FROM THE GUEST EDITOR

Multimedia Applications in Libraries

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The concept of multimedia from the traditional idea of multi-mediums such as text, photographs, siides, video and audio tapes (analogue) is being redefined by the use of new computer concepts to integrate the digitised information to include text, graphics, sound, animation and full-motion video. The dreams of multimedia technologists have come true and today we are able to store, transport, access and manipulate digitised multimedia information by simple drag and drop actions or export/import information to and from distant locations. Digitisation frees up time and creates opportunities for developers to explore the real power behind using multimedia—the ability to pick up right medium for the communication to users.

Today the most explosive technology in the area of IT is multimedia. The cost of computers is going down and the computing power of the systems is almost doubling every year. So, libraries have started using the multimedia PCs (MPCs) for acquiring, processing, organising and disseminating multimedia information to the users. In India, as on today, an individual user can now afford to buy MPCs that are becoming a part of daily requirement even at home. However, there are about 2.3 million PCs in India, which is not a significant percentage when compared with PCs installed in the advanced countries. Many libraries are still to automate their services and they have not yet started using multimedia information resources. In a survey on use of multimedia in the major special libraries in Delhi carried out by me, it was found that only 43 per cent libraries are having multimedia facilities that are being used for providing library services. The application of multimedia in Indian libraries is very limited, which includes use of multimedia CDs in the form of encyclopaedias, yearbooks, dictionaries, databases, product catalogues, software tools, web-page designs, multimedia kiosks, multimedia presentations, and user training programmes.

Defence Science Library (DSL) of DESIDOC is one of the libraries, which has started using multimedia for providing information services to the users. It is the first in India to have designed a multimedia Information Kiosk for the library users to provide information about the library, its resources, services offered, facilities available and staff that is responsible for providing these services.

Majority of the international publishers have also started or planning to start using multimedia technology for bringing out their publications. Though there are number of multimedia designing and authoring tools available in the market, due to non-friendly nature of these tools, it takes a lot of time, money and manpower to develop a multimedia publication. So multimedia-publishing industry is still looking for best tools for designing content and media inputs; multi-author, multi-site collaborative development; rapid validation and revision; and packaging on a CD-ROM or delivery on networks (including Internet). The positive sign for the libraries is that many companies invested a huge amount of money in this area and producing several thousands of multimedia information resources for libraries. Now, it is up to the libraries, how to use them in providing qualitative and quantitative services to the users.

This special issue is structured in a way that the reader is introduced with the theoretical aspects of multimedia information and the principles behind the design of multimedia content, followed by an overview of multimedia systems in libraries and their applications for providing services to the users. The list of multimedia information resources and services on internet which is expected to be a good compilation for the people to know, to use and work further in the field. The technological trends in digital media publishing and the challenges and opportunities provided to the publishers and finally, the role of library and information staff in the context of multimedia libraries to deliver an effective service to users.

Dr Ewald Jarz's paper on **Theoretical Aspects of Multimedia** discusses definition, theory of multimedia, types of multimedia information, acquiring of knowledge by the human beings through multimedia systems including educational and psychological perspectives, the basic design and technical principles of designing multimedia systems and the impact of designer's social and cultural background on the development/design of multimedia systems.

I have overviewed multimedia systems and their applications in libraries in my paper Multimedia Systems and their applications in Libraries. I have explained the difference between multimedia and multimedia, general applications and limitations, the need for multimedia in libraries, multimedia information resources, and their impact on library and information services, and discussed the multimedia library information kiosks, walk-through-programmes, multimedia databases, cataloguing and training programmes.

An exhaustive list of important library-related multimedia resources available on internet has been compiled under the title **Multimedia Information/Services/Resources in Libraries available on Internet.** This includes multimedia digital libraries, integrated multimedia library systems, multimedia instructional resources and selected lists of magazines (both print & online) on multimedia for keeping the users up to date in the field.

In **Digital Media and the Future of Academic Publishing in the United Kingdom**, Dr John Davis investigates the key issues concerned with electronic and digital publishing industry in the UK and the need of the copyright in the context of digital media. It is felt that the protection and advancement of copyright is essential both for publishers and authors. He feels that it is easier to design an electronic system in the professional and commercial sectors than in universities due to the financial resources crunch.

Prof A Jack Meadows, in his paper **Multimedia Information and Library and Staff** discussed the problems of handling multimedia information including the cost of technological infrastructure, acæss, and information orientation to the users' needs. The problems of academic users while using electronic journals (text with graphics) was studied at Loughborough University of Technology and the results are presented in this paper. This study identifies the accessing and navigational problems as major demotivating factors in handling multimedia information by the users, which require regular training and advice. This study also reveals that library staff should organise multimedia information, provide training and advice to users to handle the multimedia information effectively.

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