

MULTIMEDIA CONCEPTS

Classification of Multimedia

Continuous Media (CM):

- ❑ This is a time-dependent media
- ❑ Information is expressed by its individual value and time of its occurrence .
- ❑ Continuous media can be real-time (interactive), where there is a "tight" timing relationship between source and sink, or streaming (playback), where the relationship is less strict.
- ❑ The most common examples of continuous media are audio, video, or animation.

MULTIMEDIA CONCEPTS

Classification of Multimedia

Discrete Media (DM):

- ❑ This is time independent media
- ❑ Information in these media consist of a sequence of individual elements without a time component.
- ❑ Common types include text, image, graphics

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Classification of Multimedia

Static vs Dynamic Multimedia

Static media

- time-independent discrete media: Text, graphics, images.
- Information in these media consist exclusively of a sequence of individual elements without a time component.
- This refers to media whose content doesn't change.

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Classification of Multimedia

Static vs Dynamic Multimedia

Dynamic media

- Time-dependent continues media where content is constantly updated and is interactive.
- Websites, online forums and social media feed.
- A website is considered dynamic when it is frequently updated or changed

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Classification of Multimedia

Linear Multimedia

- ❑ Linear Multimedia is a type of a multimedia that is designed to be presented in a sequential manner with distinct starting and ending
- ❑ Active content progresses often without any navigational control for the viewer.
- ❑ It is mostly intended for display purposes with not much interactivity from the audience
- ❑ Example include; Movie, TV presentation, Storyline

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Classification of Multimedia

Non-linear /Navigable Multimedia

- ❑ Information is not presented in sequential or chronological manner.
- ❑ They are usually interactive and requires users' interactivity to control progress.
- ❑ Examples include; Game, training, Hypermedia, Website, courseware
- ❑ Netflix, YouTube are non-linear

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Multimedia Presentation

- ❑ A type of presentation that features several different forms of digital communication, such as video, interactive slides, audio clips, music and more, to get the message across.
- ❑ Presentations could also feature interactive components like forms, popups and more to help enrich the presentations both visually and content-wise.
- ❑ The core purpose of the multimedia presentation is to deliver the content(information) to a group or audience.

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Components of Multimedia Presentation

- In a multimedia presentation, several components work together to convey the main information.
- To help the end user better consume the message, components that are frequently found in a multimedia presentation are:

- ✓ Text
- ✓ Images
- ✓ Video
- ✓ Sound
- ✓ GIFs

- ✓ Animation
- ✓ Charts
- ✓ Transitions
- ✓ Narration
- ✓ Sound FX

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Uses of Multimedia Presentation

Multimedia presentations are the ideal corporate communication tools for

- ✓ Business Portfolios
- ✓ Education
- ✓ Sales Presentations
- ✓ Entertainment
- ✓ Tutorials
- ✓ Annual Reports
- ✓ Marketing Materials
- ✓ Technical Manual

MULTIMEDIA CONCEPTS

Multimedia Presentation Steps

- ✓ Define the purpose of your presentation
- ✓ Identify your target audience
- ✓ Gather all necessary information
- ✓ Outline the content with visualization ideas
- ✓ Select presentation template to add content
- ✓ Add multimedia content

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Multimedia Presentation Steps

✓ *Define the purpose of your presentation*

The following questions should unveil the purpose;

- Hope to get more people interested in your content or services?
- Wish to impart knowledge to your readers in a meaningful way?
- Need to create a pitch deck that inspires investors in your project?
- Want to report sales or business results in a unique way?
- Need to present survey results that don't bore your audience?

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Multimedia Presentation Steps

- ✓ *Identify your target audience*
- Who are the presentation targeted at.
- It is important to learn more about your audience.
- Information on background, values and interest of audience is key.
- The content and style must suit the target audience.

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Multimedia Presentation Steps

- ✓ *Gather all necessary information*
- It is important to deliver information that the audience find relevant and enjoyable
- Identify relevant information about the subject/issue to be presented

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Multimedia Presentation Steps

- ✓ *Outline the content with visualization ideas*

Break down your topic into smaller, digestible content

Think of ways that you can improve the story using different media such as;

- ✓ Video clips
- ✓ Animated GIFs
- ✓ Popups
- ✓ Interactivity between slides
- ✓ Google Maps
- ✓ QR codes
- ✓ Sound effects (FX)
- ✓ Charts
- ✓ Background music

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Multimedia Presentation Steps

- ✓ Select presentation template to add content
- Select a presentation template that suit the subject to be presented.
- There are lots of choices, from pre-designed presentations to customizable slide libraries in different styles.

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Multimedia Presentation Steps

- ✓ Add Multimedia content
- Start adding Multimedia content to the slides from the template selected.
- Follow your outline and visualization ideas.

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Multimedia Presentation Tools

- ✓ Multimedia presentations can be live or recorded.
- ✓ A recorded presentation may allow interactivity via a navigation system.
- ✓ A live multimedia presentation may allow interactivity via interaction with the presenter or performer.

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Multimedia Presentation Tools

✓ PowerPoint, Google Slides, Keynote

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Why is Multimedia important

- Digital audio/video is revolutionizing Music, film, game, and video & audio industries
- Convergence of computers, telecommunication, radio, and TV
- New application potential
 - Huge potential markets
 - Improving our lives (learning, entertainment, and work)

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Multimedia Applications

Multimedia in Business:

- Multimedia has many applications in business. The combination of multimedia technology with communication technology has created a global platform for effective Business.
- Multimedia facilities used in business include; Voice Mail, E-mail, Multimedia based FAX, Employee Training, Sales presentation and Advertisement, Records Management, marketing presentation

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Multimedia Applications

Multimedia in Entertainment:

One of the useful applications of multimedia can be seen in the entertainment Industry. Music, Movies, ADs, sound recording, editing and sound mixing are carried out with special effects and animations, like VFX.

Multimedia is also used for gaming purposes, which integrate various multimedia features. Online storage distribution of movies is not only its efficient use but also a way to secure them against any loss through infinite copies.

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Multimedia Applications

Multimedia in Education

- Many institutions use different types of computer-based teaching/learning (LMS) software based on multimedia.
- Multimedia is used to produce computer-based training courses (popularly called CBTs)
- Multimedia is used to create content of learning resources for presentation and sharing; these include encyclopaedia, eBooks, E-journals, E-library among others.

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Computer-Based Training



Teaching Aid



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Multimedia Applications

Multimedia in Hospital

- Multimedia is used used to train health specialist on surgery, human anatomy and treatment of various health associated illness through virtual simulations.
- Other applications of multimedia in medicine allow patients to consult a doctor online to get medical intervention and treatment for their sickness.
- Multimedia is also used for real time monitoring of conditions of patients in critical illness or accident

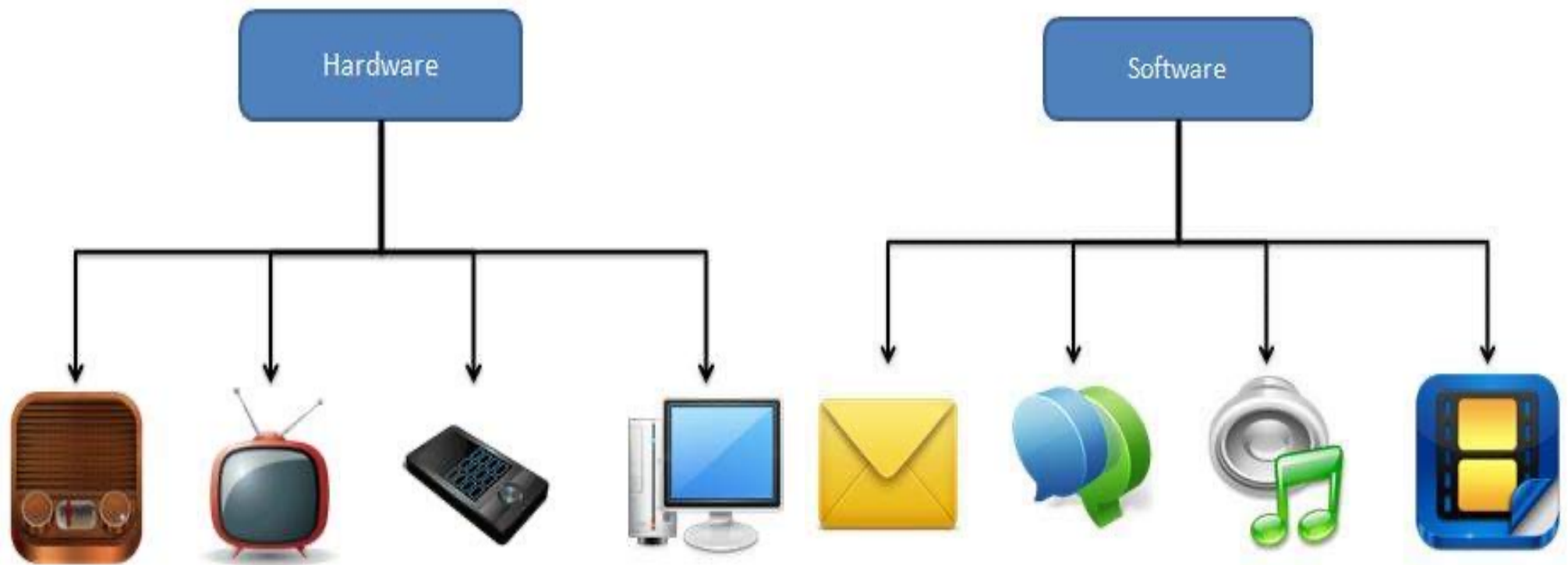
MULTIMEDIA CONCEPTS

What is a Multimedia System?

Multimedia systems are systems that can store, retrieve, and process various types of media, such as text, graphics, image, full-motion video, audio, and animation. Multimedia system comprises both hardware and software

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What is a Multimedia System?



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Components of Multimedia System

Hardware

Capture/ Input Devices: Video Camera, Video Recorder, microphone, Sensors, VR devices, digitization, 3D input devices

Storage Devices: Hard disk, CD-ROMs, Zip Drive, DVD

Communication Networks: Ethernet, ATM, Intranet, Internet

Computer System: Multimedia Desktop machines, workstation

Display/Output devices: CD-quality speakers, HDTV, SVGA, High

Resolution monitors, Colour printers

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Components of Multimedia System

Software

There are various software available such as Paint Brush, Photo Finish, Animator, Photo Shop, 3D Studio, Corel Draw, Sound Blaster, IMAGINET, Apple Hyper Card, Photo Magic, Picture Publisher, which are used to produce multimedia elements

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Components of Multimedia System

Categories of Multimedia Software

- **Device Driver Software-** These software are used to install and configure the multimedia peripherals.
- **Media Players-** Media players are applications that can play one or more kind of multimedia file format.
- **Media Conversion Tools-** These tools are used for encoding / decoding multimedia contexts and for converting one file format to another.

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Components of Multimedia System

Categories of Multimedia Software

- **Multimedia Editing Tools-** These tools are used for creating and editing digital multimedia data.
- **Multimedia Authoring Tools-** These tools are used for combining different kinds of media formats and deliver them as multimedia contents.
- **Painting and Drawing Tools-** these tools are used to create almost all kinds of possible shapes and resize them using these tools.
- **Animation and Modelling Tools-** allows user to create animation using still images at a certain rate to give it visual effect.

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Multimedia Application

A multimedia application is interactive software that combines several types of media at once to convey information to an audience.

Different types of media that can be used include:

- ✓ text
- ✓ images (photographs, illustrations)
- ✓ audio (music, sounds)
- ✓ video
- ✓ animation

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Multimedia Application

Multimedia applications have impacted the way people study, work and entertain. They are now common in:

- ✓ E-learning both in education and the workplace
- ✓ Entertainment
- ✓ Modelling and simulation (for example, in virtual reality)
- ✓ Conveying public information and promotional/advertising messages

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Stages in Multimedia Application Development

- A Multimedia application is developed in stages
- In multimedia application development a some stages must be completed before other stages whiles some stage can be executed concurrently.
- There are four (4) distinct stages presented below

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Stages in Multimedia Application Development

- Planning and estimation
- Designing and producing
- Testing
- Delivering

MULTIMEDIA CONCEPTS

Stages in Multimedia Application Development

- Planning and estimation

This stage of multimedia application development is the first stage which begins with an idea or specification of requirements.

Before starting to develop the multimedia project, it is necessary to plan what writing skills, graphic art, music, video and other multimedia expertise will be required.

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Stages in Multimedia Application Development

- Designing and producing

This stage involves designing a conceptual model for the application which would serve as blueprint

The multimedia application is developed from the plan to produce a finished product

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Stages in Multimedia Application Development

- Testing

Testing a project ensure the product to be free from bugs. Testing also ensures that the multimedia application meets the objectives of the project.

It is also necessary to test whether the multimedia project works properly on the intended deliver platforms and they meet the needs of the clients.

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Stages in Multimedia Application Development

- Delivering

The final stage of the multimedia application development is to pack the project and deliver the completed project to the end user.

This stage has several steps such as implementation, maintenance, shipping and marketing the product.