Original Research Article

Information Seeking Behaviour: An overview

Hemantha Kumar G.H.

Research Scholar, Rayalaseema University, Kurnool

Email: ghhemanth@gmail.com

Abstract

Information can be defined as a collection of facts organized in such a way that they have additional value beyond the value of the facts themselves. In simple word "information" can be defined as a processed data. Information, in the most restricted technical sense; it is an ordered sequence of symbols that can be interpreted as a message. This study aims to propose an overview of the various models and to find out how models are related to each other. These will serve the information community to illustrate that a number of factors which were responsible for, and contribute to, the different forms of sustainability of digital information services.

Keyword: Information Seeking Behaviour, Models, Types.

Introduction

The word "information" was apparently derived from the Latin stem of the nominative informatio, this noun is in its turn derived from the verb "informare". When the raw data is processed or value is added to it, data becomes information. Webster's International Dictionary (1994) defines "Information" as

a. Facts or figures ready for communication or use as distinguished from incorporated in a formally organized branch of knowledge.

b. The process by which the form of an object of knowledge is impressed upon the apprehending mind so as to bring about the state of knowing.

Information seeking behaviour

Information seeking behaviour refers to the way people search for and utilize information. The term was coined by Wilson in his 1981 paper, on the grounds that the then current 'information needs' was unhelpful as a basis for a research agenda, since 'need' could not be directly observed, while how people behaved in seeking information could be observed and investigated. However, there is increasing work in the information searching field that is relating behaviours to underlying needs.

In 1999, Wilson described an outline of models of information seeking and other aspects of information behaviour, showing the relationship between communication and information behaviour in general with information seeking and information searching in information retrieval systems. It is suggested that these models address issues at various levels of information behaviour and that they can be related by envisaging a 'nesting' of models. It is also suggested that, within both information seeking research and information searching research, alternative models address similar issues in related ways and that the models are complimentary rather than conflicting. Finally, an alternative, problem-solving model is presented, which, it is suggested, provides a basis for relating the models in appropriate research strategies.

Models of Information Seeking Behaviour

The following models that are grouped into this category are Wilson Model - 1981 and 1996, Kirkelas's Models - 1983, Johnson's Model - 1987, Kuhlthau Model - 1992, Leckie's Model - 1996, Ellis's Model - 1989, Ingwersen's Cognitive Model and Episodic Model. Models exclusively make the content of the concept that they deal more tangible through illustrations in the form of diagram, chart, map, table, graph etc.

The Wilson Model 1981

The Wilson model (1981) says that information need perceived by an information seeker gives way for information seeking behaviour to occur. In order to satisfy the information need, the user demand for formal and informal information sources and systems. The demands lead him for either success or failure in getting required information. On success, the user gets his need be fully or partially be satisfied. On failure, the user restarts his search process. It was also explained that information seeking behaviour may involve other people through information exchange by means of passing the useful information to them as well as using the information by the seekers themselves.
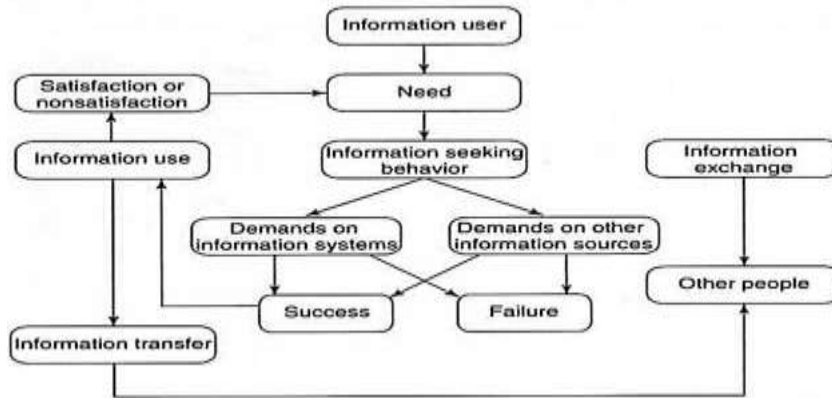
Fig. 1: Wilson Model (1981)

The Wilson Model 1996

Wilson's second model (1996) is explained below diagram.

Features of the model are Activating Mechanisms for seeking information which are affected by the Intervening variables of six types: Psychological aspects, Demographic background, Role related to social aspects, Environmental variable and Characteristics of role. This model recognizes search behaviours: Passive attention, Passive search, Active search and ongoing search. The term in the model 'information processing and use' implied that the information is evaluated to know its effectiveness on satisfying the need.
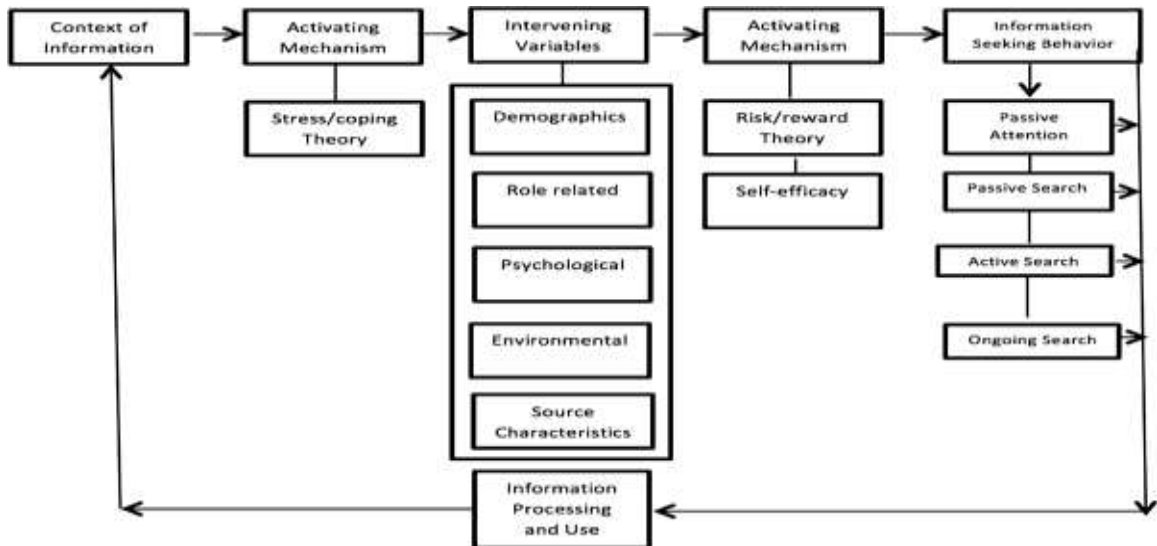

Fig. 2: The Wilson Model (1996)

Kirkelas's Model 1983

The Krikelas model (1983) is an early model and was cited widely. The model contains thirteen components. It is a general model that is applicable to ordinary life. In the model the twin actions namely information gathering and information giving are given at the top. The information gathering process is carried out based on the deferred needs which are kindled by an event or environment of the person who seeks information. The model shows that the gathered information is directed to memory or personal files.
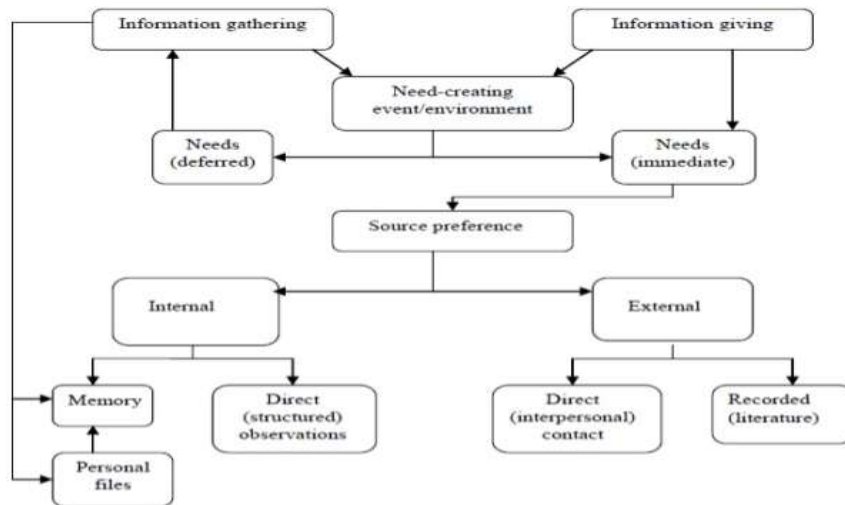
Note. From —Information Seeking Behavior: Patterns and Concepts,‖ by K. Krikelas, 1983, Drexel Library Quarterly, 19, p. 17.

Fig. 3: Kirkelas's Model of Information Seeking

Johnson's Model 1987

There are seven factors under three headings given in the Johnson's model (1987). The fundamental process flows from left to right. The four factors under the heading antecedents are grouped under two sub headings which are termed as background factor and personal relevance. The background factor includes the factors of demographics and personal experience and the personal relevance factor includes salience and beliefs. The second heading Information carrier factors include characteristics and Utilities of the information channels selected and used by the seekers. The last heading is information seeking actions.
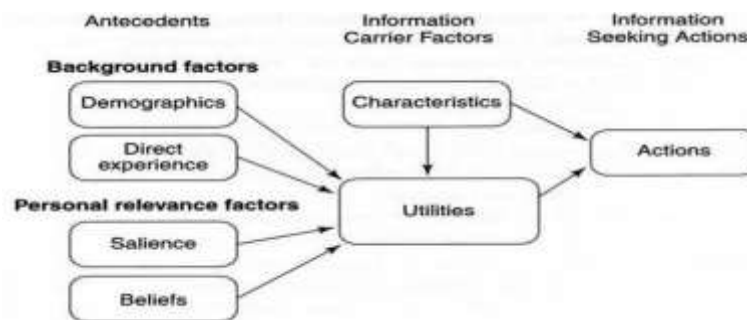

Fig. 4: Johnson's Model (1987)

Kuhlthau Model 1992

Fig. 5: Kuhlthau Model (1992)

The Kuhlthau Model (1992) is explained as follows

Initiation: When a person comes to know the lack of knowledge or understanding, uncertainty is felt. Thoughts would be vague and action for seeking information would be initiated.

Selection: In this stage the uncertainty on the area, topic or problem is not cleared and the person with a brief optimism gets readies for exploration of the information.

Exploration: While exploring for information people will get doubt on the consistency of the information, confused on the compatibility and get frustrated in the process.

Formulation: In this stage the person gets focused perception which leads to clarity and the process of seeking for information gets continued

Collection: The process of information seeking senses the right direction, information related to the focused perspective is gathered and it minimizes the ambiguity of the information

Presentation: After the completion of the search the seeker gets new knowledge which the person can present to others and put the knowledge to use.

Assessment: When the information seeker attains the required knowledge, seeker gets a sense of accomplishment and the self awareness increases.

Leckie's Model 1996

The Leckie's model (1996) concentrates on professionals such as engineers, doctors and lawyers. This model features six factors connected by arrows flowing down from the top. When five factors are unidirectional one factor is bidirectional. According to this model the factor 'work role' enables 'tasks' to perform. The performance of the tasks creates information need. The model shows information seeking behaviour as a bidirectional arrow labelled as 'information is sought'. The factor termed as 'outcomes' is the end result which connects the factors 'source of information'. 'awareness of information' and 'information is sought' through feedback arrows.
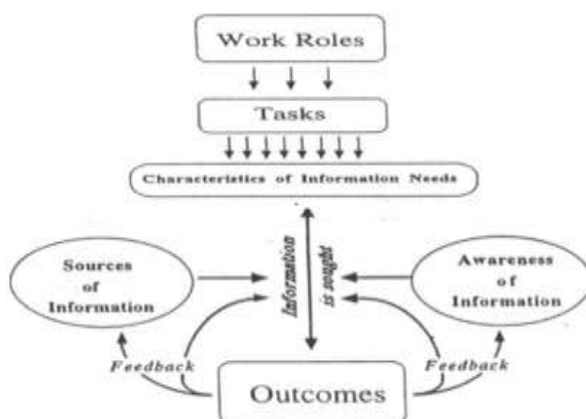

Fig. 6: Leckie's Model of Information Seeking of Professionals (1996)

Ellis model 1989

Ellis's elaboration of the different behaviours involved in information seeking is not set out as a diagrammatic model and Ellis makes no claims to the effect that the different behaviours constitute a single set of stages; indeed, he uses the term 'features' rather than 'stages'. These features are named and defined below:
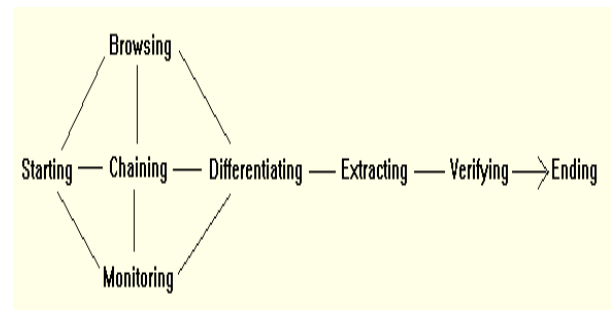

Fig. 7: A process model based on Ellis's 'characteristics'

Starting: the means employed by the user to begin seeking information, for example, asking some knowledgeable colleague;

Chaining: following footnotes and citations in known material or 'forward' chaining from known items through citation indexes;

Browsing: 'semi-directed or semi-structured searching' (Ellis, 1989: 187)

Differentiating: using known differences in information sources as a way of filtering the amount of information obtained;

Monitoring: keeping up-to-date or current awareness searching;

Extracting: selectively identifying relevant material in an information source;

Verifying: checking the accuracy of information;

Ending: which may be defined as 'tying up loose ends' through a final search.

Ingwersen's cognitive model

Ingwersen's model is slightly simplified in Figure 8. When we examine this model, we can see its close family resemblance to other models of information seeking behaviour. In particular, the elements user's cognitive space and social/organizational environment, resemble the person in context and environmental factors specified in Wilson's models and the general orientation towards queries posed to an IR system point to a concern with the active search, which is the concern of most information-seeking models. Ingwersen, however, makes explicit a number of other elements: first, he demonstrates that within each area of his model, the functions of the information user, the document author, the intermediary, the interface and the IR system are the result of explicit or implicit cognitive

models of the domain of interest at that particular point. Thus, users have models of their work-task or their information need, or their problem or goal, which are usually implicit, but often capable of explication. Again, the IR system is an explication of the system designer's cognitive model of what the system should do and how it should function. Secondly, Ingwersen brings the IR system into the picture, suggesting that a comprehensive model of information-seeking behaviour must include the system that points to the information objects that may be of interest to the enquirer. Thirdly, he shows that various cognitive transformations take place in moving from the life-world in which the user experiences a problem or identifies a goal to a situation in which a store of pointers to information objects can be satisfactorily searched and useful objects identified. Finally he points to the need for these models or cognitive structures and their transformations to be effectively communicated throughout the 'system', which will include the user, the author and the IR system designer.
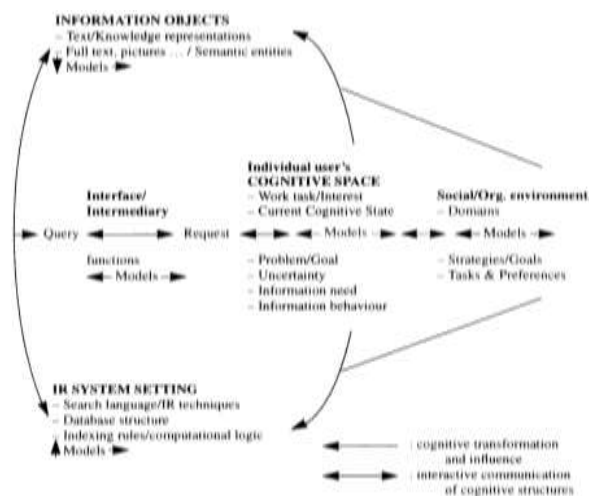

Fig. 8: Ingwersen's cognitive model

Episodic model

The episodic model was developed by Nicholas J. Belkin.

There are 4 dimensions which characterize search behaviour. These dimensions can be combined in 16 different ways.

- Method of interaction (scanning/searching)
- Goal of interaction (learning/selecting)
- Mode of retrieval (recognition/specification)
- Resource considered (information/meta-information)

Types

Google Generation detailed six different characteristics of online information seeking behaviour;

1. horizontal information seekers
2. navigation
3. viewers

4. squirreling behaviour
5. diverse information seekers
6. checking information seekers.

- **Horizontal information seeking** is the method sometimes referred to as "skimming". An information seeker who skims views a couple of pages, then subsequently follows other links without necessarily returning to the initial sites.
- **Navigators**, as might be expected, spend their time finding their way around.
- Wilson found that users of e-book or e-journal sites were most likely spend, on average, a mere four to eight minutes **viewing** said sites.
- **Squirreling behaviour** relates to users who download lots of documents but might not necessarily end up reading them.
- **Checking information seekers** assess the host in order to ascertain trustworthiness.
- The bracket of users named **diverse information seekers** are users whose behaviour differs from the above sectors.

Conclusion

I have taken this study information seeking behaviour of faculty members of agricultural universities in Karnataka and above mention models and types adopt my research the analysis of data. The various models of information behaviour, information-seeking behaviour and information searching represent different aspects of the overall problem: they are complementary, rather than competing. The key questions are: Specifically, in the case of information-searching behaviour; how does knowledge of modes of information-seeking behaviour aid our understanding of the search process, if at all? The answer of the question might best focus on that take a view of information searching as a complex process embedded in the broader perspective of information-seeking behaviour, and information behaviour in general, rather than on the micro-level of analysis that is typical of the dominant paradigm of information retrieval research.

References

1. Sudip Bhattacharjee and Manoj Kumar Sinha, Models of Information Seeking Behaviour: An Overview: Asian Journal of Multidisciplinary Studies Vol.4, Issue 5, April 2016 P.266-268.
2. https://en.wikipedia.org/wiki/Information_seeking_behavior accessed on 13-2-2017.
3. http://www.informationr.net/tdw/publ/papers/1999JDoc.html accessed on 13-2-2017.
4. https://upload.wikimedia.org/wikipedia/commons/6/68/Mam_ass_1.pdf accessed on 13-2-2017.