

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?

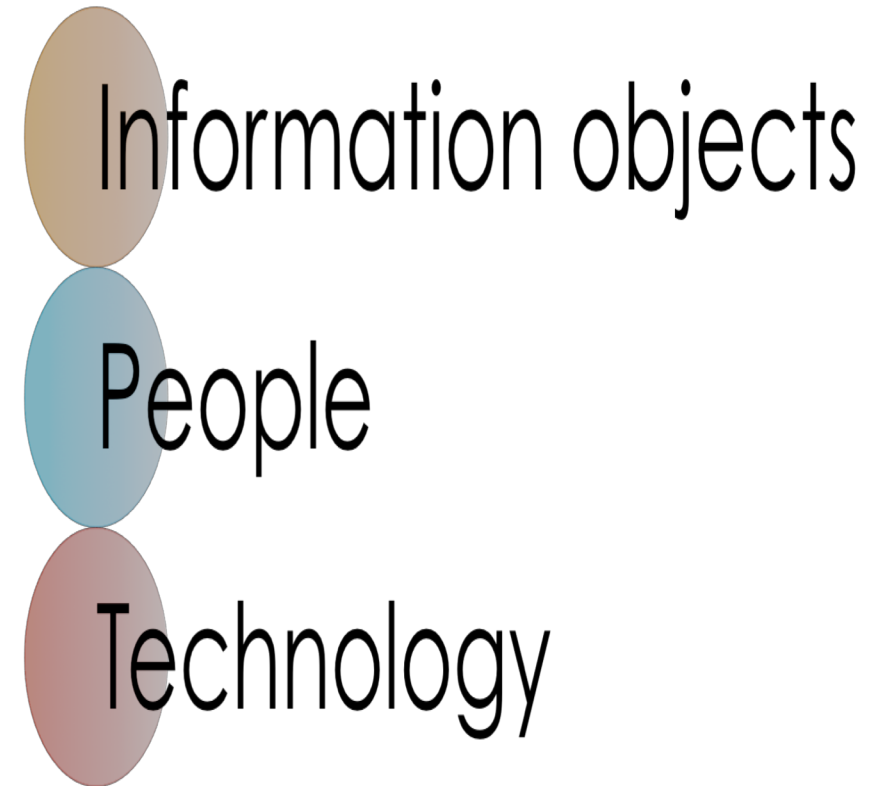
IB Research Shifts



IB Research & Discrete Elements

(Marchionini, G. (2008). Human-information interaction research and development. LISR, 30, 165-174.)

- ✦ Information research has **shifted** from
 - ✦ Focusing on **discrete elements** of information toward
 - ✦ An **ecological** account of Human Information Interaction



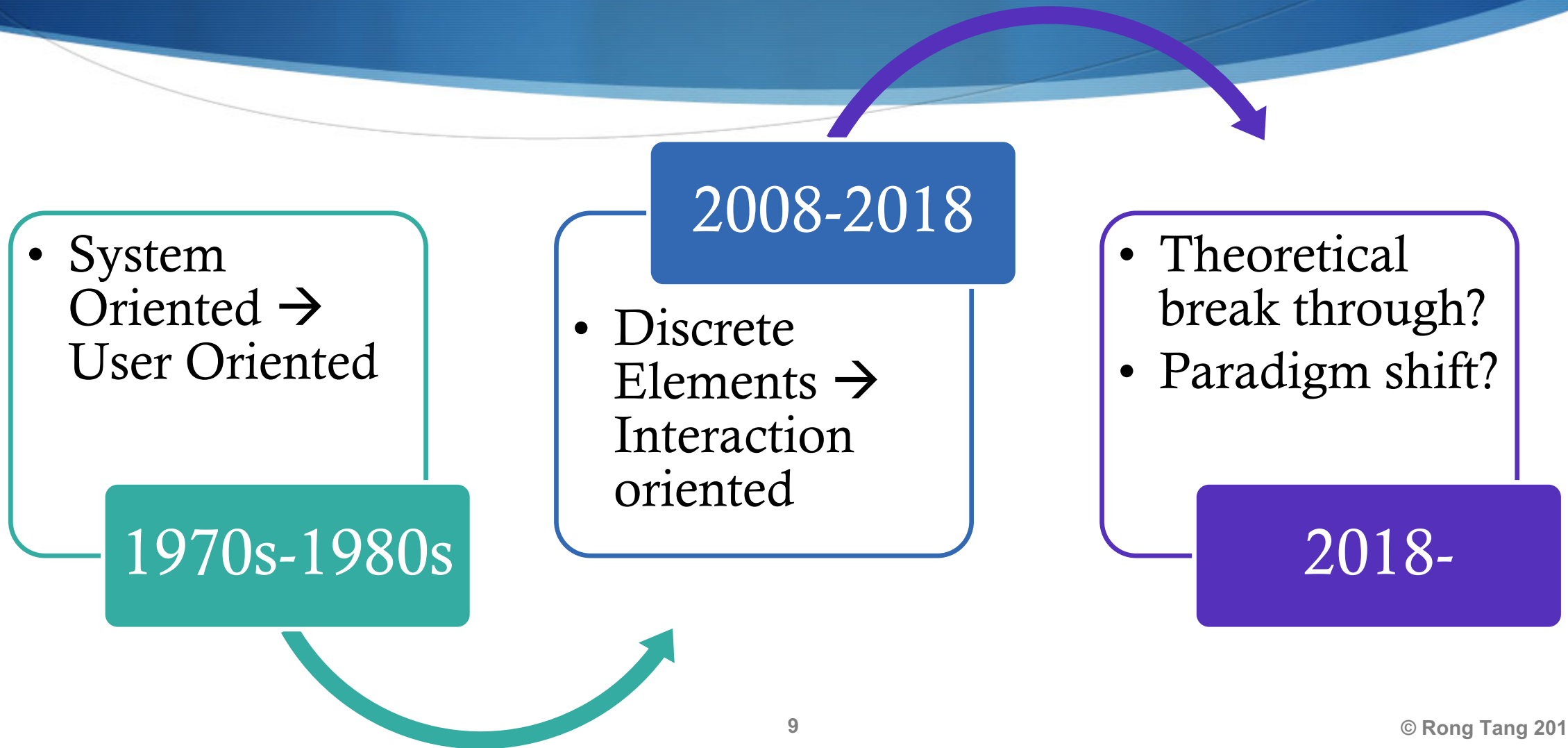
Shifts in Information Fields

(Marchionini, 2008)

From	To
Focus on stable artifacts	Grappling with how people and machines interact with dynamic, morphing information objects
Focus on individual info seekers and managers as rational cognitive actors	Considering embodied minds in a cyber collective
Issues of physical object management	Issues of scale, layering and boundary blurs
Information management	Identity management as instantiated in user profiles, filters, and personal health records

IB Research Paradigm Shifts

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Past



IB as Academic Study

(Ellis, 2011; Pettigrew, et al., 2001)

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- ✦ 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

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(Ellis, 2011)

- ✦ Information needs research suffers from
 - ✦ Shallow conceptualization
 - ✦ Defective methodology
- ✦ The notion of Information need itself was **stultifying** the research enterprise
- ✦ Wilson (1981):
 - ✦ 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)
4. The Kuhlthau Model (Kuhlthau, 1991, 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)
9. The Second Wilson Model (Wilson, 1996, 1999)

Present

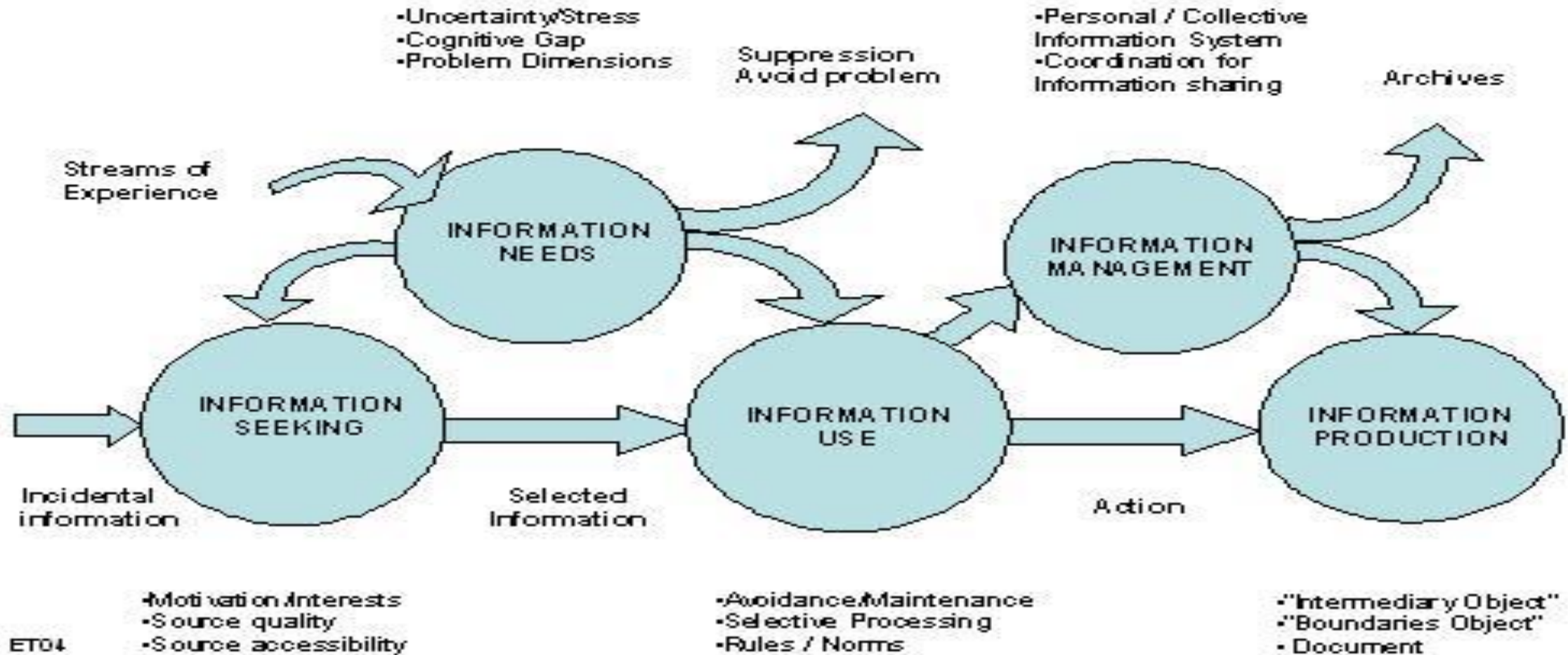


IB Current Research

- ✦ IB lifecycle modeling
 - ✦ Information Activities
 - ✦ Information Journey
- ✦ Information and Communication dual perspectives
 - ✦ ISCM
- ✦ Current state of IB research

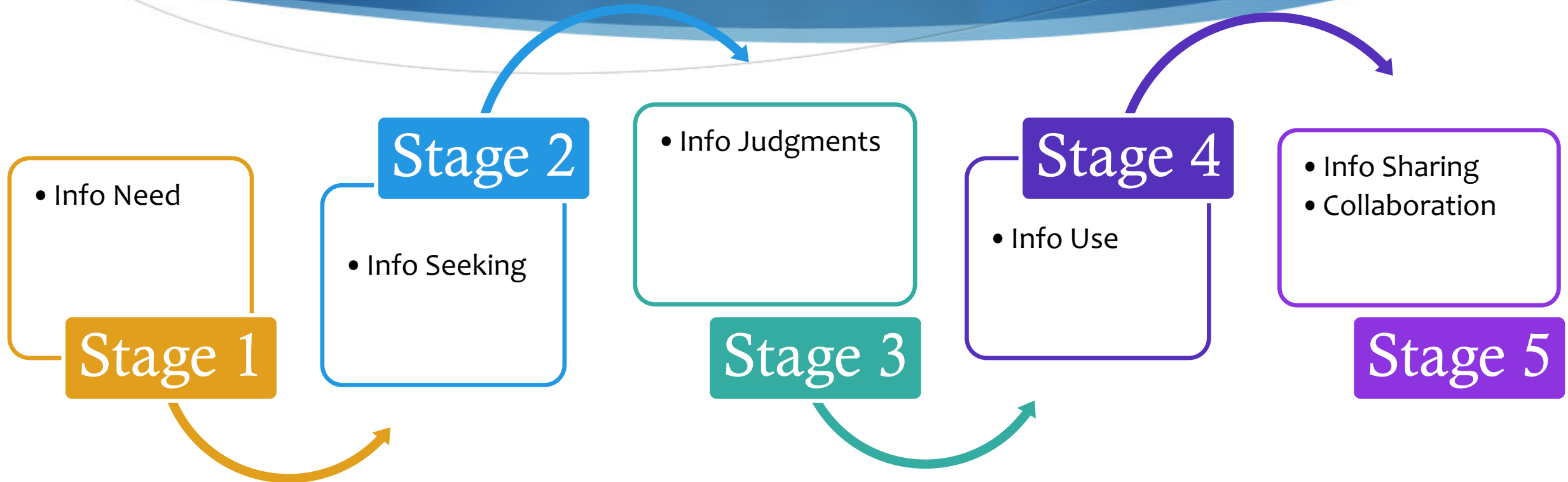
Information Behavior Activities

(source: Thivant, 2005)

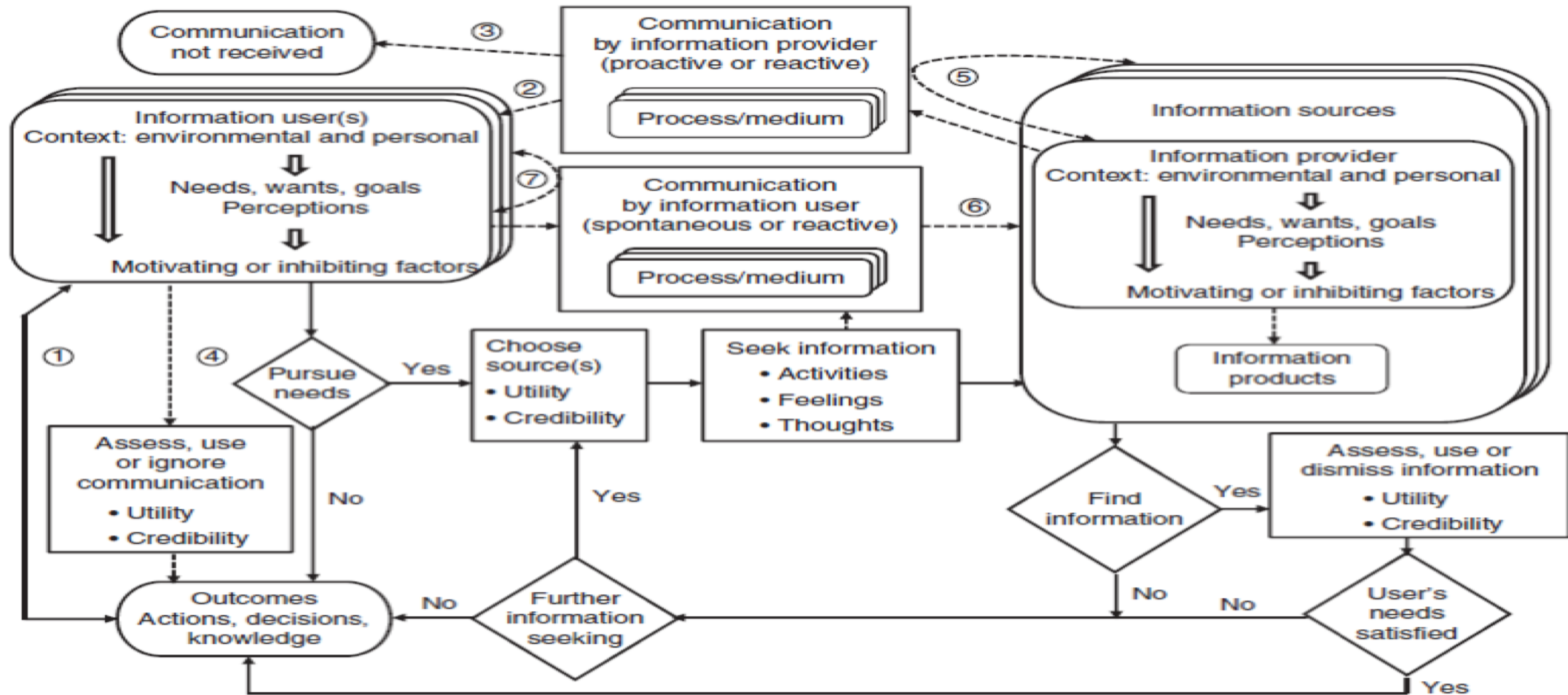


The Information Journey

(Du, J. T. The information journal of marketing professionals. *JASIST*, 65(9))



The ISCM 2015 Version

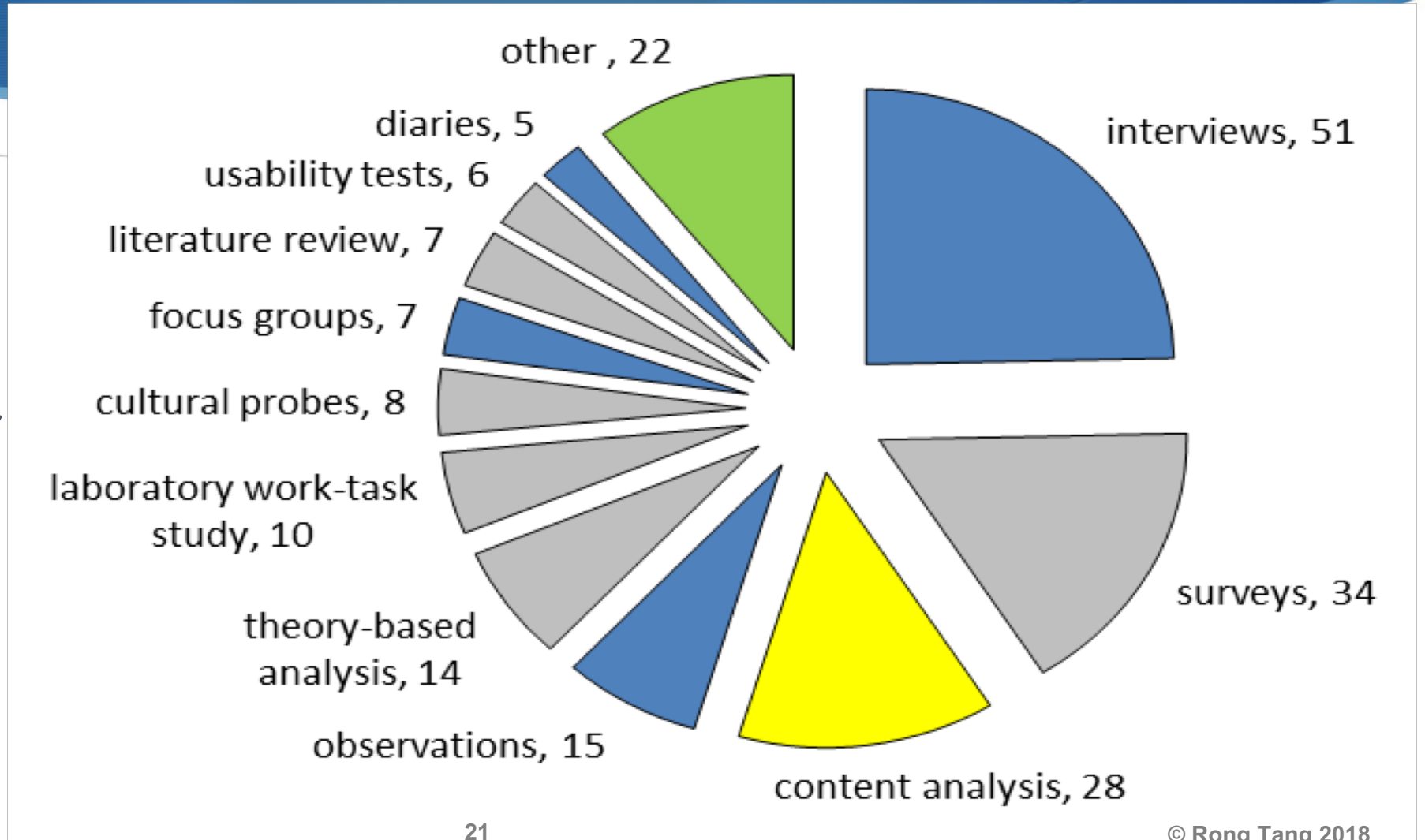


IB Research: Methods Used

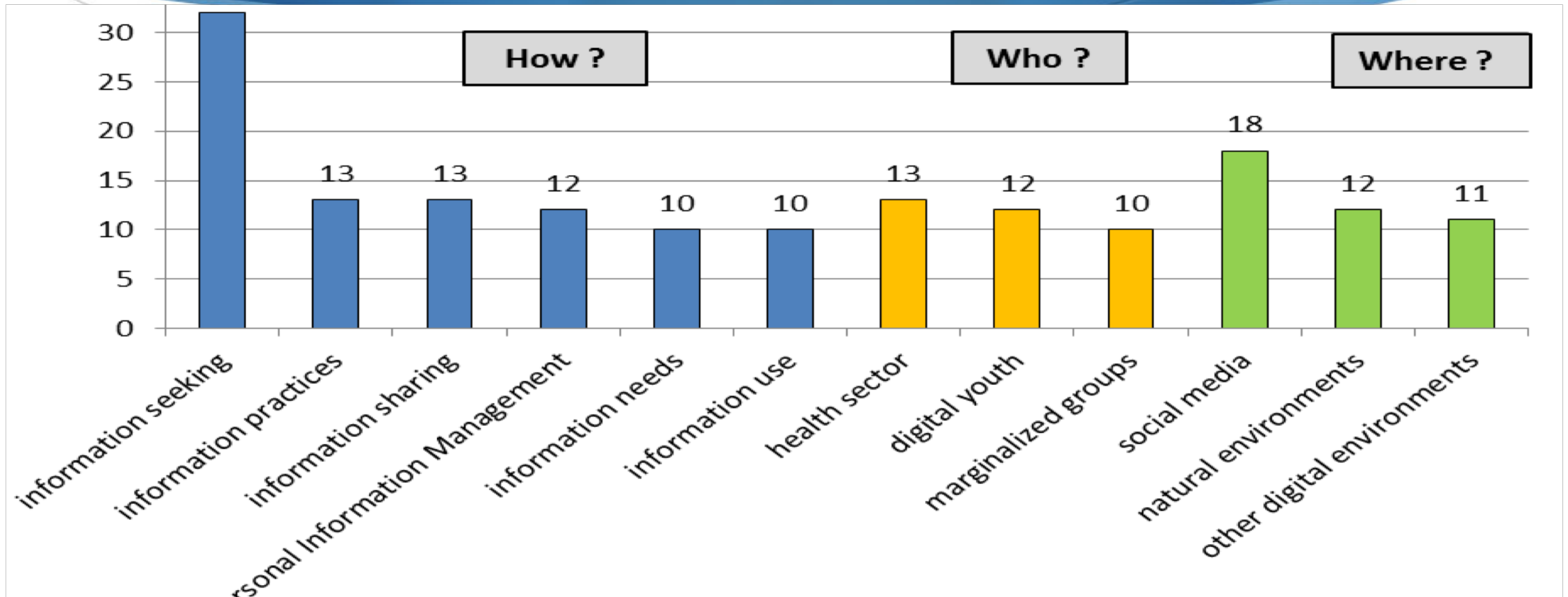
(Greifeneder, 2014)

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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

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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?

