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Opinion is divided on the issue of whether the hybrid library is likely to be the main model for the expected future or whether the hybrid library is a transitional stage leading to the fully digital library. Like library automation and electronic libraries, the concept of the hybrid library is not a new one. People have talked about providing access to multiple information systems with a single front end for many years. Often library systems vendors would demonstrate technology that allowed users of their OPACs to access a limited range of other databases and services through the same interface. However now we have the network infrastructure, open standards and available information systems to attempt to build a distributed searching and retrieval system that does not lock people into one vendor's system.

### **Definition of Hybrid Library :-**

The *Diccionario de la Real Academia de la Lengua Española* defines hybrid as “anything that is a result of combining elements of different nature”.

The “Hybrid Library” was a term in common use in UK digital library development. It originated in the UK [Electronic Libraries Programme](#), was coined by that programme's director, Chris Rusbridge. It seems that the term "hybrid library" was first coined in 1998 by Chris Rusbridge (1).

It focuses on the fact that libraries had to manage resources in multiple formats. Hybrid library at the time: As one would expect any working academic library to be hybrid in this sense. The hybrid library however occupied the space between the 'digital library' and its implied companion, the 'non-digital' library and had its uses.

The hybrid library can be “...designed to bring a range of technologies from different sources together in the context of a working library, and also to begin to explore integrated systems and services in both the electronic and print environments.” by Chris Rusbridge (2)

“The dominant user view of a library is of a physical place. But libraries are services which provide organized access to the intellectual record, wherever it resides, whether in physical places or in scattered digital information spaces. The hybrid library of the

future will be managed combination of physical and virtual collections and information resources.”

As Lorcan Dempsey (3) has said, "An information environment might be described as a set of network services which support secure and convenient access to distributed collections."

The term “Hybrid Library” is already being widely used in the majority of developed countries like U.K. In terms of its ‘concept’, the Hybrid Library is generally defined as a library in which electronic and print-based sources of information are made available together in an integrated way for consultation by users, local and remote: the Hybrid Library is a middle point between the traditional library and the fully digital library.

The hybrid library is a library which can provide a "one stop shop" for both hardcopy and electronic resources. Its information systems should provide the end user with a seamless interface that will allow them to locate paper books and journals held locally and at neighboring sites at the same time as being able to find relevant online resources, electronic publications and digitized material.

A Hybrid Library is one where a mixture of formats and service entry points has developed over time, utilizing hardcopy resources in concert with digitally-held information, face-to-face training and web delivered services.

### **Scope and importance of Hybrid library :-**

At attempt has been made in this paper to draft a blue print for establishing a hybrid library. Due to advent of digital media as well as availability of e-information, the conventional library is radically changing its scope of collection, pattern of processing and entire range of dissemination of information. The information professional are now rightly changing their library campus from conventional library system to a highly resourceful hybrid library where the conventional library will make a tie with the electronic system of information sources together with the use of modern information and communication technology. The hybrid library is a more useful and it will bring positive impact to society because of the following reasons :-

- To increase the efficiency and effectiveness of library by both traditional as well as better multiple accessibility of their resources
- To keep pace with changing environment of technical development with traditional.
- To enable faster services & to provide multiple user access
- To change the information flow from traditional library as well as digital at open space at any time any where.
- To manage large amount of digital/traditional contents with minimum spent of time
- To manage contents from multiple location
- To protect ownership and preservation of information
- Afford very large and multiple approach search
- Information is available in digital well as traditional form
- Provide access local with world wide access through internet.
- Support for both formal and informal learning in hybrid libraries.

#### **Requirement and technology :-**

The main requirements for developing hybrid library are as follows :-

- 1) Computer with high speed processor
- 2) Back up facilities
- 3) Optical Character Recognition technology
- 4) Digital lib software for organizing digit object Dspace, Green Stone Digital Library, Eprints like open access software
- 5) High speed internet connectivity
- 6) Cost-effectiveness
- 7) skilled manpower

Hybrid libraries may be developed at the **local**, the **national** and the **international** level, and a **single** library may be involved at all these levels.

There are five big projects with different approaches in abroad :

- Agora - systems led (technical infrastructure)(4)
- BUILDER - institutional (5)

- HEADLINE - learning landscapes (Business and Economics) (6)
- HYLIFE - wide range of client types (7)
- MALIBU - management implications, humanities area (8)

### **Changing role of librarian :-**

Librarian plays a vital role in a hybrid library. As electronic technology is changing rapidly, library professional have to keep pace with the developments in tech. But now a day's, tremendous growth of literature makes information explosion. So, the library has to switch over from traditional to hybrid library to facilitate multiple accesses for their potential users. Librarian must be accumulating the new technology of ICT form various training as well as traditional. Any training is an integral component of staff development and of staff development and a well organized organization have the provision of staff development and continuing education for librarians at all levels. In addition to the professional skills mentioned, the librarians and information professionals of the future must be equipped with a wide range of personal and transferable skills in order to manage the changing environment in which he or she works. The importance of transferable skills over information technology skills should be highlighted here. Management and interpersonal skills will make librarian more effective managers of networked resources and services. As Hastings (13) (1996) says "it is more important that digital librarians possess particular personal qualities (which are innate) rather than technical expertise (which can be learned)".

This is not to say that the way to avoid the electronic age is for library professionals stick their heads in the sand. The information professional must change and adapt to the new electronic information environment, he or she must learn about new technologies and be aware of the strengths and weakness of them. Librarians should not feel threatened by computers and technical developments but should move forward with the new technology and take a pivotal role within organizations.

Information professional with in libraries are playing an increasing role in dealing with information in electronic formats by creating web pages to promote their services to external customers and choosing automated library management system. Skills in information organization are more necessary in this age of information explosion. Librarians and information professionals have a key role to play in this era. For

example, librarians are well equipped to take intranet projects through the various stages of design and maintenance as they understand their users and their organizations information needs and have the range of skills to manage knowledge effectively.

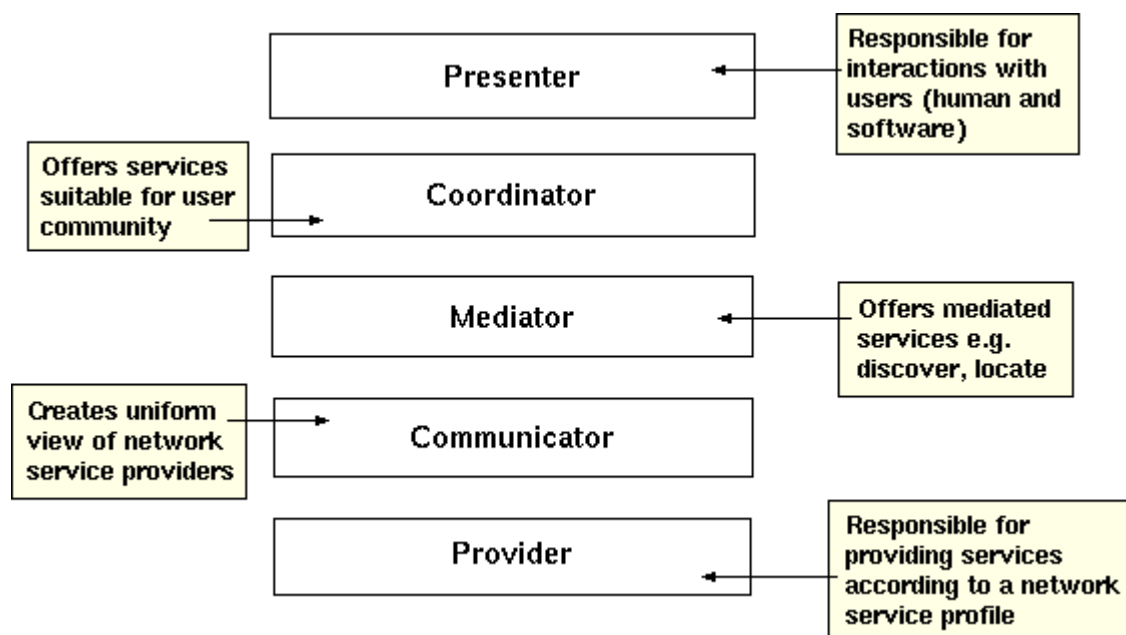
The role of librarians in this context is to help users find the information they require then provide them with the tools to access and use the resources for their individual needs. Creth (1996) (12) suggests that librarians achieve this by “actively seeking out users in a variety of setting” and by making “full use of information and multimedia technology” by offering instruction in a variety of formats (including web based instruction and online tutorials). New era librarians and information professionals should be able to manage the Digital Information System as this encompass the overall competencies (knowledge, know-how, skills and attitudes) necessary to create, store, analyze, retrieve and disseminate digital information (text, images, sounds) in digital libraries or any type of information.

## Technology and Architecture needed for organizing a hybrid library :-

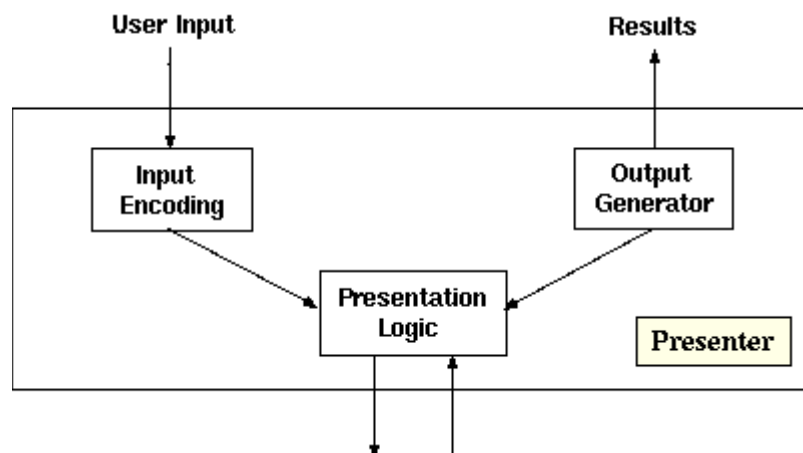
Recently, MODELS workshops have been elaborating the MODELS Information Architecture (MIA). A diagram from a presentation on MIA by Lorcan Dempsey (9) illustrates some of these incompatibility and integration issues. I would suggest the model to implement for developing hybrid library. The figure is given below :-

MODELS (MOving to Distributed Environments for Library Services)

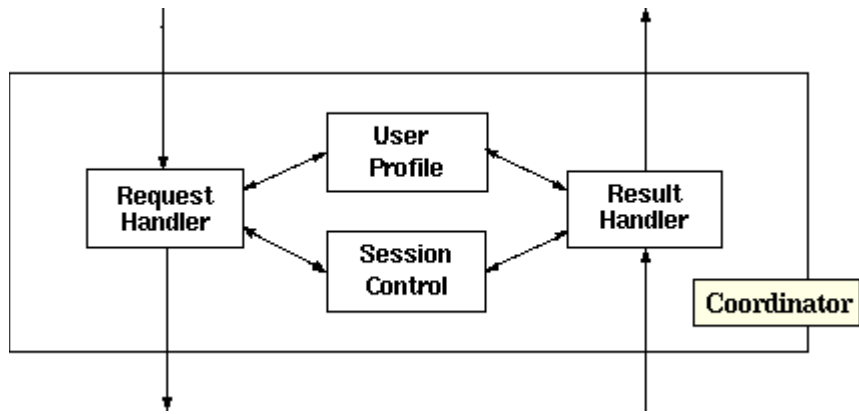
MODELS Information Architecture (MIA)



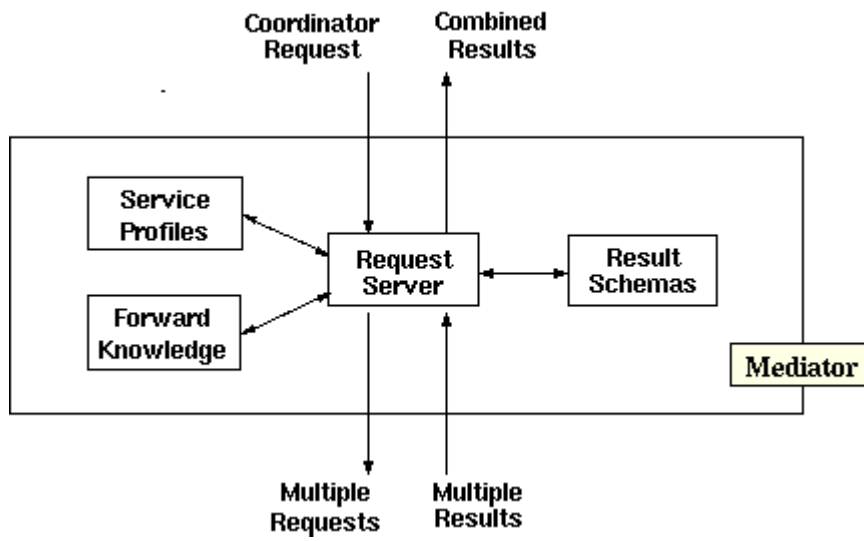
Five Layers of MIA



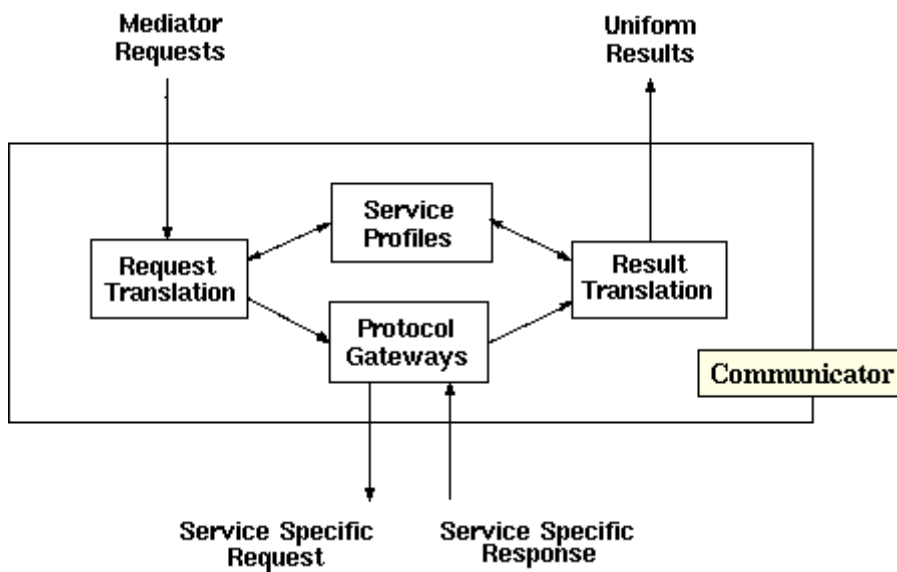
Presenter Layer of MIA



**Coordinator Layer of MIA**



**Mediator Layer of MIA**



**Communicator Layer of MIA**



Areas where significant development is needed, I believe, include

- quiet authentication, providing authenticated access without the intrusion of authentication challenges
- rights or terms and conditions metadata, and automated licenses, to allow automated processing of access management to digital library resources
- integrity and authenticity of electronic documents to replace the authority of the published work
- useful copyright management systems (supporting integration of work and information spaces while retaining reasonable control of the copyright material)
- simple information trading, including micro-payments
- more sophisticated electronic commerce
- scalability issues, including collection summaries and query routing
- metadata inter-operability (between different dialects, e.g., in descriptive metadata, or between different types, e.g., identification information between descriptive metadata and terms and conditions)
- daughter of Z39.50
- machine-independent, object-oriented packaging of digital library material
- information longevity issues -- digital preservation

API (Application Programming Interface )

“...a set of functions and procedures, and enables a program to gain access to facilities within an application... [This] enables users to customize the application for their own purposes and to integrate the application into a customized development environment.”

**Conclusion:-**

With the technology available at an affordable cost, any library may be transferred from traditional library to hybrid library. Hybrid library is being accessible from any where, any time (24\*7) as well as four wall traditional libraries. It saves the valuable time of the readers. Now a day, due to rapid changes of ICT, the entire traditional library should transform into a hybrid library. In the beginning, development of hybrid library is costly, but in future hybrid library helps all types of

users. Due to handling of information explosion into a manageable situation traditional library in future should be converted to hybrid libraries.

**Bibliography :-**

1. [http://en.wikipedia.org/wiki/Hybrid\\_library](http://en.wikipedia.org/wiki/Hybrid_library)
2. <http://www.dlib.org/dlib/july98/rusbridge/07rusbridge.html>
3. <http://orweblog.oclc.org/>
4. <http://hosted.ukoln.ac.uk/agora/>
5. <http://builder.bham.ac.uk>
6. <http://www.lse.ac.uk/blpes/headline.shtml>
7. <http://www.unn.ac.uk/~xcu2/hylife/>
8. <http://www.kcl.ac.uk/humanities/cch/malibu/>
9. <http://www.ukoln.ac.uk/dlis/models/>
10. Thamazhavel, G. *E-Libraries*. Information management in e-libraries, 26-27 Feb.2002, Allied Publishers Ltd., p.203-7.
11. Snajay Gupta and Ajay Kumar Arora. Digital Libraries : Need of the Hour. Information management in e-libraries, 26-27 Feb.2002, Allied Publishers Ltd,
12. Cretch, S.D. (1996) The electronic library: Slouching Towards the Future or Creating a New librarian's attitudes toward and use of the Internet : a structural equation modeling approach, *Library Quarterly*, 66(1), p. 59-83.
13. Hasting, K & Tenant, R. (1996). How to Build a Digital Librarian Follett Lecture Series. November 1996. Available from : <http://mirrored.ukoln.ac.uk/lis/november96/ucb/11hastings.html>.