Chapter 3

Information

Seeking Behaviour
1. Introduction

Information Seeking Behaviour is an area of active interest between librarian’s and information scientists. It reveals from the recognition of some need perceived by the user, who as a consequence makes demand upon formal systems such as libraries, information centers, online services or some other purpose to satisfy the perceived need. The information seeking behavior mainly concerned with who needs what kind of information and what reasons, how information is found, evaluated and used, and how their needs can be identified and satisfied. The study of the information seeking behavior of scientists can be dated back to the late 1940’s. Since that time, a large number of studies have been carried out on various aspects of the information seeking behaviour of scientists and this literature has been extensively reviewed.

The use of information is so complex that there cannot be a simple system to cope up with the task of effective retrieval without assessing their specific needs. This situation has given rise to the growing concepts of information searching and the manner of determining the pattern of searching is said to be considered Information Seeking Behavior (ISB). Information seeking is a matter more or less related to the sense making in which the individual chooses an item of information that best fits to his needs and purposes.
2. **Information Seeking Behaviour**

The phrase ‘Information Seeking Behavior’ has been defined variously by different authors:

According to (Krikels 19), Information seeking behavior refers to “any activity of an individual that is undertaken to identify a message that satisfies a perceived need.”

Prasad defined information seeking behavior as “a manner in which a user conducts himself in relation to a given information environment. It is, therefore regarded as essentially a process of interaction between the user and the rest of the information system.”

Ellis observed that information producing and information seeking behavior are closely linked and are the reasons why most information systems are not better accepted as they fail to provide linkage between the two activities.

2.1 **Information Seeking Situations**

Individuals in the course of time may exhibit different information seeking behavior because of a significant difference in the nature of the problem certain jobs and lifestyles may be characterized by the degree of constraints they happen. To face there can be two types of situations in which information is consulted. (1) Continuous and (2) Discrete. Bureaucrats, for example, while dealing with specific issues face discrete problems. But journalists whose responsibility is to report in a daily manner need information continuously.
There are different dimensions of behavioral assessment, while some emphasize the sociological approach as the appropriate one; others prefer psychology or cognitive science that leads the behavioral patterns. Some still say communication system to be the main stay in shaping the behavioral designs while other considers observable behavior or actions of the information user that mould the human information seeking behavior.

2.2 Elements of Information Seeking Behaviour

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Making an in depth study of information "needs" David and Katherine have proposed a paradigm shift for information Seeking behaviour. They have identified an automotive set of premises and assumptions, the essence of an alternative paradigm in a set of six elements. They are:

i. The conception of information as objective versus, subjective;

ii. Information users as passive recipient or objective versus purposive, self-controlling and sense-making beings;

iii. User of information on behaviour applied across situations versus behaviour understood. As the result of dialogue between system and user in which need
articulation goes through situationally bound interaction.

iv. The study of user behaviour primarily in the context of user interaction with the system versus holistic approaches that focus on the whole social interaction;

v. Focus on external behaviour versus internal cognition and

vi. Concerns that a focus on individual behaviour yields too much variation for system to integrate versus the need, with individuality in user behaviour. They however, conclude that traditional approaches have aspired to sophisticated quantitative techniques yet in the context of the impetus of the paradigm shifts, scholar are now calling for supplementing quantitative approaches with inductive, and qualitative approaches.

2.3 Methods Of Information Seeking

To determine the information seeking strategies of medical scientists the study has identified three basic methods of Information Seeking:

i) Piggy backing

ii) Friendly consultations and

iii) Professional Peripheration

Firstly, a user would tend to Pigg back giving information search a low priority. If there were higher priority demands on his or her time.
Secondly a person would be guided by previous experiences. And finally Professional peripheration tended to be used when one understanding the content of question.

2.4 Categories of Information Seeking

People seek information in different ways and for different purposes. Thus, the method of information seeking varies from person to person and situation to situation. Lonnqvist has identified the existence of two types of Information Seeking:

(a) Specific Information Seeking with subject acquaintance of the Scholar;
(b) Dependent Information Seeking when the subject is new and the scholar is not aware of it.

While the scholar is well aware of the subject, one can undertake Information Seeking in a specific way that suits his/her needs. This is to say that, one can gather reference to literature on the subject in a specific time frame. One can also use the greatest skill in Information Seeking which is normally practices by experienced scholars.

The second type is confined to either scholars starting to work on a new subject or a new research project which is not known to him, or terms of user is not mature enough in terms of use of information sources.

The above two types of Information Seeking does not always occurs in their present form. Individual variations could be seen but it is fair to say that these two main types have crystallized.
2.4 Approaches To Information Needs

The literature on information needs and users covers the fundamental terms in a different phenomenon, Ellis, David have enunciated the following six basic approaches which is shown in the figure1:

(i) Research Approach;
(ii) Awareness Approach;
(iii) Like-Dislike Approach;
(iv) Priority Approach;
(v) Community Profile Approach; and.
(vi) Interests, Activities and Group membership approach

These approaches seem to find the strategic issues of information needs and assessment that paved the way for different patterns of use. The problem concerning the user behaviour in relation to needs is very often judged by the system. There is a limitation of user’s concentration within the system.6
Model of Collaborative Information Seeking
2.5 Collaborative Information Seeking

The analysis of Command and Control Support (CCS) study a group identified three components on being important to the collaborative information seeking activity. Information seeking roles, information seeking patterns, & the context in which the roles and pattern are performed are shown in the figure. The first context identified was the collaborative information seeking context, which captures what is collectively known, understood, felt and believed and social structure. The second context, the organizational context describe where each participant performing within the collaborative information seeking activity is drawn from.

(i) **Information referrer.** The main task of the information referrer is to direct unsolicited information from the participants organisational context into the collaborative information seeking context.

(ii) **Information seeker** searches the specific information.

(iii) **Information verifier** is to validate the gathered information. Verification of gathered information is often an implicit part of individual information seeking activities.

(iv) **Information seeking instigator** directs the participants to gather specific information.

(v) **Information indexer/abstracter** act as a reference librarian and provides indexing abstracting service by
providing summaries as well as points to information within their organizational context.

(vi) **Group administrator** encompassed the following activities:

- Cataloging & organizing the information that resulted from the information seeking activities;
- Keeping minutes of the meetings;
- Scheduling meetings; and
- Distribution of collected information.

(vii) **Group manager** is not directly involved in the collaborative information seeking activity. The key focus is managing the Command and Control Support (CCS) study group.  

2.6 **Models of Information Seeking Behaviour**

A Professional before making an in depth progress on the problem in hand usually demonstrates his curiosity in order to ascertain whether any of his predecessors had carried out research similar to his problem, and if so, any model or theory to that effect has been established. This curiosity not only helps the scholar to conceive an idea during his initial stages of research, but also cautions him about the expected problems, which this scholar might encounter during the course of his investigation. Besides, such models sometimes act as path-finders. People have several preferences for seeking information. Even, if it is very often based upon certain hierarchies.
Professionals/Scientists seek information at different situations and circumstances. What is the Behavioural implication related to Information Seeking is a matter that needs detail discussion.

The several in depth studies were conducted in specific subject areas to determine the information needs and specific traits of Information Seeking Behaviour of the Scientists through developments of suitable models:

(a) **Stigler's Model of Optimization**

During the early 1900s an economist George Stigler had developed Optimizing Models of Information Seeking, in which he proposed the use of the concept of utility maximizing behaviour to assess the quantity of Information of people would acquire at different levels of cost and effort. He was awarded Noble Prize in 1982.

(b) **Simon's Model of Satisfaction to Information Seeking**

Similarly, satisfaction model concerning to Information Seeking designed by Simon in the 1970's emphasis the extent to which individuals and groups simplify and terminate their work on a problem, not for reasons inherent in the logic of the problem but for practical constraints. He was also awarded Noble Prize in economics in 1978.

(c) **Krikels Alternative Model to Information Seeking**
Krikels has presented the ‘alternative model’ to Information Seeking Behaviour. Though his model does not elaborately or specifically discussed information seeking behaviour, its ultimate value lies in its utility in the design and analysis of future empirical studies.

(d) Mick's Individual Behaviour Model

Mick developed the models on management oriented information research appears as a very pragmatic towards describing and studying Information Seeking Behaviour.

(e) Robert's Information Man Model

Robert's “Information-Man” model is more applied in classical economics where it predominantly played a major role in Social Science than on information studies. Through “Information Man” is simple and conservative for the purpose of study of Information Seeking Behaviour.

(f) Ellis Behaviour Model

In the grounded theory approach, Ellis has analyzed a behaviour pattern and characteristics of researchers in the field of Social Sciences. This model was employed to recommend for information retrieval system design. Further studies were also concluded modeling information seeking patterns of academics and researchers in Science and Literature at Sheffield.
Wilson's 'Work role' Model

Wilson however has a different but pragmatic view on discussing a model. In his opinion, humans' personal needs are at the root of motivation towards Information Seeking Behaviour. These needs emerged due to different roles the individual play in social life. The 'work role' is most important which applied in different activities, responsibilities and achievement of an individual especially in organizational settings. The work role generated some cognitive needs which again lead to effective needs. The ultimate result is the emergence of a pattern of information seeking behaviour.  

2.7 Research on Information Seeking Behaviour

Research on information seeking behaviour is on the rise with the growth of Multi disciplinary subjects and interest of researchers of new micro subjects, there appears a tremendous increase of special users in libraries and information centers. To cope with the task of providing satisfactory library and information services, it always desirable to make a close look at the information users. Hence library intermediaries have started to undertake several researches works on information needs and seeking behaviour of their users at different levels.

Saracevik while speaking on "Information seeking", characterized the current state of knowledge of cognitive aspects of information seeking and information retrieval in terms of two basic questions:
(1) At the level that the rationalists used to ask a hundred years, or so;

(2) That concerns not only with identification of the variables, but what is their nature and their effects.

The situation remains same as Krikelas reacted to Saracevik in the words, “work in this area of information seeking is so arduous because we are only now beginning to understand how complex the process may be and how difficult it is to define - let alone measure many of the important concepts of information needs and users” has contributed a lot to the research discourse on information seeking behaviour. Attempts have been made to relate specific variables to particular pieces of information-seeking behavioural patterns. A good number of articles have also been presented which are devoted to in-depth analysis of behavioural components of information uses still a renewed endeavour seems imperative in order to discover some of the important issues that remain hidden and possibly unexplored.

8. Conclusion

With the growth of information deluge, each one needs information of increasing variety of level, frequency, volume and use. Information needs and users have contributed a lot to the research discourse on information seeking behaviour. Attempts have been made to relate specific variables to particular pieces of information seeking behavioural patterns. A good number of articles have also been presented which are
devoted to in-depth analysis of behavioural components of information uses.

Information environment is very complex. In order to retrieve desired information of the users, the information intermediary has to adopt inter alia certain behavioural strategies to make the system effective. ISB is one such approach that identifies the basic requirements of the users. While studying ISB, it is essential to know its various categories and methods so that the real picture of user's perception is visualized. It is also important to analyse the factors that motivate information seeking. However, if the library and information system is to work effectively, it is ISB, which is required to adopt on priority basis to make the system successful.
REFERENCES:


