MODELS OF INFORMATION SEEKING BEHAVIOUR: AN OVERVIEW

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Abstract - *This study presents a layout of information seeking behavior models and its other aspects, to showing the correlation between communication and information behavior generally with information seeking and information searching in information retrieval systems. It is advised that ISB models address issues at various levels of information behavior and, they can be related by hypotheses a 'nesting' of models. Finally, an alternative, problem solving model is presented, that it is suggested to provide a basis for relating the models in appropriate ISB strategies.*

Key Words: Information Need, Seeking, searching Behaviour, ISB Models.

1. INTRODUCTION

The present study is to assess the status of ISB models and to discover how they may link with one to another and, maybe, plan an integration of the models into a more common framework. To this end, this study offers a view about existing research as a set of 'nested' models bound simultaneously by a dependency on each another and by an increasing concern, as we move to deeper levels, with better and better-quality wise details of human information seeking and searching behavior. Person himself may engage in identifying information needs and searching for such information in any way, and using or sharing that information with others.

2. MODELS OF INFORMATION SEEKING BEHAVIOUR

Some time theories are not sufficient to understand the specific problems, so models are developed to represent these problems and clear it
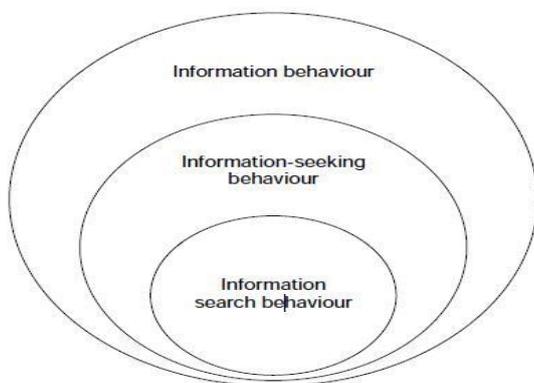
Models lead to the improvement of formal theories. The Models entirely make the content of the concept and diagram, chart, map, table; graph etc. illustrations are deal more tangible.

Reynolds (1971) defines a model as "by illustrating casual process, models make it easier to see if hypothesis are consistent with what we observe in real life".

2.1. The Wilson Model (1981)

The Wilson model (1981) says that need of information perceived by an information seeker provides way for information seeking behavior to occur. For sake of satisfy the information need, the user claim for formal and informal information sources and systems. These demands lead him for either success or failure to collect the required information. On success, the user gets his need be fully or to some extent be satisfied. On failure, the user again starts the process for find out the information. It was also explained that ISB may engage other people with information exchange by means of passing the useful information to them as well as using the information by the seekers themselves.
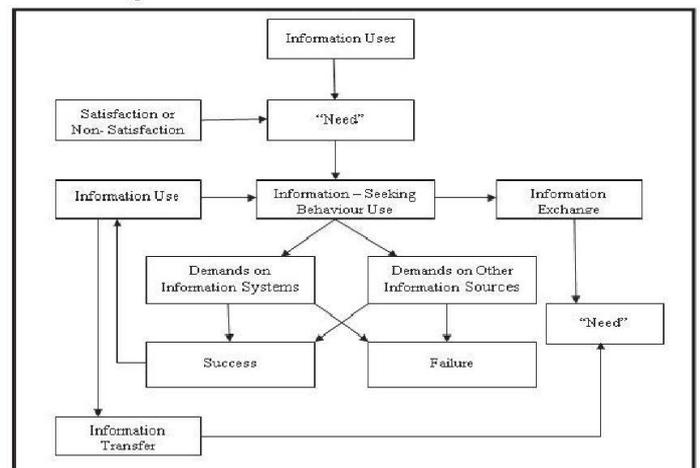

Figure 1.1 Wilson Model (1981)

Limitation of this kind of model is that it provides no suggestion of contributory issues in information behaviour and as a result, it does not directly suggest hypotheses to be tested.

2.2.The Wilson Model (1996)

The second model Wilson of (1996) is complex and features as under:

This model deals with the aspects as to why some seek more appropriate and instant Information than others, reason for the best usage of resources from a particular source than others and vague status among people in pursuance of a successfully goal which is based on the perception. The features of this model are t o Activating Mechanisms which are for seeking information affected by the Intervening variables of six types: social aspect, Psychological aspects, Demographic background, Environmental variable. This model recognizes search behaviours: Active search and ongoing search, Passive attention, Passive search. 'Information processing and use' this term in the model implied that the information is evaluated to know its effectiveness on satisfying the need.
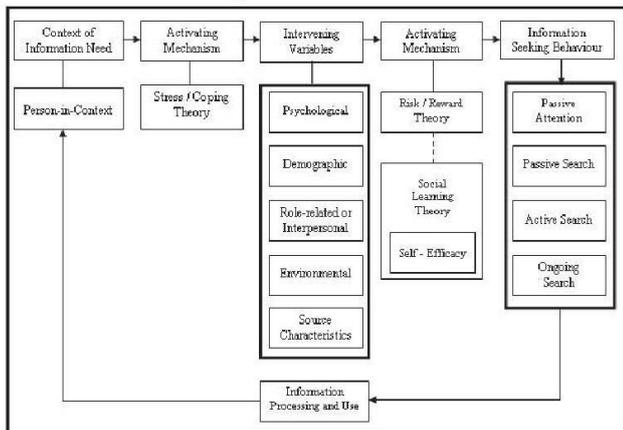

Figure 1.2 The Wilson Model (1996)

2.3.Kirkelas's Model of Information Seeking

The Kirkelas model is applicable to ordinary life. Model of Kirkelas (1983) was cited widely this model contains thirteen components. The process of information gathering is carried out based on the adjourned needs which are excited by an occasion or situation of the person who seeks the information. In this model shows that the gathered information is directed to personal files.
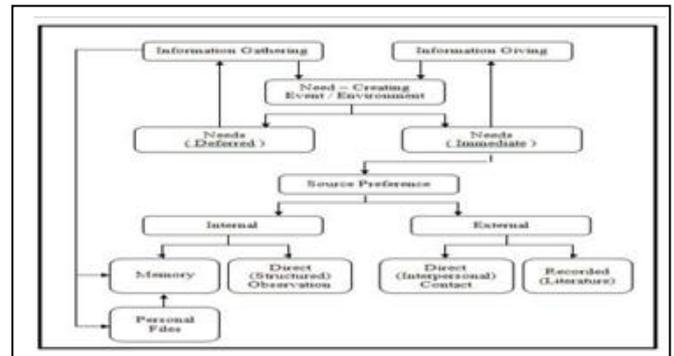

Figure 1.3 Kirkelas's Model of Information Seeking

In this course of action termed as 'information giving' which is sate based on the current needs for which the information seeker assumed to select either internal or external source of preference. When memory and personal files are concern to internal source, and the external source makes it to interpersonal contact and literature related material.

(Case 2002) The simplicity is one attractive aspect of this model and it is one dimensional flowchart in which all of the arrows travel in one direction and no one part of the process encompasses another.

2.4.Johnson's Model

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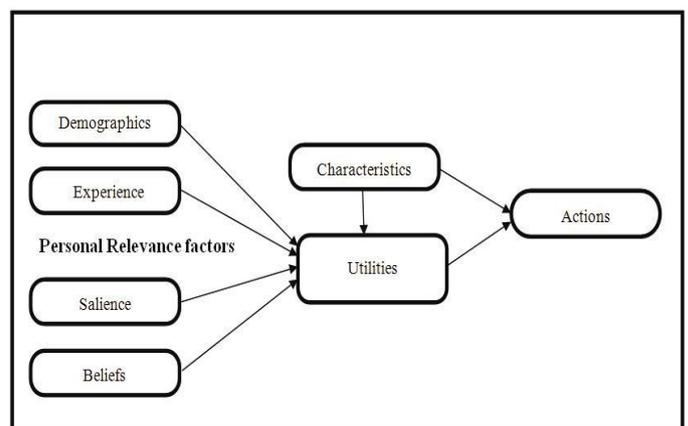

Figure 1.4 Johnson's Model (1987)

2.5.Kuhlthau Model

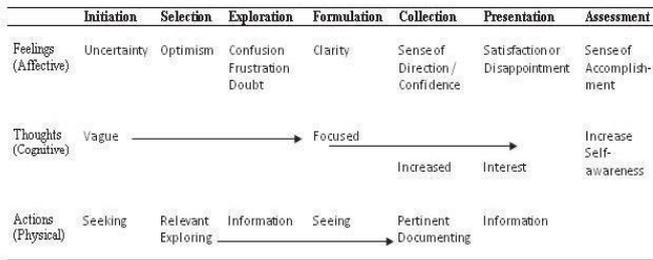|	Initiation	Selection	Exploration	Formulation	Collection	Presentation	Assessment
Feelings (Affective)	Uncertainty	Optimism	Confusion Frustration Doubt	Clarity	Sense of Direction / Confidence	Satisfaction or Disappointment	Sense of Accomplish-ment
Thoughts (Cognitive)	Vague		→	Focused			Increase Self-awareness
					Increased	Interest	
Actions (Physical)	Seeking	Relevant Exploring	Information	Seeing	Pertinent Documenting	Information	

Figure 1.5 Kuhlthau Model (1992)

The Model of Kuhlthau (1992) is explained as follows:

i.   Initiation

According to this model a person when come to aware about the lack of knowledge or understanding, uncertainty is felt then action for seeking information would be initiated.

ii.   Selection

In this stage a p e r s o n n o t c l e a r a b o u t p r o b l e m a n d the area for study or, topic so that here need arises for selection of area, problems or topic.

iii.   Exploration

People will get doubt on the consistency of the information, confused on the compatibility and get frustrated in the process while exploring for information.

iv.   Formulation

This is the stage of perception the person gets focused perception which leads to clarity and the course of action of seeking for information gets continued.

v.   Collection

This stage mainly focused on minimize the ambiguity and collect the more relevant and in the same direction.

vi.   Presentation

When the search is completed the seeker gets new knowledge which the person can present to others and put the knowledge to use.

vii.   Assessment

After attains the required knowledge by seeker, seeker gets a sense of completion and the self awareness increases.

3.LECKIE'S MODEL OF INFORMATION SEEKING OF PROFESSIONALS

The model of Leckie's (1996) concentrates on professionals such as journalists, scholars, engineers, doctors and lawyers. Features of this model are six factors connected by arrows flowing from top to down. When within 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 i n f o r m a t i o n need.

This model shows ISB as a bidirectional arrow labeled 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.
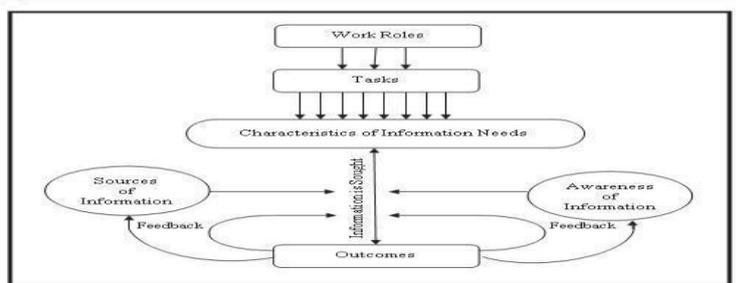
Figure: 1.6 Leckie's Model of Information Seeking of Professionals (1996)

4.INFORMATION SEEKING BEHAVIOUR VARIOUS THEORIES

In the context of information seeking behaviour many theories have been developed. A few of them are given below.

4.1.Principles of Least Effort

According to The Principle of Zipf Least Effort (1949) each individual will adopt a course of action that will involve the expenditure of the probable least average of his work, in other words the least effort.

It can additional be explained that an organization, entity, or system puts an effort either to make itself suitable for the requirements of the emerging environment or to change the situation in which it exists. For any of the above efforts the entity, organization, or system prefers an easier way of approach and cost.

With t h i s respect to information seeking, the Zipf's principle of least effort postulates that the information seeker chooses a course of action that will involve most suitable searching method for information seeking. The user will apply the searching tools that are most familiar and easy to use so as to find results. User having ability in technical searching like simple search to advance search adopt Boolean Operator and turnction and these entire thing that is required for searching   information. Principles of least effort become important in planning the library system and conducting research in modern library concepts since libraries are user centric entities.

4.2.Dervin, 1983, 1996

The sense making theory of Dervin has developed over a number of years. However, the sense making is implemented in terms of four essentials component

1. A situation in time and space, which defines the context in which information problems arise;
2. A gap, which identifies the difference between the contextual situation and the desired situation just like 'uncertainty".
3. An outcome, that is, the consequences of the sense making process, and
4. A bridge, that is, some means of closing the gap between situation and outcome. Dervin presents these elements in terms of a triangle: situation, gap/bridge, and outcome, which can be represented as in figure 1:
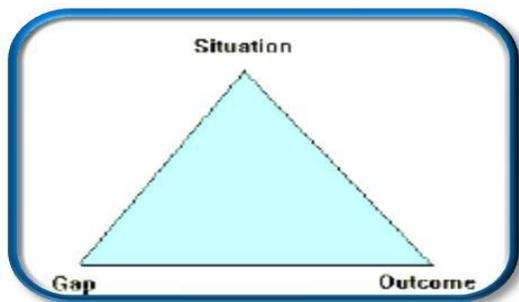

Figure 1.7: Dervin's 'sensemaking' triangle.

However, it may be preferable to use the bridge icon more directly and present the model as figure 1.8 below:
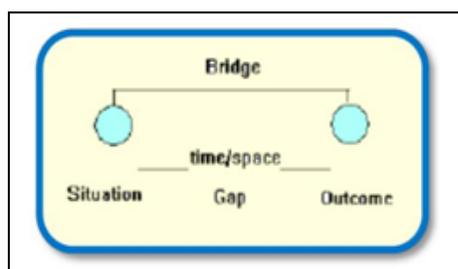

Figure 1.8 suggests

5.CONCLUSION

Number of the problems that are complementary, rather than competing, represent by the various models of information searching Behaviour and information behaviour, information seeking behaviour as:

Therefore, the key questions for research are as under:

In what ways are the models complementary;? That is, how does knowledge of one level of analysis aid another?

To what extent are the different models complete, or reasonably complete representations of the reality they seek to model?

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?

Research to answer the last question might best focus on projects 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] Tahira, M., & Ameen, K. Information Needs and Seeking Behavior of Science & Technology Teachers of the University of the Punjab, Lahore. Pakistan Journal of Information Management & Libraries (PJIM&L), 2016

[2] Wilson, T.D. and C. Walsh, Information behaviour: an interdisciplinary perspective. Sheffield: University of Sheffield, Department of Information Studies, 1996.

[3] Wilson, T.D., Information needs and uses: fifty years of progress? In B.C. Vickery, (Ed.). Fifty years of information progress: a Journal of Documentation review. (p. 1551) London: Aslib, 1994

[4] Paisley, W.J.I., Information needs and uses. Annual Review of Information Science and Technology, 1968. 3: 130.

[5] Dervin, B. and M. Nilan, Information needs and uses. Annual Review of Information Science and Technology, 1986. 25: p. 333.

[6] Wilson, T.D., Information behaviour: an interdisciplinary perspective. Information Processing and Management, 1997. 33(4): p. 551572.

[7] Wilson, T.D., on user studies and information needs. Journal of Documentation, 1981. 37(1): p. 315.

[8] Allen, T.J., Managing the flow of technology: technology transfer and the dissemination of technological information within the R & D organization. 1977, Cambridge, MA : MIT Press.

[9] Dervin, B. An overview of sensemaking research: concepts, methods and results to date. in International Communications Association Annual Meeting. 1983. Dallas, Texas.

[10] Ellis, D., A behavioural approach to information retrieval design. Journal of Documentation, 1989. 46: 318338.

[11] Ellis, D., D. Cox, and K. Hall, A comparison of the information seeking patterns of researchers in the physical and social sciences. Journal of Documentation, 1993. 49: 356369.

[12] Kuhlthau, C.C., Inside the search process: information seeking from the user's perspective. Journal of the American Society for Information Science, 1991. 42: 361371.

[13] Eysenck, H.J., W. Arnold, and R. Meili, Encyclopaedia of psychology. London: Search Press, 1972

[14] Dervin, B. and P. Dewdney, Neutral questioning: a new approach to the reference interview. RQ, 1986(Summer), 25: 506513.

[15] Dervin, B., From the mind's eye of the user: the sensemaking Qualitativequantitative methodology. In J.D. Glazier & R.R. Powell, (Eds.). Qualitative research in information management. (pp. 6184). Englewood, CO: Libraries Unlimited, 1992.

[16] Ellis, D. and M. Haugan, Modelling the information seeking patterns of engineers and research scientists in an industrial environment. Journal of Documentation, 1997. 53(4): p. 384403.

[17] Kuhlthau, C.C., Seeking meaning: a process approach to library and information services. 1994, Norwood, NJ.: Ablex Publishing.

[18] Kelly, G.A., A theory of personality: the psychology of personal constructs. 1963, New York, NY: Norton

[19] Kwasnik, B.H., The importance of factors that are personal documents. Journal of Documentation, 1991.47: p. 389398.

[20] Kuththau, C.C., The influence of uncertainty on the information seeking behavior of a securities analyst. In P. Vakkari, R. Savolainen, and B. Dervin, (Eds.) Information seeking in context: proceedings of an International Conference on Research in Information Needs, Seeking and Use in Different Contexts, 1416 August, 1996, Tampere, Finland. London: Taylor Graham, 1997

[21] Folkman, S., Personal control and stress and coping processes: a theoretical analysis. Journal of Personality and Social Psychology, 1984. 46: 839852.

[22] Murray, K.B., A test of services marketing theory: consumer information acquisition activities. Journal of Marketing, 1991. 55: 1025.

[23] Settle, R.B. and P. Alreck, Reducing buyers' sense of risk. Marketing Communications, 1989 (January), 14: 3440.

[24] Bandura, A., Self efficacy: towards a unifying theory of behavioural change. Psychological Review, 1977, 84: 191215.

[25] Ingwersen, P., Cognitive perspectives of information retrieval interaction. Elements of a cognitive IR theory. Journal of Documentation, 1996. 52, 350.

[26] Belkin, N.J., et al., Cases, scripts and information seeking strategies: on the design of interactive information retrieval systems. Expert Systems with Applications, 1995. 9: 379395.

[27] Borlund, P. and P. Ingwersen, The development of a method for the evaluation of interactive information retrieval systems. Journal of Documentation, 1997. 53(3): 225250. Spink, A., Study of interactive feedback during mediated information retrieval. Journal of the American Society for Information Science, 1997. Not document attributes in the organisation of 48(5): 382394.