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## ICT AND ELECTRONIC LIBRARY: MANAGEMENT AND DELIVERY WITHIN THE TRADITIONAL LIBRARY

G B Devchoudhary

### **Abstract :**

*ICT plays a crucial role in today's increasingly globalized world. Libraries are in a process of fundamental change brought about by radical changes in technology. In this state of transition to introduce electronic library services, traditional libraries offer support in the way of personnel, funding, information delivery and management for these electronic libraries. The electronic library is growing fast in parallel to the traditional library. The high rate of growth is dictated by factors outside the library. Libraries are under a lot of pressure to achieve their noble goals much faster than planned, to adopt new technologies, to compete with others in managing the tremendous growth of information and to be able to lead in the area. The management and delivery of information in an electronic library differs from traditional library in many ways. The purpose of this paper is to collect the management and delivery problems arisen out of adoption of the electronic library and to present possible solutions in the areas of five basic parts of scientific management – planning, organizing, staffing, directing and controlling.*

**Keywords :** ICT, Electronic Library, Library Management.

### **1. Introduction**

As information technology is becoming the cornerstone of every organization, it is bringing great changes in the organization's structure and management & delivery practices. Information and Communication Technology (ICT) and development in modern technology especially in the field of electronic communication and computer science and technology influenced the traditional libraries. It is bringing out fundamental change in the process of acquiring, storing, processing, retrieving and delivering the information generated constantly across the globe in the universe of knowledge over multidisciplinary fields of subjects.

ICT has had its effects in the economic, social, cultural, political, and even individual, spheres of life. It has dramatically transformed the societies world over. Proper use of ICT may even transform the country from developing one to a developed one in just a few years from now. The core functions of the libraries are - acquisition, cataloguing, circulation, serial control including interlibrary loan and management and delivery of information for the both traditional and electronic.

### **2. Electronic Library Vs traditional Library**

The following point illustrate the potential differences, between traditional and electronic libraries:

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- Traditional libraries are based upon centralized control and relatively few access locations; electronic libraries can be distributed and ubiquitous
  - Traditional libraries support one way, loosely coupled interaction; electronic libraries support two-way communication with tight, fast interaction.
  - Traditional libraries are based upon a model of one-way search: a consumer looking for an object; electronic libraries support systematic search: consumer looking for an object and the producer of the object looking for a consumer.
  - In traditional libraries structured text queries are used to aid intellectual access; in electronic libraries complex interactions of query, navigation/browsing, and social filtering can be used.
  - Only a librarian may add to the collection of a conventional library, because of the discipline and search restrictions to authorized data can be automatically enforced.

### **3. Responsibilities**

The electronic library is adding many additional duties on the present team for its development and maintenance such as licensing electronic journals, linking the electronic journals to the library homepage, readers service by electronic means, constant checking new databases and e-journal collection regarding their contents, formats, managing journal consortia etc. These are laborious, time consuming and wearisome jobs. Besides these tasks, making the readers alert regarding new services adapted by the library and giving group instruction as how to use the electronic library are very essential. Moreover the planning, writing texts and technical work to develop and maintain the library homepage, the heart of all bibliographic works, require a lot of effort.

### **4. Problems for Management**

Due to the impact of ICT, the library end-users expect information irrespective of format, time and location of information. To provide better and faster service and to maintain a leadership role in the information technology, libraries have accepted the electronic resources. In doing so librarians are confronted with some critical criteria within the existing set up of the library.

- As per need of the users, the library is to maintain dual subscription to both electronic and traditional materials during this transitional period that may last for some years.
- Identification of users in electronic environment is one of the major problems. The actual users of the network remain unknown.
- To meet the needs the individual user requires a single point of access to a totality of electronic library collection to retrieve a relevant set of references with adequately and efficiently ranked suitable annotations. Still it is an unachievable idea in spite of many technical efforts is made.

- User's training cum guidance to use the computer and electronic devices needs the physical presence of the users. The lack of their physical presence in the scheduled time-slot makes the assistance more difficult to provide at any later period of time.
- Electronic library is fully dependent on rapid development of technology. The constant pressure of advancement in technology forces the libraries to upgrade the technology to reflect changes.
- Each user frequently insists to allot electronic device to him/her to make the best use of time in electronic library. To accommodate all the users in a certain time in electronic library creates problems, because library is unable to provide each user one electronic device (computer) at this juncture.
- Increased access to electronic information costs library timings and technical expertise. Thus library is compelled to extend electronic library timings with the existing strength of manpower and to involve the existing staff members in good number to cope up with situation.
- Personal relation built up from face to face-human contact in the traditional libraries gradually transfers to the man-machine interaction.

Thus shifting towards electronic library is not as smooth as possible. To introduce electronic library service, the management of traditional library differs from the management of electronic library in many ways, without changing fundamental concept of customer satisfaction.

The cause of management problems by the electronic library may be categorized with possible solution in the areas of five basic parts of scientific management – planning, organizing, staffing, directing and controlling.

### **5. Planning**

Planning is a long-term process to achieve the objectives by means of evaluation and analysis of the alternatives and finds out the lacunae of a system before carrying out the actual tasks. Creation of long-range plans and forming evaluation standards are the main problems in the planning process for the librarians of the electronic library.

Advanced technology, professional development and staff training for librarians are fundamental in developing electronic library; planner should commit fund and time needed for:

- Upgradation of technology whatever needed by the library to reflect changes
- Staff training to run the electronic library system and to handle new tools
- User education to increase computer proficiency and information accessing skill

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Planning rarely works if top management does not support it. To plan properly for an electronic library certain organizations of planning may be useful guides for the librarians.

- Understanding well-defined objectives to make the future performance purposive
- Identifying the information resources to run electronic library. Resource involves human as well as time, money, technical and physical resources
- Searching opportunities. It is primarily data collecting, analyzing and evaluating functions relating to library activities
- Obtaining support from top management
- Making the plan flexible. Planning will be more fruitful if the process is modified from time to time to stimulate new thinking and to focus attention on different issues. The process used should be tailored to the needs and experience of the library and management rather than being abstracted from a planning text.

## 6. Organizing

Tasks of electronic library were not pre defined. Thus organizational problems have been cropped up with the implementation of electronic library on carrying out some projects and later on during operation. Some new duties are developed and some duties performed traditionally by the public and technical service departments are being merged. Now it will be very difficult to consider their separate entities. Reference questions are answered from on-line help and electronic media. Similarly CAS, SDI services are also being served without the help of traditional reference tools.

Cataloguing Internet resources may be used as alternative sources for roles played by Technical Service Department. Way of identification and location of a document from the traditional library has been changed from manual searching to OPAC searching.

Inter-library loan and document delivery department may be ceased as more material is available via network to the end user.

Electronic library services are based on the campus network system.

No standardized organizational structure can be made suited to all types of libraries nor can it be valid for all times. Depending upon the nature of activities and amount of control necessary, the pattern of an organizational structure can be designed. The organizational pattern must be tailored to suit a particular library and consideration must be given to the ability and specialized skill of existing and available personnel.

The Information Access division would encompass, among other functions, cataloguing and reference, while the Information Delivery division would include circulation and acquisition.

Changing role of librarians come along with a transformed organizational structure.

## **7. Staffing**

Changing library priorities and strategic planning is one thing, performing all duties with same team becomes the problem. To run electronic library within the set up of traditional library require personnel with expertise, time and access to constant training and leading to keep with rapid changes in technology.

Library runs with traditional departments such as acquisition, cataloguing, serial, reference section etc., where staff members within this administrative framework feel secure because of duties and hierarchy are well defined and since many of them have a tenure status and other privileges. But to introduce to electronic library within the traditional library some new duties are developed into new department and some may vanish after a while when the special project for developing electronic library is completed.

Special tasks can be given as personal assignment to people with qualifications, ability and enthusiasm to do more and take part with new activities. Most libraries do not get enough additional manpower, if at all to compete with new duties related to the electronic library most of the work required for the transition into the electronic library areas are done by the existing library team. The computer or the PC with its basic software is an essential tool and librarians should improve their abilities to use it constantly.

Staff development is highly important and the management should commit funding and time for the increased level of training. For training management must be careful to select the people those not only have the interest in technology but also have willingness and skills to train others.

Advanced libraries have created computer clusters for more clients, use. Maintaining and upgrading such a large amount of equipment, assisting network users, developing software solutions for problems not solve in the library integrated system are demanding constant efforts of the trained librarian and the computer engineer.

## **8. Directing**

Today, the status of the advanced library is higher in the eyes of academicians as well as information vendors. By using vision as administrative tool means encouraging new initiatives and ideas brought up by the library staff and trying to create the future through impact of change brought out by the electronic library development.

Librarians may have to apply new directing skills to remove fears among the staff members about the technology.

In order to lead in the information management the librarians should be encouraged to take initiative and enter into new projects related to library services.

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## 9. Controlling

An implementation of electronic library is a journey of growth and not a mere mechanical destination. Electronic library's ensured success depends on keeping control over computer security, increased budgetary need and copyright issues.

Conventional library materials are protected through electronic devices and strict vigilance but electronic materials because of some inherent characteristics may not be well protected from damage or loss by the same measures.

Generally a user can very easily copy the entire information of electronic material in a very little time and may publish the information for credit.

Unauthorized addition and alteration done by mischievous hankers may affect electronic library records.

The budgetary problems related to the electronic library concentrate on additional funding and cost recovery. Administrator and management are of opinion that charging fees for services is the one way of boosting revenue and the other way is to reduce cost further. It is gaining confidence among them that once an electronic library is set up it will provide more service and more access to information with the same number of staff.

Copyright is one of the vital problems in controlling electronic information. There is a greater opportunity to violet the copyright law in the free open access electronic environment. Librarian must see to project the rights of creators of information.

## 10. Conclusion and Suggestion

The construction of electronic library is a long process and challenging one. Electronic library emerging out of modern technology, planning for electronic library must take into account the constant changing nature of technology. To offer better and user friendly service the restructuring of the organs of the traditional library is must and the librarians will have to face these organizational challenges.

To achieve economy in budget, librarian should follow the growth of consortial agreements flourishing globally for collaborative purchasing with like-minded libraries or the libraries of similar purchasing power or the libraries offering services to the similar type of clients.

Replacing some printed resources with electronic material can potentially produce savings in storage cost and reduce cost of processing, shelving and re-shelving.

Moving towards electronic library from the traditional library needs a balanced collection between printed and electronic forms.

Dr. S. R. Ranganathan's philosophy of information management has long been " the right information to the right person at the right time". Add to this " in the right format" and we have a summary of the role of information professionals.

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#### ABOUT AUTHOR

**Mr. Gajendra Ballav Devchoudhury** is working as Assistant Librarian in Omeo Kumar Das Institute of Social Change & Development at Guwahati. He holds B. Sc, M L I Sc and Diploma in Computer Application. Before joining this Institute he worked in many different Institutes and carries his vast experiences in Library Automation. He has Attended a number of national and regional conferences, seminars and workshops and presented and contributed several papers.

E-mail: lib1\_okd@yahoo.co.in