Information Behavior Research in Need of Paradigm Shift

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Overview
Key IS or IB Models are...

- General or context specific (e.g., ELIS, Health Information Seeking)
- Procedural oriented, flow-chart-based
- Mostly individual –oriented, less on shared/distributed or embodied cognition
- Seeking centered. Questionable relevance to the current and emergent new information reality
Key IB Models Do not Take into Account for...

- Ubiquitous Access
- Immersiveness
- Embeddedness
- False information (misinformation or dis-information)
- Social justice
- Seeking might no longer be necessary
Overarching Question

- Are IB models (developed back in 1970s-1990s) still suitable to guide research investigation of information behavior?
- in the new information reality?
Information research has shifted from focusing on discrete elements of information toward an ecological account of Human Information Interaction.
Shifts in Information Fields
(Marchionini, 2008)

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td>Focus on stable artifacts</td>
<td>Grappling with how people and machines interact with dynamic, morphing information objects</td>
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<tr>
<td>Focus on individual info seekers</td>
<td>Considering embodied minds in a cyber collective</td>
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<td>and managers as rational cognitive actors</td>
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<td>Issues of physical object management</td>
<td>Issues of scale, layering and boundary blurs</td>
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<tr>
<td>Information management</td>
<td>Identity management as instantiated in user profiles, filters, and personal health records</td>
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IB Research Paradigm Shifts

• System Oriented → User Oriented

1970s-1980s

• Discrete Elements → Interaction oriented

2008-2018

• Theoretical break through?
• Paradigm shift?

2018-
Past
IB as Academic Study
(Ellis, 2011; Pettigrew, et al., 2001)

- Concerns of the term:
  - Information behavior is grammatically incorrect
  - People will associate it with behaviorist approach in psychology

- Benefits:
  - The behavioral focus
    - Differentiates the approach from early concerns of information needs and user studies
    - Places a distance between IB research and the more limited focus on information seeking
Sea Change in Human IB
(Ellis, 2011)

- Late 1970s and early 1980s
  - Watershed in the development of IB research
  - Emergence of conceptual thinking in IB research
  - Increased interest in use of models and explicit theoretical approaches

- Four Dimensions of Change:
  - Social science perspective
  - Qualitative orientation
  - Focus on explicit modeling of IB
  - Concern with empirical validation & exemplification
The Demise of Information Need  
(Ellis, 2011)

- Information needs research suffers from
  - Shallow conceptualization
  - Defective methodology
- The notion of Information need itself was **stultifying** the research enterprise
  - It may be advisable to
    - remove the term information needs from our professional vocabulary and to speak instead of information seeking towards the satisfaction of needs.
Problems in Info Behavior Studies
(Savolainen, 2007)

- Difficulties in specifying meaningful boundaries
- Difficulties in capturing
  - Interaction between *internal* and *external* components of info behavior
  - Cognitive and affective behavior as not easily “observable” behaviors
- Difficulties in classifying models of information seeking
  - Cognitive viewpoint
  - Social constructivist approach
    - Information ecology model
Models of Information Behavior

1. The First Wilson Model (Wilson, 1981)
2. The Krikelas Model (Krikelas, 1983)
3. The Ellis Model (Ellis, 1989, 1993)
5. The Leckie Model (Leckie et al., 1996)
6. The Bystrom and Jarvelin Model (Bystrom & Jarvelin, 1985)
7. The Savolainen Model (Savolainen, 1995)
8. The Johnson Model (Johnson & Meischke, 1993)
Present
IB Current Research

- IB lifecycle modeling
  - Information Activities
  - Information Journey
- Information and Communication dual perspectives
- ISCM
- Current state of IB research
Information Behavior Activities
(source: Thivant, 2005)
The Information Journey
(Du, J. T. The information journal of marketing professionals. JASIST, 65(9))

- **Stage 1**: Info Need
- **Stage 2**: Info Seeking
- **Stage 3**: Info Judgments
- **Stage 4**: Info Use
- **Stage 5**: Info Sharing, Collaboration

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Sample: 155 IB articles (2012-2014) published in JASIST, JDOC, iConf, and Information Research
IB Research: Freq. Topics (Greifeneder, 2014)
IB Research: What is missing?  
(Greifeneder, 2014)

- Only a small set of researchers studied mobile technology
- Ubiquitous access was not studied at all
- New remote research methods (e.g., asynchronous remote testing or synchronous online interviews) were never used
Future Directions?
IB New Areas of Investigation

- Take a fresh area of investigation or a new perspective

- Examples:
  - Immersive Information Behavior
  - Information Ecology
Technology Advancements

- Mobile becomes pervasive
- Multimedia becomes multi-sensory
- Interactive becomes participative
  - transmedia
IB Research Past, Present, and Future

Past
- The demise of "information need"
- Models of information seeking
- Models of information interaction

Present
- Information seeking still the major topic
- A small set of researchers studied mobile technology
- Ubiquitous access was not studied at all
- Information ecology oriented research has been modest

Future
- Embedded behavior and information ecology
- Manipulation of information
- Information pathology
- Digital identity

No effective use of past models
No influential new models developed
What should the new paradigm shift be?

- How do we adopt new perspectives and what new perspectives should we take?
- Do we need new models/theoretical framework?
- Do we require new methods of investigation?
- What would be the burning research questions that are timely and relevant to the new information reality?
Thank You!

Questions?