
VIRTUAL REFERENCE PRACTICES IN LIBRARIES OF INDIA

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Abstract

As public access to the internet increases, libraries will receive more and more information online, predominantly through email. Object of this paper is to check the current developing, testing, and evaluating procedures and mechanisms that will enable libraries to work in providing reference assistance over the Web to support patrons' image information needs. The user-centered project is based upon a successful model for digital reference practice that has been widely embraced in the digital library community. This approach is expected to yield new insight into users' image seeking behavior that will help libraries to provide transparent access to visual resources across collections and institutions. This article presents an overview of the project and discusses the challenges involved in helping users find appropriate images on the web.

Keywords : Information Service, Virtual References, Internet

1. INTRODUCTION

The world has grown increasingly visual as the boundaries for television, graphics, videos, movies, computer games and educational multimedia blur, and the proliferation of wireless networks, intelligent agents, and handheld devices drives the need for anytime, anywhere access to multimedia information. Images in this millennium have the potential to become an even more dominant means of cultural communication and education as they provide more immediate, global, easily understood, and powerful ways for communicating than ever before.

For many people, however, online tools and resources for locating images and other non-textual materials may be unfamiliar, difficult to learn, or insufficient to answer their image information needs. As well as the difficulty that users have in expressing information needs in general and image needs specifically¹. Until automated systems can resolve these issues, expert human intermediation is necessary. Visual reference professionals from educational institutions and libraries are well positioned to mediate between patrons and Web-based multimedia resources, but they may require additional tools and training to handle questions and provide solutions to users with non-textual information needs.

The question faced by libraries, research institutions, educational institution and other cultural heritage institutions in this world of visual information is how to respond to a growing public demand for 'round-the-clock' networked accessibility to digital information and virtual information collections. Moreover, how can they provide access to resources that cross institutional boundaries and disciplines? It is impractical to assume that a single institution will have resources for all needs, or to expect that one expert would be knowledgeable about all collections. It is also impractical to assume that the public will necessarily know how to locate appropriate image collections or how to search for digital information. (Some libraries in USA; by United States Department of Education and the National Science Foundation²; have started virtual information system by offering it just during daytime hours; others have offered it the same hours that the library is open; while others have started immediately with 24/7 access).

Having a very large number of readers, Indian educational institutes, and research institutes really require the virtual information providing to its users. One approach to answering these problems can be

found in an emerging Digital Reference Practice / Virtual Reference Practice. The Virtual reference Practice has spearheaded a project to provide media mediation within the framework of a collaborative network of experts from a diverse range of libraries of India. The conceptual framework for this network is built upon a successful digital reference model that has been widely embraced by the digital library community.

2. DEFINITION OF VIRTUAL REFERENCE PRACTICES :

Virtual Reference Practices can be defined as the provision of real-time personal assistance to patrons via web-based interactive software. To meet the user at his or her “point of need” and to satisfy the patron’s information need, the librarian can use e-mail to answer a fairly specific or simple question. The “point of need” may happen when the library is closed, or when the user is unable to get to the library. This way, users can still be in contact with experienced reference libraries.

Although most librarians have an idea about what digital reference practice is, they are less sure what to call it. There are various terms in use: online reference; digital reference; electronic reference; virtual reference; live reference. Generally speaking, virtual or live reference refers to transactions in real-time, using chat and video-conferencing, for example. Online, digital, electronic reference includes email and web form transactions. However, these distinctions are quite often blurred and overlap. In the context of this paper, ‘digital reference practice’ is used to include two broad components: ‘it is Internet-based and designed to connect users with experts’³. More importantly,

Virtual reference refers to a network of expertise, intermediation and resources placed at the disposal of someone seeking answers in an online environment. Virtual reference service can provide support for users who find online tools and resources unfamiliar, difficult to learn, or insufficient to answer their information needs. It can also provide valuable user feedback to collection builders so that they may better tailor their resources and maximize their investment in content creation⁴.

3. VISUAL REFERENCE PRACTICES IN LIBRARIES

Visual resource collections have been around for hundreds (perhaps thousands) of years, and the practice of providing visual reference practice in these collections is at least as old as documented library reference practice — perhaps older. The first academic slide libraries date back to the late 1800 B. C. at about the same time that librarianship and general reference practice began to emerge as areas of professional practice and study. The *reference interview* is a central focus of this work and consists of the librarian interacting with the patron to clarify an information need, determining appropriate resources and collections to search, crafting appropriate search strategies, and assisting the user in assessing the relevance of the search results. There is a large body of literature pertaining to the reference interview, but little that addresses the unique aspects of conducting the reference interview for an image information need.

4. THE VIRTUAL REFERENCE MODEL

Virtual Reference Model is a general process model developed through an empirical study of high-capacity digital reference services. The model consists of 5 steps:

1. **Question Acquisition** is a means of taking a patron’s questions from e-mail, web forms, or embedded applications. This area of the model concerns best practice in “online reference interviews” and user interface issues.
2. **Triage** is the assignment of a question to a process or topic expert. This step may be automated or conducted via human decision support. Triage also includes the filtering of repeat questions or out of scope questions.

3. **Answer Formulation** details factors for creating “good” answers such as age and cultural appropriateness. Answers are also sent to the patron at this point.
4. **Tracking** is the quantitative and qualitative monitoring of questions for trends. Tracking allows the creation of “hot topics”, and may indicate where gaps exist in the collection(s).
5. **Resource Creation** concerns the use of tracking data to build or expand collections and better meet patron information needs⁵.

Every text-based virtual reference practice should use this simple model in India. However, the important question is whether the model can be extended to enable digital libraries to provide reference assistance in the retrieval of information and other visual resources. Experts who provide visual resource reference assistance within digital library environments may require additional tools and training to handle questions and provide solutions to users with non-textual information needs.

5. PROJECT DESIGN

The Virtual Reference Practice project goal is to extend the digital reference model to the digital library community in order to support integration, interoperability, and seamless access to shared visual resources. Therefore, a central focus of this research is to explore how human expertise mediates between image needs and image resources in the digital library environments. As a first step in this research, it is important to develop a model and some metrics for examining users' image needs, the sufficiency of image resource description on the web, the role of collaboration and triage, and the work of human intermediaries. A number of issues are currently being explored during Phase One of this project including:

- How is digital library triage affected by expanding the existing model to include museum reference services?
- What does “out of scope” mean in this environment?
- What types of functionality do patrons need to assist them in asking for information?
- What tools do experts need in providing image answers?

6. CURRENT RESEARCH TASKS

- Survey digital libraries with existing virtual reference services to examine how they perform routing of, and collaboration in, answering image queries.
- Interview visual resource professionals who provide reference assistance to investigate how they conduct digital reference interviews and question negotiation.
- Analyze information requests to model information-seeking behavior on the Web. Analyze the content of reference requests to create taxonomy of information needs.
- Analyze reference responses to create a refined model of digital reference for information retrieval. Perform content analysis of answers to information -related enquiries from multiple perspectives.
- Analyze disconnects between the language patrons employ to describe information needs, and libraries use to describe images in their collections. Identify opportunities to create metadata automatically.
- Build iterative models. Create a model that incorporates findings, including unanticipated but required elements unique to supporting information intermediation in the virtual reference environment.

The second phase of this project will be to incorporate the results from Phase One into an operational system and software that will support the performance of reference tasks for the virtual reference practicing community.

7. EVALUATING THE SYSTEM

Evaluations of the effectiveness of the virtual information system will be conducted in a multi-method, iterative approach utilizing both qualitative methods and quantitative metrics. The four primary methods of evaluation will be:

- Unobtrusive log analysis
- Tracking of question assignment patterns
- Survey of patrons at the point of access
- Survey and interviews with virtual information professionals.

Data will present a picture of how patrons seek help in retrieving information in the virtual information environment and will drive iterative improvement to the virtual information reference desk software. Results will also demonstrate: (a) general benefits of collaboration among museums and libraries in providing digital reference, (b) benefits for the virtual information Reference Desk participants in answering image questions, and (c) benefits to patrons seeking help with their information needs.

8. CONCLUSION

The sheer amount of information on the Internet can often be confusing, and frequently offers too many choices. Web portals or gateways alone do not help in the search for sources. Users looking for a quick, clear path through what's on offer require more direct guidance from information professional. Virtual reference replicates in the digital library environment what is most valued in the physical, especially public, environment: personalized guidance in the gathering and selection of the best resources. Although this new type of service poses a challenge to more traditional public library and intuitional library service delivery in India, successful integration of the new and old models will provide users with the consistent support necessary in navigating the digital environment.

The results of this research have the potential to make several significant contributions. The virtual information project will advance the digital reference research capabilities of the digital library community and will extend the model for digital reference used by the virtual information project into the digital museum community. Results of this research will also expand greatly what we know about image seeking behavior and image intermediation. By building upon well grounded methods of providing digital reference and incorporating this directly into the capabilities of digital information reference software, patrons will be better served when they seek assistance in fulfilling their information needs.

9. REFERENCES

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