

# Librarians/information professionals in the new information environment: challenging roles

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## Abstract

With the application of IT to libraries, the librarians today have more refined tools and techniques at their disposal to provide quicker and more sophisticated services to the users. The article discusses the evolving role of librarians/ information professionals from provider of physical entities to that of information access provider, negotiator, intermediary, organizer and preserver of digital information, educator, content and intranet developer. It also discusses the skills and competencies required to perform their role effectively. Concludes that LIS education should be geared to the changing needs of the society/workplaces. It should offer such courses as provide graduates with necessary skills and competencies to perform all the roles offered to them in the new information environment.

**Keywords:** Librarians; Information professionals; Information environment; Challenging roles

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## Introduction

Easy availability of information on the Internet and its wide spread use, access to full text databases and digitization of resources are paving the way for the development of digital libraries. Digital libraries offer immense opportunities to provide any time, any place access to users. Users can search, use and create new information sources from their workplaces and homes. The questions<sup>1</sup> often arise: Will the digital libraries provide necessary or sufficient services to satisfy information needs of the users? Will the users be able to find the required information themselves? Will they do without the librarian in the digital libraries? Alternatively what roles will the librarians play in the digital libraries?

## Transition From Traditional To Digital Libraries

As a consequence of the incorporation of new technologies in libraries, traditional techniques and tools have been replaced by the new ones. Most of the libraries have started providing an Online Public Access Catalogue (OPAC), access

to CD-ROM, Internet and digital documents. Many of them have created their homepages on the Web from where users can have access to a variety of services from their workplaces or homes. The transition of the traditional library to digital library is well reflected in a number of digitization projects going on at the national and global levels. The libraries have started digitizing their resources and making these available over the World Wide Web and providing online services to the users.

But in spite of numerous digitization projects, electronic media by no means have completely replaced the 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<sup>2</sup>. The situation necessitates the librarian to "acquire, give access to, and safeguard carriers of knowledge and information in all forms and to provide instruction and assistance in the use of the collection to which their users have access"<sup>3</sup>.

## Role of LIS Professionals In The New Information Environment

In the new information environment, the librarians have to perform the role in the following capacities.

## As Information Access Provider and Negotiator

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In the new information environment, the librarians assume the responsibility of providing access to information in whatsoever form it is packaged i.e. print, audio, video, microform, numeric, computer programmes or multimedia. They will no longer be restricted to "a single entity where everything is stored", but rather will be able to offer a "range of services and collections linked together or made accessible through electronic networks"<sup>4</sup>. In such an environment "access to information does not always imply ownership, merely that the library has negotiated the means by which the patrons gain access to resources and information"<sup>5</sup>. There is a clear shift from ownership towards providing access to electronic documents just for a given time<sup>6</sup>. This in turn has created a new role for librarians - that of negotiating access rights through contracts and licenses<sup>7</sup>. License payment for an information product is a payment to use the product for a period of time that is usually specified in a contract. This payment is not for the ownership of all the rights of that product e.g. in the case of e-journals it is the publisher who decides how much access will be provided, which issues will be available and how much access will cost. Cost of e-resources has become difficult to calculate. Publishers today have come up with a large variety of new pricing strategies e.g. 'pay per view' and 'flat fees plus additional charges according to usage'<sup>8</sup>. This means that different libraries may have to pay different prices for journal subscription. Here the librarians have to see how best they can negotiate access rights through contracts and licenses.

They must be aware of what exactly are the rights and responsibilities of the parties of the contract. Are there limitations on simultaneous access, downloading or printing of material? What are the technical requirements? Is the library entitled to access the user statistics in order to evaluate usage, or does the publisher keep these data secret<sup>9</sup>.

Closely associated with license agreements are the copyright issues. When negotiating access with a publisher, the librarian must agree to certain restrictions and photocopying or distribution of electronic materials. Despite copyright notices and efforts to educate

employees about intellectual rights, electronic publications can easily be forwarded to people outside the licensed user group<sup>10</sup>. In such circumstances it becomes imperative for the librarian to develop awareness among the employees about copyright issues.

#### **As an intermediary**

Since the beginning of the profession, librarians have been in direct contact with users seeking information. They have learnt to understand what they actually need and not what they say they need. Their services are personalized and targeted for their clientele<sup>11</sup>. Upto now no "interface agents" and "personal filters" as described by Nicholas Negroponte<sup>12</sup> have substituted person to person mediation.

When the users retrieve tens of thousands of matches from digital libraries, many realize that searching and filtering information can be a complex task which should be delegated to a professional. Selecting the matches most relevant, most current and of high quality requires considerable expertise, despite continuing improvements in search refinement capabilities of digital libraries<sup>13</sup>. Librarians who possess particular knowledge and expertise in knowledge transfer seem to be the most suitable candidates for this. Wood and Walther note that rather than rendering the librarian obsolete, the digital revolution has made librarians all the more essential<sup>14</sup>.

#### **As organizer of information**

The information available on the Web is rapidly growing, highly distributed, of varying quality and dynamic. Librarians, who have acquired a good deal of efficiency and skills in the collection, organization and retrieval of information can play an effective role in adapting these to the new environment and even to go beyond these skills and develop new ways to organize and structure information. Garrod and Sidgreaves<sup>15</sup> observe that professional boundaries between computing professionals and librarians are overlapping and becoming more blurred. For librarians to effectively organize and structure information available on the Internet, they require more than basic IT skills.

With the advanced IT skills, the librarians will

be in a position to develop systems and user interfaces to make databases as accessible as possible to the users<sup>16</sup>.

#### **As a teacher**

The modern day librarians must not only be proficient in the wide range of information technologies available today but they must also be able to work with teachers to instill information literacy in their students. Information literacy is the key to life long learning<sup>17</sup>. The librarians must teach the students how to 'analyse information critically and use it wisely'. They must 'work closely with students to design, implement and revise research skills'<sup>18</sup>. McMillan<sup>19</sup> notes that within the university environment undergraduate students can be seduced by the convenience of information available through the Internet and the intervention of the librarian can teach the difference between intellectual access and electronic access. She observes that the librarians should teach information discrimination through personalised research assistance, guidance and instruction.

#### **As content developer**

Content creation and development is recognized as an important activity in the digital environment. Though technically a new concept, it has been practised by the librarians since long. The library cataloguing, abstracting and other related guides to information sources are the best examples in this context. However, the growing emphasis of this aspect in the digital environment requires some new approaches in its design and development. The librarians are expected to possess some refined skills in data organization and structuring and the presentation of the content in a helpful format so as to provide easy retrieval of required information for the users<sup>20</sup>. Bater<sup>21</sup> thinks that library professionals must become involved with the process of improving access to significant Internet content. The ideas embodied in traditional cataloguing and classification are capable of being adapted very effectively to the cataloguing of electronic documents.

#### **As intranet developer**

In the new information environment, the librarian can play an effective role in building

the Intranet site - a single access point to both internal and external data as per the requirements of the end users. He must filter the information, selecting the most relevant resources from the universe of network resources and download these to local access points to help the users to get the required information without delay.

#### **As preserver of digital information**

Preserving information in its different forms has been an important endeavour on the part of the librarians since time immemorial but preserving information in the digital form is posing the biggest challenge today. While print materials can survive for centuries or even millennia without recuperation and rehabilitation, digital materials because of their fragile nature tend to grow obsolete within a matter of years. It is not merely the physical care of the record that is a matter of concern for us, the authenticity and retrievability must also be guaranteed. This involves transforming digital documents to run on current media, software, hardware and operating systems by applying one or more digital preservation strategies such as technology preservation, emulation, data migration, and encapsulation. It is high time for the librarians to develop and implement proper policies and strategies to ensure long-term sustainability of and accessibility to the digital records.

#### **Skills Needed To Perform The Challenging Roles**

The digital library environment requires a new set of competencies for librarians. According to Meredith Ferkas<sup>22</sup> the competencies which the librarians must possess to perform their role effectively are of two kinds.

##### **Basic Technical Competencies**

- \* Ability to embrace change
- \* Comfort in the online medium
- \* Ability to troubleshoot new technologies
- \* Ability to easily learn new technologies
- \* Ability to keep up with new ideas in technologies and libraries

##### **Project Management skills**

- \* Ability to question and evaluate library

services

- \* Ability to evaluate the needs of all stakeholders

- \* Vision to translate traditional library services into the online medium

- \* Ability to sell ideas/library services

In Ferkar's view, change is inevitable but if librarians can adapt to and embrace change, they can easily learn technologies, can keep up with changes in the profession, can plan for new services and evaluate old services, can develop services that meet the needs of all stakeholders, can evaluate technologies, and can sell their ideas and market services. They will be better able to meet the challenges of changing user population and changing technologies<sup>23</sup>.

Feather<sup>24</sup> is of the view that besides the technical and management competencies, the future librarian should possess learning and teaching competencies. Learning how to learn is one of the core skills of the information professional, and applying that skill through a constant process of learning, both formal and informal, will be a hallmark of a professional career. Teaching - or rather helping others to learn - is also an integral component of the information professional's skill set. Helping end users to make best use of the tools which are available, developing their search skills, and above all giving them insights into how they can evaluate the quality of information are among the most important activities of the 21st century information professional. To be able to do this the information professional of the future will need to have some understanding of pedagogical theory and practice and of effective methods of teaching and learning.

For the information professional, the question must be how to unlearn and relearn - how to maintain a valid role in the provision of information at a time when developments in technology have brought the power of information searching to the non-specialist. The answer must be that the information professional develop additional value-added skills<sup>25</sup>.

### **Implications for LIS education**

The changes in information environment must be reflective in the LIS courses so that these

become responsive to the changing needs of the society/workplaces. These must aim at providing the graduates with a remarkable mix of required skills and competencies to enable them to play their role effectively in the diverse environments - print and digital. The focus of LIS education should not be only the library but on developing a set of competencies and skills. It is however in the "development of learning and teaching competencies that we can really help to re-engineer the information professions"<sup>26</sup>. The pace of change is such that even those who graduate today will have to continue to learn to keep up with the developments. Hence the purpose of LIS education should be "to teach people how to learn, not merely to convey facts and ideas"<sup>27</sup>. This will help the information professionals to enhance their skills through a constant process of learning both formal and informal.

The application of IT to LIS environment has, no doubt, brought about tremendous changes in it but there is no denying the fact that still in developing countries these changes have not been so drastic and most of the libraries are "still functioning with traditional collection or as hybrid libraries with a combination of print and electronic". In such circumstances the LIS departments have to bear "the responsibility of developing the right personnel with high caliber to manage the libraries and information centres of varied scope and nature ranging from small rural library to a well established digital library"<sup>28</sup>.

To prepare students for a career at different levels of information society, there is a need to offer the course at three levels<sup>29</sup>.

- \* Graduates with basic knowledge to head a small library.

- \* Postgraduate degree to have supervisors or middle managers of a large library.

- \* Post graduates with specializations such as digital libraries, network management, content management to take up lead positions.

However, the librarians/information professionals should themselves feel duty bound to enhance their skills and competencies throughout their career by attending refresher courses, continuing education programmes, conferences and reading current literature and

developments in the field.

### Conclusion

To conclude we can say that the role of the librarians is evolving to that of information access provider, negotiator, intermediary, organiser and preserver of digital information, educator, content and Intranet developer. To perform all these roles, the librarians have not only to adapt their traditional skills of collecting, organizing and retrieving information to the digital environment but also have to possess some enhanced skills and competencies to perform their role effectively. LIS courses should be geared to the changing needs of the society and offer such courses as provide graduates with necessary skills and competencies with which they can "gain employment upon graduation as well as the vision and understanding which might help them to cope better with the rapidly changing world in which we live"<sup>30</sup>.

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