Chapter 9

Users' Needs and DELNET Services

1 Introduction

Users tend to live under the shadow of ignorance and they pick up bits of information that become available to them through known or unknown sources. They are never sure about the ultimate resources available on the topics of their research. Thus their search and research is mostly relative in nature. The users create for themselves small worlds of information around their topics. These worlds expand provided the users have the resources or information disseminators that help the users in moving closer to objectivity by providing the necessary and adequate information to them.

The third and fourth laws of library science, viz. "Every user his or her document" and "Save the time of the user" lay emphasis on the importance of the user's research and his or her time. Information providers and librarians have thus a moral obligation towards the users. In order to fulfil the needs of the users and achieve better results in this task, it is important to be familiar with:

(a) the user's behaviour;
(b) the user's exact information requirements;
(c) the information resources, both indigenous and foreign, and their locations within a library and outside in other libraries and centres; and
(d) the document delivery facilities.
The Survey conducted by me of 150 DELNET users reveal from the Tables 20 and 21 the behaviour of users towards information.

Table 24
Approaches to Information by Users

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right to information</td>
<td>116 (77.3%)</td>
<td>34 (22.7%)</td>
</tr>
<tr>
<td>Interested in selected information only</td>
<td>37 (24.7%)</td>
<td>113 (75.3%)</td>
</tr>
<tr>
<td>Ready to learn IT for accessing</td>
<td>140 (93.3%)</td>
<td>10 (6.7%)</td>
</tr>
<tr>
<td>Access to information: not possible without IT in future</td>
<td>124 (82.7%)</td>
<td>26 (17.3%)</td>
</tr>
</tbody>
</table>

Table 25
Impact of Non-Availability of Information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Great effect</td>
<td>17 (11.3%)</td>
</tr>
<tr>
<td>Some effect</td>
<td>86 (57.3%)</td>
</tr>
<tr>
<td>No effect</td>
<td>40 (26.7%)</td>
</tr>
<tr>
<td>Do not know</td>
<td>7 (4.7%)</td>
</tr>
</tbody>
</table>

While 93.3 per cent of the users are ready to learn IT to access information, it is surprising to note that 86 per cent of them feel that non-availability of information is going to have some effect but not a great effect on them. What is even more surprising is that 40 per cent of them feel that it will have no effect on them. This means that works based on comprehensive research are not making an impact in the society. Respect for scholarship is lacking. There is a need therefore to
promote values which ensure respect for scholarship and it is only then that the users can get serious about collecting information.

2 Users’ Needs

In order to study the needs of users, I would draw your attention to the following activities of a network which are essential. These suggestions are made by S.V. Sangameswaran and M.V. Gopinath[1], P. S. Kwatra[2], B. Guha[3] and R. Subbaiah[4] considering the needs of Indian users:

Users

1. Identify the potential users and their categories;
2. Identify the levels of involvement of users with network services;
3. Identify the different approaches of the users in collecting information;

Information Requirements

4. Identify the information requirements of users: categorise them by levels and type of communication media, etc. and match them with the available resources and kind of users’ needs;
5. Identify the priorities of users’ needs;
6. Design the user orientation/instruction/education programme;
7. Orient the user with network services and databases;
Training

8. Provide training to the users in accessing information;

Existing Resources

9. Identify existing resources and services, for better performance and avoidance of duplication of efforts and saving of finance;
10. Develop databases and services that meet the users' needs and approaches.

Discouraging Factors

11. Identify the limitations and problems which discourage the use of network services.

Evaluation

12. Evaluate the various existing services in relation to the users needs and introduce changes and new services;
13. Develop an information system which gives regular feedback from users for introducing effective improvements.

3 Understanding the User

In a network environment the actual users are generally at a distance. They access information through the member-libraries of a network. In each member-library, either the staff can help them to
access network information or an intelligent user may use a terminal himself and access information. The users generally may not know what may be available through a network. The management of a network may also be unaware of the precise needs of the users and therefore a wide gap emerges between the networked information and the needy user. How can this gap be filled? Various facets that strengthen this correspondence need to be examined:

The survey conducted of DELNET users indicates the following results:

Table 26

<table>
<thead>
<tr>
<th>Evaluation of Libraries by Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Personal collection</td>
</tr>
<tr>
<td>Unaware of resources of interest</td>
</tr>
</tbody>
</table>

Table 27

<table>
<thead>
<tr>
<th>Methods of Collecting Information by Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Library</td>
</tr>
<tr>
<td>Citations</td>
</tr>
<tr>
<td>Indexes/Bibliographies</td>
</tr>
<tr>
<td>Databases</td>
</tr>
<tr>
<td>Other sources</td>
</tr>
</tbody>
</table>
The fact that users do not undertake extensive research is noticeable as 56 per cent of them depend upon personal collection, which would normally be outdated and 68.7 per cent are unaware of sources of interest. The positive factor is that 72 per cent of users want education about resources (Table 25) and that confirms that if proper research facilities are available, the Indian users will perform well. There is an in-built need for access to quality information.

From Table 23 we again notice that a very small percentage of users, i.e. 1 to 10 per cent make specialised searches themselves, the rest do not do so. Here again the education of users becomes necessary.

In a network environment databases are not in close proximity. They are at a distance. Therefore, the databases of the network should be easily accessible and affordable. Users' approach to collecting or accessing information is determined by their socio-economic and educational backgrounds, their behavioural patterns, reading habits and their dedication to research.[5] But in a network environment easy access to databases is necessary to help the users who approach information under different compulsions and limitations. Research studies show that remote access to the library's online catalogues helps users to become familiar with the availability of resources.[6] If the remote access is online and interactive, it is preferable [7], but if it is off-line and E-mail based, it is second best. In such an environment the network should increase the number of databases considering the interests of the users and make them available to him or her.
The foremost issue that stands out in this regard is the behaviour, educational background and the precise need of the user. It is important to know whether the user is casual or serious in seeking information, or whether the user wants general or in-depth information.

There are studies made of users' needs vis-a-vis a particular library or a discipline, but in a network environment only those needs of users come into prominence that are able to establish a direct or indirect contact with the network.

The information needs of the users of member-libraries of a network, can be very large. The more the member-libraries of a network, the greater would be the needs of their users. They would be diverse in scope and content. The assessing of these needs can be done by the library staff that provide service to users in each member-library. In India this is done only in very specialised libraries.

In order to break the barrier, DELNET produced posters which were displayed at the participating libraries. This, however, did not result in adequate feedback. A survey made by me of 150 users in the DELNET member-libraries reveals various trends.

It may be useful to know what the preferences for the medium of information among the DELNET users are:
Table 28

Preferences for the Medium of Information

<table>
<thead>
<tr>
<th>Medium</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>136 (90.7%)</td>
<td>14 (9.3%)</td>
</tr>
<tr>
<td>Latest publications</td>
<td>116 (77.3%)</td>
<td>34 (22.7%)</td>
</tr>
<tr>
<td>Periodical articles</td>
<td>115 (76.7%)</td>
<td>35 (23.3%)</td>
</tr>
<tr>
<td>Full text databases</td>
<td>106 (70.7%)</td>
<td>44 (29.3%)</td>
</tr>
<tr>
<td>Newspapers</td>
<td>106 (70.7%)</td>
<td>44 (29.3%)</td>
</tr>
<tr>
<td>Old publications</td>
<td>96 (64.0%)</td>
<td>54 (36.0%)</td>
</tr>
<tr>
<td>Online Access</td>
<td>83 (55.3%)</td>
<td>67 (44.7%)</td>
</tr>
<tr>
<td>Grey literature</td>
<td>69 (46.0%)</td>
<td>81 (54.0%)</td>
</tr>
<tr>
<td>Audio-Visual</td>
<td>68 (45.3%)</td>
<td>82 (54.7%)</td>
</tr>
<tr>
<td>Multimedia</td>
<td>66 (44.0%)</td>
<td>84 (56.0%)</td>
</tr>
<tr>
<td>CD-ROM</td>
<td>61 (40.7%)</td>
<td>89 (59.3%)</td>
</tr>
<tr>
<td>Manuscripts</td>
<td>44 (29.3%)</td>
<td>106 (70.7%)</td>
</tr>
<tr>
<td>Maps</td>
<td>34 (22.7%)</td>
<td>116 (77.3%)</td>
</tr>
<tr>
<td>Standards/Patents</td>
<td>28 (18.7%)</td>
<td>122 (81.3%)</td>
</tr>
</tbody>
</table>

It is necessary to note that the users are interested in all types of resources as far as their research is concerned and the preferences for books (90.7 per cent), latest publications (77.3 per cent) and the periodical articles (76.7 per cent) are the ones that are commonly preferred. As usual, standards and patents have got the least priority to the general set of users.

DELNET maintains a profile of each member-library and takes into account their specialisation, but it does not maintain the profiles of users of the member-libraries. In fact, that should be the job of each
member-library and each library should maintain them for SDI services. They should maintain the profiles by users and search terms and if these are available in machine readable form, they should be forwarded to the network for assessing user needs.

4 User Education

The education of users in accessing information has been in vogue for more than a century now but year after year the processes of user education have becoming increasingly complex. Ian Malley [8] gives us the common definition of user education:

“A process whereby the library user is firstly made aware of the extent and number of the library’s resources; of its services and of the information sources available to him or her, and secondly taught how to use these resources, services and sources.”

The above definition over twenty years old still stands the test of time, though the concept of the library’s resources has widened to world resources because of the roles played by library networks and the INTERNET. A network has two types of users. Firstly and chiefly, they are the libraries and secondly, the users of the participating libraries. Though the main purpose of networking is to help the users, the networks have to educate the users and also the librarians who serve them. Ian Malley [9] makes the following general observations and we could infer what can be deduced in this context:
1. Government departments were more likely to give free instruction to all types of users than private, industrial, commercial organisations;
2. Learned bodies gave instruction at the request of the users;
3. Extensive and in-depth training was more likely to be given by scientific institutions than social science and humanities institutions;
4. User instruction was necessary in special libraries;
5. Teaching the technicians online searching may not be the role that the special libraries will play; and
6. Even if the library staff does the searching, he or she would need the end-user's assistance in creating precise query formulations.

Elizabeth Orna [10] observes that users should:

(i) be aware of what the information service can do;
(ii) identify their information problems;
(iii) communicate them to information staff and discuss with them;
(iv) give feedback to the service;
(v) keep information staff aware of their changing subject interests; and
(vi) involve the service in projects which have information implications.

From the above two sets of statements we note that a library network has to provide training in using information to the libraries and to their users, bearing in mind the type of user, type of library and
ensure that the human resource available at each participating library develops a healthy relationship with their users. It is therefore necessary that user education material on a network should be given to the library staff so that the users are able to fulfil the above six conditions set by Elizabeth Orna.

4.1 Methods of Instruction

It is important to throw some light on the methods of instruction in a network environment so that we get better results. [11] The methods of instruction can be:

(a) Direct;
(b) Semi-Direct; and
(c) Indirect.

4.1.1 Direct Instruction

The network can arrange the direct instructional programmes which can be in the following forms:

Lectures
Demonstration/Workshop
Film, Videotape, Slide/Tape
Slide/Lecture

Since direct instruction is a familiar mode of instruction, it is comfortable. It is time conserving and better organisation and presentation of data can facilitate learning through this
method. But, as each user wants to obtain practical knowledge, demonstration or participation in a workshop would be preferable.

4.1.2 Semi-Direct Instruction

This method helps users to do practical work after lectures. The initial presentation should be such so that users are led to practical work soon after. This kind of training is generally done in groups in workshops.

4.1.3 Indirect Instruction

In a network environment the users are scattered and are directly in touch with the member-libraries rather than with the network. The network has to facilitate learning and therefore discussions, brainstorming sessions and the use of videos and films on the activities have to be arranged at the individual libraries.

It is important for a network to mix and match instruction methods in order to achieve the desired results. The use of online access, INTERNET, slide shows, video and film demonstrations, etc. would be highly useful. In the West users are generally satisfied with the network performance as there is a major shift towards automating networking of libraries.[12]

Inability of users to understand and apply the changing tools of information technology act as one of the major barriers in resource
sharing. The users have to depend upon the service of library and information professionals in this regard. Grace Saw and Vicki Williamson[13] argue that management policies should place higher priority upon the quality of user education programmes, because exponential growth of knowledge and databases was making it difficult for users to access necessary and sufficient information. This is supplemented by M. Pastine[14] in his introduction to the publication on user education and curriculum.

The survey results of 150 users are given below:

Table 29
Training of Users

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need of Education</td>
<td>108 (72%)</td>
<td>42 (28%)</td>
</tr>
<tr>
<td>E-mail</td>
<td>70 (46.7%)</td>
<td>80 (53.3%)</td>
</tr>
<tr>
<td>Accessing DELNET and other online databases</td>
<td>77 (51.3%)</td>
<td>73 (48.7%)</td>
</tr>
<tr>
<td>INTERNET</td>
<td>97 (64.7%)</td>
<td>53 (35.3%)</td>
</tr>
<tr>
<td>Others</td>
<td>16 (10.7%)</td>
<td>134 (89.3%)</td>
</tr>
</tbody>
</table>

Training of users is positively expressed by 72 per cent of the users, while 46.7 per cent to 64.7 per cent are interested in training in IT. We again notice that the users, have a greater interest in training and accessing information.
User Satisfaction

User satisfaction is a relative term. A user becomes satisfied when he uses all the material that he is aware of and which becomes available to him, at a given time and place. His satisfaction is relative and not absolute. Although it is the highest objective of a service provider like a library or library network, the service provider also works within the limitations of resources, time and space.

In order to get better user satisfaction, I may refer to the observations of Piedad Dector [15] regarding the steps taken towards user satisfaction at the Scientific and Humanistic Information Centre (CICH) of the National Autonomous University of Mexico. Serving about 150,000 students, 27,000 professors and researchers, CICH undertakes research on the following five topics in order to increase user satisfaction.

1. Social Sciences in Latin America through the class database;
2. The importance of the services of a magazine/periodicals library in an information centre;
3. Coverage of biomedical information by international indexes and abstracts;
4. The impact of new technologies on services in a library of an information centre; and
5. Scientific dissemination as part of university dissemination.
All the above projects provided inputs for offering better services and user satisfaction.

The views of DELNET librarians for improving user satisfaction are given below:

Table 30
Supplementary Efforts to Achieve User Satisfaction

<table>
<thead>
<tr>
<th>Supplementary Efforts</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of extra information services</td>
<td>40 (80%)</td>
<td>10 (20%)</td>
</tr>
<tr>
<td>Personal interaction</td>
<td>48 (96%)</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Reference support from outside</td>
<td>45 (90%)</td>
<td>5 (10%)</td>
</tr>
<tr>
<td>Other methods used for user satisfaction</td>
<td>8 (16%)</td>
<td>42 (84%)</td>
</tr>
</tbody>
</table>

The above statistics reveal that 80 per cent of the librarians want extra information services to be introduced for users. 96 per cent of them prefer personal interaction with the users to help them. At the same time, 90 per cent librarians want use of services from outside like DELNET to be introduced for their users. This confirms that DELNET's participating libraries want to share resources from outside to achieve the satisfaction of their users.

DELNET offers the following databases and services in 1998:

Union Catalogue of Books: CCF Format
Union Catalogue of Books: MARC Format
Union List of Serials
  Science and Technology
  Social Sciences
  Humanities
Articles Database
Union Catalogue of Serials
Specialists' Database
Jain Database: Full Text
Multilingual Books
CD-ROM Database
Union List of Video Recordings
Union List of Sound Recordings
Urdu Manuscripts Database
Database of Books in Hindi
Database of Theses and Dissertations
DEVINSA Database
Serials: Petroleum and Natural Gas
Directory of Member-Libraries

DELNET also offers the following online services:

ILL Online
DEL-LISTSERVs
Books in Print Database
Books-New Arrivals from INTERNET
Book Reviews
Current Contents

The survey conducted reveals the following status:

Table 31
Use of DELNET Databases by Users

<table>
<thead>
<tr>
<th>DELNET Databases</th>
<th>Familiarity</th>
<th>Status of Familiarity</th>
<th>Status of Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Best</td>
</tr>
<tr>
<td>Union Catalogue of Books</td>
<td>31</td>
<td>119</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(20.7%)</td>
<td></td>
<td>(35.4%)</td>
</tr>
<tr>
<td>Union List of Serials</td>
<td>27</td>
<td>123</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(18%)</td>
<td></td>
<td>(22.0%)</td>
</tr>
<tr>
<td>Database of Periodical</td>
<td>22</td>
<td>128</td>
<td>10</td>
</tr>
<tr>
<td>Articles</td>
<td>(14.7%)</td>
<td></td>
<td>(45.4%)</td>
</tr>
</tbody>
</table>
From the above table we observe that familiarity of DELNET Database among users ranges between 14.7 per cent to 24 per cent, which is very low. The familiarity of DELNET databases among the users of DELNET even for libraries depends upon the efforts made by them show a poor rating. DELNET has been distributing posters and pamphlets among users but the results have not been very encouraging. The participating libraries will have to make a concerted effort. They will be compelled to do so because the status of interest among users in DELNET effects ranges from 65.8 per cent to 70.5 per cent, which is very high. Also, among the users' status of best familiarity with DELNET databases ranges from 25 per cent to 45.4 per cent, which is encouraging and status of good familiarity among them ranges from 38 per cent to 52 per cent, which is again supportive of DELNET's interest in increasing the types of databases and services.

The response of librarians to the users not searching DELNET databases is given in Table 28.
Table 32

Reasons for not Searching DELNET Databases

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware is not functional</td>
<td>2 (4.0%)</td>
</tr>
<tr>
<td>Software is not functional</td>
<td>3 (6.0%)</td>
</tr>
<tr>
<td>Modem is not functional</td>
<td>5 (10.0%)</td>
</tr>
<tr>
<td>No technical staff</td>
<td>1 (2.0%)</td>
</tr>
<tr>
<td>No demand from users</td>
<td>39 (78.0%)</td>
</tr>
</tbody>
</table>

From the above table we notice that the reasons given by the librarians do not include lapses on DELNET's part and are not substantial or convincing. 78 per cent of them feel that there is no demand from users. We have earlier noticed that the users are in need of information and their interest in accessing more information is growing. It is just the lack of social environment which does not make the users compulsive and the librarians more responsive to the needs of users. From the following Table, it has been noticed that users have begun to equip themselves with E-mail and INTERNET facilities to collect information on their own.

Table 33

INTERNET Access by Users

<table>
<thead>
<tr>
<th>INTERNET Access</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t have it</td>
<td>14(9.3%)</td>
</tr>
<tr>
<td>Can afford it</td>
<td>57(38%)</td>
</tr>
<tr>
<td>Can’t afford it</td>
<td>71(47.3%)</td>
</tr>
<tr>
<td>Applied for INTERNET connection</td>
<td>8 (5.3%)</td>
</tr>
<tr>
<td>I am getting more information from INTERNET than I can handle [out of 57 users who can afford it]</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50 (87.7%)</td>
</tr>
<tr>
<td>No</td>
<td>7 (12.3%)</td>
</tr>
</tbody>
</table>
Table 34
Use of DELNET E-mail/INTERNET Databases

<table>
<thead>
<tr>
<th></th>
<th>DELNET E-mail</th>
<th>INTERNET Bibliographic Databases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 (10%)</td>
<td>135 (90%)</td>
</tr>
<tr>
<td></td>
<td>116 (77.3%)</td>
<td>34 (22.7%)</td>
</tr>
</tbody>
</table>

We notice that though 5.3 per cent users have applied for INTERNET connections, 38 per cent (Table 29) can afford it and can apply for the service in the near future. This is encouraging. It is clear that the awareness among users for INTERNET is growing but the 78 per cent librarians who claim that there is not much demand from users (Table 28) is wrong, because they have not explored the potential of users.

Summary and Conclusions

Resource sharing is primarily done to provide the necessary and adequate documents to the users in such a way that the users’ time is saved. A growing number of users are prepared to learn IT in order to access information. In order to serve the users more effectively, the activities of a network have been defined in terms of identification of users, their information requirements, training needs, existing resources, discouraging factors and evaluation of the users’ services. It is noticed that users do not undertake extensive research because of lack of training and knowledge about resources. The types of documents needed by users have been indentified. Stress has been laid on effective user education and efforts to be made to achieve better user satisfaction. As 80 per cent of the librarians want extra services to
be introduced among users (Table 26), DELNET has been increasing the number of databases and services. DELNET databases and services have been reviewed. The reasons given by librarians for not using DELNET services frequently since there is no demand from users has been contradicted. It is hoped that the number of users interested in IT and INTERNET is going to increase progressively.

The conclusions are as follows:

1. Provide necessary and adequate documents to the users;
2. Provide the documents/information fast so that the users' time is saved;
3. There is a need to promote values which ensure respect for scholarship;
4. Identify the potential users and categories of them;
5. Identify the levels of involvement of users with network services;
6. Identify the different approaches of the users in collecting information;
7. Identify the information requirements of users; categorise them by levels and type of communication media, etc. and match them with the available resources and kind of users' needs;
8. Identify the priorities of users' needs;
9. Design the user orientation/instruction/education programme;
10. Orient the user with network services and databases;
11. Provide training to the user in accessing information;
12. Identify existing resources and services, for better performance and avoidance of duplication of efforts and saving of finance;
13. Develop databases and services that meet the users' needs and approaches;
14. Identify the limitations and problems which discourage the use of network services;
15. Evaluate the various existing services in relation to the users' needs and introduce changes and new services;
16. Develop an information system which gives regular feedback from users for introducing effective improvements;
17. The information needs of users of a network are large and therefore all kinds of databases and services should be introduced to satisfy them;
18. At this stage the users' interest in books and periodicals is the maximum, but slowly it is going to shift towards electronic and full text documents;
19. Training of users of IT and INTERNET should be a regular activity;
20. Extra information services and extension activities should be introduced in order to achieve better user satisfaction; and
21. Participating librarians of DELNET should provide better services to users using DELNET databases and services.

References
2 Kwatra, P.S. "User studies: state of the art." Annals of Library Science and Documentation 32(3-4) 1985. pp. 73-75


