

# Collection Development in the Context of Electronic Publications and Networking: Problems and Prospects

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## Abstract

This article critically examines the issues in development of collection for libraries in the context of electronic publication and networking with special reference to formulation of policies, users, formats, storage, mode of access, selection, acquisition, bibliographical control, finance, evaluation, and manpower. It concludes that developing a need-based, relevant and cost-effective collection, consisting of electronic and other publications in document form, requires systematic planning, and effective implementation.

## 1. INTRODUCTION

Technology has dominated all the spheres of human activity. The libraries are not exception to this and it is very well reflected in the present day libraries. Thanks to technology, various media could appear after the invention of printing technology like magnetic tapes, microforms, compact discs, etc. All these storage media have found their places in libraries and are playing an important role in storage and dissemination of information. Thus, libraries have traversed a long way. Far from being dusty store houses, the world's great libraries are both the pilots and the lifeboats, of the new information age.<sup>1</sup>

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The developments that emerged during the present century have provided many opportunities and challenges for the libraries. Interdisciplinary nature of research, information explosion, production and availability of sources of information in multimedia, automation of library systems, physical deterioration of documentary sources, the changing concept from ownership to access, networks, financial constraints, etc., are some of the issues, affecting library services.

Perhaps the most important issues or realities are electronic publishing and networking of libraries, changing concept from ownership to access, and commercial availability of databases, etc. These realities have a direct impact on libraries. Hence, libraries must cope up with these realities to varying degrees.

It is a well recognised fact that, library collection is the sum total of library materials that make up the holding of particular library. Planned and systematic selection and acquisition of these, keeping in view the current

and future needs of an institution constitutes collection development, which is one of the prerequisites for any kind of library. Collection development, is thus an important function and can be defined as 'a process of making certain the information needs of the people using the collection are met in a timely and economic manner, using information resources produced both inside and outside the organisation'.

Hence, the libraries bear the primary responsibility for acquiring information and organising or storing it in such a way that the users can make the best and effective use of it. The process of recording information has changed over the years, which is reflected in the growth in number and variety of sources, in an effort to keep pace with these developments. This has had a tremendous and significant impact on libraries in general and collection development in particular. One of the ways, in which libraries can respond, is to incorporate these in collection development program. This paper examines the problems and prospects of collection development in the context of electronic publications and networking.

## 2. ELECTRONIC PUBLISHING

Electronic Publishing (EP) is a process for production of typeset-quality documents containing text, graphics, pictures, tables, equations, etc. In general, it is used to mean any information source published in electronic form. Electronic publication can also be represented as:

EP - Electronic Technology + Computer Technology + Communication Technology •• Publishing

Electronic publication includes sources like magnetic tapes, videodiscs and databases. Depending on the contents of a source, it can be either full-text or bibliographic or directory or numeric, or image. The concept EP is just 11 years old, and the first electronic book was published in Germany in 1985. Since then, there has been a steady growth in the number of electronic publications. Slowly, serials were published via electronic networks called as electronic journals. The third edition of Michael Strangelove '*Directory of Electronic Serials*' lists

224 electronic journals on the network.<sup>4</sup> There are hundreds of full-text electronic journals available online. The number of full-text databases has grown from 532 in 1985 to 3077 in 1993.<sup>5</sup>

There were only 53 CD-ROM titles in 1986, which rose to 230 in 1988, 5000 in 1993 and expected to reach 8500 by 1994. Further, there were 4422 CD titles available commercially in 1993 consisting of 1070 titles in science and technology, 931 general works and 2119 in social sciences, humanities, and arts.<sup>6</sup> Lancaster's prediction in 1981 indicated that 25% of reference books will be in electronic form by 1990, 50% of the abstracting services will be available only on electronic form by the year 2000 and 25% of the periodicals in science and technology, social sciences and humanities will not reach this conversion level until after the year 2000.<sup>7</sup>

The products of electronic publishing are mostly reference materials, secondary sources such as abstracting and indexing sources and the primary periodicals such as full-text electronic journals, are slowly replacing the print on-paper sources. Libraries have already started using computers for information activities and acquiring publications in electronic media.

## 3. NETWORKING

No library is self sufficient and therefore resource sharing among libraries is a necessity, which ensures optimum utilisation of available information resources and thereby helps in providing better services. The services like e-mail, ftp, telnet, http, on-line catalog, e-newsletter, e-bulletin, etc., available on various networks, enable the libraries to provide massive access to global information, thus maximising the access to the world information.

Nearly about 200 universities (including deemed), more than 10,000 colleges and number of scientific and research institutions are there in India, which depend for their information resources on their libraries. The concept of library network is slowly gaining momentum in India, with NICNET, ERNET, DESINET, SIRNET, BTISNET, CALIBNET, DELNET, BOMNET, MALIBNET, HYDLIBNET already

functioning and INFLIBNET under progress and BL-NET under proposal stage.

The Internet, the world's first digital utility, an all purpose network, now is accessible in India. Some areas have been identified, wherein Internet will help the Indian network system, viz.

- Establishing e-mail facilities for communication;
- Conducting user education;
- Constituting expert committee to evolve standards;
- Acquiring and installing necessary hardware and software, and;
- Providing aid in sharing the information among the Internet user's community.

In spite of these technological advancements, the primary purpose of a library has remained the same being 'to meet the challenges of providing its clientele with increased access to knowledge base that is growing at accelerated pace'.<sup>8</sup> But, one has to find answers to the following:

- (i) How to deal with the technological advancements?, and
- (ii) What are the factors that need to be considered in collection development?

## **4. ISSUES IN COLLECTION DEVELOPMENT**

### **4.1 Collection Development Policy**

Collection development has to be constantly guided by the requirements of the institution. In this information age, it is not practically possible for any library to satisfy all the information needs of all its users all the time. The libraries are still predominantly document oriented, and it is only in recent years publications in electronic media have become available. It is important here, to note that many of the fundamental changes in libraries will occur more in the process than in the product. Hence, the collection development policy has to be devised as a guide to assist the library in exercising its collection development

responsibilities, subjecting to changes, shifting functions, and reflecting the environment in which it exists.

The collection development policy committee of the collection development and evaluation section, RACD, views CDP as an indispensable antecedent to competent selection, that explains the library to defend it from its patrons and giving conceptual framework for budget requests.<sup>1</sup>

In the changed scenario, 'flexible descriptions that encompass all formats of information and resources both local and remote will require continuous adjustment as each fields, methods and materials evolve. Libraries will therefore have to focus continuously on user's priorities and needs; strategies for acquisition will follow and derive from these general analyses'. The CD policy has to incorporate all the formats in which relevant information is available.

### **4.2 User Studies**

The literature on user studies indicated that students, scholars and scientists rely on various sources of information both formal and informal, documentary and non-documentary, publications in electronic media such as online databases, CD-ROM, - full-text journals, multimedia and others. The attitude of users towards the new media in the initial years will be either resignation or hostility. The reasons are obvious—lack of portability, difficulties in browsing, different searching patterns, wailing in line due to a limited number of terminals, irritatingly slow processing rate, primitive quality of equipment, etc. In view of the tremendous storage and retrieval capacity of the new media, the ease with which the information can be searched and retrieved, there is no other alternative for libraries except incorporating them in collection, and imparting user education.

### **4.3 Format War**

In view of the availability of information in different formats, a complete evaluation of new and alternative products and services is essential. New electronic formats are making

selection process in collection development program more complex. But, libraries have to adapt themselves to the changes in format because of their very nature—their service nature.<sup>1</sup> When considering format shifts, Kreamer's five commandments can be made use of.<sup>13</sup> They are 'aesthetics', 'audience', 'compatibility', 'costs', and 'copyright'. Further he adds in 'knowing the current market place, interpreted in to the language of true patron demand and the potential for its wise use, is the key to successfully winning the format war"! 4. Franklin has discussed on how to incorporate a library's primary goals and resources limitations in to library specific format selection guidelines and given criteria which help- the selectors to choose the appropriate form at for specific resources.

#### 4.4 Storage

One of the most critical and important issue to be tackled is how and where, should these electronic formats be stored? Whether the library or the institution, has the needed appropriate environment? The library buildings that are constructed keeping in view of providing access to books, periodicals and other objects need modifications or renovations to have in way for electronic information.

There is a need for 'a more flexible approach to library design and points and flexible storage provision'.<sup>16</sup> Further, the decision as to whether the mainframe or mini or PC-based LAN or WAN is appropriate for a given situation or not. This decision has to be taken at the local level taking into account variety of factors, viz., capacity of the system, familiarity of users with procedures for transferring, requirements of downloading and printing of files, maintenance and data storage costs and the possibility of having to archival backup. Accordingly, a shift is needed in providing infrastructural facilities.

#### 4.5 Mode of Access

Every reader his or her information, says the Second Law of library science. So, information should be easily accessible to all the users. This can be facilitated by integrating electronic publications in to the library services menu by developing campuswide network, with

adequate number of terminals. Hence, the traditional mode of access has to be transferred to deliver services in non-traditional approach.

#### 4.6 Selection

Webb<sup>17</sup> predicted that 'the collection development activator of the year 2000 will deal with a world in which there is more of everything, more books and journals, more specialisation, more inflation, more use of microforms, more access to everything.' This prediction has come true. The emphasis in collection building has shifted from 'ownership to access. Librarians are being asked, what is the minimum that must be provided locally with material beyond this minimum supplied by other libraries. Reality used to require that to be of service to our users we own all the material we can afford.

The current reality, taking into account money and the increased power of electronic resources, emphasises identifying and buying only the essential and the unique.<sup>18</sup> This situation will demand decision about which format (electronic/print) should be selected, and made available as part of the collection. The criteria applied in selecting print titles should apply while selecting the electronic titles and there has to be a 'loosely coupled relationship'<sup>1</sup> between the decision makers while selecting a particular title as the titles are selected ultimately for the end users.

#### 4.7 Acquisition

Despite the non-traditional format, traditional, routine principles and practices of procurement apply to the acquisition of electronic titles. But, the librarian must increasingly become an 'educated consumer to make intelligent purchasing decisions'.<sup>21</sup> Wiggins has given two ground rules that must be accepted before order can be achieved, viz.,

*Rule-1:*

Buy no. material for any programme/Department until the priority in the institutions plan, is clearly defined. This must be clearly and openly stated by the highest- levels of the academic administration.

*Rule-2:*

Invest the resources available for collection development (including access) in a manner which reflects the long term priorities of the academic institution.

The availability of free and subscription based titles have to be checked in first. A careful monitoring of standing orders is required in order to ensure timely receipt of materials, continued services and acquisition schedule for updates<sup>23</sup> is required. Barker<sup>24</sup> and Propas and Reich<sup>25</sup> were of the opinion that in the changed context workflow has to be redesigned by integrating acquisitions.

#### **4.8 Bibliographical Control**

Electronic publications have to be integrated in the library's collection, through cataloguing. Such cataloguing needs format standards and access instructions at the international level. Woodward<sup>26</sup> observed that 'at the macrolevel, the whole question of national and international bibliographical control remains a vexed one which is unlikely to be resolved in the near future. However, he further adds that, at the I level, bibliographical control can be achieved easily'. Thornburn<sup>27</sup> has already demonstrated how to catalogue remote electronic journals and databases.

#### **4.9 Finance**

Finance is the *sine qua non* of all the library operations. It is important to see whether the electronic publications are economical in relation to print version. It costs heavily in the initial stages and even as librarian stand at the brink of powerful communication and information revolution, there are limitations on how much hardware and software can be ired to take full advantage of these tronic services'.<sup>28</sup> Regardless of whether such change is necessary, collection development must focus its energy toward relevant collections within the budgetary framework. 'Proportional use of statistics'<sup>9</sup> will have to be made use of before allocating the financial resources.

#### **4.10 Evaluation**

Perhaps nothing is more important and crucial than evaluating information in electronic format. The very nature of it, adds to the problems. Each service and product has to be evaluated and its performance has to be quantified in terms of accountability, accessibility, competency, availability, browsability, searching pattern, user-friendliness, cost, time frame, etc. Such studies are now being reported in journals like JASIS, IPR, Online, Database etc., and the methodology followed there could also be made use of.

#### **4.11 Manpower**

The availability of information in electronic formal has implications on part of the library staff. As the electronic information systems expand, the staff needs to adapt to new technologies and have to possess skills to handle them efficiently and effectively. The manpower needs to perform several new assignments concerned with collection development.

### **5. CONCLUSION**

Electronic publishing has come of age. It has certain advantages and disadvantages. Each of these constraints may be overcome as such innovations provide better services to users, these have to be accommodated. But, at the same time we have to realise that these can be used as complementary technology and but not as replacement technology. To be successful, 'we have to be as knowledgeable about electronic services and products as we are about printed resources. At the same time we need to build upon the co-operative collection development arrangements and explore new possibilities for sharing resources as widely and economically as possible'.

Hence, the challenge of this new direction in collection development is indeed an opportunity to better serve the user community by developing a need based, relevant and cost effective collection sometimes without owning but providing access to information through networking.

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