



Accredited with NAAC **A** Grade

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Library Use and User Studies
DBLIS203

Unit – 1

Introduction User Studies

1. Introduction

Libraries are established with the objective of providing services to their users. While planning library services, users have to be always kept in view so that the services being proposed and introduced are valued and used to the maximum extent. Most of the patrons are infrequent users who make a few demands for the service. If the library focuses on the heavy users and their known demands and needs, it can achieve outstanding performance... (Evans, et al.1972). However, the philosophy of librarianship is not only to serve heavy and regular users but is also supposed to look after the interests of casual and infrequent users. Everyone whosoever visits library or ask for information should find his/her information conveniently. Everybody in academics; a student or a teacher comes across some or the other problem in finding and accessing information. You as student of Library & Information and also as users of library and its services might be fully familiar with such day-to-day common problems faced in finding relevant information. To know as to what problems users face in locating and accessing information, paper on, *User and User Studies* has been introduced in the LIS curriculum so that the students of today and information professional of tomorrow are able to understand and conceptualize users' problems. Taking a simple example of a shopkeeper, who thinks of his consumers before opening of a shop and goes on adding items which have possibility of their use and salability. We notice shopping mall culture in all big cities, and small shops/stores in small cities and villages with different commodities to sell according to the requirements of the consumers. The same principle holds good in librarianship also with the difference that one earns profit and another provides services without aiming at any profit. The profit is earned and measured in the form of user satisfaction with the services being provided. The primary concern of the library profession has been to assess the information needs of the users and assist them in finding their information resources to solve their day-to-day problems relating to information access and use.

Information has been recognized as an important resource and commodity for overall development of individuals as well as nations. Today, the richness of nations is measured in terms of availability and use of information. Information poverty or the illiteracy is considered more dangerous than economic poverty. One of the differences between the developed and developing nations is that former makes good use of information than the latter. If we believe that information and knowledge is a power resource, then its holders obviously become powerful. Therefore, availability and use of information make the difference. The very purpose of information

and knowledge generation is its use for overall development of humanity and the society. Right from the inception of libraries, serving the users to their utmost satisfaction has been the one and the only one objective.

User study investigates the information requirements [of the users] almost entirely with how a user navigates a given system and what he or she could do with the data (rather than information) made available by information systems. ... (Wilson, 2006). Information science firmly founded upon an understanding of information users in the context of their work or social life is also likely to be of more use to the information practitioners by pointing the way to practical innovations in information services, and to potentially beneficial association with other communication-information-related sub system," (Wilson, 1981). Hollnagel (1980) also writes that information science is concerned with the use of information by humans ... and it is concerned specifically with the way in which humans search for information, systematically as well as unsystematically. The basis for information science is therefore to be found in our experience of using and searching for information by the users.

The scope of user study is quite wide and diverse which includes all the aspects of users as well as non-users relating to use of information. This has been an intriguing area of research in which behavioural aspects of human beings are to be studied which is ever changing according to situation and many other factors. Users are

the consumers and library professionals are the producers, organizer and communicator of information and information products. Therefore, library has to be constantly in touch with its consumers (users) as their behaviours and needs go on changing from time to time. We can easily identify the difference between the users of 20th century and the present era. If a library is developed isolating its present and future readership, it is likely to fail in its objectives. Therefore, it is important that library is fully aware and acquainted with the needs and requirements of its community to be served. Taking the analogy of producers and consumer as cited above, it is important for the producers of the products to first make an assessment of the market as to what types and kinds of products are required in the market. Library should provide what its users want. After doing proper survey of the market, products are manufactured based upon consumers' needs and behavior in order to yield maximum output in the form of use, salability, profit, etc. whatever the case may be. Similarly, library professionals also should adopt the same analogy to know and understand the customers' (users) need and take necessary steps to meet them. Library should always aim to identify and develop services to the maximum satisfaction of users. If there is any disconnect between the two, all effects, money, etc, being spent are going to be a big waste. In view of this, user study is the pre-requisite to provide need-based services and develop and modify information systems and services from time to time.

2. Scope of User Study

User means information user, patron, clientele of the library who seeks information from various sources available to him to remove his „uncertainty“ „inquisitiveness“ ‘ambiguities’ to meet his/her information need and solve various problems at hand. In these studies user and user groups remain in focus to know and ascertain the facts about their information needs, information use and information seeking behaviours, *etc.* The scope of user study ... can be expanded to include parts of computer science, communication studies and other disciplines (Wilson, 2008). Hewins (1990) called for increased interdisciplinary research in this area. She suggested that research in this area should integrate research being conducted in other disciplines (e.g., psychology, cognitive science and computer science). Wersing (1973) divides user studies into four areas: *channels of communications, information receivers (users), data sources and information senders.* The core of user studies have three main components; information needs, information seeking behavior and information retrieval, all studies revolve around these aspects. Let us broadly understand these two concepts since these are not precisely definable. We need information when we feel that our existing knowledge is deficient or inadequate to solve the problem at hand for the purpose of study and research. In such situation, users start searching information from various sources known to them. How users process their information need and retrieve and use information by going through different stages and steps. Krikelas (1983) states that „„information seeking begins when someone perceives that the current state of knowledge is less than the needed one to deal with some issue (or problem).

These concepts would be discussed elsewhere in detail in different modules. Nicholas and Herman (2009) have devoted whole chapter to define these terms. These studies broadly include all interactions between users and their information products (sources of information), information seeking behaviours including searching and retrieval processes, cognitive process, barrier and intervening variables in information accessing and use (Chandel, 2011). Eithel (1981) states that user studies are composed of *who reads what; and how these needs can be identified and satisfied.* Tenopir (2003) identified the following areas of user studies:

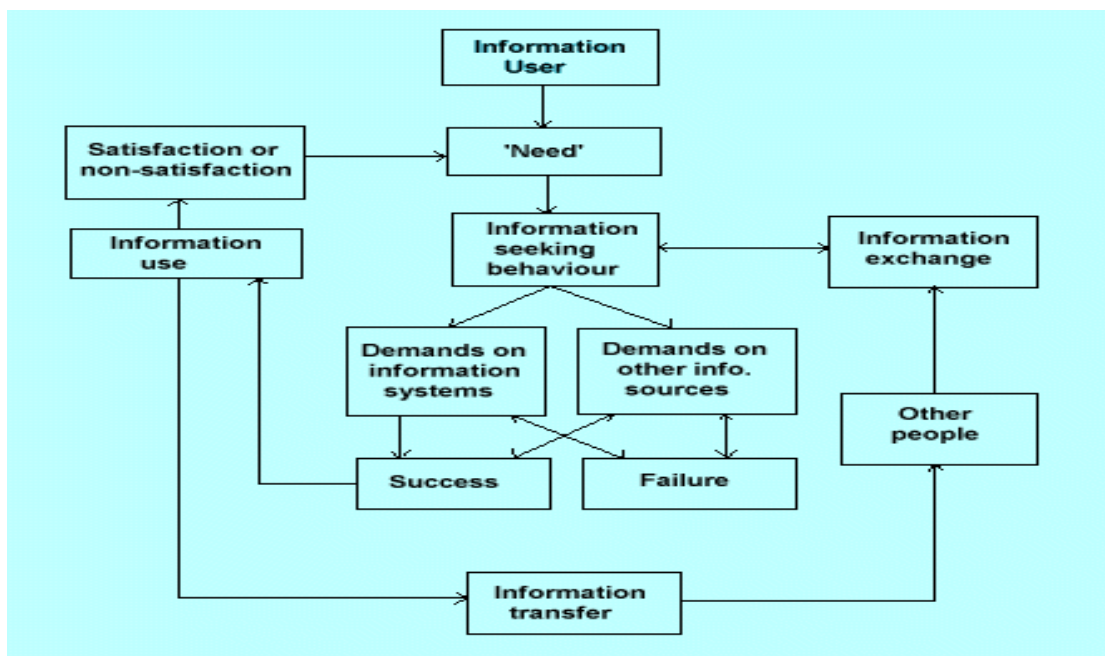
- i) What people do?
- ii) What people prefer?
- iii) What people say they do?
- iv) What people say they prefer?
- v) What they may do or prefer in the future?

The author prefers the term *people* rather than *user* which means, involving whole community to be studied to

ascertain the information need of whole population to be served rather than only library users. Needs of users and needs of the people are different. Non-users are to be converted into users or educated to use information. Therefore, identification of information needs of diverse population forming different groups of people in the community is required to be studied to serve them in a better way. Krikelas (1983) in his model identified four steps of information processing and use (1) *perceiving a need*, (2) *the search itself*, (3) *finding the information*, and (4) *using the information*, which results in either satisfaction or dissatisfaction. The thrust areas of these studies can be summarized as under:

- i) To study the reading interests and the preferences of the various categories and groups of library and information users belonging to different disciplines and environments.
- ii) To know what are the roles, activities, job profiles, academic background and social life, etc. of the users groups and how these affect upon their information needs and information seeking behaviours?
- iii) To study the information seeking behavior of different categories of users, how they search information and what search strategies, browsing pattern they follow, and what problems and barrier they face in the process of finding information?
- iv) To know what are the theories and models established on information seeking behaviours and needs, and how identification of the behaviours are useful in such studies?
- v) What channels of communication and sources the users quite often consult and use and with what frequency?
- vi) To evaluate the services being provided with users perspectives and take their feedback to improve and make services more effective and meaningful.
- vii) To go beyond *what, why, how* of usability of resources and find out the measures to educate and direct them to use right resources which may not be known to them through educating users.
- viii) To study non-users to know as to why information available to them is not being used, and identify those factors which are responsible for non-use or under-use of resources.
- ix) To know the level of user satisfaction from the services being provided and take appropriate measure to improve them, etc.

Wilson (1994) presented a model of user study covering the following components in his paper published as early as in 1981 which has as much relevance today as during the time of its proposal.



We may agree that most "user studies" have been about how people use systems, rather than about the users themselves and other aspects of their information-seeking behaviour (Wilson, 1994). These studies include: who library patrons are, how they use libraries, and more recently, what the information needs of people are and how various sources of information help or do not help them, independently of formal information delivery systems such as libraries (Julian, 1996). Various literature surveys have also revealed that most of the studies have been conducted on sources of information being referred by the users. Now the question arises as to what follow up actions are required to be taken by the practitioners in the light of such findings. In such situation, when users were found to use e-resources more than printed material, and their preferences were found more on Internet resources in full text form than resources in the library in printed format. In view of such findings what measures have to be taken as a follow up action to improve the existing services by the practitioners need to be ascertained and thoughtfully implemented. The recommendations and findings of most of these studies have not been implemented. The outcome and implementation of user studies remain questionable despite the fact that a lot of literature has been generated on the subject. Nevertheless, the importance of these studies cannot be

undermined, provided appropriate research methodology is applied. Both users as well as non-users groups form the population of these studies to be conducted with holistic approach relating to information communication, access, retrieval, transfer and exchange.

3. Brief Historical Account

Libraries were never established isolating their users. They have always been there in the background of establishment of any library. User studies have a long history; as long as the libraries themselves. Users have been always in focus right from the inception of libraries all over the world. Libraries cannot be thought of without their users. It is a different matter that the formal studies began much later when need for such studies was realized and brought out at verbal plane. Before the initiation of these studies, librarians used to make assessment of users need for books and other material hypothetically based upon their perception, formal or informal interaction with the users and indirectly observing their behaviours while in the libraries and using resources. Users' statistics might have been another indicator of users approach to library collection usage and users preferences in the beginning. Wilson (2008) traces its history from 1916 whereas he also quotes the study by McDiarmid (1940) on library survey produced in 1940. Siatri (1999) states that the beginning of user study started since 1940's. Till 1965, there were 676 user studies listed in „*Bibliography on User Studies*“ (David and Bailey, 1969). More studies started coming up after 1948 when Royal Society Scientific Conference was held. The first library surveys were designed to discover what categories of persons used libraries, not what those persons did when they were in a library nor what life or work issues were behind their library use. In earlier studies emphasis was on discovery and description of document usage (Wilson, 2008).

During 1960's two important studies were conducted by Menzel (1966) and Line (1971) in the field of science and social science respectively which deserve special mention because of their landmark contributions for further studies. These two studies made the impact and the need to conduct such studies was well realized by the professionals. INFROSS study started during autumn of 1967 with a large sample with multiple questionnaires, which led to the design of information system in social sciences. This was the first study conducted in the field of social sciences whose objectives were achieved by implementing its findings. However, such studies had been attempted earlier in the field of science but not in the field of social science since there was more awareness and consciousness of use of information among scientists as compared to social scientists. Menzel (1966) and Line (1971) made a good beginning of user studies and set directions for further studies. During 1963-1969 the American Psychological Association (APA) conducted a series of studies on users' behaviours. During 1970s these studies became quite popular and many research projects were funded by various organizations and association. In India, the feasibility study of establishment of NISSAT (National Information System in Science and Technology) was conducted by Peter Lazar in 1970

assessing the information needs of scientific community of India on behalf of UNESCO on the request of Govt. of India.

The establishment of Centre for Research on User Studies (CRUS) in 1975 in the Department of Information Studies at University of Sheffield gave more emphasis on conducting user studies (Siatry, 1999). In 1975 in the Department of Information Studies at University of Sheffield gave more emphasis on conducting user studies (Siatry, 1999). The Department had started user studies in early 1970s as reported by Roberts and Wilson (1988). These studies were in the form of student dissertations and occasional research projects, but got further promotion under the project funded by BLRDD (British Library R. & D. Department) (Wilson, 1995). Earlier studies were limited to library surveys relating to library use, readers preferences and interests. Crawford (1978) estimated that there might have been more than 1000 studies up to 1978. More and more literature started coming up during 1980s and 1990s onwards, with broader scope of these studies. During 1990 there were only 9 papers which had appeared in Web of Science which increased to 200 by 2006 (Wilson, 2008). However, *Web of Science* does not cover all the journals of Library & Information Science. Therefore, some studies might have been not been covered in web of science. From 1990-1994, 588 articles were indexed in library literature under the terms, „user studies“ and „information needs“ (Julian, 1998). During 1990s user studies became one of the main areas of research for PhD programmes in many universities in India and abroad. The courses on user studies were also introduced in many schools/Departments of Library & Information Science.

It is now estimated that 200-300 articles are being published every year on the subject (Chang, 2011). Jarvelin and Vakkari (1990) estimated that research on information needs and uses constitutes 8% of total research in Library and Information Science. However, according to Wilson (1981), the progress towards some theoretical understanding of the concept of „information need“ has been slow, though literature growth was quite high. He supports his remarks by the statement that subject from Menzel to Paisley through the various authors in ARIST volumes to Ford review of 1977 did not show any significant progress in theoretical understanding mainly due to inadequate methodology and failure to do research that is cumulative. On the other side, he also mentions elsewhere that there is no other area of information science except information retrieval that has occasioned as much research effort and writing as „user studies“ (Wilson, 1981).

Literature growth in user studies has really been fast since 1990 onwards but regretfully as had been realized by many authors and the practitioners that the implementations of the findings of these studies have not been so significant. Despite the accumulation of vast literature including thousands of PhDs produced, there is hardly any theoretical foundation of these studies with a generalized findings and conclusions, perhaps because of lack of standard methodology and the nature of the subject which involves behavioural pattern of users which are ever changing from one situation to another. Nevertheless, there are some important contributions in the form of various models of information seeking behavior which will be discussed separately in other modules of this course.

4. Why User Studies?

One of the topics discussed during the International Conference of Scientific Information held in 1958 was „*Literature and reference needs of scientists...*“. This conference provided good platform to deliberate on information needs of scientists. Urquhart (1948) made the following statement during the conference, highlighting the importance of user studies:

“...a knowledge of the requirements of the different users of scientific information and the uses to which they wish to put the information they secure should be the ultimate determining factor in the designing of methods of storage and retrieval of scientific information.”

Evans, et al. (1972) stated that determining user requirement is most important as an aid to evaluate, selection

and weeding out needs which are not being met. According to Dewe & Deunette (1979) developers of information services should see to it that information from user is more actively involved in designing phase and that the environment within which the services are used in all their sociological and psychological are also taken into account. Hood and Blackwell (1976) in their United States study identified that significant meaningful pattern can be established [by conducting user study], there would be at least a beginning basis for designing and redesigning information products and services in terms of different classes of users. Planning any functional and effective information system requires study of user behavior, which of course is not as easy as it appears to be. John Martyn (1974) while endorsing the opinions of many others, agrees that ultimate value of any information communication system should be thought of in terms of user, that are made of information and subsequent impact of information on users' scientific and technical behavior. Hale (1986) summarized the purpose of user studies to:

- i) Optimizing the allocation of operating resources by customizing services to selected clientele
- ii) Fine tuning the delivery of information within existing systems.

It is unanimously agreed that knowing your present and future readership is of paramount importance and the prerequisite to design and develop any information system to provide need-based information services, failing which there is every possibility of mismatch and disconnect between producers and the consumers. It becomes increasingly important when practitioners think of marketing of information. This pre-supposes surveying the market (community) of users to assess the information needs of the consumers fully well so that information products and services get their clientele. Belkin (1977) also realized that information users are often in *anomalous state of knowledge (ASK)* this anomaly can be resolved by "the effective communication of desired information between human generator and human user." This state of knowledge caused by „*uncertainty* and *inadequacy of knowledge*’ prevailing in the minds of the users which needs to be resolved so that they can come out of the prevailing „*problematic situation*“ and find the solution through getting information. This requires perfect communication between generator of information and the recipients and thorough cognitive analysis of the queries existing in the minds of the users. Most of the users even remain unaware of the some of the useful services being provided by the library and are not likely to make use of such services. This situation arises due to lack of communication between library and its users. The information science mainly deals with collection building, organizing and systematization, retrieval and use of information resources. A useful information output can only be created if the designer understands the product's intended users and their information needs (Landu, 1982). At every stage participation and involvement of users play an important role in introducing, improving and reinventing services.

In survey report of DLF, objectives of the users survey have been identified as under:

- i) Patterns, frequency, ease, and success of use
- ii) User needs, expectations, perspectives, priorities, and preferences for library collections, services, and systems
- iii) User satisfaction with vendor products, library collections, services, staff, and Websites
- iv) Service quality
- v) Shifts in user attitude and opinion
- vi) Relevance of collections or services to the curriculum (Covey, 2002).

5. Research Methodology

There is unanimous opinion that studying the library use and the user is one of the important areas of study which has been well realized since 1960s. It is also true that research output has its value provided results are authentic and reliable so that the findings of these studies can yield desired results. Various literature surveys have revealed that there has been large number of studies on the subject. The question arises about the reliability of the data collected and the authenticity of the findings drawn out of these studies. The common methodologies applied in these studies have been: observation keeping „... our eye on user“ (Zweizig, 1976), analysis of documentary sources, library usage through library statistics, case study, citation analysis, interview, etc. (Chandel, Saraf, 2002). With the advent of new technology, new research methodologies have been evolved; such as data collection through E-mail, social networking, on-line interviews, virtual ethnography, log analysis, etc.

Application of strong research methodology is necessary for every research topic irrespective of area of research and discipline. In these studies, it has been mostly a survey method based upon scheduled questionnaire. The authenticity of data collection through survey method has always been doubtful. It is a common observation that questionnaires are rarely filled up seriously and honestly by the respondents. When filled up and responded, there are bias opinions. However, it depends upon the researcher as to how reliable data is to be collected and which methodology is to be applied. Crawford (1978) has rightly made the following observation:

‘Sophisticated social science concepts combined with quantitative techniques produced both case report and field studies...utilizing well designed survey instrument, carefully selected. Stratified random sampling, and appropriate techniques of statistical analysis...slowly, valid and empirical data are being accumulated which in time will contribute to a unifying theory of information needs and uses. This accumulated findings and data after scientific analysis lead to directly or indirectly to improvement of systems.’

The pertinent question before us is to know as to what these accumulated findings have given to the profession and how far these findings have been responsible to achieve the identified objectives. Most of these studies have been attempted only for sake of research not for implementation and arriving at some theoretical foundations and models. Only a very few selected studies have made significant contribution to the profession. It is the choice of the right sample and the right methodology which matter significantly in these studies (Chandel and Saraf, 2002). Julien *et al.* (2011) while analyzing methods used in studying information behaviour of users conducted during the period of 1984-1998 reported that 58.1% of the studies were based upon survey method. The declining trend of using survey method from 58.1% to 44.7% was reported in another study conducted for the period 1998-2008 (Julien and Duggan, 2000). Applying content analysis method to analyze literature published on LIS from 1990-1994 found that 56% of research methodologies employed in research studies was based upon survey research the “other” category of research methods included content analysis, unobtrusive observation, and cluster analysis (Julien, 1996). The analysis further revealed that log analysis, ethnography, interview, citation and experiments methods were also used.

Survey method based upon questionnaire has its inherent limitations often criticized but hardly replicable. This means that the methodology must be used thoughtfully and carefully to collect factual data by applying single methodology or in combination with other method(s). Lyons (2011) while pointing out the limitation of research methodologies being applied observed that “...often they employed deficient research methods or promote unjustifiable interpretations of data they have collected.” Greifender (2011) made an observation that library and information science education does not always offer librarians in-depth methodological education in social

science, psychology, ethnography, and mathematics or computer science. But now teaching of research methods is being given due importance in almost all the teaching departments in Indian Universities at Master Degree and PhD levels. Over the years, there has been good progress in the improvement of research methodology and synergies and combination of methodologies are being applied for authenticity and reliability of data. Since user studies mostly deal with behaviour and attitudes of users, so complexity and intricacies in attempting these studies are quite obvious which can be solved by the combination of qualitative and quantitative methodologies.

6. Summary

conducted on the subject but with different approach warranted by new environment of digital age. Traditional settings of users have changed in the present environment. Users' behaviour over the years have been changing, consequently, findings of these studies also lose their relevance with the changing attitudes of users. Their dependence on libraries has tremendously gone down and they are satisfied whatever they get on Internet which calls for conversion of print resources into digital which are easily available and accessible to them. Libraries have to meet such challenges to attract users to use their resources within the library or outside by modifying and reinventing services according to their preferences and choices. Ranganathan (1953) in his Five Laws of Library Science have focused on uniting the users with their resource with the purpose to maximize the use and serving them to their utmost satisfaction. Menzel (1964) also in his study on „*Information Needs of Current Scientific Research*.’ emphasized the usefulness of these studies by stating that the guiding slogans must be speed, efficiency, and comprehensiveness [in the services being offered]. The overriding aim, in other words, is to bring information to the scientist promptly, to bring him all that is relevant, and to bring it to him with a

The history of „user studies“ is now more than 70 years old and large numbers of research papers, PhD theses, dissertation, project reports, conference and seminar presentations have been cumulated. During 1970s and 1980s trend was to write on classification indexing and information retrieval. It was also realized that the studies of users behavior and identification of their need for information are pre-requisites to plan and develop information systems, improve existing services and evaluate the functioning of the library from users perspectives. In view of this, user studies represented an increasing proportion of information science research (Summers, 1984). Wilson (1981) had made this observation in the beginning of 1980s that "apart from information retrieval there is virtually no other area of information science that has occasioned as much research effort and writing as user studies." This trend continued during 1990s. Even today many studies are being minimum of waste motion, especially on the scientist's own part. We should not depend upon our experience, judgments and presumptions about users information needs, better ask them what they would like to read and for what purpose? This will enable libraries to serve them better.

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Unit-2

Evolution of User Studies

Introduction

User studies, use studies, information-need studies, information transfer studies, communication behavior studies, information dissemination and utilization studies, user-research, etc., are all closely related and often not clearly defined and there is no universal definition. There is a need to understand the information need, information seeking behavior of the user to facilitate library and information centers to provide effective and quality services to its users.

It becomes necessary to point out the limitations of use and user studies. Use studies may not reveal the effects of use, indirect use of a library and information centers and many fruitful interactions of users with library. Further, use of a library and information centers and its utility to users are often quite different. A library or information centre may be used but it may not be useful; another may be useful but may not be used; a third may be neither useful nor used and ideal is one which is both used and useful.

1. Evolution of User Studies

User Studies are one of the most important and most researched areas in library and information science.

Earlier user studies were mainly related to scientists involved with biochemistry, medicine, engineering, physics etc. The high concentration of user studies in these sciences can be partially attributed to the fact that the publication of professional and scientific information in these disciplines was much more developed at the time in comparison with the humanities Technology, health, industry, and agriculture.

It may be worth noting here that Dr. S.R. Ranganathan has grouped users on the basis of types of services enunciated by him into: the freshman, ordinary inquirer, specialist inquirer, and general reader.

2 User Studies in 1930's

In the literature of LIS, the earliest reference we come across is to the study conducted by L.R. Wilson in the late 1930s. It was an attempt to investigate the distribution and status of libraries in the USA and was not aimed at obtaining information relating to library use or users.

3 User Studies in 1940s

The foundation for the user studies was laid down in 1948 in the Scientific Information Conference

of the Royal Society, where Urquhart and Bernal brought out their research findings. Urquhart (1948) conducted his study on the distribution and use of scientific and technical information.

He was associated with the sources of reference to the literature borrowed, the purpose of consulting the borrowed item, and the usefulness of the item in relation to factors like year of publication and its form.

4 User studies in the 1950's

The concept of users and their information needs found some expression at the first conference of Royal Society held at London and became a subject of discussion at the International Conference on Scientific Information held at Washington in 1958: Prof. J.D. Bernal's paper entitled "The Transmission of Scientific Information: a user's analysis" received a great attention.

It may be mentioned here that a pilot study on the use of scientific literature by scientists was conducted by R.R. Shaw in 1956 on behalf of National Science Foundation. Shaw's study is considered as one of the pioneering efforts in the direction of user studies.

5 User studies in the 1960s

Literature review shows that number of user studies increased rapidly. In 1963 the American Psychological Association (APA) conducted a series of studies concerning psychologists, which was one of the first and most important projects carried out in social and behavioral sciences (APA 1963– 1969).

Menzel refers first (Annual Review of Information Science and Technology, 1966) two comprehensive bibliographies of User Studies in 1964 and 1964, each containing 438 and 676 studies respectively.

Numbers of comprehensive studies have emerged on the subject: Use of Scientific Literature example, Davis and Bail compiled a bibliography consisting of 438 such studies as early as in 1964.

6 User studies in the 1970s

Moving towards the 1970s, user studies flourished and introduced a diversity of target user groups like magistrates, urban citizens, personnel working in local authorities, university students, etc. The 1970s also mark the point that user studies examined the use of particular information Systems, their efficiency and effectiveness and how this can be maximized. More scientists began to realise deficiencies in the use of methodological techniques and conceptualization although

no theoretical framework had been developed. The trends of user studies during this period were

well documented in the three chapters of ARISTon information needs and uses (Crane 1971; Martyn 1974; Crawford 1978).

It has been recorded that by 1977, more than 1000 important studies were conducted on the subject of 'user studies'. It must be mentioned that the growth of science and technology and, the importance accorded to the use of scientific information proliferated such attempts of user studies.

An event of great significance in the history of user studies was the establishment of the centre for Research on User Studies (CRUS) in 1975 by The British Library at University of Sheffield. The main objective of this centre was to create a national centre to act as a focus for research in user studies. Let us hope that researchers on different facets of 'user studies' will receive encouragement from the centre in future and a

theory of user studies would be developed. The establishment of a centre for research on user studies indicates the importance of the subject 'user studies'.

Martin (1976) in his article "User Studies and Library Planning" discussed the user studies and appraised their role in library planning. Author provided various guidelines for conducting user studies and concluded that user data strengthens the planning and decision-making processes at several levels, so the responses of users should be an integral part of the ongoing practice of librarians, providing constant feedback.

7 User Studies in the 1980s

The 1980s were a decade that was characterized by an increasing awareness surrounding the conceptual Framework and methodological issues of user studies. One of the first attempts at articulating this awareness was the publication, in the journal *Social Science Information Studies* of the papers Presented in a symposium of qualitative approaches to the study of information problems. Belkin (1980) formulated the theory of the Anomalous State Knowledge for information seeking behavior that included six stages: starting, chaining, browsing, differentiating, monitoring and extracting.

Kuhlthau (1988) conducted a study examining the application of library skill in assigned library

research by high school seniors. The objectives of the project were "to explore the experience of students in the library search process, to reveal evidence supporting the hypothesis that there are a sequence of stages to an information search and to propose a model of the user's stage within the search process" (Kuhlthau 1988: 232).

8 User Studies in the 1990s

In the 1990's Internet becomes information provider to information community.

The 1990's witnessed the implementation of conceptual theories that was developed during 1980's and number of researchers adopted conceptual theories and framework in designing to their research design with qualitative research methods.

Number of studies has been conducted to know impact of Internet on the user and information community.

In the year 1993 Tillman et.al conducted a study on the use of internet as a reference tool by special librarians

In the year 1996 another small case study was conducted by Eager and Oppenheim, to examine the information needs of academics. The major objectives of this study was to know and test an alternative observation technique (shadowing). In this technique participant's would be observed whole day.

Another study was conducted and published by Abel's et.al 1996; Liebscher et al,1997) to explore the factors that influence the use and option of electronic networks by engineering and science faculties at small industries.

Eager and Oppenheim (1996) undertook a small case study examining the information needs of academics. The main purpose of the study was to test an alternative observation technique (shadowing), in which the participant's would be observed throughout the day.

A recent study (Abels et al. 1996; Liebscher et al.1997) was published examining the factors that

influence the use and adoption of electronic networks by science and engineering faculty at small institutions. The study identified a number of factors that are likely to influence use and adoption of

electronic networks. These included perceived accessibility, proximity, workstation availability, and experience, ease of use, academic discipline, task and perceived utility.

9 User Studies in 2000's

Wildemuth (2003) in article titled "Why Conduct User Studies? The Role of Empirical Evidence in Improving the Practice of Librarianship" emphasized that by gathering evidences about library users, their interactions with library services and materials and context in which those materials and services are used, librarians can make sound decisions for the future.

Carr (2006) "What Users Want: An Academic 'Hybrid' Library Perspective". Author described the development of user centered approach in academic libraries over the recent decades.

Varghese (2008) "User Studies in the Electronic Environment: Review and Brief Analysis". The article summarized the results of 101 user studies conducted in the electronic environment.

10 Some Important Library User studies

Number of library user studies has been made by various organizations in various countries, some important library user studies and their findings are described below:-

**Council on Library and Information Resources (CLIR) and the Digital Library Federation,
Dimensions and use of the Scholarly Information Environment**

Number of Interviews- 3,200

55.4% of all respondents browsing library book stacks to get information 52 %

graduate students use print resources

59% graduate students use print indexes and abstract

11% use of e-journals

8% users find reading materials on a screen satisfactory

14% wants more print as compared to 11% e-Journals, 89% wants more books

OCLC White Paper on Information Habits of College Students (June 2002) with sample of 1050 qualified respondents:

Among its findings are these:

31 % of all respondents use Internet search Engines to find answer to their questions

89 % use campus library's print resources including, books, journal, articles, and encyclopedias

Americans have not yet found ideal information resources.

Electronic Publishing Initiative at Columbia (EPIC) survey of responses from 1,233 students and scholars (2004)

Some important findings are:

- Dependent on physical library 75.8%
- To retrieve books and articles from library's website 81.5%
- Physical library use more than once a month 67.7%
- Search engines were not precise 80.2%
- Physical Library is still an important destination for students
- 8 More than half of the respondents somewhat strongly agree that electronic resources can result an overload of information.... And almost half of the respondents agree that this overload can be overwhelming for them

User Studies in India

INSDOC conducted a use survey relating to its current awareness service entitled "INSDOC List of Current Scientific literature" as early as in 1964. As a result of the findings of this survey, INSDOC had to wind up the above mentioned current awareness service' and had to start the compilation of 'Indian Science Abstracts'. nother significant study is conducted by Carl M. White regarding the use of Delhi University Library in 1965.

In the same year (i.e. 1965) the Indian Association of Special Libraries and Information Centres (IASLIC) organized a seminar on "Users and Library and Information Service. Though the seminar did not discuss or, report any worth-while study/survey, but it helped in drawing the attention of the authorities of special libraries and information centers towards these problems.

Another significant effort was made by M.S.Sridhar. His doctoral research work was on Information seeking behaviour (ISB) of the Indian Space Technologists (IST) of ISRO Satellite Centre (ISAC), Bangalore. The results of this study have been published under the title "Information Behaviour of Scientists and Engineers". This study is a contribution towards user studies.

11. Recommendations and Suggestions

In changing environment of information overload, digital environment, fast growing information users; and changing information seeking behavior of users, there is a need to conduct user study to know the user's behavior towards information.

User study shows following facts which may facilitate to improve library and information services to its users:-

- Information awareness of the users
- Interaction of user to library and information resources
- Information literacy skills of the information users
- Information use patterns of the library and information centers
- Information seeking behavior of the users
- Information need of the users
- Information priorities of the users
- Evaluation of information user and information centers

12. Summing Up

User is an important component of the library and information centre. In a present Information Society it has been universally accepted that "Information is for use or Information for all." Right information helps user to solve problems, decision making, policy making and to prepare research projects. There is a need to develop healthy relationship between users and library & information centers. Now it becomes necessary to conduct user study by the library and information centers to know facts about the library and information centre users. Healthy relationship between library or information centre and users facilitates more information use and helps in evaluation of library or information centers as well as users behavior. While using e-resources user experience problems of search engines, overload of information and user wants prefers physical library use. There is a need to conduct user studies to know user's problems especially in fast growing digital environment.

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Unit-3

Review of Literature on user studies

1. Introduction

The user studies in terms of library and information science have considered the studies related with library use. The library is used by the readers and library professionals having different objectives. The library professionals are information provider and readers are considered as an information recipient. These two aspects create multidimensional platform regarding use of library material available in various form in various types of libraries. The users of the libraries may be different in their need or expectation from library.

Keeping in mind to provide better or improved services or desired information, the studies are being made by the individuals or institutions from time to time. The objectives of these studies are to evaluate library resources for the maximum utilization by the readers. The user studies in this discipline also carried out to satisfy users in seeking information from the library regarding to satisfy the five laws of library science.

In India, there are several studies conducted at school, college, university, academic institutions, rural libraries, urban libraries to evaluate the information resources and reader's satisfaction towards the library services and existing library resources. Before exploring the status of users' studies we have to explain the meaning of review of literature.

The '**Literature**' covers everything relevant that is written in books, journal articles, newspaper articles, historical records, government reports, theses and dissertations, etc. on certain relevant topics. The important word is '**relevant**'. However the review of literature is a description of the literature relevant to a particular field or topic or disciplines or subject. While writing the review of literature, the main purpose is to convey to reader what knowledge and ideas have been established on a study or topic, and to know the strengths and weaknesses of that study. A critical literature review is a critical assessment of the relevant literature. It is unlikely that you will be able to write a truly critical assessment of the literature until you have a good grasp of the subject, usually at some point near the end of your thesis.

In other words it can be stated that a literature review is an account of what has been published on a topic by accredited scholars and researchers. Generally it is being experienced in the introduction to an essay, research report, or thesis. It is not just a descriptive list of the material available, or a set of summaries.

Besides enlarging your knowledge about the topic, writing a literature review lets you gain and demonstrate skills in two areas –

Information seeking: the ability to scan the literature efficiently, using manual or computerized methods, to identify a set of useful articles and books.

Critical appraisal: the ability to apply principles of analysis to identify unbiased and valid studies.

The review of literature is a subject of discussion and it is defined by the various scholars. Some of the selected definitions are as follows –

'A literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of

cases reports are written documents. The types of scholarship may be empirical, theoretical, critical/analytic, or methodological in nature. Second a literature review seeks to describe, summarise, evaluate, clarify and/or integrate the content of primary reports.'

Cooper:(1988)

'The selection of available documents (both published and unpublished) on the topic, which contain information, ideas, data and evidence written from a particular standpoint to fulfil certain aims or express certain views on the nature of the topic and how it is to be investigated, and the effective evaluation of these documents in relation to the research being proposed.'

Hart,Chris:(2005)

'In writing the literature review, the purpose is to convey to the reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are? The literature review must be defined by a guiding concept (e.g. your research objective, the problem or issue you are discussing or your argumentative thesis). It is not just a descriptive list of the material available, or a set of summaries.'

(<http://www.utoronto.ca/writing/litrev.html>)

The review of relevant literature is nearly always a standard chapter of a thesis or dissertation. The review forms an important chapter in a thesis where its purpose is to provide the background to and justification for the research undertaken (Bruce 1994). Bruce, who has published widely on the topic of the literature review, has identified six elements of a literature review. These elements comprise a list; a search; a survey; a vehicle for learning; a research facilitator; and a report.

Bruce:(1994)

A literature review is an evaluative report of information found in the literature related to selected area of study. The review should describe, summarize, evaluate and clarify the relevant literature. It should give a theoretical base for the research and help the author to determine the nature of research. Works which are irrelevant should be discarded and those which are peripheral should be looked at critically. In other words a literature review is more than the search for information, and goes beyond being a descriptive annotated bibliography. All works included in the review must be read, evaluated and analysed (e.g. Annotated bibliography), but relationships between the literature must also be identified and articulated, in relation to your field of research.

2. Library and the review of literature

The library is a rich source of knowledge and plays a significant role in providing relevant literature for the purpose of literature review. The studies carried out on users' of the library may have in the form of books, journal's article, working paper, monographs, theses, grey literature etc. These studies may be published or unpublished but certainly find place in library. A good literature review requires knowledge of the use of indexes and abstracts, the ability to conduct exhaustive bibliographic searches, ability to organise the collected data meaningfully, describe, critique and relate each source to the subject of the inquiry, and present the organised review logically, and last, but by no means least, to correctly cite all sources mentioned (Afolabi : 1992). The Library offers a range of services and training for research scholars to assist with the production of

literature reviews including sessions on electronic databases, using the bibliographic management software, End-Note to download records, Internet searching using Netscape, Library catalogue searching, off-campus student orientation, subject resources, and research skills.

The literature search is an important task while writing a literature review on user studies. Find out what has been written on user studies is available in the library or not. Use as many bibliographical sources as you can to find relevant titles. The following are likely sources: catalogues, bibliographies and references in key textbooks and recent journal articles, abstracting databases, such as LISA, etc. Citation databases, many abstracting journals and electronic databases are available through the University Library's Research Gateway. Today some of e-resources are also available in the form of e-books and e-journal like Jstor, doaj (<http://doaj.org>). These sources may be priced or freely accessible.

3. How to write a review of literature on user studies?

In general readers of the library are treated as the users of the library. While making a review of literature on user study we have to face a large number of studies on the relevant topic. These topics may be information seeking behaviour, evaluation of library services, users' satisfaction towards libraries facilities and current awareness services, users' views regarding to provide qualitative services etc. These studies may be different by its geographical area or by its nature of study. Such kind of studies may be conducted at school, college, university level. The studies can also be made for academic or research or any other kind of special libraries. The set-up of each library is different by their working and objectives. This indicates that a user study is multi-dimensional problems which need to be read and studied carefully. There are several steps in developing a literature review on user studies. These include:

- Selecting the topic of user study for which review of literature to be carry out like information seeking pattern of users in a particular library.
- setting the topic in context
- looking at information sources
- using information sources
- getting the information
- organising information (information management)
- positioning the literature review
- writing the literature review

Noting the bibliographical details is another task for literature review. For this, write down the full bibliographical details of each book or article as soon as you find a reference to it. This will save you an enormous amount of time later on.

Another important point in literature review is finding the literature. Once you have what looks like a list of relevant texts, you have to find them. For this, use the library catalogues to see if the books and journals are held. For e-journals, look at the A-Z listing. For books and journals, you can use the catalogues available in the library. For journals, use the libraries or catalogue to see which libraries hold the journals you are looking for. If the book or journal you want is not held in library, you may be able to access it through inter-library loans. The full text of many journal articles can be found on relevant electronic databases.

Now further important point is that reading the literature on user study. Before you begin to read a book or article, make sure you written down the full details. Take notes as you read the literature. You are reading to find out how each piece of writing approaches the subject of your research/study, what it has to say about it,

and how it relates to your own study. Usually, you won't have to read the whole text from first to last page. Learn to use efficient scanning and skimming reading techniques.

The last task is writing the review on user study. Having gathered the relevant details about the literature on user study, you now need to write the review. The kind of review you write, and the amount of detail, will depend on the level of your studies. You must be keeping in mind that a literature review is different with an annotated bibliography. An annotated bibliography deals with each text in turn, describing and evaluating the text, using one paragraph for each text. In contrast, a literature review synthesises many texts in one paragraph. Each paragraph (or section if it is a long thesis) of the literature review should classify and evaluate the themes of the texts that are relevant to your thesis; each paragraph or section of your review should deal with a different aspect of the literature. Like all academic writing, a literature review must have an introduction, body, and conclusion.

4. Need for literature review on user study

A crucial element of all research study is the review of relevant literature. According to Bourner (1996) there are good reasons for spending time and effort on a review of the literature before embarking on a research study on certain field. These reasons include:

- to identify the gaps available in the literature of user study.
- to avoid reinventing and to build on the platform of existing knowledge and ideas related to user study.
- to create a research network regarding strength of the knowledge of subject area on user study.
- to identify these seminal works on user study in your area.
- to identify information and ideas that may be relevant to your study.
- to identify methods that could be relevant to your study.

The user study is not now a new concept in India but in the whole world. A large number of studies conducted in India so far. They are in the form of published and unpublished. The following are some selected relevant categories for the purpose of review to users' studies.

The research activities are carried out in India by University Grant Commission or any other prominent educational and research institutions. The Ph.D. and M. Phil degrees are also conducted by universities or colleges in each discipline for the promotion of research in particular fields. To avoid research duplication in the relevant topic they follow the procedure of review for existing literature. There are provisions for theses to have research output of existing literature of Ph.D. degrees. Theses are available for further research and interest of their institutions. Some of the theses are also available in India at INFLIBNET and Other ETDs and Repositories at MG University Theses (Nitya), ETD@IISc, Vidyanidhi, Dyuthi@CUSAT, ETDs@Pondicherry University.

The reviews of literature on users' studies are also available in journal's articles and conference proceedings and seminar's volumes. There are certain agencies like Indian Library Association, IASLIC and other library institutions and organizations produce literature on users' studies. For example 49th All India Conference held at Bundelkhand University, Jhansi and published a book consisting of 68 articles in 623 pages covering various topics, such as user perception and need, user survey and feedback methods, ways to promote library services for users, innovative services to users.

Some of the studies are available in the form of working paper, monographs and reports of funded projects. A large number of studies conducted in India on users' by using different aspect of the subject like information seeking behavior, use of resources and e-resources for certain kind of libraries. Some of the known studies are as under:

Wilson has made study on information-seeking behavior in 1999, 2000 which explore the identification of user's own needs for information, searching for such information in anyway, and using or transferring that

information. Wilson, T.D. has made a study on user studies and information needs. He is of the view that apart from information retrieval there is virtually no other area of information science that has occasioned as much research effort and writing as 'user studies'. Within user studies the investigation of 'information needs' has been the subject of much debate and no little confusion. Wilson has also made an attempt to reduce this confusion by devoting attention to the definition of some concepts and by proposing the basis for a theory of the motivations for information-seeking behaviour.

Information-seeking behavior in libraries has been the focus of enquiry for students, researchers, teachers and professionals over the decades. Kakai, et al., (2004) have defined information-seeking behavior as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating, and development.

Initially, users' studies were conducted primarily to evaluate the collections of libraries and satisfaction with library resources and personnel as well. The studies concerned with information resources, habits of individuals or groups lead to the design of appropriate information systems and services.

The focus of users' studies shifted to new approaches to information-seeking behavior based on the technology. Line (2000), made new studies of information users and their needs are even more necessary in the age of the Internet.

Mahajan, Preeti (2009) has also made a study on Information-Seeking Behavior in Panjab University of India by using primary data with questionnaire from 250 users. The users were undergraduates, postgraduate students, and researchers in sciences, social sciences, and humanities disciplines. The study examined the kinds of academic information as per their need, which information resources they prefer, whether they are satisfied with the library collections, and the general pattern of information-seeking, with special reference to the influence of course of study.

Golnessa Galyani Moghaddam, V.G. Talawar, (2008) have made study on Interlending & Document Supply. The case study was conducted at Indian Institute of Science for the use of scholarly electronic journals. The purpose of the study was to investigate the use of scholarly electronic journals at the Indian Institute of Science. A random sample of the main cohort was selected and, during five months from January 2004 until May 2004, 700 copies of the questionnaire were distributed among 40 departments of IISc; 397 completed and valid questionnaires (56.7 per cent) were received. The interesting fact was that people were interested in free access to electronic journals and preferred pdf format.

A study entitled "Electronic Journals' Usage and User Studies: a Literature Review" was published in SRELS (Sarada Ranganathan Endowment for Library Science) Journal of Information Management vol 47(2), 2010.

There are many studies reviewed on user's study and published in different form by several authors. It is very

difficult to cite all the studies. Therefore we have taken only some limited studies as an example to adopt the procedure for review.

Professor Shashi Prabha Singh illustrated the Doctoral Research Trends in Library and Information Science in India that approximately 119 Ph D. awarded by the Indian universities between 1950 -2012 on the topic 'Use and User Studies'.

5. InternationalUsersStudies

Carol Tenopir has made a study on users entitled "Use and Users of Electronic Library Resources: An Overview and Analysis of Recent Research Studies. The Council on Library and Information Resources (CLIR) summarizes and analyzes more than 200 recent research publications (CLIR Report 1995 & 2003: Washington DC). These reports focus on the use of electronic library resources and were published between 1995 and 2003. Eight major ongoing studies (each with multiple publications) are identified as Tier 1 studies and are analyzed in detail, while about 100 smaller-scale studies are classified as Tier 2 studies and are examined together."

Wood, D.N. has made a study in 1971 entitled "User Studies a review of the literature from 1966 to 1970". It was published in *Aslib Proceedings*, Vol. 23 Iss: 1, pp.11 – 23. Wood was asked to prepare the review of user studies were to bring Fishenden's work up to date. This was published in the *Journal of Documentation* in September 1965 and in his paper he looks at a limited number of British use studies and draws some broad general conclusions relating to the development of a national information service. This study considers a wide range of investigations into the information gathering habits of scientists, engineers, social scientists and others, and reports results which it is hoped will provide managers with information on which to develop policies regarding library and information services at all levels. Although an increasing number of studies is being carried out in Eastern Europe and in the USSR there has been no major work reported and consequently the review considers mainly British and American investigations.

Lancaster, F.W. has made a study on the evaluation of library services : a concise review of the existing literature. Lancaster stated that first serious attempt to develop objective evaluation procedures emerged in studies performed for the National Library of Medicine by Orr et. al. (1968).

User involvement in the design of computer-based information systems is enthusiastically endorsed in the prescriptive literature. However determining when and how much, or even if, user involvement is appropriate are questions that have received inadequate research attention. A review of research was published online in 1984 in *Management Science* on user involvement and MIS success. The link between user involvement and indicators of system success is reviewed in the study. The authors find that much of the existing research is poorly grounded in theory and methodologically flawed; as a result, the benefits of user involvement have not been convincingly demonstrated. Until higher quality studies are completed intuition, experience, and unsubstantiated prescriptions will remain the practitioner's best guide to the determination of appropriate levels and types of user involvement; these will generally suggest that user involvement is appropriate for unstructured problems or when user acceptance is important. In order to foster higher quality integrated research and to increase understanding of the user involvement-system success relationship, the authors present the following: a conceptual framework into which previous research has been mapped that can provide direction to future efforts; a review of existing measures of user involvement and system success; a set of variables that have been proposed as potentially impacting the relationship between user involvement and system success.

6. Some selected database

There are a large number of studies conducted at the national and international level on the concerned topic. They are published in various forms like books, journals, monographs, chapters in books etc. Some of the studies can be unpublished with certain reasons. It is very difficult to have all the studies in a single platform. The endeavours have been made to cover such studies in several databases. There are several databases consisting of full text and/or indexing of books, journals, theses, pamphlets, proceedings, and research reports on various topics. Some of the popular databases are as follows:

Library Literature & Information Science (LLIS)

LLIS is a full text bibliographic database that indexes articles and book reviews in more than 300 library and information science periodicals. Full-text coverage for 148 periodicals is also included. The indexing of books, chapters in collected works such as conference proceedings, library school theses, and pamphlets are also available in the database.

Library, Information Science & Technology Abstracts (LISTA)

LISTA provides full text for more than 330 journals and indexes over 560 journals, covering subjects such as librarianship, cataloging, bibliometrics, online information retrieval, information management and more.

Library and Information Science Abstracts (LISA)

Library and Information Science Abstracts is an international abstracting and indexing tool. LISA is designed for library professionals and other information specialists. LISA is currently abstracts over 440 periodicals from more than 68 countries and in more than 20 different languages.

ProQuest

ProQuest Library Science provides full-text access to over 150 core titles in library and information science. It is also authoritative Library and Information Science Abstracts database (LISA). It covers a range of titles relevant to the theoretical and applied study of library science, including trade publications aimed at the library profession as well as scholarly journals. This database offers complete text and images from journals such as:

American Libraries

Collection Building

Reference & User Services Quarterly

Technical Communication Quarterly; TCQ

School Libraries Worldwide

Portal: Libraries and the Academy

Image articles include all the charts, tables, diagrams, and other graphical elements often used to enhance the editorial value of articles that focus on education topics.

SomeOtherImportantdatabases

There are some other important databases that are also involved in making collection of studies in library and information science.

- DissertationsAbstracts
- ERIC
- INSPEC
- SocialSciencesCitationIndex
- WebofScience

7. SUMMARY

The evaluation of library services was not so familiar before 1960. Virtually it was unknown but after 1960 several studies were conducted by so many authors like L.R. Wilson(1930), Ralph R. Shaw(1956), Krishna Kumar(1970), K. Saha(1978), P.S. Kawatra(1988), G. Devarajan (1989), Bawden (1990), M.S. Shridhar(1992) Baker and F.W., Lancaster(1991) and F.W. Lancaster (1993).

The review on users' studies can play significant role in determining the direction of research for improving the quality of services provided by the libraries for certain purposes. The review can also be helpful in making policies for further research or policy making in relevant field. We can compare information retrieval system, web browsing, catalogue searching and so many information retrieval systems adopted by the libraries for their betterment or improving its quality.

The review of literature plays a significant role in research. The library has key role in research and other developmental activities. The review of literature is very closely connected to the library. The library can't be ignored while making literature review for the desired study. Here we have made attempt to explain that how to write a review of literature on user studies? We have also illustrated the need for literature review on user study. We have given some of the important national and international studies on users carried out by some agencies or individuals. The Library Literature & Information Science (LLIS), Library, Information Science & Technology Abstracts (LISTA), Library and Information Science Abstracts (LISA) and ProQuest are some selected databases highlighted in this study.

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Unit-4

Categories of Users

1. Introduction

Library and information centres collect, organize, retrieve and disseminate information to fulfil the needs of users. In the 21st Century, there is a paradigm shift in the functioning of libraries; now the libraries are more user centred, focused and friendly. In earlier days, libraries were concerned to fulfil the need of the users in anticipation and/or on demand, but now user is the integral part of all library processes and services. User is no longer an outsider or just a recipient, as he was earlier, a silent service taker, but now user is an active participant in all processes and services of libraries. The user in terms of library and information science may be readers of the library and all those who use the library for different purposes but in general, readers of the library are user. The library is called a trinity of-

- Readers,
- Reading materials; and
- Library personnel.

Here in this trinity user has been considered as the most important constituent. All library activities are focused for catering to the information needs of the user. With the advent of the information communication technologies (ICTs), various types of platform are available and user services can be provided in real time enabling the library professionals and users to work symbiotically and ensuring seamless functioning of the library.

Indian library users have very diverse and complex social profile. Users are influenced by their social background, cultural, political, and economic conditions. There are various terms used in various contexts to represent the concept of reader across the world. In this module an attempt has been made to define and describe various alternative terms in library and information science, Jennifer Rowley, Heidi Julien, Michael Gorman, BT Laloo etc. have attempted to differentiate these alternative terms.

2. Alternatetermsfor‘User’

In library and information science literature, various terms have been used to represent the concept of user. There are varieties of terms used in different contexts for users. These all terms reflect the same meaning and inter-changeably used for the term user with different connotations. These terms are enumerated alphabetically as below.

- Audience
- Borrower
- Buyer
- Client
- Consumer
- Customer
- Patron
- Purchaser
- Reader
- User
- Visitor

3. Meaning of Alternate Terms

In libraries and information centres various terms are used to represent the user. All terms have different meaning, scope, purpose and uses, though these terms which are used by different subject experts, are synonyms or near to synonyms to represent the concept. The definition of various key terms is given below:

Audience

Audience is a common term, which is used in library and information science too. This term is used in the context of public libraries and research activities. Audience is defined as "The group of consumers for whom a media text was constructed as well as anyone else who is exposed to the text" (Wilson, 2011). Definition is very wide. This definition reflects the media and information literacy context. Generally audience are viewers of any programme or show. Wikipedia says, "... an audience is a group of people who participate in a show..."

Borrower

According to ODLIS a borrower is "a person who checks out books and other materials from a library. Most libraries require user to register to receive the borrowing privileges associated with a library card. The library privileges to which a borrower is entitled are indicated by the individual's borrower status."

The term is widely used in circulation activities or circulation counter of a library. In the context of library's functioning borrower, reader or user terms are synonymously used. Various other terms have been coined with association of this term, for instances, borrower's card, borrowers' register, borrower account, borrower status, and borrowing period.

Buyer

Business Dictionary defines buyer as "a party which acquires, or agrees to acquire, ownership (in case of goods), or benefit or usage (in case of services), in exchange for money or other consideration under a contract of sale."

Libraries are the social institutions and considered as the not profit organisations; hence they do not come under the purview of business. The concept of marketing is now being applied in the operation of libraries. Some libraries and information centres are charging for their services, but charges are meagre and not for profit. So this term is not popular and frequently used in library scenario.

Client

According to ODLIS a client is "a person who uses the services of a professionally trained expert, or of a professional organization or institution, usually in exchange for payment of a fee. Librarians employed in academic and public libraries usually refer to the people they serve as users or patrons because libraries have traditionally provided most services without charge. Information brokers who operate on a fee-for-service basis can be more appropriately said to serve clients."

This definition elaborates the term and also describes the scope of the term in various contexts.

Consumer

Consumer is also synonymous to user. Business Dictionary defines it as "1. A [purchaser](#) of a good or [service](#) in retail. 2. An [end user](#), and not necessarily a purchaser, in the [distribution chain](#) of a good or service." Generally this term is not preferred in the literature of library and information science.

Customer

According to Business Dictionary a customer is "a party that receives or consumes products (goods or services) and has the ability to choose between different products and suppliers."

Harrod's Librarians' Glossary and Reference Book defines customer. "...the user of a service; in particular the term implies that a financial transaction is taking place whereby a service or commodity is transferred to a purchaser."

The definition given by Business dictionary is more comprehensive and incorporates all types of consumers. Today this is fashionable to call information as a product or a service and libraries provide information products

and services to their readers. Most of these services are rendered free of cost by the libraries, some cases they charge but nominally.

Patron

This term is often used in libraries and in library and information science literature. ODLIS defines patron as „any person who uses the resources and services of a library, not necessarily a registered borrower. Synonymous with user.“ Generally patron means a person who donates or supports organization.

Purchaser

Business Dictionary says that purchaser is „a person or entity that is a recipient of a good or service provided by a seller under a purchase order or contract of sale.“

Generally this term is not used in library activities. Most of the library products and services are free of cost or charges are very nominal.

Reader

This is a core term frequently used in libraries. Generally libraries have reading room, in which readers read or consult materials kept for this purpose. Harrod's Librarians' Glossary and Reference Book defines reader as "a person who makes use of literary material in a library; a member of a lending library is frequently called a Borrower." Reader is a general term, which is frequently used interchangeably for user.

User

User is a person, who uses library and information resources for various purposes. It may be an individual, a group, an institution, or any other. It is to be noted that user's information need could / will be different or vary time to time and place to place. It must be remembered that in the changing world the information need is also changing very rapidly. This is more important than how do LIS professionals frame or feel problem? If LIS professionals do not indulge in the user studies, they would not be able to accurately forecast the future scenario. In libraries and information centres the terms user, reader, patron and borrower are frequently used for various purposes. In LIS literature these terms have been defined to differentiate their connotations.

Visitor

Dr. SRR Ranganathan used this term frequently in his writings. He expressed "visitors fall into two groups : those who want immediate attention. and those who want to make unhurried selection

without too much assistance.” (Ranganathan: Five Laws of Library Science: 74). This is a general term, a visitor who visits a place or someone or somewhere. Visitor visits the library and information centres to consult or refer the material to fulfil his / her information needs. This is a common term used for a user, who visits a library.

4. Importance of User

Father of nation Mahatma Gandhi has said, “...a customer is the most important visitor on our premises. He is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so.” This statement describes the whole philosophy of serving the people. LIS professionals should keep this statement in mind while serving the users." Customer is the King " is a slogan we listen everywhere in the market. It shows the importance of users in the market. User satisfaction is the supreme and ultimate purpose of any library.

S.R. Ranganathan expressed his view on the importance of users in library science profession, he said “you should not impose your ideas, your likes and dislikes on him Alas! we are all human and in trying to prove that we are right, we lose sight of our main object which is to help the visitor in finding out what he can use with pleasure and profit. Work with reader. Don't work on him. You can lead him. But you cannot drag him. Work with him on his own ground.” (Ranganathan, The Five Laws of Library Science)

User is a very important component of library system or of any information generation, exchange and utilization process. Information is a public resource or a common resource; it must be made available to all citizens on equal footing. Library and information centres are deeply associated with the information generation, exchange and utilization process. This process can be made more effective and useful if users participate in this process. Now users are not only beneficiaries of services or passive actors in this process. In the 21st century's changed scenario, a user is an active part of any product or service. Now ICT has given a platform for reciprocity in the functioning of libraries and information centres. Libraries should understand the importance of the user and they must associate users in the planning of products and services rendered.

Today libraries are facing several problems; one of them is the dearth of users. Many people do not visit libraries to avail their services. Endemic nature of this problem in India can be realized by visiting any library. This problem can be solved by giving due importance to users. As users are beneficiaries of any information product and service ultimately, their opinion and feedback with regard to planning and execution of any service and product would associate more of them to the libraries. Users' need must be satisfied by all means.

Categories of Users

It is very difficult to cover or limit the scope of the categories of users. Users may be categorised in various ways. How to capture or limit possible categories is a big challenge before the professionals. In this module an attempt has been made to give one dimension to understand the wide and complex scenario of the phenomenon. Categories of the user may be divided on the basis of some characteristics. Further categorisation may be done on the basis of attributes.

The diagram given below shows the various categories of the users:

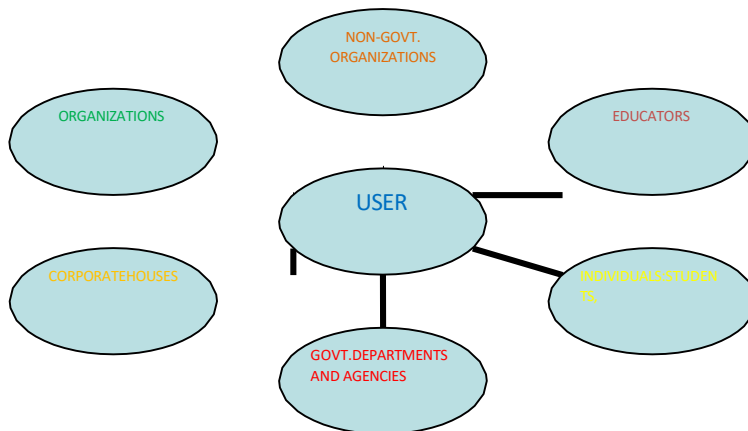


Diagram 1: Various categories of the users

In the following diagram the term "person" is illustrated and various divisions, subdivisions and sub-sub division are enumerated on the basis of different attributes. This chain of divisions can be enhanced in any direction by adding an attribute. For instance, in the following diagram the term "person" has been further divided by literacy, by gender, by age, by marriage status and by economic status. Then each division is again put under subdivisions. A map is ready to understand the scope of categorisation of users.

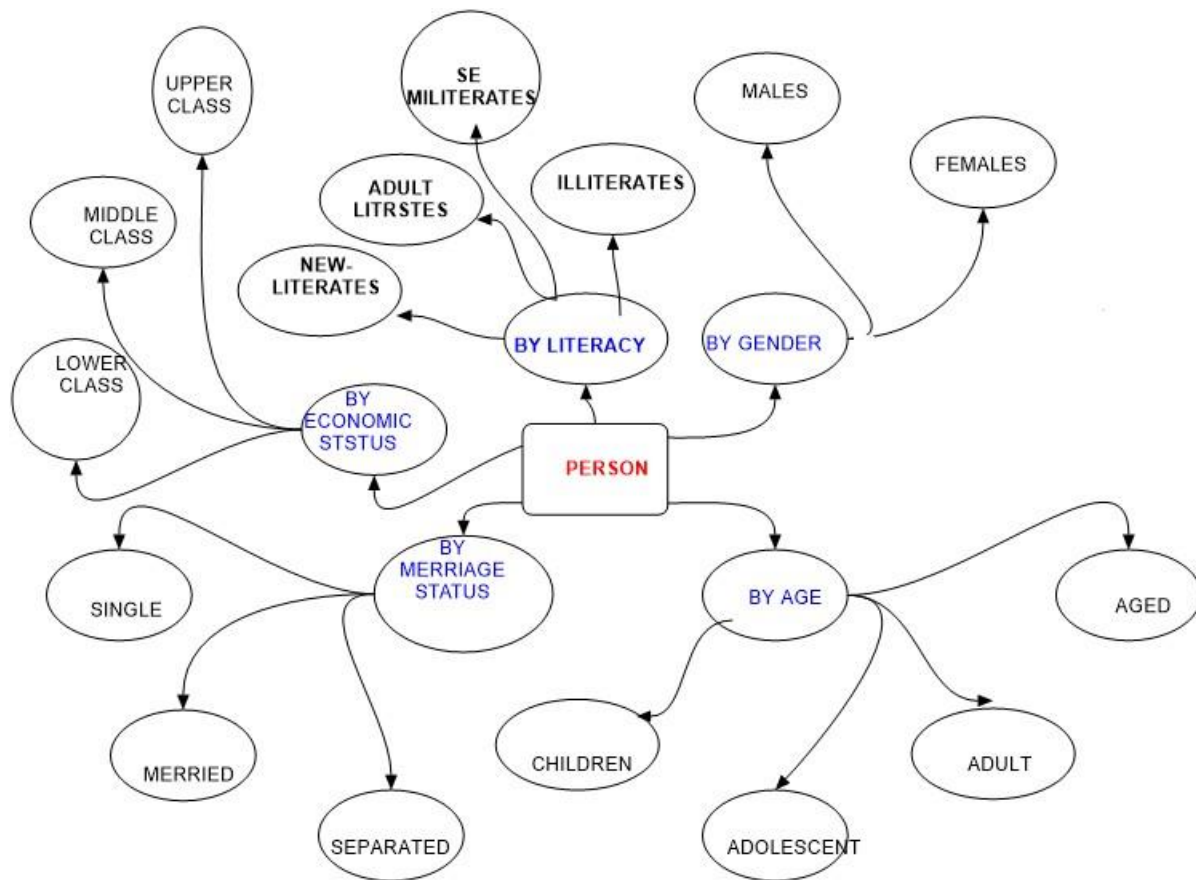


Diagram2:Showingacategorizationofaterm"person"withvariousattributes.

Categories can be made on the basis of attributes or scope and development of new knowledge. For example:Usercanbecategorizedonthebasisofdifferentkindofdisabilitiesasenumeratedinwikipedia (<en.wikipedia.org/wiki/Disability<).</p>
</div>

<p>Categoriesofdisabledusers</p>
</div>

1. Physicaldisability

</div>

2. Sensorydisability

</div>

<p>Visiondisability</p>
</div>

<p>Hearingdisability</p>
</div>

<p>Olfactoryandgustatorydisability</p>
</div>

<p>Somatosensoryimpairment</p>
</div>

Balance disorder

- 3 Intellectual disability
- 4 Mental health and emotional disabilities
- 5 Developmental disability
- 6 Non-visible disability

Categories of students

Categories of students can be drawn on the basis of various attributes, such as:

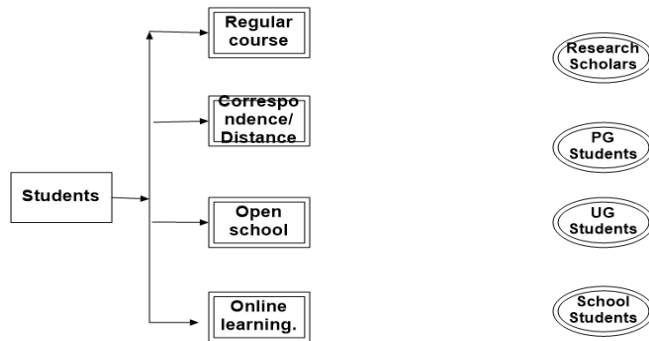


Diagram: 3 Categories of Students

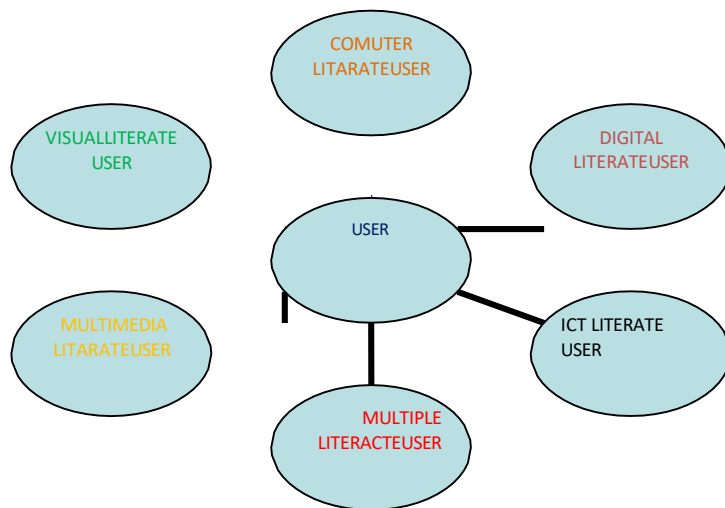
Persons associated with educational activities, for example:

Teachers: Teacher can be further categorised on the basis of level of education:

- Universities: Professor, Associate Professors, Assistant Professors, Demonstrators
- Colleges: Associate Professors, Assistant Professors
- Schools: Postgraduate Teachers, Trained Graduate Teachers, Primary Teachers.

Administration: Registrars, Finance Officers, Section Officers, etc. Diagram:

4 Categories of Users on the basis of literacy :



5. Characteristics of Users

It is very difficult to enumerate all characteristics of users, because user is a blanket term, which incorporates a variety of attributes. Some of characteristics may be:

- Social background
- Racial
- Ethnic
- Religious
- Cultural
- Social
- Economic
- Demographic
- Physical
- Mental

Every user has a specific kind of behaviour, because the personality of a person gets affected by their religion, family values, demographic and geographical attributes, cultural environment and values exists in that society.

All these factors affect the information seeking behaviour of the users. Users as individuals or as groups always have a specific kind of features. Library and information science professionals should always keep in mind these characteristics. Accordingly they can plan and execute various information products and services to the users. Ultimate task or function of any library product or service is to satisfy the ever-changing and ever-growing information needs of the users. If LIS professionals know the attributes of the users, they can plan product and services in better way.

6. Summary

User is the most important component of library activities or information business. There are various alternative terms for user, such as: audience, borrower, buyer, client, consumer, customer, patron, purchaser, reader and user. All these terms have been defined and explained above. In this module, an attempt has been made to differentiate these terms. Categories of users have been enumerated and it has been explained how these categories can be multiplied by taking into account different attributes. Various characteristics of users, such as their social background, viz., their racial, ethnic, religious, cultural, social, economic, demographic, physical, mental statuses among others affect their information seeking behaviour.

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Unit-5

Identifying of User's Information Needs

Introduction

Identification of information needs is a pre-requisite to design and develop any information system to provide need-based information services to the users. In earlier times before systematic beginning of users' studies during 1940s, generation of library services were mostly based upon professional perception without gathering the factual data of information needs of users. Nevertheless, the libraries have been always aiming at serving the users in a best possible way by providing them the desired reading resources they are likely to use. With the advances in library profession, it was felt that empirical data should be collected from the various communities and groups of users in order to generate and provide need-based effective and meaningful services to the perspective users. In India, S.R. Ranganathan (1933) particularly through his *Five Laws of Library Science* brought to the conscious level of library professionals that users are the focal point and every activities of the library profession revolves around them. He brought forth as to how the messages embedded in his laws could be complied with to serve the users in a most effective manners and ways. The philosophy emanating from these laws emphasizes that users have to be always kept in sight while building resources and services. To quote Taylor (1986) "The „principal strength of value added model lies in its stress on the user and on the needs and dimensions of the information environment as a major element in the design and evaluation of system."

It has been a great concern of the profession as to how user-centered services could be generated and disseminated. Mismatch between the resources and the users' need must be minimized as far as possible. This presupposes that information professionals must know the information needs of the users, they are going to serve. Further, they should also know as to how people seek, retrieve and prefer to use information. When we think of marketing of information, we must first know our clientele to have salability of our information products. The producers or the generators of any product should always produce such commodities that meet day-to-day needs of the perspective consumers without any barriers and drudgery. Information user is happy when he gets what he/she is looking for. To achieve this, information needs of the users to be first identified before planning such services (Chandel, Saraf, 2004).

According to Wilson (1980) "perfect knowledge of inquirer is predictions and perfect knowledge of all texts, which could possibly be used by an inquirer, would be necessary before that ideal set could be identified. For library it is important to investigate the preferences of its users to be able to acquire

adequate information sources (Vilar and Zumar, 1995) "...a knowledge of the requirements of the different users of scientific information and the uses to which they wish to put the information they secure should be the ultimate determining factor in the designing of methods of storage and retrieval of scientific information." (Bernal, 1959).

Before, this module is further elaborated, let us attempt to define and understand connotation of „needs“. Need is a psychological concept and human being according to Karl Marx is a creature of need. These needs are to be satisfied to avoid complications and unpleasantness and remove uncertainty. Need is a requisite which is required or wanted or desired. Need is a necessity such as food, water, security, etc.

3. What Needs is?

To define need is difficult. But human being is a creature of need as stated by Karl Marx. Even philosophers have avoided and neglected definition of need (Reader, 2005). Ohlsson (1995) observed that there are two concepts expressed by the term „need“ – one referring to certain psychological drives and another referring to certain casual connections between states. Psychological drives of Ohlsson is similar to Maslow theory of hierarchy of needs (1943).

Dictionary meaning of need is a condition or situation in which something is required or wanted, e.g., I need a glass of water. Business Dictionary defines „need“ as a motivational force that compels action for its satisfaction. Needs range from basic survival needs (common to all human beings) satisfied by necessity, to cultural, intellectual, and social needs (varying from place to place, and age group to age group).

{General: A motivating force that compels action for its satisfaction. Needs range from basic survival needs (common to all human beings) satisfied by necessities, to cultural, intellectual, and social needs (varying from place to place and age group to age group) satisfied by necessities.

Read more: <http://www.businessdictionary.com/definition/need.html#ixzz30CVH6E1M>}

We need food, shelter to survive. People need health care. But there is a difference between need for food and health care. Anything, which is necessary but lacking leads to generation of need. These needs are due to lack of and deprivation of something which are to be satisfied in order to avoid unpleasantness, remove anxiety and feeling and to move on to higher level need. Other terms used as synonymous or near synonymous to „needs“ are requirement, demand, want, preference. Needs are contingent, wants and preferences in contrast are in-contingent (Ohlsson, 1995). When some demand is put to seek something, it implies that there is a need behind this demand. So we may infer that demand is also the expression of need. The difference between wants and needs has been summarized as under (McCain, 2012):

| | WANTS | NEEDS |
|---|-----------------------------------|---|
| 1 | Subjective | Objective |
| 2 | Relative | Abstract and absolute |
| 3 | Uncontingent | Contingent |
| 4 | Insatiable | Satiable |
| 5 | Attributable to human individuals | Attributable in principle to any entity |

Students may refer the articles written by Nicholas and Herman (2009) Line (1974) Robert (1975) and Brittan (1970) for further detail to find out the difference in the usage of these terms.

4. Definitions of Information Needs

The concept of information needs was first time used by Robert (1962). Taylor attempted to describe how an inquirer obtains an answer from an information system, by performing the process of seeking information consciously or unconsciously (Wikipedia). However, Menzel (1964) preferred the term „demand“ in place of „need“. Our collection development policy is also based upon demand theory. In all literature of Library & Information Science, mainly two terms have been frequently used, i.e., Information needs and information seeking behaviour.

It is not only information needs of users exclusively which is to be met, libraries are also expected to meet the requirement, demand and want of the users. Users may put demand on the system to get information, may require some piece of information or want to read and consult some information resources which may not be based upon their actual needs. Therefore, for the purpose of this study, „information needs“ should be considered in a broader perspective which also includes information requirement, want and demand of information, though difference among these terms have been discussed in the preceding paragraphs. Information needs is not the basic need as need for food, shelter and health care.

Information seeking theories often refer to the concept of *information needs*, a presumed cognitive state wherein an individual's need state triggers the search behavior characteristic of information seeking in a given context (Design dialogues, Nov. 15th, 2010). On day-to-day basis people engage themselves in information seeking at some level (consciously or unconsciously) (Krikelas, 1983). When an attempt is made to define information needs, both the terms „information“ and „need“ should preferably be defined individually for better understanding of the concepts of two terms. But both these terms are difficult to define, as such there is no consensus in defining these terms. Need is an internal process and information is nebulous term. In view of this situation, Wilson (1981, 2005) suggests that the term „information needs“ be abandoned and replaced with the term „information-seeking behavior.“ He writes (2005): the term "information-seeking behavior" should be adapted in place of information needs as behaviour is observable, whereas needs being internal mental states, are not. „Information needs“ and „information seeking behaviour“ cannot be treated as conveying same meaning, nor information needs can be adapted to mean information seeking behaviour and vice versa. When information need is felt, the process of information seeking begins. In other words, information needs generate information seeking or information gathering behaviour. Information seeking behaviour includes how users look for information, how they make use of resources, what are their preferences, choices, how they interact with the barriers of information communication and information systems in use, how they perceive their need and formulate search strategies to access information (Chandel, 2004). This makes the difference between „information need“ and „information seeking behaviour“. But the argument of Wilson is

convincing in order to resolve the issue by replacing information needs with information seeking behavior to come out of the complexity in defining „information need“. But the meaning and the concept of both the terms are different.

Belkin (1977) gave the concept of *Anomalous State of Knowledge* (ASK). He identified the fundamental problem of communication between information generator and information user and concluded that cognitive level of recipient of information is anomalous with respect to some goal. ASK is similar to unconscious need of Taylor (1968), when user is not able to conceptualize what he actually needs. However, it may not be true in all cases. When reference is made to unconscious need, unexpressed need, anomalous state of knowledge, it is difficult to bring „information need“ under a precise definition. When people recognize a gap in their state of knowledge, that is, when they experience “an anomalous state of knowledge”, they wish to resolve that anomaly and seek information. But libraries are not supposed to meet the information needs only but have to provide all resources whatever is required or demanded or /wanted by the users. The following statements may explain the difference among terms like need, demand, requirement, preferences and wants which almost convey the same meaning so far as meeting information needs is concerned:

- i) There is a demand of course books as observed by the library staff.
- ii) Survey revealed that majority of the users above the age group of 60 years like to read religious books.
- iii) In public library, users often look for recreational and inspiration materials. Users often want to read new arrival and new publications in their area of interest. People need digital libraries in 21st Century. In need morning newspaper to begin the day.
- iv) Local history is one of the subjects of interest of local community.

Krikelas defines information needs as a state of uncertainty recognized by individual (Henefer, and Fulton, 2008). Information needs is felt in different circumstances encountered by the individual. Information is also sought even without the feeling of its „need“. It is not always need based. One may search information out of inquisitiveness to know latest advances in the subject, resolve problems in hand relating to work one is engaged in. Information is also sought for recreational, inspirational and motivational purposes which don't fall under the category of human basic needs. One may also gather information to keep updated and influence people around him with his knowledge. Some people have instinctively derived to seek information to go on changing their knowledge structure and keep themselves abreast with latest developments. Therefore, „information need“ is to be considered in a broader sense which includes want, demand, preferences, choices for information resources.

5. Characteristics of Information Needs

Main characteristics of information needs could be summarized as below:

- Information needs is subjective as well as objective with inter-relationship between the two. Needs are objective because it is a discoverable matter of fact what needs a person has.
- Needs differ from: individual-to-individual, group to group, institution to institution, society to society, environment to environment, and from time to time conditioned by the purpose and function at hand (Chandel and Veena, 2004).
- Need-Creating Event/Environment are responsible factors behind information needs and information gathering (Krikelas, 1983).
- Nature and types of information needs differ according to the purpose in hand and the situation in which it arises.
- Information needs is often non-specific, intangible, visceral and thus unknowable and non-specifiable in a query to an information system (Belkin, Oddy, and Brooks, 1982).

6. Types of Needs

There are different types of needs conditioned by the different purposes in hand. The environment in which one works or in which one lives will have bearing on the type of information one needs as well as one defines that need. Voigt (1959) had identified only three types of needs: *Current approach* (to keep up-to date), *Everyday approach*, *Exhaustive approach*. Menzel (1964) added one more function to Voigt list that of enabling a scientist to „brush up on a field – that is to familiarize himself with more or less well defined field of inquiry. Need may also arise from isolated event (Henefer and Fulton, 2008). Krikelas (1983) believed in only two types of needs; *immediate need* and *deferred needs*. Whittaker (1993) gave the following types of information needs:

- i) *Regular*: Such as current awareness, browsing of subject journals.
- ii) *General*: General reading according to the interests hobbies etc.
- iii) *Quick reference*: Fact-finding, statistical information.
- iv) *Relating to personal problems*: Travel, diagnosis of diseases, finding a job, etc.
- v) *Personal development*: Study abroad, qualifying competitive examination, and improving professional competence.
- vi) *Research*: Writing thesis, project report, dissertation, literature survey and review, etc.

Gorman (1995) identified following types of information needs:

- i) *Unrecognized*: not aware of information or knowledge
- ii) *Recognized*: aware that information needed may or may not be pursued
- iii) *Pursued*: information seeking occurs, may or may not be pursued

Taylor (1962) identified following four stages in the minds of the inquirer when asking four types of questions, giving rise to information needs:

- i) Actual, but unexpressed, need for information (the visceral need)
- ii) The conscious, within-brain description of the need (the conscious need)
- iii) The formal statement of the question (the formalized need).
- iv) The question as presented in the information system (Compromised need).

Orr (1970) gave a detailed account of types of information needs. He identified why of information needs based upon input and output functions which are given below:

Input Functions:

Regular Needs

Current Awareness: To keep abreast of new development.

Everyday Reference: To obtain specific items of information essential for day-to-day conduct of ongoing project.

Personal: Such as food, drinks, etc.

Stimulation: Suggest new ideas, approaches and problems.

Feedback: To obtain reactions to own work and refine problem definitions.

Episodic Needs

Retrospective: Search to learn of past work possibly relevant to and useful for current or project.

Exhaustive: All relevant work.

Limited: Limited by size or by criteria (e.g., literature of last 10 years).

Instructions: To acquire new competencies or to „brush up“ in areas where competency has declined.

Consultation: To obtain tailor-made „solutions“ or expert opinion on specific problems recognized as outside areas of special competence.

Output Functions

Responding

This is in response to input needs of the users which may be explicit or implicit. The output response could be:

Informing

Alerting (Current awareness)

Answering (Everyday reference)

Referring (Retrospective search)

Teaching (Instruction)
Advising (Consultation)
Reacting to meet personal needs

Requesting: To solicit input from others explicit or implied requests aimed at meeting own needs for current awareness, everyday reference, retrospective search, instruction and consultation, as well as for stimulation and feedback.

Promoting: To advance own ideas, projects, career, or reputation, namely:

Proposing: To obtain support from sponsors, collaboration and cooperation from others.

Preempting: To establish a proprietary „claim“ for contribution, pending definitive disclosure or „registration“.

Registering: To make a contribution part of the permanent record esteemed by reference group or sponsors.

Re-enforcing: To improve chance of achieving desired end by citing own contribution, etc.

Defending: To refute criticism.

Types of information needs depends upon nature of problem in hand which varies from individual to individual in different circumstances. The very purpose of going into the details of types of information needs is to find ways and means of meeting these needs to the utmost satisfaction of different types of users belonging to different communities by generating such services which have relevance to the users. Some writers distinguish information needs according to the activity in which information gained is used, Menzel (1964). Knowledge of different types of information needs provides background to generate different types of services to different types of users. Today's users are entirely different to earlier users of two or three decades ago. Internet and Google experience have changed the information seeking behaviour of the users. They expect everything in a

single click irrespective of the location and possession. Most of the users today want comprehensive information in full-text.

7. Meeting Information Needs

The classification of information needs is quite diverse as discussed above and it is quite challenging to meet varied needs of different types of users. Any type of need or demand can confront the professional who should be ever prepared to meet the situation. Menzel (1964) had identified three themes to provide expected services to the scientists to meet out their requirements which has the same relevance to day as 50 years ago:

- *The guiding slogan must be speed, efficiency and comprehensiveness. The overriding aim in other words is to bring information to scientist promptly, to bring him all that is relevant, and to bring it to him with a minimum of waste motion, especially on the scientist's own part.*
- *The prototype activity is exhaustive search. This means the delivery to the scientist of all documents satisfying a small set of criteria that he has defined in advance.*
- *The achievement of these goals lies along the road of greater systematization, greater streamlining, greater mechanization, greater automation of information processing and dissemination.*

Though these were conceived as untested themes and assumptions but have passed through the test of the time and seem to be proven facts. During 1960s there was hardly any application of technology to achieve the above goals which Menzel had very thoughtfully conceived and foresighted. In the present electronic age, nothing can be achieved without systematization, mechanisation and automation. These are the roads leading to reach library users to meet out their information needs.

It is interesting to note that IFLA (2011) had used the term wishes of the users in place of needs of the users.

What are the wishes of four present users have been summarized by IFLA (2011) as under:

- *Ease of access, i.e. users would like to have as much content as possible online and remotely accessible from wherever they are, using any device they have at hand.*
- *Ease of search across databases and available content assets, i.e. users would like our search engine to be like Google, easy to use, yet much better and more precise*
- *Richness of content, i.e. users would like to have easy access to a very rich repository of content in all formats and languages, 24 by 7.*
- *Affordable services, i.e. users are prepared to pay for service, however, they would like librarians to help them negotiate for lower fees and make the payment process easy and convenient. Most would prefer to pay as they use, rather than by subscriptions.*
- *Content translated into the mother tongue language that they understand, i.e. users would like access channels and navigation paths to be in the languages that they choose, and the content to be in the language that they are able to read*
- *Easy access to resource persons or librarians who can help them to navigate and provide suitable coaching when they need help.*

8 Summary

The purpose of identifying information needs of users is to provide need based value added information services. Users are always to be kept in view and emphasis should be on their needs which also include demand, wants, preferences and also the wishes. A large number of literature have been published on users studies particularly on „information needs“. The precise definition of information needs is still lacking. Information need is not similar to need for food, shelter, healthcare, etc. Information needs is not the basic need. If information need is not satisfied, it may not lead to consequence as being starved without getting food or not getting healthcare. Information is not only sought when needed, however, users may seek information for recreation, to keep themselves up-to-date in their subject of interest. Many users out of their hobby also seek information. They may be driven to find information out of curiosity and interest which may not fall strictly under the definition of need. Information is sought when one feels that his knowledge is not adequate than required to meet the situation, this inadequacy has to be removed by providing right information.

We have discussed different types of needs of different users which obvious have different sources and services to be generated and provided. The basic function of the library begins with collection building, if it is developed based upon „needs“, resources would be used. Therefore, identifying information needs of users plays an important role providing need-based services.

It is also equally important as to how these services should be provided. Google and other service providers search engines have attracted library users and majority of the our users are being withdrawn away from the libraries. Convenience and ease of use are dominating factors. User information seeking behaviour have entirely changed, their dependence on libraries is declining. Therefore, it is not only important to assess the information needs of the users, but it is equally important how to provide services to them according to their expectation. Information need has to be interpreted in a broader sense of the term so that whatever is sought is provided timely and effectively provided. It hardly matters whether it is demand or want or need.

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