

Multimedia

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Multimedia??

Derived from the word “**Multi**” and “**Media**”

Multi :- Many, Multiple.

Media:- Tools that is used to represent or do a certain things, delivery medium, a form of mass communication – newspaper, magazine / tv. Distribution tool & information presentation (text, graphic, voice, images, music and etc).

Multimedia means that computer information can be represented through audio, video, and animation in addition to traditional media (i.e., text, graphics drawings, images).

Multimedia: is the field concerned with the computer-controlled integration of text, graphics, drawings, still and moving images (Video), animation, audio, and any

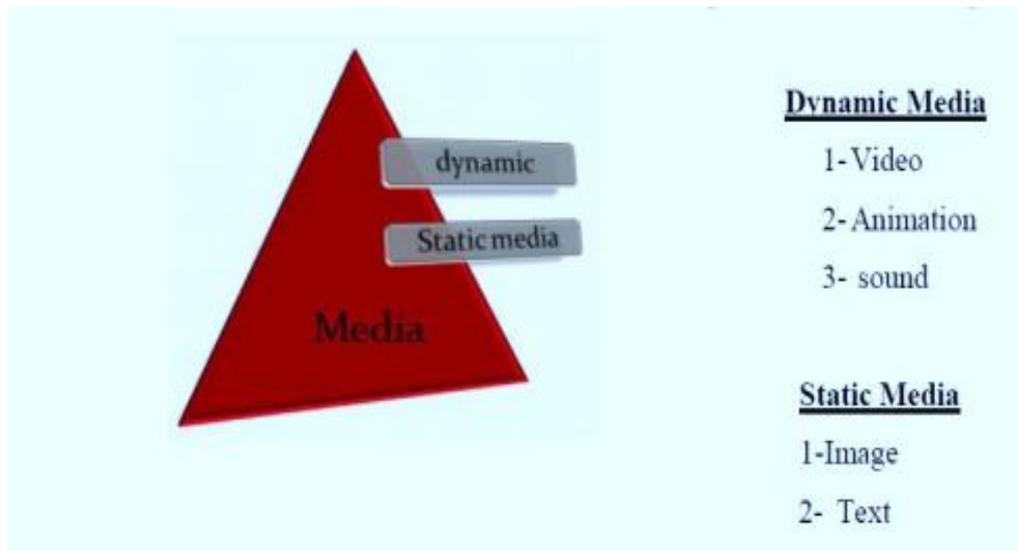
other media where every type of information can be represented, stored, transmitted and processed digitally.

The terms static and dynamic media refer to the way in which a medium is presented.

- Static media, such as the newspaper, is printed in black and white and cannot be altered once it has been written.

The static data are those in which the temporal component is not present and do not need a synchronization among the data.

- Dynamic media is constantly updated and is interactive with player control. Dynamic media is developing in the modern world and the classic example is a website. In the dynamic data the temporal variable is present.



History of Multimedia:

Brief history of use of Multimedia:

- **Newspaper:** the first mass communication medium that uses text, graphics, and images □

- **Motion Pictures:** conceived of in 1830's in order to observe motion too rapid for reception by the human eye. Thomas Alva Edison invented motion picture camera in 1887

- **Wireless Radio:** 1895, Guglielmo Marconi sent first radio transmission at Pontecchio, Italy

- **Television:** the new medium for the 20th century, established video as a commonly available medium and has since changed the world of mass communications.

The connection between computers and ideas about multimedia covers what is actually only a short period:

- 1945: Vannevar Bush wrote a landmark article describing hypermedia system called Memex.
- 1960: Ted Nelson coined the term hypertext.
- 1967: Nicholas Negroponte formed the Architecture Machine Group.
- 1968: Douglas Engelbart demonstrated the On-Line System (NLS), very early hypertext program.
- 1969: Nelson and van Dam at Brown University created an early hypertext editor called FRESS.
- 1976: MIT Architecture Machine Group proposed a Multiple Media project resulted in Aspen Movie Map
- 1978: First hypermedia videodisk
- 1985: Negroponte and Wiesner co-founded the MIT Media Lab.
- 1989: Tim Berners-Lee proposed the World Wide Web

□ 1990: Kristina Hooper Woolsey headed the Apple Multimedia Lab.

□ 1991: MPEG-1 was approved as an international standard for digital video later MPEG-2, MPEG-4

The introduction of PDAs in 1991 began a new period in the use of computers in multimedia.

□ 1992: JPEG was accepted as international standard for digital image compression later JPEG2000 The first Mbone audio multicast on the Net was made.

□ 1993: The University of Illinois National Center for Supercomputing Applications produced NCSA. Mosaic- the first full-edged browser

□ 1994: Jim Clark and Marc Andreessen created the Netscape program.

□ 1995: The JAVA language was created for platform-independent application development.

□ 1996: DVD video was introduced; high quality full-length movies were distributed on a single disk.

□ 1998: XML 1.0 was announced as a W3C Recommendation

Hand-held MP3 devices first made with devices holding 32MB of flash memory.

□ 2000: WWW size was estimated at over 1 billion pages

Multimedia Application

an Application which uses a collection of multiple media sources:-

- ✓ text
- ✓ graphics
- ✓ images
- ✓ sound/audio
- ✓ animation
- ✓ video.

Disadvantages of Multimedia

1- High monetary cost

□ May require reformatting of information.

- Requires high amount of disk space.
- Requires powerful computer.
- Large amount of varied hardware is necessary like:

CDROM

drive, Sound card, Speakers and Scanner.

2- Technical expertise needed to set up multimedia system.

3- Encourages reliance (التكال) (on technology.

- Users may begin to rely on the presence of technology
- Can be seen as only source of information.