

Collection Development in the Digital Era: Adapting Libraries to Changing User Needs and Technologies

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Abstract: Library is a trinity of books, staff and readers and book is the foundation of the library. Collection Building is a very important function of a library which should be given for the most careful attention. The collection building programme is a plan to carry out the objectives of any library in relation to the development of library collections. Several studies are being conducted at the national and international levels for assessing the user satisfaction level, evaluation of collections and how to update the existing collections to meet the changing requirements. This study intends to analyze the strategy for developing the library collection in increasing competitiveness in the current era of globalization. This paper describes various trends in collection development in digital environment. The advent of IT has made a clear and pervasive impact in almost every area of library services. As such, the library environment has undergone a rapid changes leading to new generation of libraries with an emphasis on e- resources. Moreover, as the popularity of e-resources increases, the librarians and staff are also concerned about e-resources, their methods accessing, evaluation, selection, organization etc. The changes that have occurred in acquisition, retrieval and storage of information due to technological developments have been discussed. Limitations, restrictions and problems being faced by librarians and readers due to the same have also been discussed.

Keywords: Collection Development, Policy, Techniques, Digital Resources, E-Resources, Libraries, Collection building.

INTRODUCTION

Libraries are the repositories of the wisdom of ages stored in the form of recorded information for use of present and future generations. Collection development is one of the most challenging and imaginative processes of the library profession whereby, the library staffs acquires a variety of materials to meet the demand of its users. The phrase “collection development” does not seem to be new to the librarians for most of them often using it as a synonym for the terms “selection” and “acquisition”. Earlier, the main task of the librarian was just the material selection but now the same has been extended to the creation and maintenance of web sites, teaching specific references, fund raising and other tasks. Even when libraries have been restructured and divisions have been given new names like computer application division etc., the work is still perceived as belonging either to technical services, reference service or acquisition. In fact, collection development is hybrid work incorporating both technical and public services. Positions that blur the lines among these organizational units are difficult to define and evaluate (Jakubs, 1999). In today’s modern information technology era, most of the information is available in digital form. Many organizations are designing and developing digital libraries. As compared to traditional library, digital library requires different set of skills and competencies to handle a digital collection. The present paper discusses in details the importance of digital resource, digital library and collection development. It highlights the procedure of

developing a digital collection with reference to born digital and in house digital resources (B. M. Panage, 2016)

CONCEPT OF COLLECTION DEVELOPMENT

Collection development implies selection, acquisition and evaluation of the library collection in order to see that both print and non-print materials that are available in a library are really useful to the clientele. Its purpose is to find out the user’s information needs to find out the users’ information needs, select and acquire documents, that are really useful to the clientele, periodically review the collection for weeding out unwanted and outdated documents from it (Dhimal and Sinha, 2002).

Collection development is the process of acquiring books/documents and non-print media needed to satisfy request for the information needs and to attain systems objectives (Oza, Nimesh D, 2020). Activities includes:

1. Assessing the users need
2. Evaluating the present collection
3. Determining selection policy
4. Coordinating selection of items
5. Re-evaluating
6. Preserving

A library should acquire all other books on the related topics; a library should contain all the reading materials pertaining to the history and culture of a particular country, city, place or

institution as the case may be Information needs of the users (Gopinath and Rao, 1982).

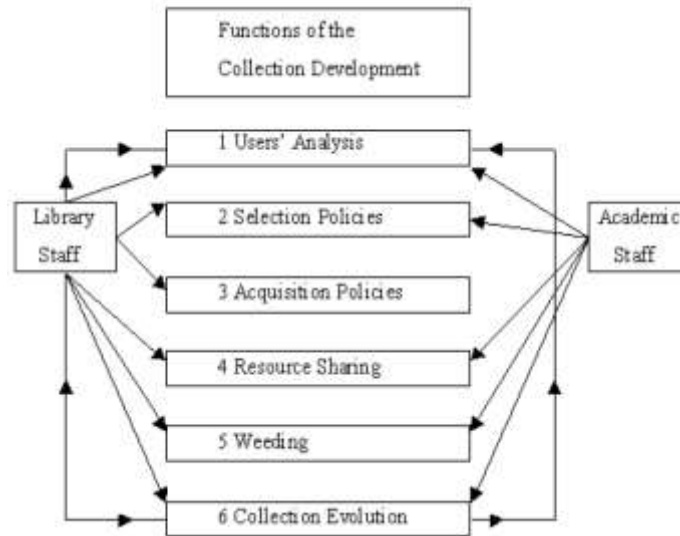


Fig.1: Functions of Collection Development

COLLECTION DEVELOPMENT STRATEGY

Collection development is considered as one of the primary tasks for any library and information center. It is a dynamic and continuous activity. In order to develop a balanced, user-oriented and active collection, a well-planned and thought out system has to be evolved by the library and information managers in close association with the representatives of various user constituencies. Such a system will not only help/develop need based collection but also save money, time and space that would, otherwise, be wasted on developing irrelevant, outdated, and passive collections.

TRADITIONAL VS. DIGITAL COLLECTIONS

Traditional libraries typically have a large physical collection of books, magazines, newspapers, journals, and other materials. This collection is typically organized by subject, making it easy for users to find the necessary information.

A digital library (also called an online library, an internet library, a digital repository, a library without walls, or a digital collection) is an online database of digital objects that can include text, still images, audio, video, digital documents, or other digital media formats or a library accessible through the internet. Objects can consist of digitized content like print or photographs, as well as originally produced digital content like word processor files or social media posts. In addition to storing content, digital libraries provide means for organizing, searching, and retrieving the content contained in the collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals or organizations. The digital content may be stored locally, or accessed remotely via computer networks. These information retrieval systems are able to exchange information with each other through interoperability and sustainability (Kavitha, R, 2009).

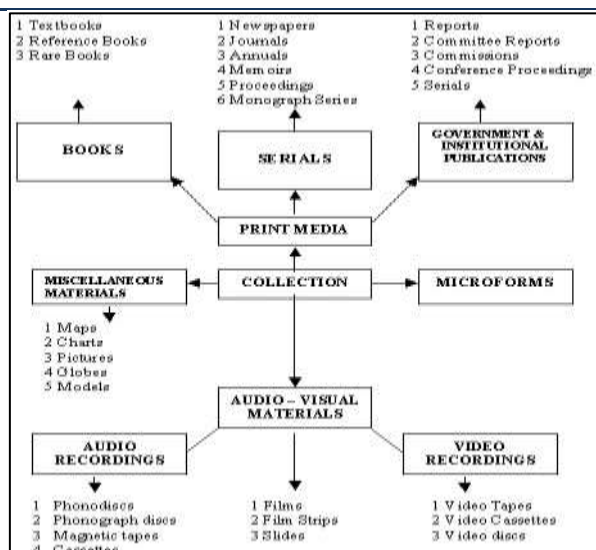


Fig.2 Library Collection

EVOLUTION FROM TRADITIONAL PRINT COLLECTIONS TO DIGITAL RESOURCES IN LIBRARIES

The tools used by librarians in their daily work have changed vastly during recent years. Today, hardly any library is equipped exactly as it was only a few years ago. In addition to traditional means like card catalogs and microfiche readers, most libraries now also offer an online public access catalog (OPAC), public PCs equipped with CD-ROM drives, scanners, or public terminals connected to the Internet. An increasing number of libraries are building homepages on the World Wide Web from where users have access to a variety of services without physically entering a library.

Many libraries are in transit from the traditional towards the digital library. We witness a shift from libraries offering information about (electronic and print) information towards providing access to full texts of documents. Not only recent publications, but also many historical library holdings are being digitized (Corbin and Coletti, 1995). These electronic collections allow users from everywhere at any time to consult the material without doing any harm to fragile documents.

Despite numerous digitization projects, electronic media by no means are dominant compared to print material. There is still a lot of paper in our libraries, and we expect this to be the case for a long time to come. The paper-based library will co-exist with the digital library for the foreseeable future, because electronic publications are not developing at the expense of print media, but in addition to them.

SELECTION OF E-RESOURCES

Selection is not a new term to librarian and staff as they have been doing it since long back the libraries started acquiring printed material. However, libraries are now focusing to adopt e-resources, information technology approaching towards the e-resources rather than printed materials as technology developed. In fact, the emergence of Internet, particularly, the www (World Wide Web) has a triggered proliferation of web based full text online resources as a new media of information delivery. As the web has grown, not just in popularity and use, but also in content, librarians are trying to meet the needs of the user and identify new resources, such as online databases, web based resources, collections in digital library, e-books, e-journals etc. The selection process should be done in relevant with the demands of the users, committee, focus group, users recommendation etc.

CHALLENGES, ISSUES AND PROBLEMS IN COLLECTION DEVELOPMENT

Library collections are becoming increasingly complex and diverse owing to many types of formats and managing and accessing these resources brings its own challenges. The libraries are dealing with print, electronic and digital formats and although technology has immensely enhanced the scope and use of these collections, the electronic formats in addition to the physical materials pose significant challenges in managing these heterogeneous collections. The adoption of e-resources has made great advantage over the library services. In fact, most of the users are satisfied with such facilities since they can easily

retrieve their required information within a short period of time. However, libraries face a number of challenges as they seek to continue offering the high level of services that users have come to expect. Selecting, acquiring and maintaining different types of e-Resources like e-books, e-journals, reference sources and full text journals which are multidisciplinary in nature is more complex than print resources (Raja Goud B, 2020).

Legal and access issues, technological compatibility and services for training and ease of use have to be taken care of. Continuous content evaluation is also required as the content of the resource may change over time. There can also be duplication of content across databases which results in confusion and wastage of investments. Lack of perpetual access is another issue. Many of the e-Resources may be licensed for a limited period and once the license period expires the subscription is cancelled. Preserving and archiving e-Resources therefore poses its problems.

USER-CENTERED COLLECTION DEVELOPMENT

A holistic collection incorporates the characteristics of both traditional collection and the changes brought by technology. Since collections are developed primarily for serving the information needs of the users, how users perceive a collection while seeking information and how the collection can facilitate information seeking are important factors to be considered while developing collections. For a collection to be useful, the items should be selected based on the community's needs (Lee, 2000). Several studies are being conducted at the national and international levels for assessing the user satisfaction level, evaluation of collections and how to update the existing collections to meet the changing requirements (Fombad & Mutula, 2003). Along with the advancement of information, technology and advances in science in the field of information, it is felt that various advances and modernity have an impact on all aspects of information seeking behavior and the need for information is increasing. It is undeniable that we are required to face the changes that exist. The rapid development of information technology has affected various fields of life and professions; this has caused system changes in institutions.

A digital library is not a library that physically exists, but is a virtual library, that is, a digital library can be visited by users but not physically. The library is accessible to all information seekers.

Digital libraries make it easier for users to access library materials, because various collections are already available in digital form.

MANAGING DIGITAL RESOURCES

Prajapati, Dipti, (2016) properly described that e-resources also present a number of technical issues that need to be considered to ensure resources are compatible with existing library hardware and software and that the library has the capability to provide and effectively maintain access to resources on an ongoing and cost effective basis. Evaluation should be in consultation with the appropriate technical staff and should include consideration of the following:

Method of Access – Access to remote hosts via the Web is often preferable because it provides additional benefits such as faster updating, optimum access, reduced burden in terms of storage, preservation and maintenance.

Authentication – Access via IP filtering is often preferable because it typically provides simultaneous access for multiple users. IP-address recognition can also provide access to users via a proxy server, allowing authorized library users to access content from outside the physical confines of the library is an important feature. It should, however, be noted that access via proxy server sometimes is negotiated in the license agreement.

Access via login and password may be less preferred, as it presents a number of challenges around dissemination and control of passwords, particularly when a library serves a large user base.

Compatibility – The resource should be compatible across a range of platforms and, where local installation and maintenance are required, should be compatible with existing hardware and software supported by the library. The selector should also determine if the e-resource requires any special hardware, software, multimedia, and/or audio capabilities. Where this is the case, consideration needs to be given to the additional cost of acquiring, installing and supporting the appropriate software or multimedia components.

Licensing - Unlike print publications, e-resources are not purchased outright and usually require a license agreement to be in place. Prior to purchase, the license must be reviewed and negotiated to inform and support the evaluation process, and to ensure that it reflects the selector's expectation. It is preferable to obtain, where possible, a standard model license agreement that describes the rights

of the library in an easy-to-understand and explicit language.

COLLABORATION AND CONSORTIA

Laxman Rao, (2006) has appropriately depicted the need for consortia- “Library consortia have been formed to deal collectively with the problems of purchasing online products, to benefit from the best possible volume pricing, and to secure the best terms of agreement from online publishers”. It is known that libraries and information centers are not able to procure, organize and disseminate vast amount of information due to lack of adequate fund and budget. Nowadays, consortia subscription to e-resources through consortia of libraries is a viable solution to increase the access to e-resources at a lower cost. Library consortia refer to cooperation, co-ordination and collaboration among the libraries or institution for the purpose of resource sharing. The libraries all over the world are forming consortia of all types and at all levels with an objective to take advantage of global network to promote better, faster and most cost effective ways of providing e-resources to the information seekers. The collective strength of consortia members facilitates to get the benefit of wider access to electronic resources at affordable cost and at the bests terms and conditions.

ACCESSIBILITY AND EQUITY

Accessibility refers to the design and development of digital products and services in a way that enables individuals with disabilities to perceive, navigate, and interact with them effectively. In the context of digital libraries, accessibility ensures that individuals with visual impairments, hearing impairments, cognitive impairments, or motor impairments can access and use the resources and services provided.

• Barriers to Accessibility in Digital Libraries:

- Inaccessible Content: Lack of alternative text for images, audio descriptions, or transcripts for videos hinders comprehension for visually impaired users.
- Complex Navigation: Unclear menus, confusing layouts, and poorly labeled buttons make navigation difficult, especially for users with cognitive impairments.
- Limited Device Compatibility: Some digital libraries might not be optimized for various devices, excluding users who rely on specific assistive technologies.

- Lack of Captioning: Videos without captions or subtitles exclude users with hearing impairments from multimedia content.
- Inconsistent Formatting: Inconsistent use of headers, fonts, and styles can confuse screen readers, affecting the understanding of content structure.

• Importance of Inclusive Design

Inclusive design is an approach that aims to create products and services that are accessible to all users, regardless of their abilities. In the context of digital libraries, inclusive design involves considering the diverse needs of users and implementing design solutions that cater to those needs. Inclusive design not only benefits individuals with disabilities but also improves the overall user experience for all users. By considering accessibility from the early stages of design and development, digital libraries can create a more inclusive and welcoming environment for everyone.

FUTURE TRENDS AND INNOVATIONS

Libraries play a crucial role in promoting literacy, encouraging lifelong learning, and serving as common spaces for all citizens. Libraries provide various functions, such as information retrieval. AI can enhance search capabilities, helping visitors find more relevant content through advanced algorithms and natural language processing. Another function is personalized recommendations. AI-powered systems can analyze a patron’s preferences, borrowing history, and reading habits to suggest books, articles, and other library resources that may interest them. Virtual reference assistance is also an important function. AI chat box and virtual assistants can provide instant help and guidance to patrons, answering questions, offering research assistance, and providing support outside of traditional library hours. Finally, AI algorithms can assist with collection management, helping librarians make informed decisions about acquiring and organizing library materials. Libraries carefully manage their collections by studying how people use them, forecasting demand for specific materials, and optimizing their collection management processes. Accessibility technologies powered by AI can increase accessibility by providing speech-to-speech information, creating new options, and improving mobility for people with disabilities. Data analytics using AI can help libraries analyze usage data, identify trends, and gather insights to guide their decision-making around collection

development, resource allocation, and service progress reporting. AI can assist in digitizing and preserving library collections, developing metadata and other responsive processes, and ensuring the long-term availability of cultural heritage materials through features like metadata tagging and image recognition. AI-powered teaching tools and interactive platforms can support library outreach efforts, providing authentic learning experiences, language translation services, and engaging storytelling programs. The AI technology can help engage diverse audiences by analyzing social media patterns, gathering data, and designing library programs and services that cater to the needs and interests of local communities.

CONCLUSION

Knowledge is power and library is the reservoir of the knowledge. Hence it is necessary to have a good balanced collection in every academic library in order to serve the needs of the reading community. Collection development implies building up collection with quality material through proper acquisition and weeding policies. With the rapid advancement in computer technology along with information technology, libraries and information centers have been blessed with electronic materials and therefore libraries are gradually shifting towards the electronic libraries with electronic resources. Collection development of digital libraries is greatly influenced by a number of stakeholders such as library and information science professionals, publishers, subscription agencies, database manager and information services providers. The day is not far off to visualize all Indian libraries with huge digital collection and the latest technology to access the same. As libraries evolve in reaction to technological advances, it's far vital that librarians embrace AI as a catalyst for innovation and improvement. By incorporating AI-powered solutions, libraries can adapt to the converting wishes of their customers and reaffirm their importance as community resources.

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Source of support: Nil; **Conflict of interest:** Nil.

Cite this article as:

Pal, R. "Collection Development in the Digital Era: Adapting Libraries to Changing User Needs and Technologies." *Sarcouncil Journal of Multidisciplinary* 2.3 (2022): pp 12-17.