

# ROLE OF MULTIMEDIA TOOLS IN LIBRARIES

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## **Abstract :**

Multimedia is a technology engaging variety of media .Multimedia is the collection of Text, audio, video, animation, and graphics. The concept of paperless society is effective with the invention of multimedia. Multimedia help the user in providing information from different media on one platform. Its enhanced the concept of networking and resource sharing. Multimedia Library provide high quality service. This paper describes multimedia, its applications and limitations. its hardware and software requirements . Multimedia prepared in hypertext environment is called Hypermedia. The need for multimedia in libraries and its use for various applications such as multimedia library information kiosks, , training, digital libraries, multimedia databases, multimedia catalogues, multimedia library collections, electronic publishing, etc .

**Keywords :** Text , Audio, Video, Animation, Graphics, Animation, Digital Library, Multimedia.

## **Introduction :**

The main functions of a library are to collect, organize, preserve and deliver information to its user. Time to time, several techniques and technologies have emerged for handling the information more speedily and effectively. After the invention of pictures, moving pictures,voice recording discs, sound tapes, microcomputers and optical storage systems were introduced in the commercial market .Those days library starts acquisition of non-book material and call them as multimedia collection. During the late 1980s, computer specialists succeeded in integrating the text, graphics, animation, audio, and video information on a computer after converting them into digital media called multimedia for publicity purposes. This is a major achievement in the field of publishing, which directly influenced both librarians and users.

At the same time the convergence of multimedia technology with the telecommunication industry is creating a scenario with mililar impact. If the feature of the telephone and televisions are combined the resulting visually enriched communication makes application such as home shopping etc.

**What is multimedia :**

Multimedia is formed by the combination to two term” Multi and Media” .Multimedia is a combination of some or all forms such as text, data, images, photographs, animation, audio and video, which are converted from different formats into a single platform . All hypermedia products are multimedia products except vice versa. The basic difference between hypermedia and multimedia is in the organization and linkages of the information fragments.



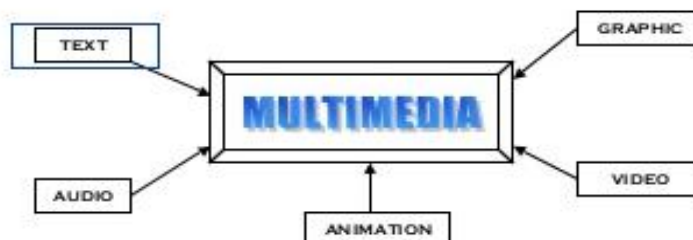
**Definition :**

According to oxford English Dictionary “ Multimedia is designing pertaining to a form of artist ,educational or commercial communication in which more than one medium is used.”

Multimedia can be defined as “Multimedia is the field concerned with the computer-controlled integration of text, graphics, drawings, still and moving images(video),animation, audio, and any other media where every type of information can be represented, stored ,transmitted and processed digitally”.



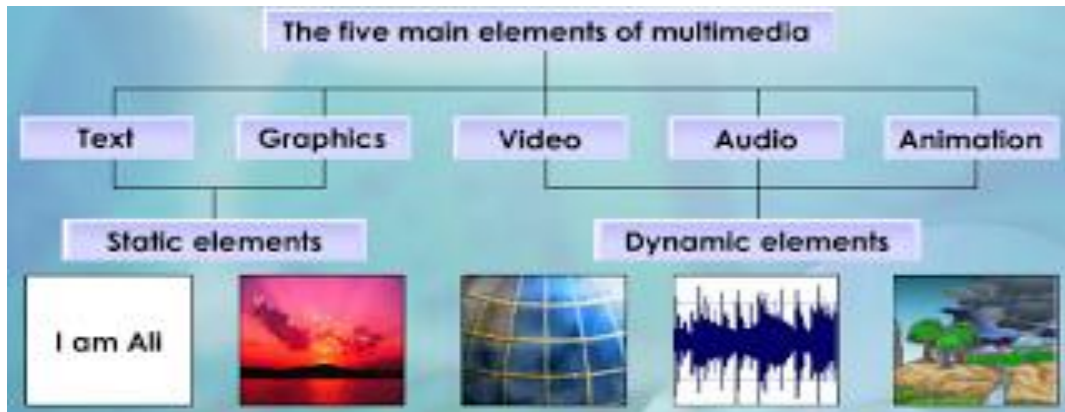
**Elements of the multimedia :**



(a) Text: notes, captions, subtitles, contents, indexes.

- (b) Data: tables, charts, graphs, spreadsheets.
- (c) Graphics: drawings, prints, maps, etc.
- (d) Photographic images : negatives, slides, prints .
- (e) Animation: including both computer generated, video, etc.
- (f) Audio: speech and music digitized from cassettes, tapes, CDs, etc.
- (g) Video (digital): either converted from analogue film or entirely created within a computer.

A multimedia system records, processes, stores and delivers all types of information in binary code the same way as a computer does. This is major different from the traditional analogue technology .The main advantage of a digital format is the flexibility in combining, transmitting, manipulating and customizing the elements of the multimedia according to the needs of the user.



**Text :** Text is the most important part in multimedia contents. These text are different than other types of text such as newspaper text , book text and journal texts . Text involves the use of text types, sizes, and colors. In multimedia Other media can be linked through the use of text. In fact ,many multimedia applications are based on the conversion of a book to a computerized form.

**Audio :**Audio element is generally used to enhance the usual multimedia environment,and in some case may become more effective than other media ,while putting together.A multimedia application may require the use of speech, music and sound effects. These are called audio or the sound element. There are two basic types of audio or sound: analog and digital audio. Audio sound can also reinforce the user's understanding of information presented in another type of media. For example ,a narration might describe what is being seen in an animation clip.Audio sound is available in several different Format.

### Graphics :

Graphics include still Pictures, image and Photo alone and those with dynamic movements like animation. Its make the multimedia application attractive. They help to

illustrate ideas through still pictures. There are two types of graphics used : bitmaps(paints graphics) and vector9draw graphics).

**Animation:**

Animation are perhaps the most interesting part of multimedia computing but with a hitch, they're extensively time consuming and demands heavy artistic capabilities on the developer's part.Animation refers to moving graphics images.Animation is especially useful for illustrating concepts that involve movement.Such concepts as playing a guitar or hitting a golf ball are difficult to illustrate using a single photograph ,or even a series of photographs ,and even more difficult to explain using text.Animation makes it easier to portray these aspects of your multimedia application.

**Video :**

The Video is the more important part of the Multimedia. Video provides a powerful impact in a multimedia program. In multimedia applications, the digital video is gaining popularity.Full-motion video ,such as the images portrayed in a television ,can add even more to a multimedia application.Although full-motion video may sound like an ideal way to add a powerful message to a multimedia application ,it is nowhere near the quality you would expect after watching television.Full-motion video is still in its beginning stages on PCs ,and it is limited in resolution and size.Even with advanced methods of data compression ,full-motion video can suck up hard disk space faster than water falls when poured out of a bucket.Right now ,there are two major methods of incorporating full-motion video into a multimedia application: Microsoft Video for Windows ,and Quick Time for Windows from Apple Computers.Both products come with tools for getting the video from an external input (a videocassette recorder or a video camera) and storing it on your hard disk drive.

**Hardware Requirements:**

A stand alone multimedia required following hardware configuration :

- Computer
- Monitor
- Means of User
- Input Devices
- CD Device and CD ROM
- Sound Synthesizer
- Scanner
- Printer
- Video Camera



### Software Requirement for multimedia :

We can classify multimedia software as a system software . some of the example are given below:

- Video for Window
- Quicktime
- Digital Video Interface
- Multimedia Technology

Some of these software are necessary for multimedia environments –

Photoshop, Adobe Dreamweaver, Adobe Fireworks, Gimp, Google, Skechup, Adobe Flash Player, Adobe CS4 etc.

### Requirement for a multimedia Workstation :

Minimum configuration required for any multimedia system is a 386 or 486 processor at least 4MB of RAM ,VGA video Display 640x 480 resolution super VGA about 30MB or 100 MB hard disk, Microsoft compatible mouse, CD-Rom drive, video Cards,101 Keyboard be added to run simple multimedia application.

### Need for Library :

Multimedia is used for batter access and presentation of information. Multimedia full fills users needs for variety and quality of information. In information explosion era multimedia can be effective for quickly and right kind of information to a variety of users.

### Multimedia in Library :

Many big libraries including the Library of Congress (LC), British Library, OCLC, etc. are building their collections in multimedia form. The main type of multimedia products being sought in libraries are reference and educational. Other related categories include databases (both bibliographic and full text), electronic books, software and their training packages, entertainment, leisure, etc. American Centre Library, British Council Libraries and a few other libraries in Delhi are having good number of multimedia PCs (MPCs) for using Internet and multimedia resources to their users.

### Types of Multimedia System :

- Multimedia Library information Kiosk

- Training
- Self Learning Tools
- Digital /Electronic Libraries
- Multimedia Databases
- Multimedia Catalogues
- Multimedia Information Retrieval System
- Multimedia information Resources
- Geographical Information Systems
- Electronic Publishing
- Multimedia Archival System

**Advantages of Multimedia in Library Science :**

- Multimedia make the program easy, interesting excellent and user friendly.
- It Increase Learning Efficiency.
- By using multimedia be can add interesting sound and animated effect.
- Multimedia Element are easy to use.
- Multimedia helps user to browse & navigate easily.
- Its enhanced Networking and resource sharing.
- Its provide good quality video, image, amination etc.
- Multimedia give freedom to its user for searching & information.
- Multimedia create 3-D effect of object in a variety of ways.

**Disadvantages of Multimedia In Library Science :**

- Multimedia required a maximum amount of money this is very difficult of small label Library.
- Its required Trained staff for development & management of media.
- Converting all the resource in the digital multimedia and then storing is very difficult.
- Its required special software and hardware.
- There are a lack of search and pattern recognized capability for locating the information.

**Conclusion :**

At the end we can conclude that The multimedia which is the emergency and convergence of modern technology has brought about significance change in the field of library and information Science. Multimedia technology will help to resume barriers and distance and the time. It is the power and capacity of multimedia technology that help every reader to get the information which he or she wants. Multimedia is fully revolutionized which he or she wants. Multimedia is fully revolutionized our society and institution particularly our libraries, it provide better links between the users and its required information.

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