doctor plays a key role in medical underwriting of the proposal before accepting the proposal. Further, doctor plays a key role in verification of claim payments against the life and health insurance coverage. In health insurance, the most important intermediary is "TPA" or Third Party Administrator who is engaged by the insurer for a fee or remuneration to act as a service provider to the insured on behalf of insurance company. According to IRDAI (TPA) Regulations, 2001, at least one of the directors of the TPA shall be a qualified medical doctor registered with the Medical Council of India. Medical professionals have good opportunities in insurance as well.

- There are **Cost Containment Specialists** as well as **Loss Control Specialists** who help the insurers by suggesting measures for loss prevention, minimisation of the costs and risk management.

CHAPTER 5: ITES SECTOR

5.1 Introduction

Indian IT-ITeS industry has built its reputation in the global arena based on several differentiators-chief among them being manpower. Over the years, organizations across the world have come to recognize the value that India's vast and readily available pool of IT professionals brings to every engagement. Global organizations have found it extremely cost-effective to leverage this significant resource and gain bottom-line benefits by harnessing its power and in addition to the harness the quality and innovation benefits, by working with the top of the line.

Going forward, however, the scenario is expected to be very different. Instead of just cost arbitrage the world will look to India for highly priced and specialized talent. Ageing western economies are already facing severe skills shortage, and will, in the years ahead, require people with advanced technology skills and domain knowledge. In the near future it would also be an added requirement to nurture mobility between occupations and across labour markets.

If India is to emerge as the skills factory of the world (at all levels of the value chain), the hub that manpower starved nations look to in future, a huge effort will have to be made now, to build for the years ahead.

India itself will need people. With the global markets veering towards recovery, IT-ITeS organizations in India are back into hiring mode. In fact, by 2020, the sector is expected to create direct employment of 10 million and indirect employment of about 40 million, touching diverse sections of society.

The global sourcing market in India continues to grow at a higher pace compared to the IT-BPM industry. The global IT & ITeS market (excluding hardware) reached US$ 1.2 trillion in 2016-17, while the global sourcing market increased by 1.7 times to reach US$ 173-178 billion. India remained the world's top sourcing destination in 2016-17 with a share of 55 per cent. Indian IT & ITeS companies have set up over 1,000 global delivery centres in over 200 cities around the world.

More importantly, the industry has led the economic transformation of the country and altered the perception of India in the global economy. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US, continues to be the mainstay of its Unique Selling Proposition (USP) in the global sourcing market. However, India is also gaining prominence in terms of intellectual capital with several global IT firms setting up their innovation centres in India.

The IT industry has also created significant demand in the Indian education sector, especially for engineering and computer science. The Indian IT and ITeS industry is divided into four major segments – IT services, Business Process Management (BPM), software products and engineering services, and hardware.

5.2 IT Services Sector

The IT Services segment is the largest contributor to the IT industry, accounting for more than half of industry revenues. IT services involve a full range of engagement types that include consulting, system integration, IT outsourcing, and managed services.

Following are the core activities of IT services sector:

- IT Consulting
- Systems Integration
- Custom Application Development (CAD)
- Software Deployment and Support
- Infrastructure Management Consulting and Integration
- Infrastructure Management Operations
- Software Testing
- IT Education and Training
- Services Oriented Architecture (SOA)
- Application Management
- Information System Outsourcing
- Hardware deployment and support
- Web Services

5.3 BPO Services Sector

BPO includes processes that may be IT-enabled, do not necessitate on-shore presence and are hence, offshore-able. Customer interaction, and Finance and Accounting services account for a significant portion of BPO revenues. Most leading IT companies have BPO divisions/subsidiaries. The growing area in this segment is what is called as Knowledge Process Outsourcing (KPO).

Following are the core activities of BPO sector:

- Customer Interaction & Support (CIS)
- Customer Care
- Finance & Accounting (F&A)
- Research and Analytics
- Human Resource Management (HRM)

- Procurement Services / Supply Chain Management
- Knowledge Services (KPO / Knowledge Process Outsourcing)
- Legal Services (LPO / Legal Process Outsourcing)

5.4 Market Size

The internet industry in India is likely to double to reach US$ 250 billion by 2020, growing to 7.5 per cent of gross domestic product (GDP). The number of internet users in India is expected to reach 730 million by 2020, supported by fast adoption of digital technology, according to a report by National Association of Software and Services Companies (NASSCOM).

Indian IT exports are projected to grow at 7–8 per cent in 2017-18, in addition to adding 130,000-150,000 new jobs during the same period.

Digital commerce market in India is set to grow at 30.4 per cent year-on-year to Rs 220,330 crore (US$ 34.11 billion) by December 2017, according to a report by Internet and Mobile Association of India and IMRB Kantar.

Indian technology companies expect India's digital economy to have the potential to reach US$ 4 trillion by 2022, as against the Government of India's estimate of US$ 1 trillion.

Digital payments in India rose 55 per cent in volume and 24.2 per cent in value year-on-year in FY 2016-17, stated by Principal Advisor, Niti Aayog.

Employees from 12 Indian start-ups, such as Flipkart, Snapdeal, Makemytrip, Naukri, Ola, and others, have gone on to form 700 start-ups on their own, thus expanding the Indian start-up ecosystem. India ranks third among global start-up ecosystems with more than 4,200 start-ups.

Total spending on IT by banking and security firms in India is expected to grow 8.6 per cent year-on-year to US$ 7.8 billion by 2017.

The public cloud services market in India is slated to grow 35.9 per cent to reach US$ 1.3 billion according to IT consultancy, Gartner. Increased penetration of internet (including in rural areas) and rapid emergence of e-commerce are the main drivers for continued growth of data centre co-location and hosting market in India. The Indian Healthcare Information Technology (IT) market is valued at US$ 1 billion currently and is expected to grow 1.5 times by 2020. India's business to business (B2B) e-commerce market is expected to reach US$ 700 billion by 2020 whereas the business to consumer (B2C) e-commerce market is expected to reach US$ 102 billion by 2020.

Cross-border online shopping by Indians is expected to increase 85 per cent in 2017, and total online spending is projected to rise 31 per cent to Rs 8.75 lakh crore (US$ 128 billion) by 2018.

5.5 Investments

Indian IT's core competencies and strengths have attracted significant investments from major countries. The computer software and hardware sector in India attracted cumulative Foreign Direct Investment (FDI) inflows worth US$ 22.83 billion between April 2000 and December 2016, according to data released by the Department of Industrial Policy and Promotion (DIPP).

Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra, are diversifying their offerings and showcasing leading ideas in blockchain, artificial intelligence to clients using innovation hubs, research and development centres, in order to create differentiated offerings.

Some of the major developments in the Indian IT and ITeS sector are as follows:

- India plans to create wireless Technology 5G by the end of the year 2020 which will help India in realising its most important goals of "Increasing the GDP rate", "Creating Employment" and "Digitizing the Economy".
- Power2SME which serves as platform for raw material requirement of the small and medium scale enterprises (SMEs) has raised US$ 36 million from its investors which includes Inventus Capital Partners, Accel, Kalaari Capital, International Finance Corp. (IFC) and Infosys chairman Nandan Nilekani.
- Unacademy a platform that helps educators to create multimedia content which can be used for free of cost by users has raised US$ 11.5 million from Sequoia India Capital Advisors and SAIF Partners.
- The mobile wallet industry is expected to maintain its current pace of expansion and the value of its transaction is expected to reach Rs 32 trillion (US$ 480 billion) by 2022, growing at a rate of 126 per cent.
- India's largest online retailer, Flipkart, has raised at least US$ 2.5 billion from SoftBank Vision Fund to maintain its dominance in the Indian e-commerce market and to fight against its arch rival Amazon India.
- Google plans to set up its first data centre in India in the city of Mumbai by 2017, to improve its services to local customers wanting to host their applications on the internet, and to compete effectively with the likes of Amazon and Microsoft
- SAP SE, in partnership with the Associated Chambers of Commerce of India (ASSOCHAM), has rolled out a knowledge sharing resource centre which will serve as a one-stop portal for businesses looking to adopt or migrate to technology that will make them future ready for the biggest taxation reform of goods and services tax (GST).
- Freshdesk, one of first companies from India to offer Software-as-a-Service (SaaS) to global companies, has raised US$ 55 million in the latest round of funding led by Sequoia Capital India and existing investor Accel Partners, estimating to value the company at US$ 700 million.
- Warburg Pincus LLC, the US-based private equity firm, plans to invest around US$ 75 million in series C round of funding to buy a significant stake in Capital Float, an online credit platform.

- Apple's supplier and assembler, Taiwan-based Winstron, will set up an iPhone assembly facility in Peenya, Bengaluru's industrial hub, thus making India the third country across the world to have an assembly unit for Apple's iPhone.

- Paytm's online marketplace unit raised US$ 200 million in a funding round led by a US$ 177 million investment to be made by Alibaba Group Holding Ltd, and balance by SAIF Partners.

- Intel Corporation plans to invest in Digital India related solutions such as India stack, Unique Identification (UID), e-government 2.0 and other government initiatives, and scale up operations of its data centre group (DCG), as per Mr Prakash Mallya, Director DCG, Asia for Intel Corporation.

5.6 Skill requirements in the IT and ITeS Industry

The Indian IT and ITES industry currently employs about 2.2 million persons in comparison to 0.8 million in 2004. In the context of growth forecasted for the industry, availability of skilled human resource supported by appropriate skill building initiatives will be the key to this growth.

Major trends impacting skill requirements for the IT Industry:
- Continuous demand for skilled workforce
- Demand for skilled workforce in IT consulting
- Demand for skilled workforce in specific industries like BFSI, Healthcare, and Education
- Inability to Innovate in skill development
- Increased share of other business verticals
- Increased opportunities in the Indian market from other markets like Europe
- Evolution of newer pricing models
- Evolution of new technologies like Cloud Computing;

5.7 Major trends impacting skill requirements

- Increasing share of business from KPOs
- High-end research and analytics, online market research, and legal advisory
- Increasing demand of end-to-end service offerings in the domestic market
- Increasing confidence of clients on Indian outsourcing vendors

This unprecedented growth in the IT-ITES sector can be much more with markets opening up further and supported by large investments in innovation, skill building, IP creation, and development of IT infrastructure in tier-2 and tier-3 cities. At the same time, risks such as protectionism, security, poor infrastructure, and lack of skill development can dampen the growth. For this growth to materialize, India needs to develop its talent pool and serve as a hub for end-to-end services, and innovation in business models and technology offerings.

Based on the trends witnessed in productivity and the likely growth potential of the IT and ITES industry, it is expected that the industry would employ about 7.5 million2 persons directly by 2022. A large portion of this employment is expected to occur in the ITES (BPO/KPO) exports sector, followed by IT exports and then in the domestic market. The incremental human resource requirement in the IT and ITES sector is expected to be about 5.3 million persons till 2022.

5.8 Business Process Outsourcing (BPO)

Business Process Outsourcing (BPO) is the delegation of an intensive business process to an outside service provider who owns administers and manages it according to a defined set of metrics. Business-process outsourcing is generally for back-end administrative functions that are necessary to run a business but are not a part of the core business.

In business process outsourcing (BPO), a client's business process is performed by a vendor. Certain business processes of the client are transferred over to the vendor, and the vendor's office then becomes the "back office" for the client's outsourced business processes. The vendors are given the responsibility to manage the client's business processes, such as call centers, emergency hotlines, claims management, helpdesks, data management, document processing and storage, financial services (banks and insurance), payroll, auditing, accounting, travel management systems, various logistics and information systems services. Hence, a BPO vendor needs to have the capability to provide consistent levels of customer service spanning across a range of services and businesses.

Though BPO has inherent risks, it also provides many benefits to the client. Apart from focusing on short-term cost savings and operational efficiencies, it is important that BPO be performed with a strategic mindset, whereby decisions are based on wider business context and help in gaining competitive advantages in the tough external environment.

In India, Business Process Outsourcing (BPO) is the fastest growing segment of the ITES (Information Technology Enabled Services) industry. Factors such as economy of scale, business risk mitigation, cost advantage, utilization improvement and superior competency have all lead to the growth of the Indian BPO industry. Business process outsourcing in India, which started around the mid-90s, has now grown by leaps and bounds.

India is now the world's favored market for BPO companies, among other competitors, such as, Australia, China, Philippines and Ireland. The BPO boom in India is credited to cheap labor costs and India's huge talent pool of skilled, English-speaking professionals. Research by the National Association of Software Services and Companies (NASSCOM) has revealed that quality orientation among leading BPO companies, 24/7 services, India's unique geographic location and the investor friendly tax structure in India have all made the BPO industry in India very popular.

5.8.1 Advantages of BPO

BPO can lead to considerable cost advantages:

- The client does not have to invest in the infrastructure or the technology required to execute the business processes and hence saves on capital expenditure.
- The vendor's economies of scale and economies of scope help in reducing the costs of running the business processes.
- The very process of bidding for and negotiating the outsourcing contract makes the respective vendors give estimates on the costs involved in executing the business processes, which in turn makes the costs more predictable for the client.
- BPO allows organizations to focus its core business, and outsource the noncore business that take up a considerable amount of management time and resources.
- BPO makes a client's transition to newer business processes easier, wherein the legacy or current business processes are outsourced to a vendor during the transition period.
- BPO gives more flexibility in managing labor:
  - o Any upsurge or downswing in the volume of business process work would entail variations in the required manpower. The client does not need to worry about this because the recruitment and staffing for outsourced business processes would be the vendor's responsibility. A vendor organization can more easily manage variations in manpower needs since it would be executing a huge number of business processes (for various clients) that involve a large number of vendor employees working on similar tasks. The vendor can easily balance out variations in staffing needs across its various BPO projects.
  - o BPO frees up a client's in-house resources (infrastructure, manpower, etc.) from noncore activities, and they can instead be utilized in the development of core competencies and processes that could give the client a competitive edge in the market.
  - o BPO gives the client access to the process and technical expertise of the vendor personnel, which can have a positive impact on the way the client's business processes are executed.
- To stay competitive, most vendors strive to adopt the best business process maturity models that can guarantee better quality and service. Hence, clients can benefit from the quality provided by the best-in-class vendors.

5.8.2 Disadvantages of BPO

It is important to dwell upon the possible disadvantages of BPO services before outsourcing any work. Here is a list of some of the shortcomings BPO companies.

- Although outsourcing is considered cost-effective, there are some hidden costs. So before signing an assignment make sure to have detailed contract paperwork.
- A single BPO company may associate with multiple organizations at a time. Consequently, providers cannot concentrate comprehensively on assigned tasks. This will lead to slow turnaround times, poor quality and sluggish issue settlement.

- Even if BPO companies guarantee data security, there are high risks of exposing confidential data mainly associated with human resources, recruitment, payroll, and account services.
- If the right BPO provider is not chosen, it is difficult to get the expected final outcome. There may be issues related to linguistic variations, time frames and classification of responsibilities. Sometimes, outsourcing leads to loss of control above the corporate business processes.

5.8.3 Classification of BPO

BPOs are generally categorized into horizontal and vertical services. These have been explained below:

Horizontal BPO: Horizontal BPO involves function centric outsourcing. The vendor specializes in carrying out particular functions across different industry domains. Examples of horizontal BPO are outsourcing in procurement, payroll processing, HR, facilities management and similar functions. Automatic Data Processing (ADP) is an example of a horizontal BPO vendor. ADP focuses on providing services in horizontal functions such as payroll, HR, benefit administration, tax solutions, etc. However, according to Gartner, companies should focus on providing vertical services as the market matures.

Vertical BPO: A vertical BPO focuses on proving various functional services in a limited number of industry domains. Healthcare, financial services, manufacturing and retail are examples of vertical BPO domains. EXL Service Holdings is a vertical BPO having focus on industry domains such as healthcare, business services, utilities and energy and manufacturing.

Recruitment	Sales	Procurement	Process
Identify open position	Identify customer	Identify supplier	Process A
Search candidates	Obtain order	Obtain product catalogue	Process B
Conduct interviews	Deliver product	Select suppliers	Process C
Select new hire	Receive payment	Send payment	Process D

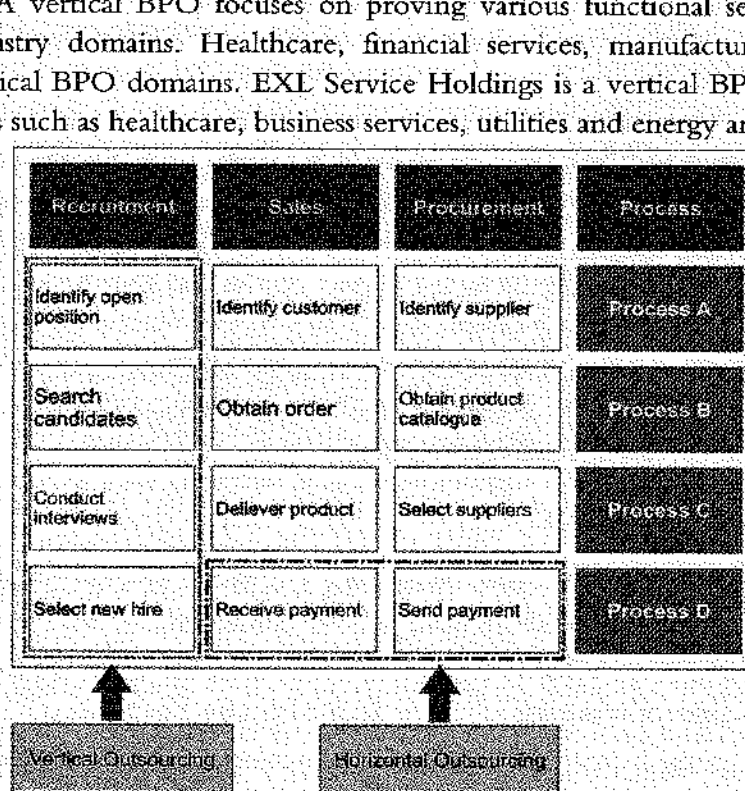Vertical Outsourcing   Horizontal Outsourcing

Figure. Horizontal and Vertical BPO

CHAPTER 6: HOSPITALITY SECTOR

6.1 Introduction

The hospitality industry is a broad category of fields within service industry that includes lodging, event planning, theme parks, transportation, cruise line, and additional fields within the tourism industry.

The hospitality industry is a multibillion-dollar industry that depends on the availability of leisure time and disposable income. A hospitality unit such as a restaurant, hotel, or an amusement park consists of multiple groups such as facility maintenance and direct operations (servers, housekeepers, porters, kitchen workers, bartenders, management, marketing, and human resources etc.).

Usage rate, or its inverse "vacancy rate", is an important variable for the hospitality industry. Just as a factory owner would wish a productive asset to be in use as much as possible (as opposed to having to pay fixed costs while the factory is not producing), so do restaurants, hotels, and theme parks seek to maximize the number of customers they "process" in all sectors. This led to formation of services with the aim to increase usage rate provided by hotel consolidators. Information about required or offered products are brokered on business networks used by vendors as well as purchasers.

In looking at various industries, "barriers to entry" by newcomers and competitive advantages between current players are very important. Among other things, hospitality industry players find advantage in old classics (location), initial and ongoing investment support (reflected in the material upkeep of facilities and the luxuries located therein), and particular themes adopted by the marketing arm of the organization in question (for example at theme restaurants). Also very important are the characteristics of the personnel working in direct contact with the customers. The authenticity, professionalism, and actual concern for the happiness and well-being of the customers that is communicated by successful organizations is a clear competitive advantage.

6.2 Tourism

6.2.1 Indian Market

The Indian tourism and hospitality industry has emerged as one of the key drivers of growth among the services sector in India. Tourism in India has significant potential considering the rich cultural and historical heritage, variety in ecology, terrains and places of natural beauty spread across the country. Tourism is also a potentially large employment generator besides being a significant source of foreign exchange for the country.

157
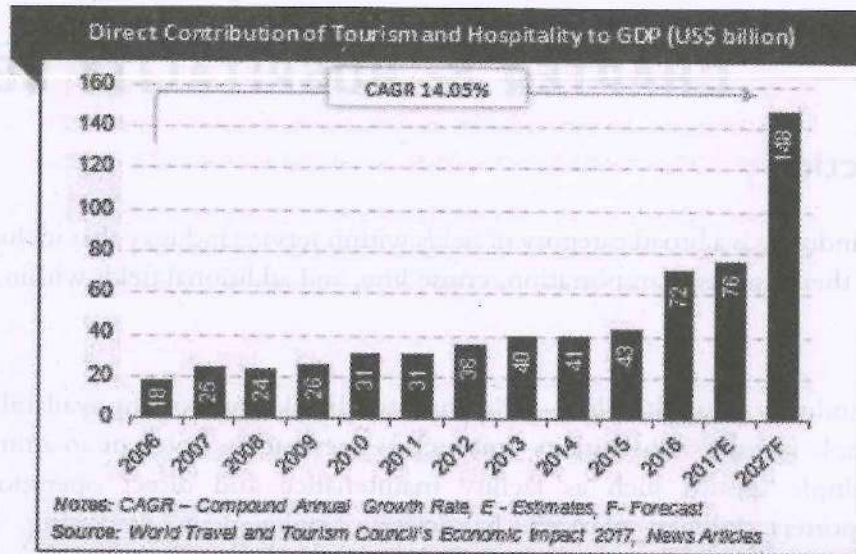
Figure. Indian Market: GDP from Tourism & Hospitality

6.2.2 Market Size

India's rising middle class and increasing disposable incomes has continued to support the growth of domestic and outbound tourism.

Domestic Tourist Visits (DTVs) to the States/Union Territories (UTs) grew by 15.5 per cent y-o-y to 1.65 billion (provisional) during 2016 with the top 10 States/UTs contributing about 84.2 per cent to the total number of DTVs, as per Ministry of Tourism.

Foreign tourist arrivals (FTAs) in India increased 18 per cent year-on-year to reach 723,000 in September 2017. FTAs on e-Tourist Visa in India increased 71 per cent year-on-year to 118,000 in September 2017.

India's Foreign Exchange Earnings (FEEs) increased 16.1 per cent year-on-year to US$ 2.176 billion in August 2017.

India is expected to move up five spots to be ranked among the top five business travel market globally by 2030, as business travel spending in the country is expected to treble until 2030 from US$ 30 billion in 2015.

International hotel chains will likely increase their expansion and investment plans in India, and are expected to account for 50 per cent share in the Indian hospitality industry by 2022, from the current 44 per cent.

6.2.3 Investments

The tourism and hospitality sector is among the top 10 sectors in India to attract the highest Foreign Direct Investment (FDI). During the period April 2000-June 2017, the hotel and

tourism sector attracted around US$ 10.48 billion of FDI, according to the data released by Department of Industrial Policy and Promotion (DIPP).

With the rise in the number of global tourists and realising India's potential, many companies have invested in the tourism and hospitality sector. Some of the recent investments in this sector are as follows:

- MakeMyTrip raised US$ 330 million from Ctrip.com International Ltd, Naspers Ltd and few undisclosed investors, in a bid to withstand competition in the ticketing segment.
- MakeMyTrip has agreed to buy Ibibo Group's India travel business at a deal value of US$ 720 million, thus creating India's largest online travel firm with a value of US$ 1.8 billion, as estimated by Morgan Stanley.
- Yellow Tie Hospitality Management LLP, specialising in franchise management of food and beverages firms, plans to invest up to US$ 15-20 million in five restaurant ventures of celebrity chef Mr Harpal Singh Sokhi, with the aim to have 250 outlets under these brands by 2020.
- Chaudhary Group (CG) Hotels & Resorts aims to have 200 hotels operational by 2020.
- DineEquity Incorporation has signed a franchisee partnership deal with food services firm Kwal's Group, in order to enter the Indian markets with their breakfast chain IHOP.
- As per industry experts, mid-hotel segment in India is expected to receive investments of Rs 6,600 crore (US$ 990 million) excluding land over next five years, with major hotel chains like Mariott, Carlson Rezidor and ITC planning to set up upscale, budget hotels in state capitals and tier-II cities.
- Hyatt Hotels Corporation has outlined plans of bringing its Hyatt Centric brand to India soon along with three new hotels in Kochi, Rameswaram and Hyderabad by 2017.
- Vatika Hotels Pvt Ltd has raised Rs 495 crore (US$ 74.25 million) in debt from Axis Bank Ltd to expand its hotels and quick-service restaurant chain besides its business centres.
- AccorHotels, a French multinational hotel group, plans to expand its footprint in Guwahati and Kolkata by adding more 550 rooms to its portfolio of hotels in the next three years.

6.2.4 Government Initiatives

The Indian government has realised the country's potential in the tourism industry and has taken several steps to make India a global tourism hub.

In the Union Budget 2017-18, the Government of India announced some initiatives to give a boost to the tourism and hospitality sector such as setting up of five special tourism zones, special pilgrimage or tourism trains and worldwide launch of Incredible India campaign among others.

Some of the major initiatives taken by the Government of India to give a boost to the tourism and hospitality sector of India are as follows:

- The Ministry of Environment, Forest and Climate Change, Government of India, is planning to revise India's coastal regulation norms aimed at opening up the 7,500 km long coastline for developmental activities like tourism and real estate.

- The Central Government has taken a number of steps for smooth transitioning to cashless mode of payment to ensure that no hardship is faced by the tourists and the tourism industry remains unaffected from government's demonetisation move.

- Maharashtra Tourism Development Corporation (MTDC) has come up with a unique tourism experience of visiting the open cast coal mine of Gondegaon and underground coal mine of Saoner, which are near Nagpur and part of Western Coalfields Limited.

- A Tripartite Memorandum of Understanding (MoU) was signed among the Indian Ministry of Tourism, National Projects Construction Corporation (NPCC), National Buildings Construction Corporation (NBCC) and Government of Jammu and Kashmir for the implementation of tourism projects in Jammu and Kashmir.

The factors for the growth of the Tourism sector of Indian economy

- Increase in the general income level of the populace
- Aggressive advertisement campaigns on the tourist destinations
- Rapid growth of the Indian economy

6.2.5 Types of Tourism
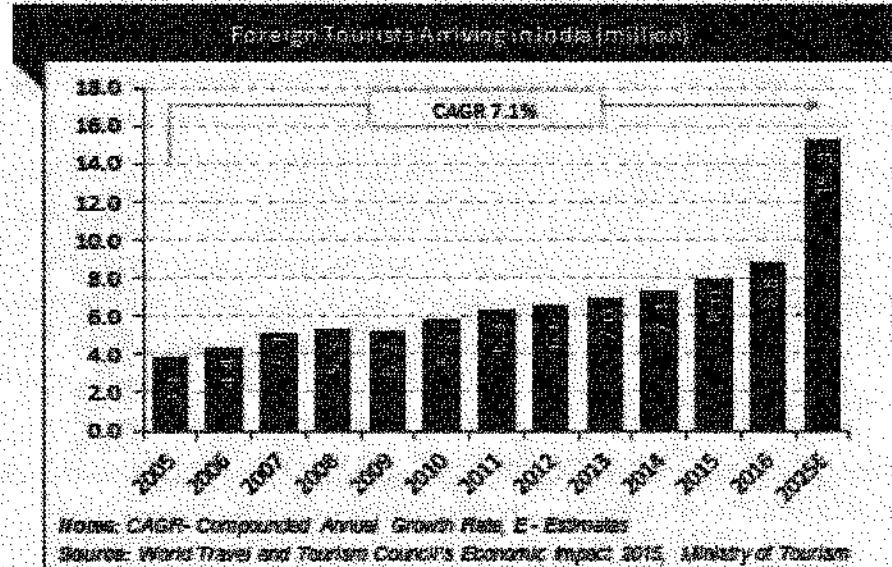
Figure. Types of Tourism: Foreign Tourist arriving in India

India is a country which witnesses a lot of diversity pertaining to its ecology, mythology, history, its geographical diversity in terms of mountains, planes and plateaus and also the medicinal diversity teaching us the Science of Life (Ayurveda). India showcases a variety of tourism options which includes Ecological Tourism, Pilgrimage Tourism, Historical Tourism, Adventure

Tourism, Medical Tourism and an upcoming Ayurveda Tourism. So Tourism in India could be broadly classified on the basis of above mentioned categories.

Leisure tourism: Leisure time can be defined as "free time", not doing any work. It is that time to do things that you normally have no time for in your daily life. Leisure tourism includes a holiday with the following:

- Relaxation: Sleep, relax, reading, walk on the beach, taking a scenic drive o Sport activities: hiking, swimming, surfing, running
- Visit places of interest and local attractions Visiting friends and relatives
- Shopping for goods that will be used by the tourist.

Business Tourism

Business tourism can be defined as "travel for the purpose of business".

Business Tourism can be divided into three sections:

a) Trading for goods to be resold on a wholesale basis.

b) Conduct business transactions

eg. visiting a client, contract negotiations.

c) Attending a conference, exhibition or event associated with their business.

Ecological Tourism

The rich diversity in the flora and fauna with a blessing of the beautiful natural attractions has encouraged Ecological Tourism in India. The forests cover on the Andaman and Nicobar islands, Orissa, Meghalaya and the Malabar Coast; the Kaziranga and Jim Corbette wildlife sanctuaries; the mountain ranges in North India and the Hill Stations such as Shimla, Kulu, Manali, Ooty; the Paradise on Earth, Kashmir; the beautiful beaches at Goa and the backwaters of Kerala and much more is nothing but a feast for all nature lovers.

Pilgrimage Tourism

India has a very strong mythological background and is also known as the LAND OF GODS AND GODDESS. India being the most culturally developed country and the birthplace of many saints, poets and philosophers has marked growth in Pilgrimage Tourism since ancient times itself. Kedarnath, Badrinath, Amarnath, the Golden Temple at Amritsar, Dwarka, Dargahs and Masjids at Delhi and Ajmer, churches and temples at Goa are some of the common tourists' attractions pertaining to Pilgrimage tourism.

Historical Tourism

India is a land which gave birth to many legendary rulers and warriors creating a glorious historical background. Every city or place in India has a story to tell about its history. The common tourists' attractions for the same include the Taj Mahal at Agra, the beautifully carved Ajanta Ellora and Khajuraho caves, the forts at Delhi, Rajasthan and Maharashtra, one of the oldest and historical cities of India "Madurai" and many more.

Medical Tourism

Medical Tourism is an upcoming kind of tourism in India. Due to low cost and efficient medication facilities more number of people all over the world considers India to be a better option for medication purpose. The later part of the paper studies Medical Tourism.

Ayurveda and Yoga Tourism

Ayurveda may be regarded as the "Science of Life" which was developed long ago in 600 BC. India has witnessed an overall growth in tourist arrivals due to the upcoming; Ayurveda Tourism. The state of Kerala in South India is the popular destination of Ayurveda Tourism. The main focus of Indian Yoga is nothing but simple 'yogasanas' and meditation which rejuvenates one's mind, body and soul. There are many Ashrams in India encouraging Yoga Tourism. The mountain ranges of the Himalayas, Rishikesh, Kedarnath, Gangotri of northern India are some of the places where one can get eternal peace and satisfy their spiritual quest and are the prefect destinations for Yoga Tourism.

Adventure Tourism

Due to its geographical diversity India is one of the finest places for Adventure Tourism. Mountaineering, skiing, trekking in the ranges of Himalayas, Camel safaris in Rajasthan, River rafting in the Ganges near Rishikesh, Rock climbing, Wind rafting and much more of an adventure for every adventure lover is bestowed by India upon its Tourists.

Sports Tourism

Sports tourism refers to international travel either for viewing or participating in a sporting event. Examples include international sporting events such as the Olympics, world cup (soccer, rugby, and cricket), tennis, golf and Formula 1 Grand Prix.

Wildlife Tourism

Wildlife tourism is the observation of wild (non-domestic) animals in their natural environment or in captivity. It includes activities such as photography, viewing and feeding of animals. This form of tourism offer tourists customized tour packages and safaris and is closely associated with eco-tourism and sustainable-tourism. Other minor forms of tourism include Slum tourism, Luxury tourism, Agritourism, Geo-tourism, culinary tourism and many more. Tourism is also a profitable industry for the following sectors: accommodation venues, tour guides, recreation, attractions, events and conferences, food and beverage, transportation and the travel trade.

6.2.6 Opportunities

Whether you want to further your existing career or switch to another, the hospitality industry offers a wide range of exciting job opportunities. Although many people immediately think about hotel work when they hear the word "hospitality," individuals seeking management positions in the field can choose among a number of viable employment sectors including travel and tourism, casino management, and various food and beverage industries. Although it is valuable to amass some practical, entry-level experience in your chosen area of interest, if you

truly want to advance in your career, most authoritative sources recommend obtaining an appropriate college degree in the academic discipline of hospitality administration.

The hospitality industry can give an opportunity to operate a tour company, plan events at a resort, or board a cruise ship as a recreation director. However, in order to succeed in any of these dynamic fields, the importance of college-level hospitality administration training cannot be underestimated.

For those with the proper education and drive, the opportunities in the hospitality industry are nearly limitless. The World Travel and Tourism Council recently released a report that compared economic growth in the hospitality industry to growth in other market sectors. The organization ultimately determined that hospitality and tourism has one of the highest potentials for expansion of any industry.

The exceptional economic growth of the hospitality industry fuels an exceedingly quick rate of career evolution. This acceleration can take the form of rapid promotion opportunities or vertical career moves into more complex and prestigious work environments. Because of the dynamic and fast-paced nature of the industry, many hospitality organizations offer administrative positions to employees at comparatively young ages.

At the management level, workers in the hospitality industry receive all of the traditional benefits, such as competitive healthcare packages and retirement plans that people have come to expect from a senior professional position. However, the hospitality industry, by its very nature, typically offers a range of unique and exciting fringe benefits. Depending on your specific area of professional interest, you may be eligible for free or discounted housing, hotel rooms, airfare and ground transportation, meals, laundry services, and other valuable amenities.

6.2.7 Benefits of career

To capitalize on all that this industry has to offer, you must first educate yourself about the intricacies of hospitality administration and familiarize yourself with the diverse opportunities that are available in a wide variety of hospitality fields. In addition to general hotel and restaurant management, you may want to consider looking into employment options in the following, often overlooked, areas:

- Airline and railway travel
- Conferences and conventions centres
- Travel agencies
- Tourist offices and ministries of tourism
- Tour operators
- Spas and wellness centres
- Cruise companies
- Event management

- Casinos
- Catering companies
- Bars and private clubs
- Concert and theatre venues
- Museums and other cultural venues
- Theme parks
- Fitness clubs and sports organizations (such as gyms, golf clubs, and tennis facilities)
- Real estate management companies
- Hotel development and construction
- Manufacturers and suppliers of hospitality equipment

6.2.8 Road Ahead

India's travel and tourism industry has huge growth potential. The tourism industry is also looking forward to the expansion of E-visa scheme which is expected to double the tourist inflow to India. JW Marriott plans to have 175-200 hotels in India over the next four years.

AccorHotels India has adopted a 'born in France, made in India' approach to increase its properties in India, which has reached a total of 45 hotels and is expected to increase to 55 hotels.

The tourism sector of Indian economy is at present experiencing a huge growth. The Tourism sector of Indian economy has become one of the major industrial sectors under the Indian economy. The tourism industry earns foreign exchanges worth Rs. 21,828 crore. Previous year the growth rate of the tourism sector of Indian economy was recorded as 17.3%.

The growth in the tourism industry is due to the rise in the arrival of more and more foreign tourists and the increase in the number of domestic tourists. Tourists from Africa, Australia, Lain America, Europe, Southeast Asia, etc are visiting India and there are growing by the thousands every year.

Indian Tourism offers a potpourri of different cultures, traditions, festivals, and places of interest. There are a lot of options for the tourists. India is a country with rich cultural and traditional diversity. This aspect is even reflected in its tourism. The different parts of the country offer wide variety of interesting places to visit. While the international tourism is experiencing a decelerated growth, the Indian counterpart is not affected.

6.3 Theme Parks

More Indians were "taken for a ride" as the Indian theme park industry grew at 10.25 per cent in 2016 to reach Rs 2930 crore, up from Rs 2660 crore in 2015, according to a report released

by Ficci and KPMG. The industry, however, has to make greater strides to match the global level.

The global theme park market, buzzing majorly on theme parks in the US, Japan, China, Hong Kong and Korea, and various others coming up in Dubai and Abu Dhabi, is currently valued at Rs 2.7 lakh crore.

The amusement and theme park industry in India is about two decades old and it is relatively new when compared to its origin in USA & Europe. This industry found its roots in India during mid and late 1980s when a few innovative entrepreneurs took challenge of pioneering few amusement parks in Delhi, Kolkata, Mumbai and Chennai. The growth in this industry started only in the last decade and that happened possibly during the advent of globalization when economic potential of the social capital began to be perceived.

6.3.1 Facts on Indian Amusement Park Industry

- The amusement industry in India is at a growing stage currently with more and more developments happening in this industry all across the country.

- The size of the Indian Amusement Park business is estimated to be around Rs 4000 crores and is estimated to grow by 10% per cent per annum in next couple of years.

- The amusement and theme park industry is deemed to be worth Rs. 10000 crores in India by 2020.

- Currently for a population of 1.15 billion in the country, there are only 120 amusement parks and 45 Family Entertainment Centers. This indicates that the growth potential of Indian amusement and theme park industry is substantial.

- Global leaders in entertainment parks and attractions like Universal Studios, Disney, Sony and Ripley Entertainment are mulling over investments of billions of dollars in India considering the vast potential in this region. Private equity funds are also aggressively dedicating resources towards this sector.

- The Indian small and big players in the Amusement Industry are looking at the tremendous growth potential of this industry in the next 5 years.

- Growth of India's retail sector had been the main driving force for the amusement industry in India.

- Globally, domestic and international tourists comprise more than 50% of the total footfall at popular amusement parks.

- Transport corridors like expressways and the Metro line are bringing an increasing number of people closer to entertainment hubs.

- The high growth potential of the industry in highly populated India will boost tourism, social infrastructural development as well as employment generation. The success and growth potential of this industry is resulting into the advent of new manufacturers of amusement parks' rides in India.

6.3.2 Structure and Development of Amusement Park Sector

Amusement Parks are recreational facilities that offer a varied range of entertainment options ranging from theme parks to spine chilling roller coaster, 3D theatre to giant wheel, in a cluster format. These parks provide one-stop-shop leisure and entertainment solutions for the entire family at one place and are a key source of tourist attraction (domestic and foreign) and revenue generation for the State. The demand for entertainment options such as amusement parks, I-max, shopping malls are rapidly increasing across the Country. The key demand drivers for the segments are rising base of middle class, increasing disposable income, changing lifestyle, cultural shift and increasing emphasis to lead a holistic life with a balance of work and leisure.

6.3.3 Tourism - Amusement parks

During the last decade domestic tourism had grown @ 14% on an average and currently it is estimated at 527 million. Out of this, the amusement park industry generated only 15 million footfall during last year. Globally, domestic and international tourists comprise more than 50% of the total footfall at popular amusement parks. We can, therefore, expect that there would be manifold increase in footfall in amusement parks in India as the large parks in India are gradually converting themselves to larger destination parks with additional investments following the footsteps of large global parks. Currently for a population of 1.1 billion in the country, there are only 120 amusement parks and 45 Family Entertainment Centres. This indicates that the growth potential of Indian amusement and theme park industry is substantial.

The high growth potential of the industry in highly populated India will boost tourism, social infrastructural development as well as employment generation. The success and growth potential of this industry is resulting into the advent of new manufacturers of amusement parks' rides in India.

A recent market survey research shows that this industry in India is growing at a rapid pace and over 120 amusement parks and water parks are currently in operation in India. Out of them only 15% can be classified in the "large parks" category, 30% as medium size parks and balance 55% are small size local parks. Investments to the tune of Rs 10,000 crore are likely to flow into the domestic amusement and leisure sector by 2020 with about 500 new parks are expected to come up across the country. The Rs 4,000-crore Indian amusement and leisure industry expects fresh investment of Rs 10,000 crore by the year 2020. In terms of employment generation, the new parks are likely to create jobs for six crore man-hours per month.

It is estimated that the total capital investment made in the amusement and theme park industry in India till date, is more than INR 40 billion (excluding investment on land). The estimated annual revenue generated by this industry is approx INR 20 billion, at present, which is expected to grow to almost three times by the year 2020 at a CAGR of over 11%.

Today, Indian manufacturers can produce international standard quality products at a competitive price for both the domestic and the global market. Both these areas have good

potential. Amusement parks have not received their due recognition for their enormous potential as an infrastructural facility for tourism. The amusement industry worldwide is a very significant part of the tourism effort. In India, the tourism policy does not address the needs and the potential of the amusement industry. As such, today the amusement industry in India receives no special incentives.

6.3.4 Recreation Industry - Amusement parks

Recreation Industry is currently one of the most exciting sectors in India. The current market for leisure is estimated to cross USD 1 bn in next few years. The leisure industry mainly consist of amusement park, malls family entertainment centers (FECs) and multiplexes. The present consumer base is estimated around 30 million people.

At present there are around 200 FECs in the Country and the number is expected to grow to 400 in the next couple of years. Amusement parks contribute nearly 40% of the total leisure industry turnover.

Through the years though there is a healthy growth, but at the same time it is burdened by local entertainment tax ranging from 10 to 25 per cent in various states. Further if any imposition of Central Tax like Service Tax will cripple the whole industry. The industry can absorb either of the taxes and not both, he stated. Further he urged to make amusement industry an integral part of tourism and development in India at the Central Government Level. Recreation Industry is currently one of the most exciting sectors in India. The current market for leisure is estimated to cross USD 1 bn in next few years. The leisure industry mainly consist of amusement park, malls family entertainment centers (FECs) and multiplexes. The present consumer base is estimated around 30 million people.

At present there are around 200 FECs in the Country and the number is expected to grow to 400 in the next couple of years. Amusement parks contribute nearly 40% of the total leisure industry turnover.

Famous Ten Amusement parks in India (in alphabetical order)
- Adventure Island (Delhi)
- Essel World (Mumbai)
- Fun n food Village(Delhi)
- Nicco Park (Kolkata)
- Ocean Park (Hyderabad)
- Veegaland (Kochi)
- VGP Universal Kingdom (Chennai)
- Vismaya (Kannur, Kerala)
- Wonderla (Bangalore)
- Worlds of Wonder (Entertainment City, Noida)

6.4 Hotel Industry

Over the last decade business opportunities in india had intensified and elevated room rates occupancy levels in India. Even budget hotels are charging USD 250 per day. 'Hotel Industry in India' success story is only second to China in Asia Pacific. The World Travel and Tourism Council, says that India ranks 18th in business travel and will be among the top 5 very soon. India's big success stories include the new model for development and growth; a model that is uniquely made.

Indian Hotel industry's room rate are most likely to rise 2% annually and occupancy to rise by 80%, over the next two years. 'Hotel industry in india is gaining its competitiveness as a cost effective destination. The 'Hotel Industry' is likely to add about 60,000 quality rooms, currently in different stages of planning and development which would be ready by 2012.

MNC Hotel Industry giants are initiating for Joint Ventures to earn their share of pie in the race. The Indian Government has approved 300 hotel projects, where half are for the luxury range. Analysts say that the manpower required by the hotel industry has increased from 7 million in 2002 to 15 million in 2010. More and more IT Professionals are moving into the Metro cities as the USD 23 billion software services sector pushing into the Indian economy. Indian Hotel Industry is set up to grow by 15% a year. In 2010 during the Commonwealth Games in Delhi 50 mew International budget hotel chains moved into India. One of the major reasons for the increase in demand for hotel rooms in the country is due to the boom of IT, telecom, retail & real estate industries. India's increasing stock market and new business opportunities are always been attractive for foreign investors and corporate travellers to look for business opportunities in the country.

With a consistently growing middle class and increasing disposable income, the tourism and hospitality sector is witnessing a healthy growth and accounts for 7.5 per cent of the country's GDP. According to a report by KPMG, the hospitality sector in India is expected to grow at 16.1 per cent CAGR to reach Rs 2,796.9 thousand crore in 2022.The hospitality sector encompasses a wide variety of activities within the services sector and is a major job provider both direct and indirectly. The sector attracts the most FDI (Foreign Direct Investment) inflow and is the most important net foreign exchange earners for the country. It also contributes significantly to indirect tax revenue at the state and central level which includes revenues from VAT, Service Tax, and Luxury Tax etc.

6.4.1 Categorization of Hotels

The bais division in India according to the location is as follows:

Heritage Hotels

These types of hotels reflect the old glory and grandeur of India, they are mostly the old havelis and mansions of ancient times which have been turned into Heritage Hotels, and these provide

tourists with an opportunity to experience royal pleasure in traditional ambiance. They mostly concentrate in the princely states of Rajasthan, Delhi & Madhya Pradesh.

Luxury Hotels

These hotels are equipped with world class infrastructural amenities, they offer the tourists with a fine lodging and dining experience. They extend a warm welcome to the customers catering primarily to the upper class executives.

Budget Hotels

These kids of hotels are like home away from home, they accommodate customers from upper middle and middle class. Mostly names as Economy Class Hotel, Business hotels and discount hotels, the budget hotels support the modern infrastructural facilities for a comfortable and pleasant stay.

Resorts

Resort hotels in India are mostly found in hill stations and sea side tourist destinations. These are located amidst natural beauty, they are the ideal place to enjoy some valuable time with family and friends or in solitude.

Important Hotel groups in India

Indian hotel industry has been booming business and has also given a boast to tourism business in the country. Radisson Hotels India, Taj Group of Hotels, Park Group of Hotels & ITC Hotels are some of the known hotels in the hotel industry that are famous for unique amenities and superb accommodation arrangements.

There are also the ITC Maurya Delhi, ITC Martha Mumba, and Fort Radisson of Radisson Group in Kolkata, Radisson Jass Hotel Shimla, The Taj Westend, Bangalore, Taj Coromandel, Chennai. The major cities like Bangalore, Hyderabad, Chennai, Gurgaon, and the suburbs of Mumbai are the areas, most attractive for international investment and as expected these are the cities with the largest development pipelines, combined these cities account for 89 of the 161 projects in the pipeline and 16,734 guestrooms, which is 68% of the rooms in India's total pipeline.

6.4.2 Latest Developments

Indian Hotel Industry holds a special place in the international world of hospitality. India is culturally the most diverse place in the world. It serves as the vivid kaleidoscope of landscapes, magnificent historical sites and royal cities, misty mountain retreats, colourful people, rich cultures, and festivities. Luxurious, hot & cold, chaotic and tranquil, ancient and modern India leaves a last time impression.

In recent years the Indian government has taken several steps to boost travel & tourism which have benefited the hotel industry in the country. The initiatives by the government include the

abolishment of the inland air travel tax of 15% to 8%, reduction in excise duty and aviation turbine fuel and removal of a number of restriction on outbound chartered flights, including those relating to frequency and size of aircraft.

Indian hotel industry has the best staff for hotels unlike employees in East Asian hotels who are charming and gracious, Indian staff is also grooming themselves to take initiative and discretion of decisions on the sport. Most are better educated and speak better English than their East Asian counterparts. Indian hotel industry is to be proud of as it has much to be so. The real success story of the Indian hotel industry was due to the fact that it took on the global chains on its own terms and it won.

Complimentary Products
- Swimming pool,
- Fitness Center
- Meeting rooms
- Business centre
- Complimentary hight speed internet
- Free local calls
- Hot continental breakfast
- Morning newspaper
- Guest laundry
- Dry Cleaning
- Coffee/tea maker,
- Mini Fridge
- Microwave
- Valet Parking
- Wake UP Service
- Bike rental at the reception desk
- Fitness centre
- Tennis court
- Beauty parlour
- Hairdresser
- Private car park
- Travel agent
- Airport pick up drop
- Guide facilities
- Banquet halls
- Meeting rooms

6.5 Cruise Lines

The cruise industry is one of the biggest working parts of the travel and tourism industry. While it is very much flourished in the outside parts of the country, India has large cruise tourism potential. Cruise tourism in India is not that developed as of now, but slowly the companies are planning for launching a number of services for the interested people to travel in cruises in India.

India being a country full of vast and beautiful coastlines, evergreen forests and idyllic towns can be a perfect destination for cruise travellers. South East Asian countries are fully flourished with cruise market whereas India lacks behind in the required infrastructure and services that are needed. This is one of the biggest challenges of the cruise market in India. Also, there is not enough financial support for the purpose of cruise tourism.

Also, taking a look at the infrastructure in India, the ports are mostly used for the purpose of the freight transport and not for the tourism purposes. And while the cruise tourism requires the ports to be used for the purpose of tourism, it affects the future of cruises severely.

The cruise tourism infrastructure must be very well planned out in order to hold the number of passengers on the port with the required services for them as well as the large spaces for ships to park for maintenance purposes. But, looking at the current scenario of the states like Goa and Cochin, they look very much favorable for the grand voyage tours in the near future. The cruise companies also have lately started developing an interest in India as it serves as the cross over destination for South East Asian destination. This has significantly increased the cruise tourism potential in India. Also, the big cruise companies have started taking interest in Indian states like Goa and Cochin.

The world famous, Norwegian Cruise Lines recently agreed to send a ship to India for the first time which was departing from Dubai and crossing over Goa, Mangalore and Cochin before reaching Sri Lanka. This was a big step in the future of cruise tourism in India as it opened opportunities for development. The recent developments have paved a way for many cruises companies to think of launching the cruises in India starting from Mumbai, Goa and many more places. Newly formed promoters Monarch Cruise plans to offer a cricket and Bollywood themed cruise with its voyage legs at Kochi and Mumbai. This marks as one of the big steps in the cruise market of India.

Also, the Carnival subsidiary Costa Cruises has recently announced plans for a series of sailings out of Mumbai on the costa neoclassica starting from this winter. This cruise basically plans to carry passengers to the Maldives via Mangalore and Kochi and return journey via Goa.

Thus, looking at the overall scenario of the Indian ports and the recent developments that are taking places, cruise tourism in India is sure to boost its way in the global market by next 5-10 years.

6.5.1 India's Cruise Potential

As per the Bureau of Immigration, Government of India, 20.38 million Indians travelled abroad in 2015, which is an annual growth of 11.1%. However, the number of cruise passengers from India during 2015 is just about 120,000– 125,000, which does not even amount to 1% of the total outbound. This means cruise tourism in India is virtually an untapped segment and has the potential to grow many folds, year-on-year. According to Kishan Biyani, MD, Ark Travels, "Larger ships and varied itineraries is what the Indian customer is looking for and that is what is being offered in 2017 in the South Asian region. MICE is already showing a growth of 10% for the year. The traveller trends for Diwali are also looking positive."

Indian travellers have arrived at a point where they distinguish between cruise as an attraction and cruising as a complete vacation, believes says Dipti Adhia, Director, Discover the World - India. "There are now many more players in the fray, but the ones to succeed, will be those who can offer the product and service which is out of the box. India has just began its journey as an emerging market for International cruising," she adds.

6.5.2 Time for Domestic Cruising

Since the cruise segment in India is still at a very nascent stage, the opportunity lies in developing the domestic ocean cruising market. A significant number of travellers in India are still unaware of how a cruise holiday can be a great option of exploring new destinations as well as indulging in onboard facilities on a single trip. It is advisable to launch a contemporary ship sailing in the domestic waters. This would allow passengers from India get a first-hand experience on their home turf since the product would be effectively cheaper than its international counterparts. As a majority of the population in India is still not familiar about cruising, it is difficult to develop and sustain a product that is targeted at only a niche premium segment. At this juncture, it is imperative that a ship sailing in Indian waters is launched, which would be a novelty. It should be targeted at a larger audience to not only popularise the segment and product at large, but also elevate India's tourism offering.

Moreover, a domestic cruise ship docking and making ports of call in the country would also draw the interest of and promotional investment from the state tourism boards in showcasing the best of what their coast can offer in terms of sightseeing and accommodations, besides local culture and cuisine. Hence, a mass product is preferable at this stage.

However, there also exists a case for the launch of two distinct products for the Indian market, which may be distinguished as a mass product and a class product. Additionally, to make cruise tourism a vibrant segment, the foremost step is education of the travel agents and tour operators, since bookings in India are largely driven through them. Another crucial area that needs to be accorded adequate focus is the emerging Tier-II and III cities, which are the hidden gems because those are the markets where the majority of bookings will be generated from in the future. Since Indians are price conscious, while devising a cruise package, the cost-aspect should be given a detailed consideration.

6.5.3 Cruise Lines in India

The Oberoi Motor Vessel Vrinda Cruise

Explore the beauty of Kerala's backwaters with the Oberoi Motor Vessel Vrinda Cruise. The five-star vessel takes you on an enthralling journey in God's own country, sailing through the serene waters of Alleppey.

You will be treated to live Kathakali and Mohiniattam performances on board, and travel along the Vembanad-Alleppey canal route, surrounded by lush greenery. You can also take a traditional rice boat to navigate the narrower channels of the backwaters. The best time to take this cruise is between the months of November and April.

The Vivada cruise on M.V. Paramhamsa

The Sunderbans have the largest mangrove ecosystem in the world and are home to Royal Bengal tigers. The Vivada cruise lets you spend four days aboard the Paramhamsa, sailing through the tangles of trees, watching for tiger sightings while cruising along the channels surrounding the Sunderban Tiger Reserve.

The itinerary includes a visit to Bhagabatpur Island which serves as a hatchery and sanctuary for Gangetic crocodiles.

Costa neoClassica Cruise

Costa Cruise India has recently launched a three to seven day cruise along India's western coastline. It starts off in Mumbai and sails to Cochin over a four-night period, and the next leg takes you to Male (Maldives) in three nights.

There is also seven night tour between Mumbai and Male. There are short day-tours planned in Mangalore and Cochin City, which will take you to pristine beaches, sanctuaries and various temples. The cruise.

6.6 Job Roles

- Concierge

  A concierge interacts directly with customers, providing them with various services. They act as liaisons, providing guests with particular services they might need. These services could range from providing a babysitter to getting tickets to a show to suggesting a restaurant. At some hotels, this is an entry-level job. However, some luxury hotels require concierges to have years of experience.

- Event Planner

  Many hotels have conference rooms or event spaces that they rent out for various events, ranging from meetings to weddings. An event planner works with the company or individual to arrange the event, and make sure the event runs smoothly.

- **Executive Chef**

  Hotels with restaurants and/or room service have a number of kitchen jobs, including kitchen staff, waiters, and kitchen managers. One common job is executive chef. He or she must supervise all cooks, sous chefs, and other kitchen employees. He or she typically orders the food, plans the meals, and cooks in the kitchen.

- **Front Desk Clerk**

  A hotel front desk clerk (sometimes known as a front desk agent) serves as the first point of contact for all guests. They typically check guests in and out of their rooms, and answer any questions they have. A front desk clerk needs strong customer service skills and good problem-solving abilities.

- **General Manager**

  There are a number of management-level jobs in hospitality, including supervisor of guest services, housekeeping supervisor, front desk supervisor, and kitchen manager. One broad management job is hotel general manager. He or she makes sure that everything is running smoothly in all departments, including customer service, food, building maintenance, and more. He or she oversees much of the staff, and ensures that guests are satisfied with their stays.

- **Housekeeper**

  Housekeepers are responsible for maintaining a standard of cleanliness throughout the hotel. They typically clean individual hotel rooms, as well as the common areas. They make beds, do laundry, clean bathrooms, and more. Being a housekeeper requires some physical stamina and strength, since you often have to lift heavy loads and be on your feet most of the day.

- **Porter**

  Also sometimes known as bellhops (though this is sometimes considered an outdated term), porters handle baggage for guests. They might bring the luggage up to guests' rooms, or take luggage down to the lobby when a guest's stay has ended. A related service job is a valet, whose job involves parking, and later retrieving, the cars of various guests.

- **Hotel Operations**

  Hotels employ front-desk staff, housekeeping staff, restaurant staff, managers, and sometimes porters, event planners, and a concierge, depending on the type of hotel. Most of these positions require excellent customer service skills, attention to detail, team work, and good personal grooming. Creative problem-solving (because travelers sometimes have unexpected problems) and a thorough knowledge of local resources and attractions are important as well.
  - o Hotel Front Desk / Guest Services Skills
  - o Concierge Skills

- **Food Service**

  Food service includes everything from fast food to working as a server in a high-end restaurant.

  All of these jobs require excellent customer service skills, careful attention to detail (forgetting a minor detail could give a customer food poisoning or trigger a life-

threatening allergy), and a thorough knowledge of the restaurant's current offerings. The work is fast-paced, and a good memory is crucial.

- o Fast Food Worker Skills
- o Food Server Skills List
- o Waiter / Waitress Skills
- o Restaurant and Food Service Skills

- **Food and Beverage Preparation**

Food and beverage preparation may include customer service (for example, for bar tenders or coffee baristas), or these jobs may be entirely behind the scenes (for example, line cooks). In addition to specific skill using the tools of the trade, such as espresso machines and kitchen equipment, more general abilities are absolutely required. These include, again, attention to detail, plus a commitment to safety, the ability to work well as part of a team, and the ability to work quickly and calmly in a high-pressure environment.

- o Bartender Skills List
- o Chef Skills List

- **Maintenance and Cleaning**

Someone has to keep restaurants, hotels, and clubs clean and sanitary. Other work includes repairing equipment, changing light bulbs, and replacing broken locks on bathroom stall doors, for example. There is substantial overlap between the custodial and maintenance skills sets, and some positions may combine both roles to some extent. These skills include everything from the safe and appropriate use of cleaning chemicals to basic electrical repair and carpentry.

Teamwork is often important, as is a strong work ethic.

- o Maintenance and Janitorial Skills List

- **Management**

Hospitality management requires skills some that are specific to the industry and others that are important in any management context. When applying for such a position you will have to demonstrate teamwork, leadership, budgeting, strategic thinking, customer service, and a thorough understanding of your specific business—whether that means being able to speak intelligently about food and wine for a restaurant manager, to understanding when the busy season is for your hotel and why.

- o Hotel and Resort Management Skills
- o Management Skills List
- o Soft Skills for Managers