Information Seeking and Beyond: Impacts of Studying Different Forms of Information Behavior

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ABSTRACT
Although people engage in a range of information behaviors, the majority of previous models and empirical research in information behavior tend to focus just on information seeking and use. This panel will discuss the need of extending the territories of information behavior research beyond seeking and use. Panelists will explain their own research studies that explore different forms of information behavior, and introduce emerging models including serendipitous finding of information, information-organizing behavior, and information-creating behavior. Theoretic and methodological issues concerning modeling the new modes of information behavior will be discussed. This panel will involve the audience in identifying under-investigated areas of information behavior and discussing potential impacts of studying various forms of information behavior on individuals, society, organizations, systems & technology, and culture.

Keywords
information behavior; information-creating behavior; information-organizing behavior; information-keeping behavior; serendipitous finding of information; information behavior models.

INTRODUCTION
Information behavior refers to the totality of human behavior when people interact with information through various sources and channels in different contexts (Case, 2012; Fisher, Erdelez, & McKeehlie, 2005; Wilson, 2000). Information behavior encompasses a range of behaviors from purposive behavior of seeking, using, managing, sharing, and creating information to unintentional or passive behavior such as serendipitous finding of information to actively avoiding information. Previous research, however, has been predominantly limited by its focus on individuals’ information seeking and use (Godbold, 2006). The panelists’ research and models show how people’s information needs might be met by not only seeking and using information but also serendipitously finding, organizing, keeping, and creating information. The panel will engage the audience to discuss the need of extending the territories of information behavior research, theoretical and methodological concerns, and potential impacts of research studies that investigate different forms of behavior.

THE PANEL
The goal of this panel is to provide an interactive forum to:
1. introduce emerging models that explore under-investigated areas of information behavior and complement traditional models;
2. discuss theoretical and methodological issues concerning modeling “other” forms of information behavior;
3. identify different forms of information behavior that need to be investigated; and
4. discuss potential impacts of studying various forms of information behavior on individuals, society, organizations, systems & technology, and culture.

The following areas of information behavior will be presented.

1. Serendipitous Finding of Information by Naresh Agarwal
Serendipitous or accidental discovery of information has often been neglected in information behavior models, which tend to focus on information seeking, a more goal-directed behaviour. In a recently accepted paper in Information Research, Agarwal defines terms relevant to serendipity. By building on existing literature and conceptual frameworks, he attempts to include serendipity in information behavior models. The main contribution is to map the conceptual space of serendipity in information behavior and to arrive at a definition for serendipity in the field of information behavior. In the panel, he will discuss scenarios of
serendipitous finding when not looking for anything in particular, and of finding relevant information on something other than what one is currently looking for. The frameworks arrived at should help further shared understanding and more research in this area.

**Figure 1. Placing serendipity within information behavior (Agarwal, in press)**

**2. Information-Organizing Behavior** by Kyong Eun Oh

**Figure 2. The Personal Information Organizing Process (PIOP) Model (Oh, 2014)**
People organize their information in certain ways in their daily lives. Also, there are various challenges to, as well as advantages of, effective personal information organization. Despite its importance and close relationship with our lives, little is known about information organizing behavior, especially what process people go through when organizing information. The panelist will stress the need to explore how people organize their personal information in everyday life.

Oh will also introduce her recent model, the personal information organization process (PIOP) model. This is a six stage model that holistically shows the process of organizing personal information. The PIOP model identifies behavioral (actions) and cognitive (thoughts) aspects of the process, as well as decisions and factors that are involved during the process. This model also shows that social groups i.e. thought communities influence the information organization process.

Oh’s current research project aims to further explore information organizing behavior. The PIOP model initially has been developed by investigating how academics in social science field organize their information. In her current research project, she examines how museum, archive, and library professionals organize their personal information by using PIOP model as a framework.

Since information organizing behavior is part of individuals’ everyday lives, investigating information organizing behavior makes direct contributions to the development and design of various devices, applications, and strategies that support individuals’ effective organization of their information. This will impact individuals by facilitating finding information, supporting reminding and managing tasks, and increasing individuals’ personal productivity which is connected to the productivity of social or private groups.

3. Information-Keeping Behavior by Kyong Eun Oh

Information-keeping behavior can be defined as “the way people keep information in a physical or virtual location for a certain period of time for personal or organizational use”. Just like information finding, organizing, and creating, people extensively keep information. However, information keeping behavior is another form of information behavior that has been understudied. Previously, information keeping behavior has been often investigated in the personal information management context: most studies focused on the end result of keeping behavior or examined certain aspect of keeping behavior as part of personal information management activity. Thus, research studies that specifically examined information keeping behavior are rare. In addition, information behavior models that show how people keep information have been missing. In this panel, the panelist will introduce and highlight some of the primary findings from personal information management literature in terms of information keeping behaviors, and emphasize the need to further investigate information keeping behavior in the information behavior context.

Information keeping behavior is closely related to other forms of information behavior. Examining information keeping behaviors is expected to contribute to the designing systems and tools that support effective information keeping behavior. This will impact individuals by strengthening the benefits of effective information keeping such as reminiscing, retrieving, and remembering intentions (Sellen & Whittaker, 2010) and overcoming the weakness of human memories.

4. Information-Creating Behavior by Kyungwon Koh

Contemporary people are frequently engaged in creative production and make contributions to the information world. In the past, people tended to access static information resources to take the needed information with them. In this digital age, in which user-generated content and user participation are key, people not only seek and use information individually but also share and create information actively. Previous studies and practices, however, are limited by their focus on the information search processes and instructional strategies for information seeking and use. The panelist will address a need to investigate how people create and present information.

Koh (2013) proposed a definition of information-creating behavior as “the way people create messages, cues, and informative content that can be used to meet the existing or potential information needs of the creator or other users” (p. 1827). The examples of information-creating behavior vary from posting facts, tips, and answers to social Q&A and user forums, to creating multimedia tutorials on YouTube, to writing on blogs, Wikis, and other social media. Information-creating behavior is closely related to different forms of information behavior, such as information seeking, use, and sharing, which often occur simultaneously and create an iterative process.

Figure 3. Information-creating behavior as a form of information behavior (Koh, 2013, p. 1836)
The panelist’s current research explores how middle school students create scientific information using different technologies in a school library MakerSpace. Dervin’s Sense-Making Methodology provides a theoretical and methodological framework to understand how students make sense of the world around them by creating information and learning by making. Findings will provide implications on the ways information professionals facilitate youth to become successful information creators. The study results might alter the current information literacy instruction practices; the updated instructions can teach not only information seeking and use but also information creation and presentation.

Research on information-creating behavior is highly relevant to the needs of various information and library communities. Studies might provide implications for information professionals in supporting the creative behavior of community members. Information professionals have been working with community people so that they can effectively search for information, determine the quality of information they find, and appropriately use the information to solve a problem. This traditional role is now compounded by the emergent need to foster and promote people’s information creation skills, because in this digital age, a truly information literate individual must be able to participate in their community and society by producing and sharing information. Findings from information-creating behavior research will provide the foundation for designing timely information services and tools that support people’s effective, efficient, and ethical information creation.

PANELISTS / MODERATOR
Each participant contributes unique perspectives to the proposed panel discussion based on their research and models.

Kyung Eun Oh, PhD
Kyung Eun Oh is an Assistant Professor at the School of Library & Information Science at Simmons College in Boston. She earned her Ph.D. at Rutgers University, School of Communications & Information. Her research interests include categorization, information organizing behavior, and personal information management (PIM). In her dissertation research, she explored the process of organizing personal information from a cognitive sociological perspective, and developed a model that explains the process. Her dissertation, “The process of organizing personal information”, won the 2015 ALISE/Eugene Garfield Dissertation Award. Her current research projects focus on further developing the personal information organizing process model by applying it to different social environments, and investigating various PIM behaviors. She has been involved in a number of funded research projects including those funded by National Science Foundation (NSF), Hewlett-Packard (HP) technology, and Korea Research Foundation (KRF). Her teaching areas are information organization, metadata, research methods, and information technology. She is currently on the governing board of Dublin Core Metadata Initiative (DCMI).

Naresh Agarwal, PhD
Naresh Agarwal is an Assistant Professor (Associate Professor starting July 1, 2015) at the School of Library and Information Science at Simmons College, Boston. He earned his Ph.D. from the National University of Singapore (NUS)’s Department of Information Systems, School of Computing. His teaching areas are technology/web development, evaluation, knowledge management and theories of information science and technology. Agarwal’s research area is Information behavior and knowledge management - the way people look for information and the contextual factors that impact their choice of information sources. He seeks to understand and synthesize the apparent contradictions in this phenomenon and tries to reconcile multiple perspectives. His publications span these areas. Agarwal has held various leadership positions at ASIS&T - the Association for Information Science and Technology. He was a member of its Board of Directors from 2012-2014. Agarwal was awarded the ASIS&T James M. Cretsos Leadership Award in 2012. Prior to entering the doctoral program at NUS, he worked for six years in technology roles in the voice-over-IP, bioinformatics and digital cinema industries. You can learn more about him at http://www.nareshagarwal.co.nr/.

Nicholas Belkin, PhD (moderator)
Nicholas Belkin is Distinguished Professor of Information Science in the Department of Library & Information Science, Rutgers University, where he has been since 1985. Previous to that appointment, he was Lecturer and Senior Lecturer in the Department of Information Science, The City University, London. He has held visiting positions at the University of Western Ontario, the Free University, Berlin, and the Institute for Systems Science, National University of Singapore. He received his Ph.D. in
Information Studies from the University of London (University College).

Professor Belkin has served as the Chair of the ACM SIGIR, and President of the American Society for Information Science and Technology (ASIS&T). He is the recipient of the ASIS&T’s Outstanding Teacher award, its Research Award, and its Award of Merit, for outstanding contributions to Information Science. He is one of the founders of the “cognitive viewpoint” in information science, and is the author or co-author of over 200 journal articles, conference proceedings and book chapters.

Professor Belkin’s most recent research has focused on personalization of interaction with information, in particular, personalization of information retrieval based on searchers’ current and past behaviors, and on methods for evaluation of whole-session search. His current research project, Characterizing and evaluating whole session interactive information retrieval, is supported by the National Science Foundation.

STRUCTURE OF THE PANEL
The panel would run according to the following timetable and be moderated by Nicholas Belkin.

- Introduction: 5 minutes
- Presentation 1. Serendipitous finding of information: 10 minutes
- Presentation 2. Information-organizing behaviour & Information-keeping behavior: 15 minutes
- Presentation 3. Information-creating behavior: 10 minutes
- Interactive discussion and Q&A: 45 minutes
- Wrap up: 5 minutes

CONCLUSION
People often engage in various forms of information behavior simultaneously and continuously. By introducing recent research studies that investigate different forms of information behavior, by actively identifying understudied forms of information behavior, and by discussing potential impacts of studying various forms of information behavior with the audience, this panel proposes to extend the boundaries of information behavior studies. We expect that taking a range of information behavior into account when studying information behavior will enrich information behavior studies, and deepen our knowledge by allowing us to understand information behavior more holistically. Discussing the impacts of studying different forms of information behavior is also directly connected to the 2015 ASIS&T conference theme “Information Science with Impact: Research in and for the Community”.

REFERENCES


