Web Search Patterns In Digital Libraries by Faculty Members of Engineering Colleges: A Survey

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Introduction

The World Wide Web (WWW) has become a vast resource of information. The problem is to find out the information required by an individual, is often difficult, because of the complexity in organization and information. The increasing in the volume of information resources and the rapid progress in information technology has changed the methods and ways of retrieving and disseminating information to the users in the library. Users are spending a lot of time for getting electronic information. Web searching services are playing an important role in order to get recent and updated information. Necessary tools are developed to help users to get electronic information easily.

Web Searching

Regardless of the search tool being used, development of an effective search strategy is essential if an individual wants to obtain satisfactory results. A well planned search strategy is of great importance when the database under consideration is one as large and amorphous as the World Wide Web. A web searching is an interaction between an individual and a database, where the individual

states his query in the form of search terms and logical combinations of search terms, to retrieve small sets of very specific information, from large computer stored database. The term web searching can be used to indicate the search services available from producers of database or vendors or suppliers of these databases.

Kinds of Web Search

Boolean Search

Boolean searches will find the exact terms as entered. To narrow the results of a search, terms can be combined with AND, OR, and NOT and placed in parentheses.

*Connecting two terms with AND means both terms must be present.

*Connecting two terms with OR means either term can be present.

*NOT followed by a term means that the term must not appear in

the search results.

*Parentheses are used to combine sets of Boolean expressions.

Concept Searches

Concept searches will find not only the search words and phrases but also related concepts. For example, in a concept search for the term "law," the system will also search for related terms, such as "lawyer" and "legal."

Pattern Searches

Pattern searches will find both the search terms and terms with similar spellings. This type of search is helpful in retrieving terms or names with alternative spellings or common misspellings. For example, a pattern search for the term "theater" will also search for alternative spellings, such as "theatre."

Wildcard Searches

Wildcard searches find variations on word roots. To conduct a wildcard search, type an asterisk at the end of the search word.

For example, "**correction**" will find the words "**correction**", "**corrections**", or "**correctional**". This type of search will ensure that you also retrieve the plural forms of the words you search for.

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Advantages of Web Searching

The advantages of web access are considerable and it is important that they should be clearly appreciated inside the profession of librarianship and information work.

Administrative Advantages

*Save time, space and money

*Save effort and person-hours

*Greater efficiency

Searching Advantages

Web services offer searching of

*Indexes

*Fields

*Controlled vocabulary

*Boolean operation and set manipulation

*Word and phrase searching

*Search limiting

Informational Advantages

*Qualitatively different kinds of searches are possible

*Easier to assess quality of information found

*More clues: authorship, institutional affiliation, reputation, references,

*Processing of search results: SDI, sort, rank, tabulate, export, integration with Intranet/ portal etc.

Purpose of study

The purpose of the study is to know, the use of Web searching by the faculty members of Engineering Colleges affiliated to Acharya Nagarajuna University, Guntur.

Objectives of the study

The objectives of the present study are:

1. To study the use of web services in digital libraries by the faculty members of the Engineering Colleges

2. To know the time spent for Web searching by faculty members

3. To examine the types of approaches, databases and search techniques used by the faculty members

4. To know the satisfaction of faculty members with Web services

5. To highlight the problems in web searching of information.

Methodology

Keeping in view the objectives in mind, a questionnaire is prepared to collect data from the faculty members of the following Engineering Colleges affiliated to Acharya Nagarjuna University:

*Velagapudi Ramakrishna Siddhartha Engineering College Library (VRSEC)

*Koneru Lakshmaiah College of Engineering (KLCE)

*Rayapati Venkata Ranga Rao and Jagarlamudi Chandra Mouli College Engineering (RVR & JC)

*Baptla Engineering College (BEC)

*Sri Venkateswara Hindu College of Engineering (SVHCE)

The researcher have undertaken the survey in the month of October, 2007, spreading over 10 days. There are 600 faculty members working in these colleges. Copies of questionnaire are distributed to 100 faculty members. However, the investigator received responses from the eighty faculty members only. The analysis and interpretation of the data is presented in the following paragraphs.

Data analysis

Frequency of using the digital library

The distribution of faculty members according to their frequency of using the digital library is shown in Figure 1.

Fig.1: Frequency of using the digital library

Once in a week, 12.5

2 or 3 times in week, 28.75

Daily, 58.75
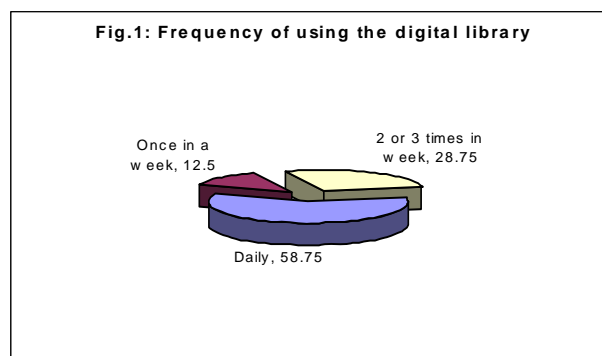
It is evident from Figure 1 that 58.75 percent of the faculty members are using the digital library daily, 28.75 percent two or three times in a week, and the remaining 12.50 percent once

in a week. Hence it can be concluded that most of the faculty members are using the digital library daily.

Time spent

The distribution of faculty members according to the time spent in digital libraries for searching the online information is shown in Figure 2.

Fig.2: Time spent by the faculty members in ifnromation retrieval
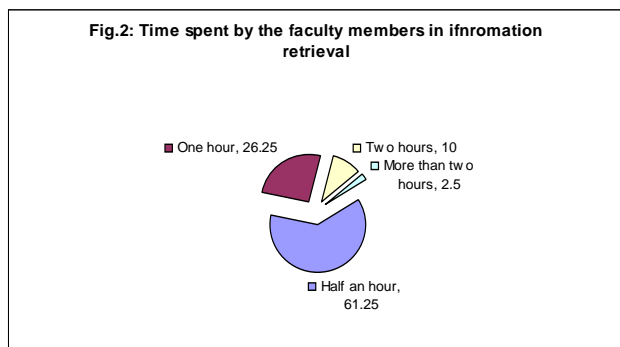
It is evident from Figure 2 that 61.25 percent of the faculty members spent half an hour in online information retrieval, 26.25 percent of them spent about one hour, 10 percent of them spent two hours and 2.50 percent of them spent more than two hours in digital libraries. Hence it can be concluded that most of the faculty members spent half an hour for retrieving information.

Types of approaches

The distribution of faculty members according to their approaches for searching the needed information is shown in Figure 3.

**Fig.3: Types of approaches made by the faculty members**
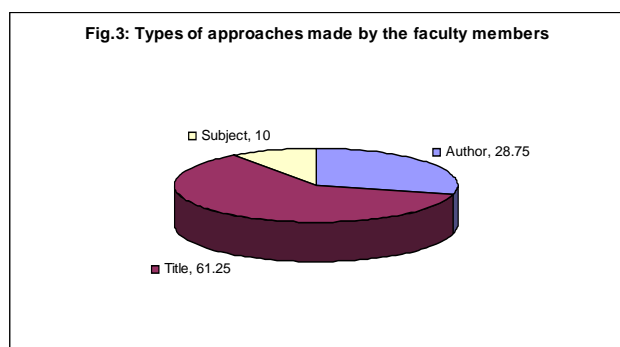
It is evident from Figure 3 that the faculty members of Engineering Colleges mostly search the needed information by title approach compared to the author and subject approaches.

Types of databases

The distribution of faculty members according to their searching of different databases is shown

in Figure 4.

Fig.4: Types of databases searched by the faculty members
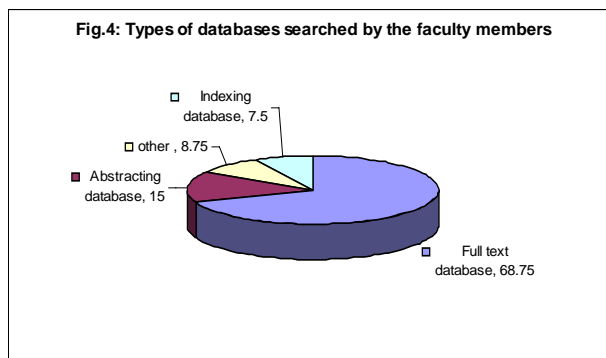
It is evident from Figure 4 that it is clear that most of the faculty members (68.75%) are accessing the full text databases and 15 percent of them are accessing the abstracting databases and 8.75 percent of them are accessing other databases (both bibliographical and full text databases) and the remaining 7.5 percent of them are accessing indexing databases.
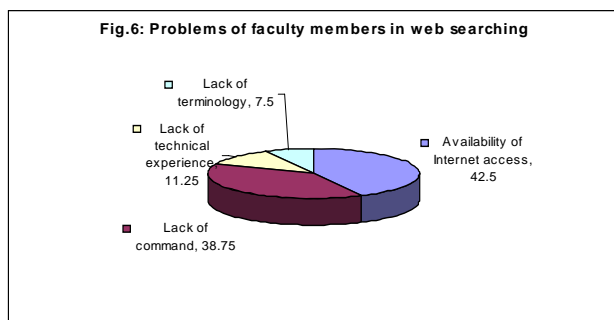
Search techniques

The distribution of faculty members according to their use of search techniques for finding the related information is shown in Figure 5.

Fig.5: Search techniques used by the faculty members
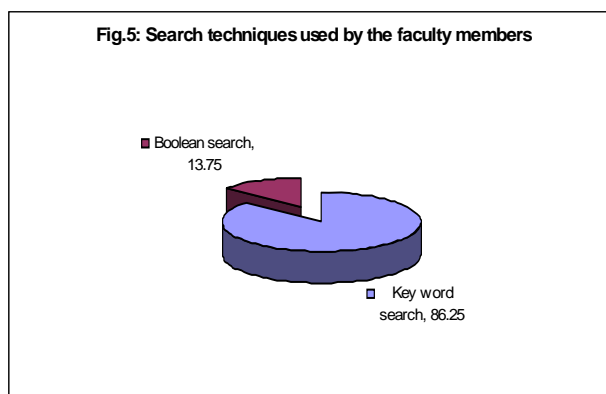
It is evident from Figure 5 that 86.25 percent of the faculty members are using the keyword search technique and 13.75 percent of them are using Boolean logic search technique for information retrieval from the online databases. Hence it can be concluded that most of the faculty members are using the Key Word search technique for information retrieval.

Problems in web searching

The distribution of faculty members according their problems in web searching is shown in Figure 6.

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Fig.6: Problems of faculty members in web searching

It is evident from Figure 6 that the problems faced by the faculty members in web searching are availability of Internet accessing (42.5%), lack of command (38.75%), lack of technical experience (11.25%) and lack of terminology (7.5%). Hence it can be concluded that most of the faculty members are facing the problems of availability of internet access.

Satisfaction of faculty members

The distribution of faculty members according to their satisfaction of web services is shown in Figure 7.

Fig.7: Satisfaction of faculty members with regard to web services
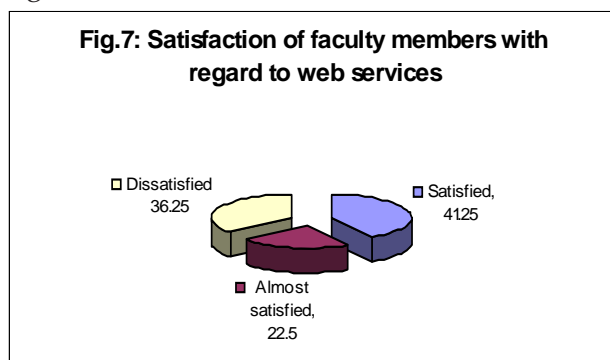
It is evident from Figure 7 that 41.25 percent of the faculty members are satisfied with regard to web services, 36.25 percent of them are dissatisfied and the remaining 22.5 percent of them are almost satisfied. Hence it can be concluded that most of the faculty members (63.75%) are either satisfied or almost satisfied.

Conclusions and Suggestions

1. It is evident from the data that majority of the faculty members (58.75%) are using the digital libraries and therefore, it is imperative that Internet facility in libraries and online connectivity in departmental libraries should be strengthened further.

2. The research reveals that most of the faculty members (61.25%) are spending half an hour on an average in digital libraries in search of online information and therefore, the faculty members should be trained and guided properly in order to equip them for procuring the required information through online search at a quicker pace and in a focused manner.

3. It is also found that most of the faculty members (61.25%) are searching for the required information with reference to title approach rather than the author and subject approaches and therefore, faculty should be trained in the search techniques and methods in order to facilitate easy accesses to information.

4. The research also discloses that most of the faculty members (86.75%) are getting accesses to the full text databases and therefore, it is suggested that increasing database facilities should be provided.

5. It is also found by the researchers that majority of the faculty members (86.25%) are using the key word search for information retrieval from the online database. If the faculty is properly trained then it will definitely enable them to procure the required information in an easy and expeditious manner.

6. It is also found that most of the faculty members have the perception that the primary problem encountered by them in web searching is the availability and operation of the Internet accesses. Hence, it is suggested that online bandwidth facility should be upgraded and strengthened.

7. It is also found that an appreciable number of faculty members (63.75%) are contented and which also includes the almost satisfactory category with the web services. This clearly points out there is no scope for complacency as there is much grater scope for improving the access to web services. This requires the training of the faculty in user friendly approach and techniques for easy access and procuring of the desired information without any problem or hitch.

Acknowledgement

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