A Conceptual Model of Collaborative Information Seeking

Ric Jentzsch and Paul Prekop
University of Canberra, Australia

Past research into information seeking has generally focused on the information seeker as an individual, and examined the activities, roles, behaviours, methods and processes an individual uses to locate and gather information. Little work has been done examining the information seeker as a group, that is, collaborative information seeking. The goal of the research described in this paper is to examine collaborative information seeking, suggest a conceptual model for collaborative information seeking and relate that model to current information technology initiatives. The potential value of collaborative information seeking can be seen (not limited to) in such information technology initiatives as computer supported collaborative work (CSCW), knowledge management, and electronic commerce.

INTRODUCTION

The aim of this paper is to present information seeking within a collaborative context, suggest a conceptual model of collaborative information seeking, and suggest the application of the model in an information technology context.

Information seeking exists on a continuum ranging from individual information seeking, through shared information seeking, and into collaborative information seeking.
seeking. During individual information seeking, the information seeker interacts with no one during the information seeking activity. During shared information seeking, the information seeker interacts with external agents or systems, in the way of social navigation (Jentzsch, 1999) that helps select information sources and aids in the gathering of the needed information. During collaborative information seeking, multiple information seekers work together throughout all stages of the information seeking activity in finding and retrieving information.

STUDY OF INFORMATION SEEKING

Formal research into information seeking has been conducted for more than 50 years, and has progressed from the initial views of information seeking as a mechanistic goal driven process, through to current cognitive and behavioural views of information seeking (Ellis, 1989). Information seeking forms an important part of many human activities, ranging from decision making and problem solving through to resource allocation and system management (Rouse and Rouse, 1984). As an area of research, information seeking crosses many disciplines, such as psychology, library and information science, management information systems, knowledge management, and information technology. Each discipline has its own set of models, perspectives and assumptions that attempt to define and describe information seeking (Brown, 1991).

Collaborative information seeking, that is information seeking as performed by a group of information seekers, has not been examined in detail by previous researchers or has it been well considered in the commercial world. As a result, there is little in the way of information technology to support information seeking when performed by two or more information seekers in a collaborative group environment.

Information seeking has been described and discussed from various viewpoints and using various terms. For example, the concepts presented in information literacy research encompass all the skills and tools needed to find, understand, absorb, and essentially use information (Bruce, 1996; Mutch, 1997; Snively and Cooper, 1997). Existing models of information seeking offer different perspectives on how information seeking can be described, and what activities, steps or actions constitute the information seeking activity (Westbrook, 1993; Kuhlthau, 1991; Ellis, 1989; Dervin, 1983; Cheuk, 1998; Court, 1997; Leckie, Pettigrew and Sylvain, 1996; Brown, 1991). Some of these models assume information

Figure 1: Information Seeking Continuum