

METHODS OF FORMING A VIRTUAL NETWORK OF LIBRARIES

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Abstract

Most libraries today offer a wide range of online services to their users. The internet and web technologies are no longer new to academicians; hence, it is time for libraries to become virtual and develop their online presence to further facilitate and enrich educational processes. In this context, virtual libraries provide innovative ways to serve the new generation of library users. They represent the future vision of libraries. This paper provides an overview of a Virtual Library System, detailing its purpose, features, functions, design, and development within a Virtual Library Environment. The impact of the "Virtual Library" on "Lifelong Learning" is also emphasized. Additionally, the paper enumerates the principles for developing a Virtual Library Collection and highlights the advantages of Virtual Libraries. Notably, it advocates for the Virtual Library of India to be hosted by the INFLIBNET Centre.

Keywords: Virtual Library, E-Learning, Knowledge Society, INFLIBNE.

Forming a virtual network of libraries involves digitally connecting various libraries to share resources, information, and services. Here are some commonly used methods to create such networks:

Library Management Systems (LMS): Implementing a unified library management system enables libraries to share catalogs, resources, and patron information. This system typically includes features for cataloging, circulation, acquisitions, and online public access catalogs (OPACs).

Interlibrary Loan (ILL) Systems: Establishing interlibrary loan systems allows libraries to request and lend materials among themselves. Integrating ILL systems within virtual networks enables libraries to access resources beyond their own collections.

Methods to Create a Virtual Network of Libraries:

Shared Digital Repositories: Establishing shared digital repositories allows libraries

to contribute digital collections, including e-books, digitized documents, audiovisual materials, and archival content. These repositories provide network members with access to a diverse range of resources.

Federated Search Tools: Implementing federated search tools enables users to search simultaneously across multiple library catalogs, databases, and digital repositories. This facilitates efficient discovery of resources available within the virtual network.

Resource Sharing Agreements: Creating formal agreements among participating libraries fosters resource sharing, expertise exchange, and service collaboration. Such agreements may include reciprocal borrowing privileges, cooperative collection development, and collaborative programming.

Library Consortia: Joining library consortia or cooperatives consolidates multiple libraries to leverage collective resources and negotiate favorable deals with vendors. Consortia enhance resource sharing and collaboration among member libraries.

Virtual Reference Services: Providing virtual reference services enables users to access reference assistance, research support, and information literacy instruction from anywhere. These services can be either centralized, managed by a single library, or distributed across a network of libraries, ensuring that users receive timely and effective support tailored to their needs.

Collaborative Digital Projects: Launching collaborative digital projects—such as digitization initiatives, online exhibits, and digital preservation efforts—can significantly enhance access to cultural heritage materials and scholarly resources. For example, a consortium of libraries might work together to digitize historical newspapers, creating a searchable online archive accessible to all.

Online Communities and Forums: Establishing online communities and forums enables library staff to exchange ideas, share best practices, and discuss technical expertise related to the implementation, management, and maintenance of virtual networks. For instance, a dedicated forum could facilitate discussions on software solutions for digital collections or user engagement strategies.

Open Access Initiatives: Libraries can champion open access initiatives that promote the free sharing of scholarly literature and research outputs. Collaborating on open access repositories, such as a shared platform for institutional publications, allows libraries to advocate for open access policies effectively and increase the visibility of research produced by their communities.

By employing these methods, libraries can form a robust virtual network that expands access to resources, fosters collaboration, and enhances the quality of library services for patrons.

Virtual Library

Creating a virtual library involves leveraging digital technologies to provide access to resources, services, and information online. Here's how you can establish a virtual library:

Digital Collections: Curate and digitize a wide range of materials including e-books, articles, journals, databases, audiovisual materials, archival documents and special collections. Ensure that these digital collections are accessible and searchable through the library's website or online catalog.

1. Online Catalog:

- Implement an intuitive online catalog or discovery system that allows users to easily search both digital and physical collections. Enhance user experience with advanced search options, filters (e.g., by format, subject, or date), and browsing capabilities to facilitate efficient resource discovery.

2. Electronic Resources Management (ERM):

- Utilize specialized ERM software to manage subscription databases, e-journals, and e-books. Ensure authorized users can access these resources seamlessly, possibly integrating single sign-on (SSO) for convenience.

3. Virtual Reference Services:

- Offer multiple virtual reference options, including live chat, email inquiries, and video consultations. This support helps users with research questions and boosts information literacy.

4. Digital Reference Collection:

- Curate a digital reference collection featuring online encyclopedias, dictionaries, subject guides, and research tutorials. This collection should serve as a foundational tool for users navigating the information-seeking process.

5. E-Learning Resources:

- Provide access to e-learning resources, tutorials, and online courses to facilitate lifelong learning. Collaborate with educational institutions to offer diverse and relevant educational materials.

6. Interlibrary Loan (ILL):

- Establish interlibrary loan services for users to request materials not available in the library's collection. This enhances resource availability and fosters collaboration among libraries.

7. Collaborative Tools:

- Integrate tools like virtual meeting platforms (e.g., Zoom), discussion forums, and group study spaces. These tools facilitate communication and collaboration among users and library staff.

8. Accessibility Features:

- Ensure the virtual library platform is accessible, incorporating features such as screen reader compatibility, closed captioning for videos, and alternative formats for print materials. This inclusivity will broaden user access.

9. User Authentication and Security:

- Implement secure user authentication methods (like two-factor authentication) to protect access to licensed resources and sensitive data. Stay compliant with privacy and security regulations to safeguard user information.

10. Promotion and Outreach:

- Promote the virtual library through social media, email campaigns, and local outreach events. Offer training sessions and tutorials to help users effectively navigate and engage with the virtual library.

Enhancing the Virtual Library Experience

Feedback and Evaluation:

1. User Feedback Mechanisms:

- **Surveys and Feedback Forms:** Regularly distribute surveys after users interact with the library. For example, a brief post-session survey can gauge user satisfaction and gather suggestions for improvements.
- **User Testing Sessions:** Organize periodic user testing workshops where participants navigate the virtual library platform. Gather qualitative data on their experiences, noting any challenges they face in finding resources.

2. Continuous Improvement:

- Use the feedback collected to identify common areas for enhancement. For instance, if many users struggle with the search functionality, consider overhauling the search algorithm or adding more filters.
- Regularly review the library's content and update it based on user needs and emerging trends in information consumption.

Understanding the Virtual Library Concept

A **Virtual Library** serves as a gateway to information found elsewhere, emphasizing access over ownership. It curates links to resources hosted on external platforms, which can be particularly beneficial for institutions with limited physical collections.

- Gapen's definition underscores the blend of on-site and remote resources, highlighting the need for an efficient electronic network. This framework allows libraries to offer extensive information without the constraints imposed by physical collections.

The Shift in Library Functions

- Traditional librarianship has often centered around selection and management of physical materials. In contrast, **virtual libraries** prioritize seamless access to diverse information sources, enabling users to find and utilize resources quickly.
- This shift has fostered collaborations among libraries, scholars, and publishers, enhancing scholarly communication. For example, partnerships can facilitate shared access to databases or joint initiatives for digitizing rare materials.

By implementing a robust feedback and evaluation system alongside understanding the foundational principles of virtual libraries, you can create a dynamic and user-centered environment that supports lifelong learning and research. The evolution of virtual libraries not only enriches individual user experiences but also contributes to a broader, collaborative approach to knowledge dissemination across the globe.

Features of a Virtual Library

It provides speedy and wide access to updated information in a global manner. It has changed the traditional library system of cataloguing only book materials.

Cataloguing of NBM (Non-Book Materials) includes not only databases but also websites. Greater emphasis is on access and not on collection.

Time saving:

It results in a creation of digital divide because only developed countries with strong funds for automation and fulfilling infrastructural requirements for Virtual Library can afford to support Virtual Library services.

Functions of a Virtual Library

The function of a Virtual Library is to ensure the systematic development of the means to collect, store, and organize information and knowledge in digital form and to provide easy and affordable access to it around the clock from various locations.

Virtual Library should:

1. Provide ICT-based access to a range of digitally available publications for educational purposes available in the public domain and from other sources;
2. contribute to the efficient delivery of information to students, researchers and teachers of all universities and other educational institutions;
3. strengthen communication and collaboration between and among the research, library and educational communities, nationally, regionally and internationally;

Virtual Library Environment

The Virtual Library Environment means virtual teams; virtual communication and the electronic environment are now a reality for the library. Users are able to view and request information resources either from the library Intranet site or over the Internet and contact staff by phone and e-mail for more general research requests.

Library services will entirely be virtual. Delivering virtual information services differs from traditional information service delivery in the following areas:

Clients are unable to visit the library to preview resources, collect material or access resources such as databases. All communication must be conducted through e-mail, phone or fax. Information literacy training must be delivered innovatively, as traditional face to face training sessions are no longer possible. Even several libraries have developed 'tele-training' sessions, which are training sessions delivered via telephone link-up in areas such as using library's electronic sources and searching networked databases through their Intranets or Internet.

There is an increased dependence on information technology to access information resources. As a result, library users often expect technical support from librarians, and queries regarding network and access problems become increasingly common. This means librarians must keep abreast of current technical developments and know when and where to refer clients with problems beyond their knowledge.

These differences have a number of implications for the virtual library, such as an increased emphasis on value added information. This information should be easy to locate using tools such as the corporate Intranet. This allows users to clearly discern which information is most relevant to their work practices, without the benefit of face to face

communication. Marketing assumes an increasingly important role in the virtual library as users are potentially less aware of the library than if it were located in close proximity.

Given the differences from traditional library services, there are a number of key components for successful service delivery in the virtual environment:

Maintain interaction with clients: The Virtual Library needs to maintain a human presence' by balancing both telephone and e-mail contact. Using e-mail exclusively changes the users' service style that users are accustomed to and increases the likelihood of lengthy correspondence.

Continued Visibility: The Virtual Library has to maintain an everyday presence in the virtual environment by activities including: posting news items on the Intranet home page, writing feature articles for the newsletter etc. and inviting people into the library when they are traveling in the vicinity.

Policies and Agreements: Users are often unsure of the service boundaries in the virtual environment. Highly visible policies outlining the virtual library's role and service level agreements mean both parties have clearly defined roles and responsibilities. The Virtual Library's service level agreements and policies detail the services provided by the library, clients' obligations, request turnaround times and borrowing privileges etc. Virtual teams have been defined as those which may have many virtual teams with team members located in different locations, working to accommodate varying time zones and technical infrastructure.

The virtual environment has had a dramatic impact on the way team members operate. As emphasized by Cascio (1999) who believes one of the most

challenging aspects of virtual teams is the absence of physical interaction and the lack of synergy associated with verbal and non-verbal communication (Cascio, 999). As with servicing remote clients, working in the virtual team increases the importance of communication and willingness to interact via new electronic tools

(Mohrman, 1999).

Design and Planning of a Virtual Library

The design of a comprehensive Virtual Library and its proper implementation, needs the examination of the feasibility of how best to create, operate and expand, taking into account of the availability of present infrastructure etc. In this context, the issues mentioned below must be addressed:

Institutions to be included (Universities, other training institutions, libraries etc);

Access modalities (institutional and/or individual);

Content themes (faculties and subjects to be covered in connection with higher and tertiary level curricula);

Content form (access to existing materials and the need to create new content in English, and/or other national languages; content in the public combining collusion of commercially available content);

Principles of Development of Virtual Library Collection

Six principles have been identified that drive the development of a Virtual Library Collections as enumerated below:

Priority of Utility: Usefulness is the ultimate reason behind all collection decisions. Predicting utility is, however, notoriously difficult.

Local Imperative: Local collections are built to support local needs, and expenditure of local resources must have a demonstrable local benefit.

Preference for Novelty: Although historical collections are essential for research, only limited resources can be devoted to the collection and maintenance of older material.

Implication of Intertextuality: To add an item to a collection is to create a relationship between it and other items. Building a collection always creates new textual relationships.

Scarcity of Resources: All collection development decisions have to balance scarce resources – funding, staff time, document size, user time and attention.

Commitment to the Transition: More and more information will become available in digital form. Libraries are responsible for promoting this transition and assisting users to adjust to it.

Conclusion

Virtual libraries are indeed at a crossroads, grappling with significant challenges as they strive to establish a sustainable framework for ongoing development. To create a successful virtual library system, it's essential to integrate several key components:

Collaborative Content Development: Establishing library-based, open, and cooperatively developed content will ensure that resources are diverse and accessible. Collaborations with academic institutions, publishers, and other libraries can enrich the offerings and enhance the quality of available information.

User-Centric Support: A virtual library must prioritize its user community by providing accurate, reliable, and affordable access to a wide range of scholarly and educational resources. This can include user training, support services, and the implementation of intuitive navigation tools.

Embracing Technological Advancements: The success of virtual libraries hinges on leveraging technological innovations. By investing in advanced data storage, representation, and image processing technologies, libraries can manage and present vast amounts of information effectively. This will enable them to evolve into immersive, three-dimensional electronic information centers, enhancing user engagement and learning experiences.

Future Vision: As virtual libraries reshape the landscape of information access, they represent a new vision for libraries in the future. By addressing current challenges through strategic collaboration, user support, and technological investment, virtual libraries can transform into dynamic hubs for knowledge and research, fostering lifelong learning for diverse communities.

In summary, the path forward for virtual libraries is not without obstacles, but with a focused approach and commitment to innovation, they can thrive as vital resources in the digital age.

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