DIGITAL LIBRARIES

BY

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Digital Library (DL): Concept

- All documents in library are in digital form.

- Technical processing in library done through IT.

- Inf. dissemination done in library through IT.

- Storing of inf. in optical devices.

- Access to library on-line.

DIGITAL LIBRARIES:DEFINITION

- Cleveland (1998) defines a DL as a web based electronic storage and access environment for inf. Stored in digital format, either locally in a library or in a group of networked libraries or at remote locations.

- According to Bernie Hurley (2002), "Digital libraries are different from traditional library automation, in that, they are designed to support the creation, maintenance, management, access to, and preservation of digital content".

EVOLUTION

Traditional Lib-------→Electronic Library--->
Digital Library→Virtual Library

Need

- Information explosion

- Decreasing library budget

- Space problem

- High information demand

- Available technology

Objectives of DL

- To manage large amount of digital contents (Images, Audio, Video clippings).

- To digitize the archival (rare) materials.

- To search the contents at faster rate.

- To access the materials from outside library location.

- To share resources among other libraries.

- To save space of library.

- To protect materials from wear and tear.

Functions

- Information Storage facilities
- Solution to Physical space
- Maintenance of rare collection
- Better search facilities
- Seamlessly integrated resource sharing. Digitalize documents
- User friendly interface
- Information availability for longer time
- Support advanced search

Advantages of DL

- Accessibility from anywhere (DL shifts the library to users).

- Provides more information than traditional library.

- Provides latest information.

- Round the clock information is available.

- Media integration (text, images, sound, video, and graphics together)

Technologies Requirement for Creating DL

- High-speed local network and fast connection to Internet.

- Relational databases that support a variety of digital formats.

- Documents in digital version.

- Full text search engines to index and provide access to resources.

- A variety of servers, such as Web server, CD server, FTP server.

- Adequate PCs equipped with multimedia kits.

- Local Area Networking (LAN) connectivity among PCs.

- Well-trained manpower

- Meta databases (database that describe and provide links to other databases)

H/S for Creating Digital Library

HARDWARES

1. **Computers**

- i) SERVERs : 1. For Library Database
  2. For Internet use
  3. CD-Server for CD

  ii) Client : Pentium II/III
  iii) OPAC:

2. **LAN connectivity in lib. & campus : (D-Link)**
   - □ - Hub networking system
   - □ - Switch networking system
   - □ - Wireless networking system

3. **Scanner: (HP)**
   - □ - Flatbed scanner (Charged coupled device, CCD)
   - □ - Sheet feeder scanner
   - □ - Drum Scanner

4. **Barcode scanner**

5. **Capturing devices: Digital camera (Kodac, Minolta,)**
   - □ - CCD camera
   - □ - Web camera

6. **Switches / Routers**
7. **Modem**
8. **Uninterrupted Power Supply (UPS)**
9. **Disk Backups**

SOFTWARES

- Server Operating System

- Desktop Operating System

- Data Base Management System

- Web/ FTP/ Mail Server Software

- Content Creation Software

- Firewall & Protection Software

- Combo Drive for reading and writing of CDs & DVDs

- Multimedia Kits

- DL Software

Any Question?

Thanks