CHAPTER – VI

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6.0 Introduction

The present study has attempted to study the impact of electronic information resources on users in university libraries of Karnataka State. It provides a broad overview of the use of Internet, electronic journals / databases, CD-ROM databases in general, and their impact on library users in particular. The study examines in detail the extent of use of electronic information resources by the members of the faculty, research scholars and P.G. students of Science and Technology discipline in the universities of Karnataka State.

In this research study, the researcher has taken into consideration all the relevant resources, published and unpublished users' perceptions, their use of electronic information resources, and examined them in detail to understand the impact upon users. Inferences were drawn from the analysis of the data. Subsequently, the following findings have been evolved.

6.1 Major Findings of the study

6.1.1 Background Information about the Respondents

1. Users in this study consisted of the faculty members, research scholars and P.G. students of six universities of Karnataka (table – 5, pp 174).

The highest response has come from Mangalore university (87.27 %) and least response has come from Mysore university (75.14 %).
2. Of the total 706 surveyed, 544 (77.05%) respondents are male and about 162 (22.95%) respondents are female (table – 6, pp 175).

3. It is observed that out of 706 respondents, 231 (32.72%) are the faculty members, 240 (34.00%) are research scholars and 235 (33.28%) are P.G. students (table – 7, pp 176).

6.1.2 Library use

4. It is general understanding that the frequency of users’ visit to library depends upon the resources, organization, maintenance and value added services that it provides. It is found that the majority of respondents, that is, 172 (24.36%) visit library everyday, and about 168 (23.80%) respondents visit library twice a week (table – 10, pp 180).

5. A question was asked to get the opinion about the use of information electronic resources. The analysis of the data reveals that the majority of users depend upon both print and electronic information resources (tables 11-13, pp 181-183).

6. It is observed from the data that the majority of respondents use the information sources for teaching, research and study purpose (tables 14-16, pp 184-186).

6.1.3 Use of Internet

7. Internet is described as the backbone of the information superhighway. The survey indicated that the majority of respondents, that is, 84 (87.50
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% from Mangalore university constitute the highest percentage, and 99 (73.33 %) respondents from Karnataka university record their least use of Internet on a regular base (table – 17, pp 189).

8. Users were asked about the place from where they access Internet. The response of users regarding the place of Internet access reveals that they do not depend only on library for Internet access. Alternatively, they access Internet at their department, cyber café, departmental laboratory and at their homes (tables 18-20, pp 190-192).

9. Users were asked about the primary use of Internet. According to the data that the majority of respondents indicate that e-mail is the most primary use of Internet, followed by research and browsing e-journals purpose (tables 21-23, pp 193-195).

10. The analysis of the data about users’ opinion about much preferred search engines on the Internet has indicated that Google and Yahoo search engines are more frequently used by the respondents, whereas for AltaVista, Lycos and MSN search engines are used less frequently (tables 27-29, pp 201-203).

11. From the analysis of the data on impact of Internet on users, it is evident that the majority of users agree that it is easy to browse Internet sources as there is an accuracy of output. The data further reveals that there is immense impact of Internet (as a source of information) on users’ study / research / teaching (tables 33, pp 209).
6.1.4 Electronic Information Resources: General Information

12. It is evident from the data that the majority of users agree that they are aware of electronic information resources available in the library (table – 34, pp 211).

13. The majority of users agree that they can now do better research because of the availability of electronic information resources. Further, it is clear that the majority of users indicate that they are uncertain about the statement they have to rely more on others while searching electronic information resources (tables 35-38, pp 213-216).

14. Users' were asked about the convenience of accessing information in electronic format compared to print sources. The survey has indicated that the majority of users agree that information locating and identifying, accessing and using information are most easier compared with print sources (tables 39-42, pp 218-221).

15. It is important to know the users’ different skills in making use of electronic information resources. The data indicates that the majority of users learnt by trial and error method, and by the advice of their friends. It reveals that the majority of respondents are self reliant and competent in accessing electronic information resources (tables 43-45, pp 223-225).
6.1.5 Use of Databases and Subject Gateways

16. A question was asked about the awareness of bibliographical, full text databases and subject gateways / portals. It is evident from the data that users agree that they have fair knowledge about the bibliographical, full text databases and subject gateways / portals in their concerned subject (table - 46, pp 227).

17. The data about users’ opinion about information content in electronic databases and e-journals. Its analysis indicates that information content in electronic databases and e-journals is better than that of print versions (tables 47-49, pp 228-230).

18. It is observed from the data that the majority of users indicate that they access electronic databases and journals to search bibliographical information, full text articles whose details are already known and access the full text of articles after searching from the databases (tables 50-52, pp 231-233).

19. Users were asked to give their opinion about the frequency of use of full text electronic journals, databases and subject gateways / portals. The data reveals that the majority of users access full text journals fortnightly (table – 53, pp 234).

20. From the analysis of the data regarding the impact of electronic databases / journals and subject gateways / portals, it is observed that the mean value for the two statements is agreed by the users. It reveals that
there is a tremendous impact of electronic databases / journals and subject gateways / portals on users study / research / teaching (tables 59-60, pp 240-241).

6.1.6 Use of CD-ROM Databases

21. It is learnt from the data that the majority of users are aware of the CD-ROM databases available in the library. The data further reveals that there is a deep impact of CD-ROM databases on users study / research / teaching (table – 62, pp 245).

22. It can be inferred from the data that the majority of users indicate that the information content is better than that of print versions (tables 62-64, pp 245-246).

23. Users’ were asked to compare CD-ROM databases with print sources. The data indicates that it is easy and convenient to search CD-ROM database than a print version. Further, it reveals that search time of CD-ROM database is less than that taken by print sources (tables 65-67, pp 248-250).

6.1.7 Opinion of Users about attitudes of Library Staff

24. It is evident from the analysis of data (tables 69-71, pp 253-255) that users are uncertain about the above statements. It reveals that they are not taking personal interest and are not demonstrating how to use electronic information resources. The opinion of P.G. students about the
performance of the library staff with regard to technical efficiency,
services offered adapting to the changing needs of the users is very slow.

6.1.8 Problems faced by the users while accessing and using EIRs

25. A question was asked about the problems faced by users while accessing
and using electronic information resources. It can be inferred from the
data that the majority of users do face problems of non-availability of
suitable personal computers and software. It is also found out that there
is lack of support from the library staff (tables 72-74, pp 257-259).

6.1.9 Need for Information Literacy Programmes

26. From the analysis of the data on the need for training, orientation or
guidance, it is clear that the majority of users need minimum training,
advice or guidance. It clearly indicates that users are aware of, and are
using, electronic information resources (tables 75-77, pp 260-262).

6.1.10 Advantages and Impact of EIRs

27. It is found out from the data that electronic information resources
provide faster and reliable communication and multiple choices of
formats to the users (tables 78-81, pp 263-267).

28. The majority of users agree that there is some improvement in the
quality of study / research / teaching after using electronic information
resources. Further, it is found out that the availability of electronic
information resources has increased the contribution of research papers
by the users to a great extent (tables 84-85, pp 270-272).
6.2 Impact of Electronic Information Resources on Users

1. The present study projects the search behaviour of the user and use behaviour of electronic information resources. Moreover, it also offer avenues for the users to enhance, develop, modify and sharpen the search strategy which is a self learning process by constant usage of e-resources in the course of the study / research / teaching.

2. The study indicates that users are switching to electronic information resources because of many advantages like multiple choices of formats, multi user access and contains links to other cited articles etc.

3. The study throws light on the awareness of computers, use of search engines and exploitation of database search and electronic information resources.

4. Users are slowly marching towards e-journals because of availability of wide range of online databases / e-journals being provided by the INFLIBNET through UGC-Infonet consortia programme (which an individual library cannot dream of).

5. It is also observed that users are not dependent on others when search electronic information resources. They learn to explore electronic information resources effectively by trial and error method.

6. It also serves as continuous lifelong learning process for the users, academic institutions, R & D activities are thriving and depend on
nascent uniform thought which in turn forces the users to use electronic information resources.

6.3 **Implied Suggestions**

The views and comments offered by the respondents have enabled the investigator to offer some feasible suggestions for deriving maximum benefit from the impact of electronic information resources on users.

These implied suggestions are mentioned below:

1. The majority of users prefer Internet as their first source to look for the needed information. They also agree that it has a significant impact on their study / research / teaching. Hence, the authorities of the university in general and libraries in particular must make all efforts to upgrade Information Communication and Technology (ICT) infrastructure for providing seamless broadband Internet access to users.

2. Users have indicated that they learn about information skills for accessing electronic information resources by trial and error and through friends. However, this results in users' wasting their precious time and places them into avoidable efforts.

   Hence it is suggested that the authorities of the library should develop new information literacy programmes, which impart required skills to users in accessing electronic information resources.
3. The data about the use of e-resources reveals that users prefer electronic information resources compare to print sources because of their format and delivery. Hence, libraries must make all out efforts to increase the number of e-resources, such as e-journals, online databases in their collection.

4. CD-ROM databases are the e-resources, which are available for access off-line as well. The opinion about convenience of search is also favourable. So it is recommended to the library authorities to identify, procure and make available more and more CD-ROM databases for users.

5. Users access Internet sources from several places, like Library, department, cyber café and home. However, it has been identified by the help of the survey that the users are facing difficulties in libraries as these are not enough number of workstations. Libraries must make provision of workstations in commensurate with the number of library users. Non availability of computers results into users getting frustrated. Hence it is recommended to the authorities of the university libraries to create necessary infrastructure facilities.

6. The responsibility of the library personnel is increasing day-by-day in a changed environment. But the present study / survey revealed that the library staff does not take keen interest to help users in accessing electronic information resources and also users have expressed their
displeasure towards the library staff. These behavioural issues should be improved by providing adequate training to the library staff about the use of electronic information resources and first make them confidant users. This will certainly bring about some change in their attitude.

7. The study reveals that there is some improvement in the quality of research / teaching and contribution of research papers. During the first part of the 21st century there is a fast increase in the number of electronic information resources and at the same time assured to be the most important sources of information for research and educational institutions like universities. In view of this, there is a dire need to expand the profile of online resources available at these libraries. Publications of some societies or publishers are not yet covered.

Hence, the authorities of the university are urged to allocate more finance on priority base towards this. Unless additional finance is provided, it is very difficult for libraries to obtain licenses for online resources.

8. The present scenario of the library is that all the universities get maximum online resources through the UGC – Infonet consortia. However, not all universities get maximum electronic information resources through the UGC Infonet. There is a need to increase the number of electronic information resources covered under the UGC – Infonet Programme. Hence it is suggested that the authorities of the
university libraries must take up this issue with the UGC / INFLIBNET to cover and provide access to maximum number of electronic journals to support the promotion of quality higher education in the state of Karnataka.

9. The present study reveals that all the six universities in the state are heavily suffering from shortage of funds. And there is no expected support from the authorities of the universities regarding the procurement of the required electronic information resources. As a result, university libraries are failed to meet the needs and requirements of the users. Hence it is recommended to all the state universities that, they should come together and to form consortia. This consortium could be discipline based or a general one. This will definitely add substantial electronic information resources to the existing collection of the university libraries.

6.4 Conclusion

The current trends in electronic environment suggest a complete revolution in the status of collection development. As Information Technology (IT) advances, the emphasis of academic libraries has focused upon the intrinsic excellence of collection development suitable to electronic information resources.
During the past few years lot of information is available in a variety of forms like CD-ROM, online databases, e-journals etc. Inventions of devices, like CD-ROM, DVDs, flashcards, pen drives, etc., which have huge storage capacity, have changed the outlook of libraries. These electronic information resources and storage devices bring about drastic changes in the academic libraries because of their distinct advantages like convenience of search, low search time, most updated data etc. The infrastructure development of these electronic information resources is very expensive also.

The electronic information resources have considerable impact on the collections of academic libraries. The significant factor is that some of these sources are available only in electronic forms. Moorthy and Karisiddappa (1996) opined, “The impact of electronic publishing in general and electronic journal in particular is four-fold. These are more useful due to inherent capabilities for manipulation and searching, providing information access to acquiring information resources is cheaper, savings in storage and maintenance, etc., and sometimes the electronic form is the only alternative. These offer a variety of capabilities to enhance the quality of services offered by Libraries and Information Centers (L & ICs).

The developments in the ability to store and retrieve a large amount of information have stimulated enough interest in new ways of exploring information for the advantage of academic and research community. In the past
few years many factors spurred the interest in the information delivery mechanism in academic libraries. In India, the initiatives of UGC-Infonet and INDESST and the proposed e-journal consortia have paved the way for networking of electronic information resources among all the universities. These issues demand the university library and information professionals to be proactive, in developing new collection management policies and models to sustain in the resultant hybrid information environment.

The present study reveals that electronic information resources have a positive impact on library users. The future of the library and information services at academic libraries depends upon major factors, like, availability of manpower in adequate proportion, which continuously keeps updating its IT skills and determination of higher authorities in allocating appropriate recurring grants to procure, update and maintain IT infrastructure and electronic information resources.

The present study also makes an all out effort to present the profile of all the state universities of Karnataka State. Further, the study also attempts to make an assessment of the impact of electronic information resources on library users. It can be seen that users' attitudes towards library resources are changing, and have realized the importance of electronic information resources.
6.4 Areas of Further Research

The present study suggests that there is ample scope for further research on the impact of electronic information resources on users in university libraries. This study is restricted to Science and Technology faculty of six university libraries in Karnataka State. However, a detailed study can be carried out on library users by considering other faculties like Social Sciences and Humanities either separately or collectively or comparatively. The present study may be continued with wider scope and different approach for instance, comparative study of Agricultural universities and Non-Agricultural universities in Karnataka State.

Internet provides opportunities for communication among its users. It is one of the electronic resources, and also offers librarians an the opportunity to apply their established skills as educators, information managers, custodians, information providers, and change agents in their work with Internet users. Therefore, the present study will also widen the scope of research on the Impact of Internet Information Resources on Users in University Libraries.

Information Literacy Programmes impart skills to users in accessing electronic information resources. The present study also provides scope to study in detail the need for developing the required information skills in using electronic information resources in academic libraries.
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References