Future Directions: Information Behavior in design & the making of relevant research

Perspectives from a practitioner
Saturday, October 25, 2008

Keith Instone
Information architecture lead, ibm.com
Agenda

- About me, HIB research and so on
- Position papers: Greater impact on designers
- Position papers: Finding information
- What keeps me up at night

Warning: I have not practiced this, I have no idea how long it would take to talk about everything in here (10-360 minutes), questions welcome at any time to make sure you get something out of this within the 45 minutes I have
About me

- Computer science (BA, MS)
- Psychology
- Hypertext (Technical communication, popular culture, Telecommunications, …)
- Web usability
- Library science / Information architecture
- User experience
- IBM
- Change, innovation, business strategy
- Out of my comfort zone…
## Life in 3 “camps”

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant [aka semi-practitioner]</td>
<td>Strategy documents and proposals (bridging theory and practice but not in the trenches), how to think about the problems, deliverables, sales</td>
<td>&quot;An information architecture perspective on personalization&quot; white paper (and book chapter)</td>
</tr>
<tr>
<td>Practitioner [“Innie”]</td>
<td>Concrete, doable, practical, real-world, in the weeds, communication of ideas, short and long term trade-offs, “lose battles, win wars”</td>
<td>Redesign options for the IBM US Solutions page, My IBM integration strategy, PowerPoint decks</td>
</tr>
</tbody>
</table>
Related pre-conference sessions (SIG-IA)
(Where I would be if I wanted to hang out with people I already know)

- Seminar: Information Architecture 3.0, Peter Morville, 8:30 – 12:30
  - Extending our understanding of **structural design** beyond its semantic foundations to incorporate social elements such as identity, reputation, presence, groups, sharing, conversations, and relationships.
  - Designing next-generation search interfaces and applications that combine best practices in **tagging** and taxonomies with search analytics, **guided navigation**, thesauri, clustering algorithms, linguistic toolsets, and rich result interfaces.
  - Evaluating the multi-channel challenges and real-world opportunities presented by ambient **findability** and the emerging Internet of objects.
Related pre-conference sessions (SIGHCI)
(Where I would be if I wanted to hang out with people I already know)

- Symposium: **HCI in Interactive Information Environments** with a focus on Groups
  - How do groups use highly interactive computing technologies to access, use, and share information?
  - What kinds of social interfaces provide the best support for information **interaction** within groups?
  - What is the role of sociability in information access?
  - How do we study and evaluate highly interactive computing technologies for groups?
  - Is **usability** still the key for assessing use?
ASIS&T 2008’s conference theme, People Transforming Information – Information Transforming People, provides an important opportunity for the SIG USE symposium to offer guided reflection on the big questions around which information behavior researchers and practitioners can (or should) be making a difference.

Our people-centered approach has enabled us to deepen our understanding of the ways in which people interact with information, information systems, and other people.

Communicating these insights to researchers and practitioners in related areas of study and design, however, continues to pose a challenge for our community.

Thus, the reflective moment to be offered by this year’s Symposium will be used to consider one particular challenge: communicating the significance of information behavior research to designers of products, systems and services.

Keith Instone, Information Architecture Leader, IBM.com. Keith will share some of the IA challenges he faces every day working on a large and distributed corporate web site.
Symposium questions

- How does our research address the transformative relationship between people and information?
- What are the fundamental questions that we should be looking at in our research?
- How are we to move towards making a greater impact on organizations and designers?
- How can or should information behavior research be presented to translate effectively into the language of other information research communities?
Keywords and definitions

- Information behavior research
- Human information behavior (HIB) research
- Human-computer interaction
- User experience
- Information architecture
Models in information behavior research
TD Wilson - JOURNAL OF DOCUMENTATION, 1999 - emeraldinsight.com
... MODELS IN INFORMATION BEHAVIOUR RESEARCH T. D. WILSON td.wilson@shef.ac.uk Department of Information Studies University of Sheffield ...
Cited by 322 - Related articles - Web Search - BL Direct - All 12 versions

Eye Movements in Reading and Information Processing: 20 Years of Research
K Rayner - PSYCHOLOGICAL BULLETIN, 1998 - content.apa.org
... Behavior Research Methods, Instruments & Computers, 55, 1-7 ... Failure to integrate visual information from successive ... Behavioral & Brain Sciences, 17, 247-292. ...
Cited by 786 - Related articles - Web Search - BL Direct - All 10 versions

The Effects of Product Class Knowledge on Information Search Behavior
... (1999) Dimensions of consumer search behavior in services. ... (1999) External information search for banking services. ... (1999) Behavioral research into heuristics ...
Cited by 480 - Related articles - Web Search - Library Search - All 3 versions

The Study of Congruence in Organizational Behavior Research: Critique and a Proposed Alternative
JR Edwards - ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES, 1994 - ideas.repec.org
... of Congruence in Organizational Behavior Research: Critique and ... info | Download info | Related research | Statistics. ... Information about this may be contained in ...
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Special Issue on Information Science Research

Human Information Behavior

T.D. Wilson
University of Sheffield

Abstract

This paper provides a history and overview of the field of human information behavior, including recent advances in the field and multidisciplinary perspectives.

Keywords: human information behavior, information seeking, research, user studies.

Introduction

Until recently the computer science and information systems communities have equated ‘information requirements’ of users with the way users behave in relation to the systems available. In other words, investigations into information requirements were concerned almost entirely with how a user navigated a given system and what he or she could do with the data (rather than information) made available by information systems.

This is now beginning to change as ethnographic methods are introduced into the requirements definition stage of systems design, and Beyer and Holtzblatt (1998) have shown the benefits. However, even when such methods are employed, the designers appear to be asking, “How is this person using the

review some of this research and to point to findings that enable the system designer to put the design process in the wider context of the user in the organization.

Some Definitions

Some definitions are needed before we go further. In this paper, four terms are used: information behavior, information seeking behavior, information searching behavior and information use behavior. They are defined as follows:

Information Behavior is the totality of human behavior in relation to sources and channels of information, including both active and passive information seeking, and information use. Thus, it includes face-to-face communication with others, as well as the
Some definitions (according to Wilson)

- **Information behavior**: totality of human behavior in relation to sources and channels of information. Face-to-face, TV, etc.
- **Information seeking behavior**: seeking for information with a purpose to satisfy some goal
- **Information searching behavior**: micro-level interactions with system. HCI (mouse clicks), intellectual (boolean), mental (judgement)
- **Information use behavior**: incorporate information into knowledge base. Physical and mental.

Note: in practitioner world, “search” is often used to mean all of this, and more. Sigh.

- Wisdom > Knowledge > Information > Data
Bedtime reading
“Where the action was” (SIGCHI, 1992)
“Where the action is”

- Paul Dourish, The foundations of embodied interaction
- Embodied interaction is interaction with computer systems that occupy our world (physical, social)
- Embodiment is about engaged action rather than disembodied cognition
Embodiment

E.g., what is the difference between *information behavior* and *behavior* in this setting?
Take a drink of water
IB Research → Application
IB Research → Other domains

- How are we to move towards making a greater impact on organizations and designers?
- How can or should information behavior research be presented to translate effectively into the language of other information research communities?
Recaps from position papers (agreement)

- Collaborate with other disciplines’ research agendas
- Generalize, questions for design, integration into methods
- Faster methods, faster application
- Explain user behavior to designers
- 2-way communication, collaboration, user + system perspectives
- HIB + HCI
- Outside comfort zone
- Activity theory as the framework
- Engaging other communities: Outreach, translation
- Relevant, accessible, actionable
- From research to checklists
- Dialog with other communities, Researcher/creator barriers
- Usability studies
- Presence in other fields

Probably more agreement on the *what* than the *how*
Where do we meet to work these things out?

- **Connecting with practitioners**
  - ASIS&T (here)
  - IA Summit
  - Online?

- **Connecting with other (research) disciplines**

- **Does the “user research umbrella” help?**
Does a “research agenda” help us?
As a way to translate research into a framework for application

Yikes!
Take a drink of water
Position papers: Topics that might help me do my job

“Finding information” but also broader

- Interpersonal relationships
- Social settings
- Multi-tasking, cognitive shifts
- Credibility
- Social context
- Activities, actions, operations
- OPAC
- Filtering info out of documents
- Apply Web Analytics
- Data sharing
- Credibility
- Reflection on process
- Community, social aspects
- Scholarly communication
- Culture, values, authority
- News reading
Big picture things that me keep up at night for IBM

- Search (but really, finding)
- Personalization
- Frameworks for user generated, business generated content (IA separate from content)
- Aggregation, clustering, (semi-) automatic tools for organizing information in ways that make sense to users
- Web 2.0 services (applied to ibm.com)
- Business problems (complex ones)
- Change (fostering it, dealing with it)
“How do you stop FTP from truncating on the AS/400?”

Search results

Search:

- Stop ftp from truncating on the as/400:

Additional searches

- United States
- Worldwide
- Advanced search
- Search tips

Limit your search by category:

1. Redbooks - The AS/400 NetServer Advantage
   [IP, It enables an AS/400 system to provide ... hardware or software on the AS/400 system. This redbook
   URL: http://www.redbooks.ibm.com/abstracts/SG245196.html?...]

2. Redbooks - UNIX C Applications Porting to AS/400
   [openess features of the AS/400 system in terms
   URL: http://www.redbooks.ibm.com/abstracts/SG244438.html?...]

3. Redbooks - Content Manager OnDemand Guide
   [are either not well known to the OnDemand community or are
   misunderstood. We reviewed all aspects of the OnDemand topics.
   Among these ... by various subjects on different platforms, this IBM
   URL: http://www.redbooks.ibm.com/abstracts/SG246915.html?...]

4. SG244438
   [chapter describes the issues related ... spawns, and so on. It also]
All service-management communities

IBM Service Management community
103 members | Updated by Terry Eaves
This community is an open forum for collaborating on IBM Service Management solutions, questions, and discussions and sharing favorite resources and links. Important links: Weekly IBM Service Management JamsNew Blog: IB
Tags: community, compliance, eam, governance, green, ibm, performance, pulse, rational, risk, security, service-assurance, service-availability, service-delivery, service-management, service-providers, soa, storage, tivoli

IBM Tivoli Software Main Community
149 members | Updated by Elaine Tully
This community is an open forum for the public to post relevant questions and resources related to considering, marketing, selling, using, deploying, and supporting IBM Tivoli products and solutions. READ THESE INSTRUCTIONS FIRST on how to par
Tags: automation, community, compliance, eam, governance, green, ibm, infrastructure, itil, main, maximo, netcool, official, performance, pulse, rational, risk, security, service-assurance, service-availability, service-delivery, service-management, service-providers, software, storage, tdi, tivoli, tsm, user-group, valent

Pulse conference community
107 members | Updated by Tiffany Winman
This community is an open forum for discussing, sharing, and collaborating on the IBM Pulse Conference. It helps Pulse attendees manage their contacts beyond the life of the conference; share and stay up-to-date on conference news; foster conversations through Pulse fo
Tags: cloud-computing, community, conference, eam, event, experts, green, gurus, itil, pulse, pulse08, security, service-management, tivoli, tivolipulse08, training

View as cloud list
IBM Syndicated feeds

<table>
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<th>Event name</th>
<th>Start date</th>
<th>City</th>
<th>State</th>
<th>Technology Sponsor</th>
<th>Industry</th>
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<td>10/13/2008</td>
<td>Las Vegas</td>
<td>Nevada</td>
<td>Systems and Technology Group</td>
<td>Cross</td>
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<td>H-Any Summit</td>
<td>10/13/2008</td>
<td>Henderson</td>
<td>Nevada</td>
<td>Software Group</td>
<td>Cross</td>
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<tr>
<td>Storage Network World (SNW) Fair</td>
<td>10/13/2008</td>
<td>Dallas</td>
<td>Texas</td>
<td>Systems and Technology Group</td>
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<td>Does IBM BladeCenter fit your IBM i, AIX or Linux environment? Listen to our webinar.</td>
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<td>Virtual Event</td>
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- View conferences worldwide
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For IBMers, community is not a buzzword, but a living form of collaborative innovation. We work shoulder to shoulder with clients, partners and neighbors across the globe to change the way the world works.

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Interact with fellow developers through blogs, wikis, forums, podcasts, events, webinars, web feeds, exchange, and more.

IBMers past and present
The Greater IBM Connection
A worldwide business and social network for IBMers past and present.

Industry Consortiums
- Blade org
- Grid org
- Power org

User communities
Network with other independent user group community members in online forums and/or in local meetings held around the world.

Software
- Information management
- Lotus
- Rational
- Tivoli
- WebSphere

Systems, Storage and Technology
- AIX & Linux on Power
- Mainframes
- Storage
- System i
- More about Systems communities

Industries
- Product Lifecycle Management (CATIA-CADAM)
- Retail

IBM Corporate Citizenship
Helping people use information technology to improve quality of life.
- IBM Corporate Citizenship
- World Community Grid
- IBM On Demand Community for Retirees

Most popular community spaces
- IBM Trust Software Main Community
- Pulse conference community
- IBM Service Management community
- Tivoli research volunteers
- Business Analyst SQA Community

Most recommended blogs
- Jennifer Dennis
  - Pulse 2009: Viva...
  - Pulse conference...

- Jennifer Dennis
  - 2009 Olympic ML
  - Pulse conference...

- Jennifer Dennis
  - Rise and Shine...
  - Pulse conference...

- Jennifer Dennis
  - The Shirt off My...
  - Pulse conference...

- Jennifer Dennis
  - Introducing IBM...
  - Trust Software...
未来三年，不必再为服务器故障担忧

12月30日前，购买Power 520/550服务器，可免费获三年全程呵护服务与技术培训，让您在感受POWER6超凡科技的同时，享受IBM精英团队的全方位支持！

点击详情，心动不如行动
“Nobody will go it alone - not in a business this complex.”

- Andy Grove, Intel chairman and CEO

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Change

- “The only constant is change” – Heraclitus
- HIB → ibm.com UX → Organizational change
  – Russell’s “Collaborative sensemaking”
- HIB changes (or becomes irrelevant)
Summary

- Thanks for getting me out of my comfort zone
- What is “information behavior” again and why should I care? Who else should care?
- If you can help me solve problems with search, personalization, user-generated classification, aggregation, SOA for UX, complex business problems, then I will care
- If you can help me understand HIB, and if I can translate it into a business impact (e.g., user experience improvements), then [something good will happen]
And now for the really good part….

- Small group discussions!