CHAPTER 1
INTRODUCTION

This is the era of knowledge and information. The unprecedented growth of knowledge and information has impacted all organizations including the libraries. The conventional functions of libraries are collect, process, disseminate, store and retrieve information to provide better services to the end users. In the digital environment, the role of libraries is changing to provide the competitive advantage for its users. The success of library and information centre depends upon their ability to utilize information knowledge of its staff to serve the user community (Patel 2012).

A digital library is a collection of documents in organized electronic form, available on the Internet or on CD-ROM (compact-disk read-only memory) disks. Depending on the specific library, a user may be able to access magazine articles, books, papers, images, sound files, and videos. On the Internet, the use of a digital library is enhanced by a broadband connection such as cable modem or DSL. Dial-up connections can be used to access plain-text documents and some documents containing images, but for complex files and those with animated video content, a downstream data speed of at least several hundred kilobits per second (Kbps) can make the user's experience less tedious, as well as more informative. Internet-based digital libraries can be updated on a daily basis. This is one of the greatest assets of this emerging technology. On CD-ROM, the amount of data is limited to several hundred megabytes (MB) per disk, but access is generally much faster than on an Internet connection. Several CD-ROMs can be combined in a set, and because the disks are small, a large library can be accommodated in a reasonable physical space. The main limitation of CD-ROM is the fact that updating cannot be done as frequently as on the Internet. In addition, producing and distributing CD-ROMs involves overhead costs that are largely nonexistent in Internet-based libraries.

Some institutions have begun the task of converting classic books to electronic format for distribution on the Internet. Some files can be viewed directly in HTML format; others can be downloaded in PDF format and printed. Some publishers keep electronic files of books and produce them one unit at a time in printed and bound form on demand. Electronic distribution of intellectual and artistic property has authors, agents, and publishers concerned about the possibility of copyright infringement. It is much easier to copy a CD-ROM, or to download an electronic book and make unauthorized copies of it, than it is to reproduce bound volumes and
distribute them illegitimately. Fundamental changes in copyright law - and/or changes in the way in which the laws are enforced - are likely to occur as digital libraries expand and their use becomes more widespread. Digital libraries are playing a strategic role in the showcasing of research done by an institution or university, since 1988. Large scientific communities rely on the digital libraries as a primary resource for storing and acquiring information. One of the challenges is to make navigation in large amounts of data as intuitive as possible (Giorgi 2010).

Every library provides quality services to its users and to strive continuously for their amelioration. Libraries, having stated their intention of satisfying their users, realized that their first task is to be informed about their needs and problems. Users do not always know what they want or are even able to explain which problem they have, what kind of difficulties they face when coming into a library or searching its online public access catalogue (OPAC). In order for these problems to be identified, examined and finally solved, librarians have developed user studies that have been carried out in many libraries all over the world. The main target of every user study is to bring to light the users’ perspectives. Exploring users’ behavior, measuring users’ satisfaction, meeting users’ needs, even before they are expressed, has become an art and a science in a library’s quality services. User studies have become the medium for all. In a nutshell, user studies are a mean of data collection, an old evaluation method for services provided a mode to re-establish the services, the needs and the priorities of every library. These are the tools for making decisions (Aphrodite 2007).

Studies on information seeking behavior have been conducted worldwide as they are very essential to measure psychological, logical and emotional approach of an information seeker in the pursuit of looking for information. The study helps to know whether the information needed is aptly conceived or generated in mind and the information seeking process is on the right track. The study also helps to know whether the information seeker applies or executes his attitudes in the right direction which will yield him right information and solve information needs. This information is required for the information providers to plan for effective plans and models to help the information seeker in a better way (Fazlur 2011).

The purpose of this study is to investigate the information needs, use of information channels, information seeking process and information seeking behavior of users of colleges affiliated to North Maharashtra University Jalgaon and Pune University, Maharashtra. The study attempts to know the primary dependent source of user to gather information. On the sidelines,
the study enables to know the statistics of the library resources and the infrastructure. The study also investigates the sufficiency of the library resources and the level of satisfaction on library services.

COMPONENTS OF DIGITAL LIBRARY

Digital library framework permits many different computer systems to coexist. The key components are shown in the figure below. They run on a variety of computer systems connected by a computer network, such as the Internet. (1)(See figure 1)

Fig. 1: System components

SYSTEM COMPONENTS

We have to use two user interfaces: one for the end-users of the digital library, the other for digital librarians and system administrators who manage the collections. Each user interface is in two parts. A standard Internet browser is used for the actual interactions with the user. This can be Netscape Navigator, Microsoft's Internet Explorer. The browser connects to client services, which provide intermediary functions between the browser and the other parts of the system. The client services allow the user to decide where to search and what to retrieve; they interpret information structured as digital objects; they negotiate terms and conditions, manage relationships between digital objects, remember the state of the interaction, and convert among the protocols used by the various parts of the system. Repositories store and manage digital objects and other information. A large digital library may have many repositories of various types, including modern repositories, legacy databases, and Web servers. The interface to this
repository is called the repository access protocol (RAP). Features of RAP are explicit recognition of rights and permissions that need to be satisfied before a client can access a digital object, support for a very general range of dissemination of digital objects, and an open architecture with well defined interfaces.

Handles are general-purpose identifiers that can be used to identify Internet resources, such as digital objects, over long periods of time and to manage materials stored in any repository or database. When used with the repository, the handle system receives as input a handle for a digital object and returns the identifier of the repository where the object is stored. Search System the design of the digital library system assumes that there will be many indexes and catalogs that can be searched to discover information before retrieving it from a repository, these indexes may be independently managed and support a wide range of protocols.