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Digital Resources: What Academic Libraries Need to Know and How Important They Are

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ABSTRACT

New technologies have always piqued the interest of libraries because they can improve service quality and operational efficiency. Public, academic, and special libraries alike are currently eager to embrace new technologies, particularly the usage of e-resources, as they provide the opportunity to lower operating costs and enhance administration of users and collections. Electronic copies of books, journals, and other reading materials that have been digitized so that computers can read them are known as e-resources. These days, a large number of library resources are available electronically and online. Anytime, anywhere, around the clock, everyone can get the information they need.

KEYWORDS- Digital Resources, Digital Library, Digital Age

INTRODUCTION

Information that is mostly kept on electronic or digital medium is kept in a digital library. Digital books, scanned images, graphics, textual numerical data, movies, audio clips, and more are a few examples. The digital library is giving way to the universal library, which is an ever-improving indexing, extraction, and summary system that is vast distributed information and dynamic adieus repository that can be accessed from anywhere. It will be a free-flowing, wall-free library. The Infrastructure Technology and Application (IITA) working group defines digital libraries as having unlimited access to information via computer and communication networks.

DIGITALAGE

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one illustration of how resource sharing has changed in the digital age. Again, he emphasizes, "OCLC began as a regional cooperative network in the state of Ohio, USA, and progressed to become a national network in the USA. It then expanded to become an international network, comprising more than 23,000 libraries and information centers across sixty-three (63) nations and territories. A few of the many creative ways that resources are being shared that are being developed worldwide right now are electronic mail, video conferencing, teleconferencing, and the Internet, which allows users to access billions of pieces of information worldwide.

DIGITAL RESOURCE ORGANIZATION

In order to support the objectives of its community or organization, the library should establish a policy for the creation and acquisition of information resources. The content, current format, and quality of these informative resources, which include the OPAC, electronic books, electronic journals, internet waves, emails, bulletin boards, and databases (CD-ROM and DVD-ROM databases), should satisfy users. The employees of digital information services should make use of other organizations' resources in addition to their own internal resources and competence to obtain information, get in touch with certain specialists, and access external sources of information. The digital library should make the most recent reference source available for access in order to guarantee the content's accuracy.

KEY TECHNOLOGIES AND SERVICES TO BE CONSIDERED FOR BRARIES

- 1. Library Intranet
- 2. Network PC sand Simply Interactive PCs (SIPCs)
- 3. Managed LAN and WANs
- 4. Managed PCs
- 5. Applet Servers
- 6. Integrated Library System Server
- 7. HTTP/Z39.50Serverto Support300Users
- 8. Intranet Server
- 9. Internet Server
- 10. Network CD-ROM Server for Hosting CD-ROM Databases
- 11. Network Database Server to Support Many Simultaneous Provide
- 12. DataStorageforElectronicTextResources,AdministrativeApplicationsServer
- 13. Network Media Server
- 14. Multimedia Work stations
- 15. Desktop Video Conferencing
- 16. Video Conferencing Theater
- 17. Video Conferencing Production Studio and Equipment
- 18. Satellite Download and Uplink
- 19. Assistive Devices for Physically-Challenged Users
- 20. Patron Self-Charge Work stations
- 21. Computer Lab for Training and Digital Literacy Programs
- 22. Audio Visual Production Facilities
- 23. Audio Visual and Film Theater
- 24. Job/Career Center



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- 25. Kiosks
- 26. Compact Book Storage
- 27. Smart Cards for Staff and Users
- 28. Security and Monitoring Systems
- 29. Outsourcing of Selection and Technical Processing of Library Materials

E-Resources and collection development

In addition to its conventional holdings, the Libraries now offer a wide range of electronic information resources, including e-books, e-journals, full-text databases, e-reports, CD-ROM and DVD-ROM databases, online databases, and internet resources.

Libraries have begun to subscribe to these electronic resources because of their diverse features when compared to print ones. Many techniques and skills are required to handle and manage these resources. The capacity to search utilizing unique properties like multimedia information, the capacity to save physical storage space, the possibility for multiple users to access them concurrently, and the lack of physical processing stages like receiving and binding are only a few advantages of e-resources.

The various s electronic services provided by threow library portal are:

- 1. On-line Public Access Catalogue (OPAC)
- 2. Digital repository
- 3. CD/DVD Access
- 4. E-Resources
- 5. NPTEl Videos
- 6. Current Awareness service
- 7. Project Literature Services
- 8. Content page service

Issues and Challenges in developing E-libraries

Numerous considerations, including content, functionality, pricing, infrastructure, access, technological obsolescence, licensing, ownership, and copyright, must be taken into account when integrating technology and electronic resources. As a result, it's crucial to assess and create strategies for integrating this new technology before making investments in e-resources, as seen below:

- 1. Content and pricing
- 2. Infrastructure requirements
- 3. Functionality and reliability
- 4. Technological obsolescence
- 5. Archiving/ Preserving e -resources
- 6. Copyright
- 7. Licensing issues for e-resources

Purpose of a Digital Library

The main objective of a digital library should be to provide users with access to information and suitable reference tools for identifying and evaluating different kinds of material and sources (Bhattcharya, 2004). In order to be found intelligently and confidently using technologies that don't demand a lot of



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technical experience, learning needs to be digitalized and organized.

Perhaps the most challenging of all is coming up with a workable business model to pay for the digital library. Intellectual property and creating technology to assist learning communities are two viewpoints that can be used to analyze digital libraries in the information age, albeit they are not mutually exclusive (Jeevan, 2004).

Challenges Facing the Digital Libraries

A digital library requires a substantial outlay of funds for the digitization of the current collection and the acquisition of digital resources. It is consequently impossible for small libraries in emerging South Asian countries with inadequate incomes to make investments in creating digital libraries or digitizing their materials.

Sl. No	Library activities and services	Digital technology
1	Generate/ originate Information	Word Processing, Text editing, Character recognition, voice recognition
2	Preserve/store Information	Electronic Publishing, Magnetic storage, Videotext, Tele – text, Computer Disk, ROM
3	Processing of Information	Electronic Data processing, Artificial Intelligence/ Expert Systems
4	Retrieval of Information	Database Management Systems, Information Retrieval off-line, online
5	Disseminate/communicate Information	Electronic Mail, Electronic Document Delivery, Computer Conferencing, Tele facsimile, View Data
6	Destroy/Remove Information	Magnetic Erasers, Optical Erasers, eusethe medium

E-Resources and services

- 1. E-database
- 2. E-Journals
- 3. E-book
- 4. E-Standers
- 5. E-Patents
- 6. E-Mail
- 7. E-News Papers
- 8. Open Access Resources
- 9. Open Course Ware
- 10. Online Publics Access Catalogue(OPAC)
- 11. Web OPAC
- 12. Scanning and Downloading



E-Book-Electronic book-

A book made available in digital form for downloading or using on a computer, an E-Book reader, or another electronic device with an Internet browser.

E-Journal-Electronic journal

-A journal provided in a digital format for access viaan Internet browser, a computer or other electronic device.

E-mail –Electronic Mail

- Messages, usually text, sent from one person to another via Computer and also can be sent to a large number of addresses simultaneously.

Download

- To move an electronic resource from one storage device to another.

Academic Library E-services in Digital Age

Electronic Mail List: E- Mail list Listserv is a popular mean of internet communication. These are means of participation in electronic discussion on a particular topic with other interested persons throughout the world.

Online Public catalogue (OPAC)

OPAC is the interface between the user and the collections of a library. It is a metadata cataloguingandinformationavailabletotheusersofinteractivesearching to get their nee of information.

Selective dissemination of Information(SDI) Services

Customers of SDI have the option to get bibliographical data with or without abstracts. Creating user profiles, document profiles, and matching the two are among the duties related to SDI. This system needs to be examined and updated on a regular basis in order to provide efficient services. The SDI has taken the place of the annual CAS..

CD-ROM Database

A CD-ROM is a compact, lightweight, easily transportable, and very dense computer storage device. Users can now access a variety of information sources, including dictionaries, encyclopedias, and subject-specific sources, on CD-ROM. These sources include multimedia, bibliographic, and full-text content.

Access to E-Books

The term "e-books" refers to the electronic or digital counterpart of a printed book, and it is revolutionizing the way that information is organized and presented. A personal digital assistant (PDA), a specialized reading device, can be used to read electronic books.

Access to E-Journals

Journals are crucial for the dissemination of scientific knowledge. In "Electronic Journals" Electronic



Journals is the name of the journal's online version. Participation in consortia established by UGC and MHRD is the most recent information technology approach in electronic journals (national and international). The journals consortiums are managed by INDLIBNET under the name UGC-INFONET.

Internet Browsing

One of the most significant achievements in the fiels of ICT is the Internet. It is the network of network connecting throughout the globe. It gives access to a world of information and is a wonderful communication tool.

Bulletin Board Services

The library's bulletin board is an electronic notice board that is used to advertise the availability of books, journals, important events, seminars, meetings, new arrivals, etc.

CONCLUSION

The development of an electronic library is a long and challenging process and libraries need to apply properskills in planning the collection and manageboth print and e-resources. There is a rapid urge of the user community to get more information in e-format. Replacing printed resources with electronic materials can reduce the cost of processing, shelving, and binding. Moving towards electronic library from the traditional library needs a balanced collection between printed and electronic forms.

India's push for digital libraries is growing quickly, and traditional libraries are now gradually transitioning to digitization. UGC provides financial assistance to academic libraries for the improvement of their electronic information dissemination infrastructure. College, university, and research libraries in India can join a consortium to subscribe to online publications thanks to efforts made by UGC and the INFLIBNET centre. However, in the digital age, librarians, information scientists, and other professionals must become familiar with the most recent technological advancements in this sector of library.

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