What is IT?

- IT stands for Information Technology.
- When computer and communication technologies are combined, the result is information technology or "infotech".









- Information Technology deals with the use of electronic computer & software to convert, store, protect, process, transmit & retrieve information securely.
- Information Technology is a general term that describes any technology that helps to produce, manipulate, store, communicate and disseminate/broadcast the information.

Duties of IT professionals

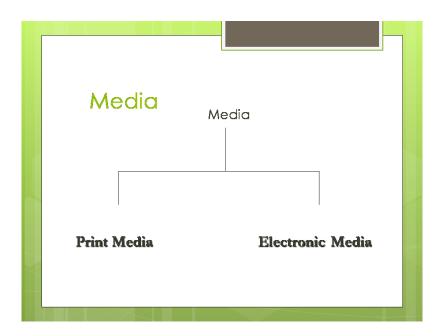
A few of the duties that IT professionals perform may include:

- Data Management
- Networking
- Computer Hardware
- Data base
- Software design as well as the management and administration of entire system.

Media

Media is the plural of Medium With the help of medium we carry our information from one place to another. For example: Air is medium for sound waves.

Our sound propagates in the form of air particles and touch the destination (e.g. Ear).



Print Media

News and Information on paper (Hardcopy).

For Example:

- Newspaper,
- Magazine etc

IT Role in Print Media

- Because of "Information Technology", the dream of production without manual intervention is today reality.
- The automation of many tasks in Newspaper production has been reality for several years. Newspapers already use softwares and robotics to perform a number of production tasks, from webbing up to pagination.

Technology used in Newspaper production Software

- MS-Word and Inpage (Typing)
- o In-Page (inp)
- Liwal (Pashto)
- Adobe Photoshop (Picture Refining)
- Quark Express (Page Making)
- Corel Draw (Graphics)
- Adobe Acrobat Reader/Writer (Making PDF)
- Internet (Attachment, E-mail, Online Newspaper)

Technology used in Newspaper production

Hardware

- Computer
- Telephone
- Fax Machine
- Printer/Plotter
- Press Machine

Electronic Media

 News and Information in the form of electromagnetic waves.

For Example:

- Radio,
- TV

IT in Radio Station

Because of IT we are able to make a small Professional Radio Station using only three rooms.

- 1) One for Office.
- 2) One for On-Air Studio.
- 3) One for Transmitter.

It is very easy to make a 15 minutes Radio Play in one hour.

Radio Production

- Recording the voice.
- Transfer the recorded audio to Computer.
- Editing /Mixing different audio tracks with program ID or theme music.

Technology Used in Radio Station

Software

- Adobe Audition (Record, Edit and Mix upto 128 different audio tracks).
- Audio format conversion software.
- Radio Boss (Scheduling the transmission).
- Winamp media player (Playing the audio files).

Technology Used in Radio Station

Hardware

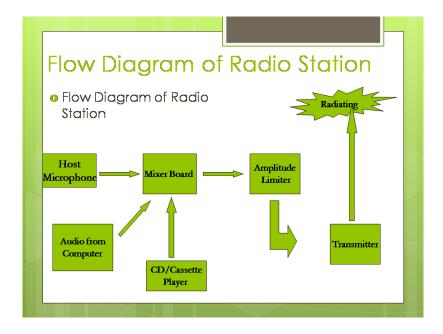
Portable Voice Recorders

There are three types of voice recorder:

- Tape/Cassette Recorder (60/90 mins)
- 2) MD/Mini Disk Recorder (80 mins and 160 mins)
- 3) IC/Chip Recorder (up to 280 mins dependent on memory size)

Technology Used in Radio Station

- Computer and Sound Card (For Recording and Playback).
- Microphones and Headphones.
- Mixer Board (To mix audio from different sources at a time).
- ODs and Cassette Players.
- o Amplitude Limiter.
- Transmitter (To Radiate Audio Signal).



IT Role in TV

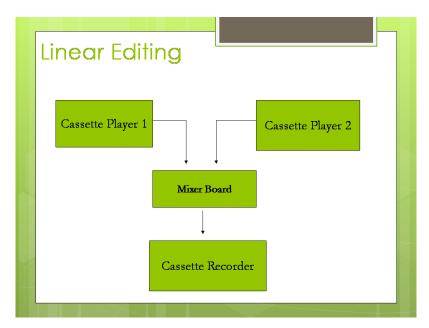
Because of Information Technology, the following changes occurred in Television Technology.

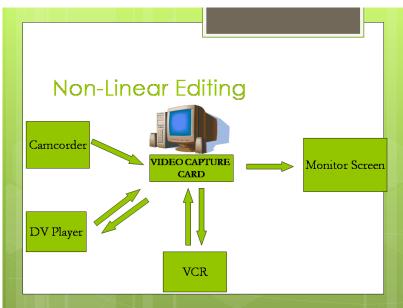
- Audio/Video Editing using Computer,
- Broadband Technology for News Gathering,
- Graphics/Animations/Virtual Studio System.

Editing Techniques

There are two types of editing the Audio and Video:

- 1) Linear Editing (LE),
- 2) Non-Linear Editing (NLE)





Advantages of NLE

- Low Cost,
- Upto 99 Video and Audio Tracks,
- Reduce Editing Time,
- Zero Generation Loss during multiple duplications,
- Edit from anywhere within video clip.

Disadvantages of Linear Editing

Linear Editing is expensive, time consuming and complicated because it is "Tape to Tape" editing technique.

Software for TV

- Adobe Premiere Pro (Video Editing)
- Coral Draw (Graphics)
- Adobe Photoshop (Pictures)
- 3D Studio Max (Graphics and Animations)
- Inpage (Urdu Composing Software)

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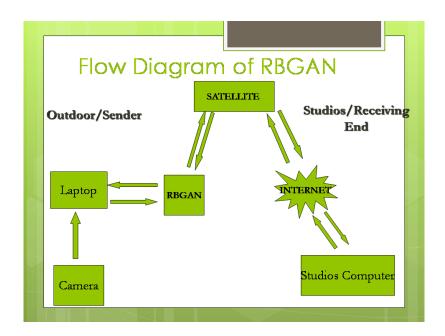
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Broadband Technology & News Gathering

RBGAN (Regional Broadband Global Area Network) .

RBGAN is a device through which we access the high speed internet via satellite.

- First to report the latest NEWS.
- E-mail (keep in touch with the central office).
- Digital image transfer.



Stringers

Stringers/Correspondents of Newspapers/Channels use the following techniques to send their information to their destination:

- 1) FTP (File Transfer Protocol)
- 2) Telephone (Mobile, Landline)
- 3) E-mail

Thank You