Introduction

A Consortium could be described as a group of organizations who come together to fulfill a combined objective that usefully requires co-operation and sharing of resources. And need to have a clear mutual goal in order to ensure their success. A library Consortium formation can be local, regional, state, national and inter institutional level.

According to Webster's 3rd new International Dictionary, Library consortia is "an agreement, combination, or group formed to undertake and enterprise beyond the resources of anyone member" (Merriam Webster online dictionary. 2008)

Online Dictionary for Library and Information Science (ODLIS) defines Library Consortia as "an association of independent Libraries and/or Library systems established by formal agreement, usually for the purpose of sharing". Membership may be restricted to a specific geographical region, type of Library (Public, Academic, and Special) or subject specialization". (ODLIS-Online Dictionary for Library and Information Science)

Consortium is the term, which has many meaning. In the beginning libraries work in the field of collection development and resource sharing in the widest sense of word. Later on cooperative cataloguing system were as consortia. As purchasing association in the network environment the term "Consortia" is now widely used.

Review of Literature

The study of related research implies locating, reading and evaluating research reports. The survey of the literature is a crucial aspect for planning of the body of research. The
investigators reviewed only those studies which are related to the present study.

It was revealed that majority of the users are aware about the availability of online journals. And majority of respondent indicated that they make use of online journals for their research work. It was also found that users faced problems while using online journals. A need was also felt by some research scholars regarding inclusion of some more e-journals in UGC-Infonet Consortium (Zaidi and Bharati, 2008). The users faced problem while accessing e-consortium and lack of awareness of e-resources available. It was suggested that a training programme should be conducted regularly to improve the usage of e-journal consortium. (Gupta and Rawtani, 2008) There is a need of conducting regular orientation/training programme for the UGC Inforonet programme; more number of e-journals to be included in the UGC Inforonet consortium (Veenapani, Singh and Devi, 2008). A high proportion of teaching and research staff are aware of the collection of electronic journals and there is an increasing preference for the electronic information sources to the detriment of the printed format. The collection of electronic journals is highly valued and most users expect to increase their use during the next few years. The results also confirm the importance of discipline and age as explanatory factors of the use of electronic journals (Borrego et. al., 2007). In a study under the title "Preserving perpetual access to electronic journals: A Korean consortial approach" This study describes the key findings of the Korean Electronic Site License Initiative (KESLI), established by the National Digital Science Library to develop a digital archive of electronic journals in Korea. Research and relevant activities included developing system architecture, suggesting journal selection criteria and publisher selection criteria, choosing a set of metadata elements, and addressing stakeholders’ concerns. Recommendations for further tasks have been made in order to have the system fully operating by December 2007 (Choia and Parkb, 2007). A study observes that electronic journals continue to usually be the format of choice for institutional serials subscriptions. However, in developing countries this is not always the case, due to access and connectivity issues. He found that insufficient administrative infrastructure and resources were the major contributing factors and reasons why harnessing of e-journals is not more ubiquitous and common in Nigeria. The paper offers some useful suggestions on how to tackle these problems through constant training of users on the use of internet, networking all libraries' computer terminals, provides stand-by generator, and put in place a technical-oriented manpower. Finally, there is a need to overhaul the telecommunication industry so as to get a better result in term of Information Technology development in the developing countries (Ajegbomogun, 2007). Authors discuss the concern over the archival of electronic journals such as unprecedented pace of technological developments, hardware and software updates. Copyright issues and mergers cessation and stoppages of publishing industries. The successful operation of library consortium clearly depends upon a number of things such as good working relationship among the members and consortium headquarter clear policies and priorities, attempts to address the issue and concern etc. However, the consortia initiatives in India are not popular and the trends are slowly catching up among the professional community. Now libraries recognized that they can accomplish more by working together than they can individually (Bavakutty and Azeez, 2006). The libraries and information centers with their static financial allocations have to consider new ways to consolidate global resources amongst them in order to maximize their limited financial resources. Fortunately, availability of powerful computers at affordable cost, speed of telecommunication networks to remote areas, advent of internet, increasing interest in creating digital contents etc, are now helping the library and information professionals to give answer to the challenges occurring due to the explosion of information and knowledge, increasing cost of library materials, changing format of reading materials, shrinking library budget and increasing demand of the users for information and knowledge. Keeping in view of these factors, he discusses the concept of resource sharing and the role of library consortia as an effective collaborative approach to face challenges of modern librarianship (Bhatt, 2006).

**Objectives of the Study**

The major objectives of the study are as follows:

i. To identify the awareness and use of UGC-Infonet Consortium by research scholars;
ii. To know the place where the research scholars accessing it;
iii. To find out the purpose and degree of utilization of UGC-Infonet by the research
scholars;
iv. To assess the way of influence and the level of satisfaction;
v. To reveal the factors that promoted or hindered in the use of UGC-Infonet consortia;
vi. To suggest remedial measures for the improvement of the use of UGC-Infonet Consortia.

Scope and Limitations

The scope of the present study is restricted only to the research scholars of the University of Delhi, India and use of the UGC-Infonet consortia for their research work only. The geographical area is limited to Delhi only.

Methodology

This study used questionnaire to collect the data from respondents, as many similar studies conducted earlier also used this method for data collection (Naved Ahmad and Nishat Fatima, 2009). Besides questionnaire, the investigators applied observation and informal interview to collect the data from the respondents.

Sample Population

A total number of 100 questionnaires were distributed randomly to the selected Research scholars of University of Delhi at the university campus in the year 2009. Out of which, 95 duly filled questionnaires were returned back by the respondents showing an overall response rate of 89.09 percent. So, there are just five (05) questionnaires were rejected due to incomplete responses. The authors visited many times and approached the respondents to increase the response rate.

Variables

In order to achieve the objective of the study, authors selected the Social Sciences Research Scholars of the University of Delhi.

Pilot Survey

The pilot study ensures the present questionnaires are relevant and meaningful to the average respondent and to decide which questions were relevant for the purpose of study. The investigator distributed questionnaire among 20 research scholars of University of Delhi, for the pilot study which was very helpful in modifying the questionnaire suitably.

Data Analysis and Interpretation

Data collected through questionnaire were organized and tabulated by using statistical method. The graphs were presented in an easiest way to understand our study.

Knowledge about UGC-Infonet Consortia

Research Scholars were asked whether they know UGC-Infonet Consortia. The Graph-1 indicates that 93.68% of respondents were aware about UGC-Infonet Consortia and only 6.32% of respondents were not aware of UGC-Infonet Consortia. Hence, it was found that majority of the research scholars were aware about UGC-Infonet Consortia.

Source of Knowledge of UGC-Infonet Consortia
It is noted that different sources such as guidance of the library professionals and teachers, advertisements or through web searching, the consortium is known to the Research Scholars. The following graph shows the response of the Research Scholars regarding sources through which UGC-Infonet Consortia is known.

(Multiple answers were permitted)

It is interesting to note that 35.78% research scholars said that they know the UGC-Infonet Consortia through University Library followed by 34.74% Research Scholars know the same by Teachers and Research Supervisors, 33.68% know the consortium by Co-Research Scholars, 22.10% know the UGC-Infonet Consortia by University Website, 20% know the Consortium by Library Professionals, 14.74% know the Consortium by searching the Web, 10.53% know the consortium through advertisements and only 2.11% responded that they know the consortium through other sources. (Graph-2)
Research Scholars were asked where they access UGC-Infonet E-Journals and major purpose of the question was to identify the place where Research Scholars obtained the E-journals and what extent they access. The Research Scholars have been accessing the E-journal from Department Computer Labs, Computer Center and University Library.

The Graph-3 summarizes where the Research Scholars accesses E-journals. Majority 55.78% of the scholars were accessing the E-journals from University Library access terminal. 47.36% scholars were accessing E-journals from University Computer Center. Accessing from the Department Computer Labs limited to 25.26%. A few 3.15% were accessing E-journals from other places.

**Purpose for using UGC-Infonet E-journals**

Research Scholars were asked about the purpose of using the E-journals. Even though the purposes are many, the major purpose and the response of the students are given below.
The Graph - 4 shows that 81.05% majority of the respondents using e-journals for research work, and 47.36% using for finding information in the area of specialization, 42.10% were using e-journals for keeping up-to-date subject information and 36.84% using e-journals for study. A good share of students ie, 27.36 % using e-journals for publishing articles and books. Use of e-journals limited to 15.78 % for preparing UGC-National Eligibility Test.

Frequency use of UGC-Infonet E-journals

Here an attempt has been made to find out the frequency use of E-journals. Graph-5 shows the frequency of use of E-journals by Research Scholars of Delhi University

Graph - 5 reveals that 27.88% of students use the UGC-INFONET E-journals daily followed by 45.02% use at 2-3 times in a week. Almost 13.48% went once a week and 8.36% 2-3 use one in a month same and 5.26% use the e-journal occasionally.
Maximum Use of Full-text E-Journals

Maximum usage of full-text e-journals accessed by students through UGC-Infonet Consortia is as follows: Emerald, Cambridge, Taylor & Francis, Spring & Kluwer, J-Store, Project-Muse, RSS publication and ACS publication. It is noted that the Taylor & Francis is the leading usage as 38.94% Research Scholars responded in the study followed by 36.84% Research Scholars searched journal Cambridge and Springer & Kluwer, followed by 31.57% respondent searches Elsevier Science journals, 24.21% Research Scholars search journal published by J-Store. Only 24.21% students access the publication of Emerald publishers, 10.52% students access the journals of Project–Muse, 7.36% students search journals of ACS publication, 6.34% students search journals of RSS publication, Few students 4.21% searches e-journals of other publishers. (Graph - 6)

Use of Search Techniques

There are different techniques used to search in the database for relevant articles in one's field. Commonly used techniques are Boolean Operators, Truncation, Phrases search and wild card. The uses of these techniques by the Research Scholars of Delhi University are under.

Graph - 7 indicates that most of Research Scholars 42.10% are using field search techniques, followed by 27.37% using phrases, 25.26% using Boolean Operators and 10.53% uses truncation as a search techniques. Only 3.16% resounded that they use Wild Card as search techniques same percentage uses other techniques for searching.
Need of User Orientation/Training Programme

Research Scholars were asked if any training programme or orientation is needed to know and search the UGC-Infonet e-journals. The responses of the Research Scholars are given below.

It is observed from the below table that 85.27% of Research Scholars responded that there is need for training or orientation programme to know searching of the UGC-infonet journals and 14.73% of the Research Scholars responded that such programmes are not needed. (Graph-8)

Need for Printed Journals

There was a question "whether a print format journal is essential in addition to e-Journals?" The Research Scholars responded to the question as under:

It is surprising to note that print journals are also needed in addition to e-journals, by majority 86.32% Research Scholars and 13.68% responded that print journals format is not needed. (Graph – 9)
**Need more E- Journals in UGC-Infonet Consortia**

Research Scholars were asked "whether more full-text journals are needed in the UGC-Infonet Consortium?"

It is clear from the Graph - 10 that majority 79.96% of the respondent replied that more journals are needed in the Consortium and few of the respondent 20.04% replied that no need for more journals in the Consortium.

**Satisfaction with Existing Internet Facilities**

For browsing electronic journals, there is a need for sufficient Internet facilities in the library. The response of the Research Scholars regarding internet facility as under

The Graph – 11 clearly shows that 70.52 % of Research Scholars are satisfied with the existing internet facility and remaining 29.48 % of the respondents are not satisfied with the existing internet facility.
Influence of the UGC-Infonet E-Journals on Research Efficiency

Research Scholars were asked "how the UGC-Infonet E-journal Consortium affects their research efficiency?" Even though the Consortium influenced in many ways as shown in the following graph.

(Multiple answers were permitted)

The Graph – 12 shows that majority 62.10% of Research Scholars experiences that the e-journals helps to expedited research process, 44.21% responded that it facilitate easier to access the information, 42.10% responded that it facilitate to access the up-to-date information, followed by 36.84% responded to improve professional competence, 31.58% responded that it facilitate faster to access the information and it also influence access to wider range of information to 26.31% of the respondents and the other data follows.
Access Problems
Graph - 14 shows that 46.31% of the Research Scholars indicated that Lack of system speed while accessing was the major problem followed by 44.21% of Research Scholars faced difficulty in accessing full-text, 32.63% of the Research Scholars indicated slow internet connectivity as well as lack of sufficient E-journals, 21.10% of Research Scholars responded that limited access terminals is the problem, and 16.84% responded that they face difficulty in finding the relevant information, 20% responded that they face retrieval problem, 15.79%, respondent indicated that they faced insufficient time and training. A few including loading (Retrieval Problem) followed by 13.68% indicate that poorly designed website make problem, followed by 5.26% responded they face problem to read the journal from the computer. Only 2.1% respondents face other type of problem.
Evaluation of UGC-Infonet Consortia

There is a need to evaluate the UGC-Infonet E-journal consortium. By searching information, the users can only decide the usefulness and satisfaction with the services. The responses of research scholars on the usefulness and satisfaction were stated as under Graph 14:

The above graph indicates that, 49.51% of Research Scholars covered under the study revealed that the consortium was satisfactory, followed by 32.62% Research Scholars stated that it was good, 13.71% stated that it was excellent and remaining 4.16% it was poor.

Conclusion and Discussion

The present study sought to examine the "USE of UGC-INFONET consortia by the Research scholars of Delhi University, Delhi: A Survey". The survey reveals that most of the Research scholars are aware about the UGC-INFONET consortia. From the survey the investigators have been able to find out that maximum number of the research scholars were consulting and accessing the E-journals from the university library and computer center not just for research purpose but also for keeping update in their subjects. Most of the researchers consult E-journals daily. They consult almost all major publishers’ E-journals. Most of the Research scholars feel easy to use E-journals rather than printed journals. But the level of satisfaction regarding the facility of internet is low. They are in need of full text articles and they require effective training and orientation course on how to use e-journals effectively

The study identifies that the majority of the Research scholars (93.68%) are aware of the UGC-INFONET consortia. The study also indicates that (35.78%) of Research scholars get information about UGC-INFONET e-journal consortium through University library. The investigators revealed that majority of Research scholars in DU (81.05%) use UGC-INFONET E-journals for their research works.

The analysis of data shows that Taylor & Francis most accessed journal as substantial number (38.94%) of Research scholars using it.

It was found that most of the Research scholars (42.10%) use field search techniques to search in the database of the consortium.

The investigators found that 85.27% of Research scholars feel the need of training on how to exploit these e-resources in efficient and effective way. Majority (86.32%) of Research scholars prefer to take print format of journal articles in addition to E-journals.

The investigator found that UGC-INFONET consortia have an influence on the study and research of 62.10% of Research scholars by the way of expedition of research process. A substantial number of Research scholars are satisfied with the services provided by UGC-INFONET consortia.

It is recommended that the user awareness programme should be held from time to time to increase the utilization of UGC-INFONET consortia. To provide the E-journals facility efficiently effectively the number of PCs and printers must be increased in the computer center and departmental labs. User training programs on information searching skills should be provided for the proper and effective exploitation of UGC-INFONET consortia. The university library professionals should organize regular workshops with the cooperation of INFLIBNET. Number of journals provided through the UGC-INFONET consortia should be increased in respective research fields by accessing the need of researchers. University library should revise the website having proper link to the concerned site rather than keeping printed document of publishers.

References


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