



Virtual Dave Lankes

Presentation

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TITLE: Digital Reference Research: Fusing Research and Practice

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ABSTRACT: Presentation on the digital reference research agenda.

KEYWORDS: digital reference, virtual reference, research



Digital Reference Research: Fusing Research and Practice

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Digital Reference Research Agenda

- Defined as a Reference Document that Seeks to Indicate:
 - The scope and scale of a phenomena
 - What is known about a given phenomena under investigation
 - What gaps are recognized in the understanding of a phenomena
 - A common belief of the priorities of in filling the gaps in understanding



Background

- VRD 2001 Closing Session Call for “Moving Beyond 1000 flowers”
- Digital Reference Research Symposium
 - Information Institute of Syracuse, National Library of Canada, Association of College & Research Libraries, Harvard university, QuestionPoint with participation by the Institute of Museum and Library Studies and the Library of Congress
 - <http://quartz.syr.edu/symposium>



Background: White Papers

Tasks	Topics
Define the topic under consideration	Question Negotiation in an Electronic Environment <i>Janes</i>
Review the current state of the art in this area	Education for Digital Reference Services <i>Smith</i>
Provide some empirical data regarding issues and strategies	Standards, Systems and Software for Digital Reference <i>McClennen</i>
Offer options and SPECIFIC recommendations for how best to resolve the issues and make some progress in this particular area.	Fit of Digital Reference into the Digital Library Arena <i>Pomerantz</i>
Clarify the issues/challenges that need to be addressed	Policies and Standards for Digital Reference in Consortia <i>Whitlatch</i>
	Digital Reference in Primary and Secondary Education <i>Lankes</i>
	Image Intermediation <i>Goodrum</i>



Symposium

- Harvard University
 - August 1-3 2002
 - 35 participants from:
 - Libraries
 - Academia
 - Government
 - International
 - Vendors





Background: Synthesis

- Track leaders at 2002 Virtual Reference Desk Conference
- ACRL PIL Publication
- JASIS&T
- RUSQ?





Progress Through the Agenda



Conceptualization: Determining the fundamental field and conceptual structure of the field



Operationalization: Translating the abstract concepts into actionable items and questions

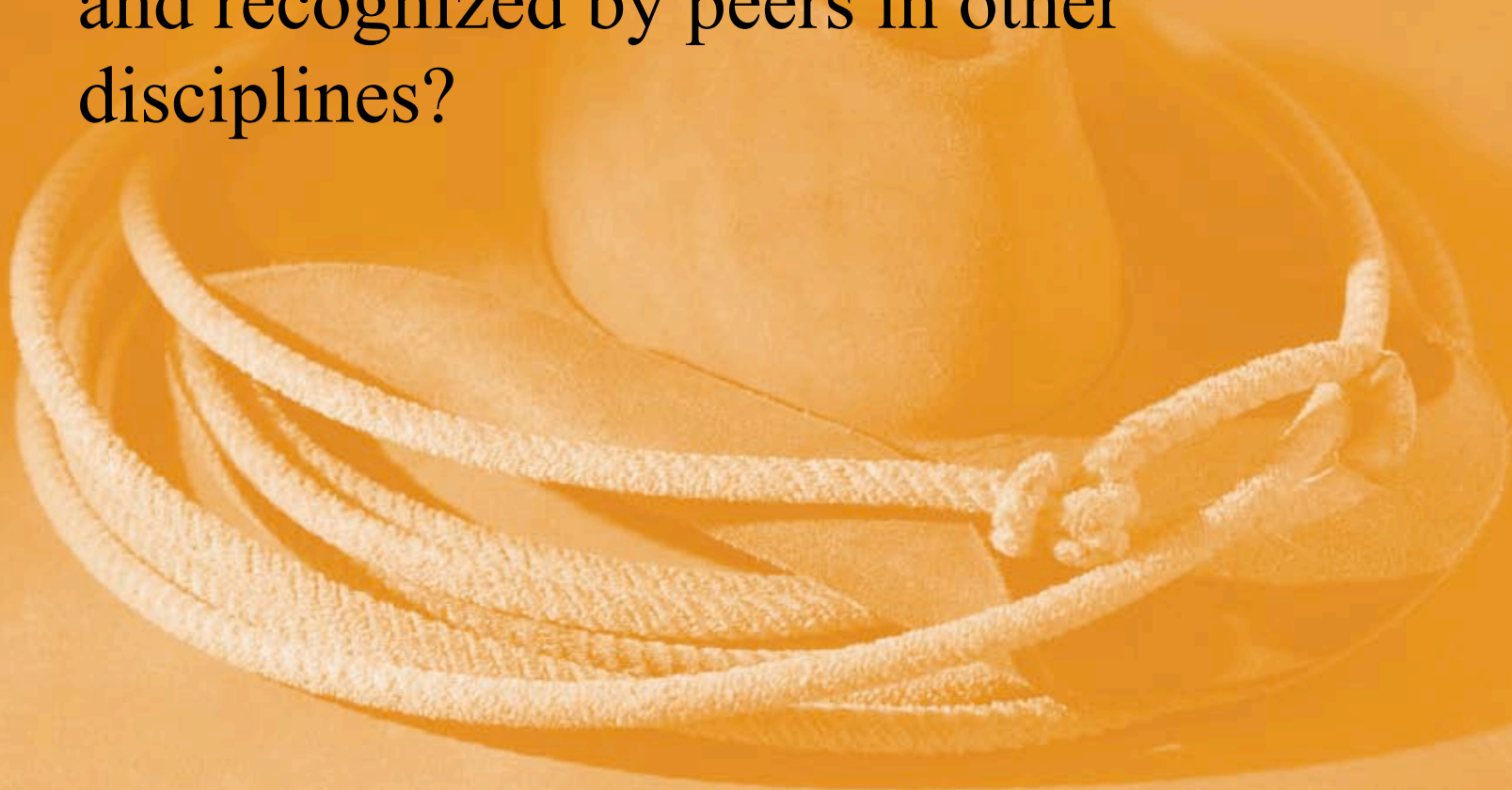


Implementation: Obtaining results from the research questions and putting them into practice



Arms' Thought Experiment

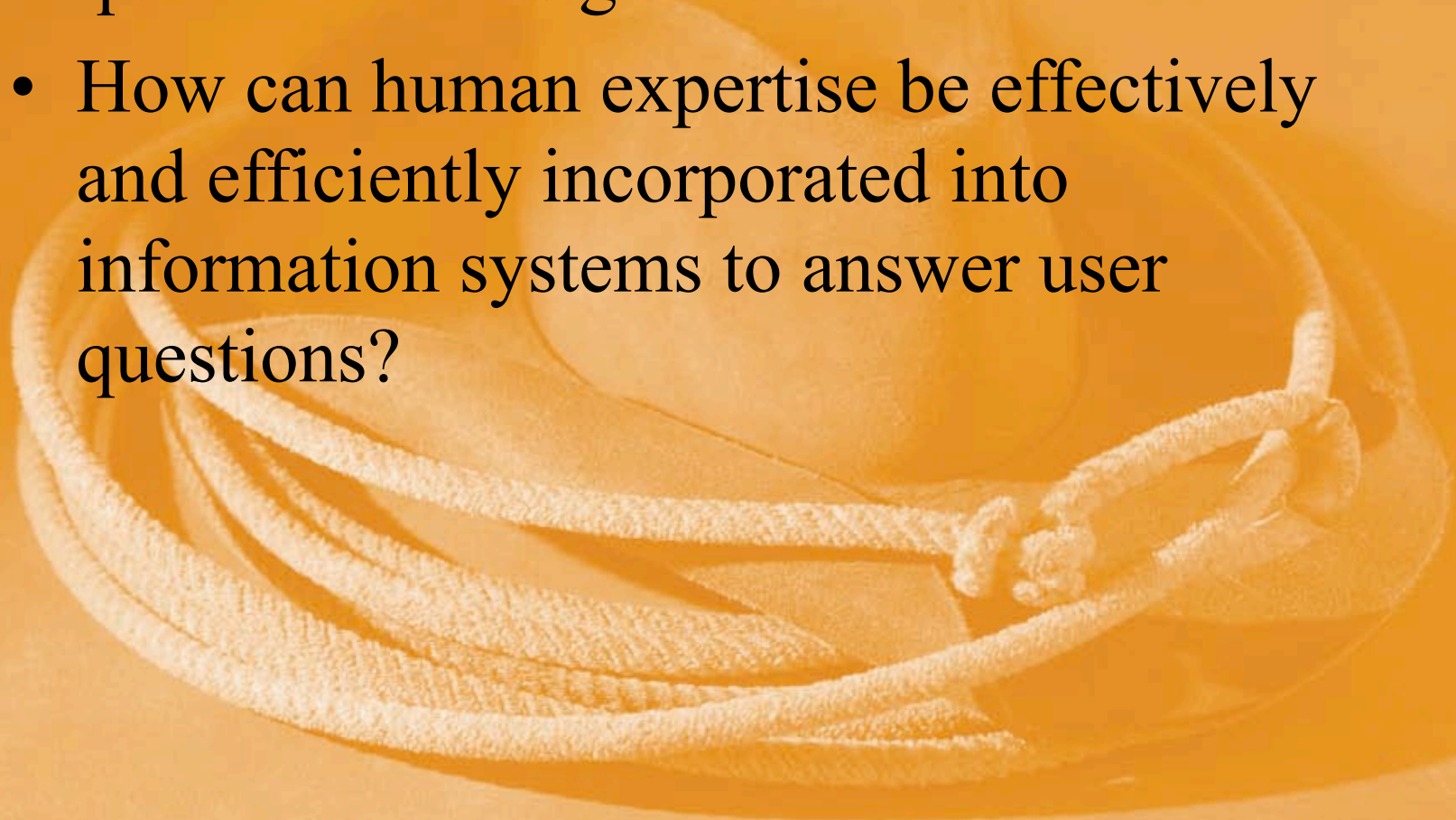
- What contribution would a digital reference researcher make that would be significant and recognized by peers in other disciplines?





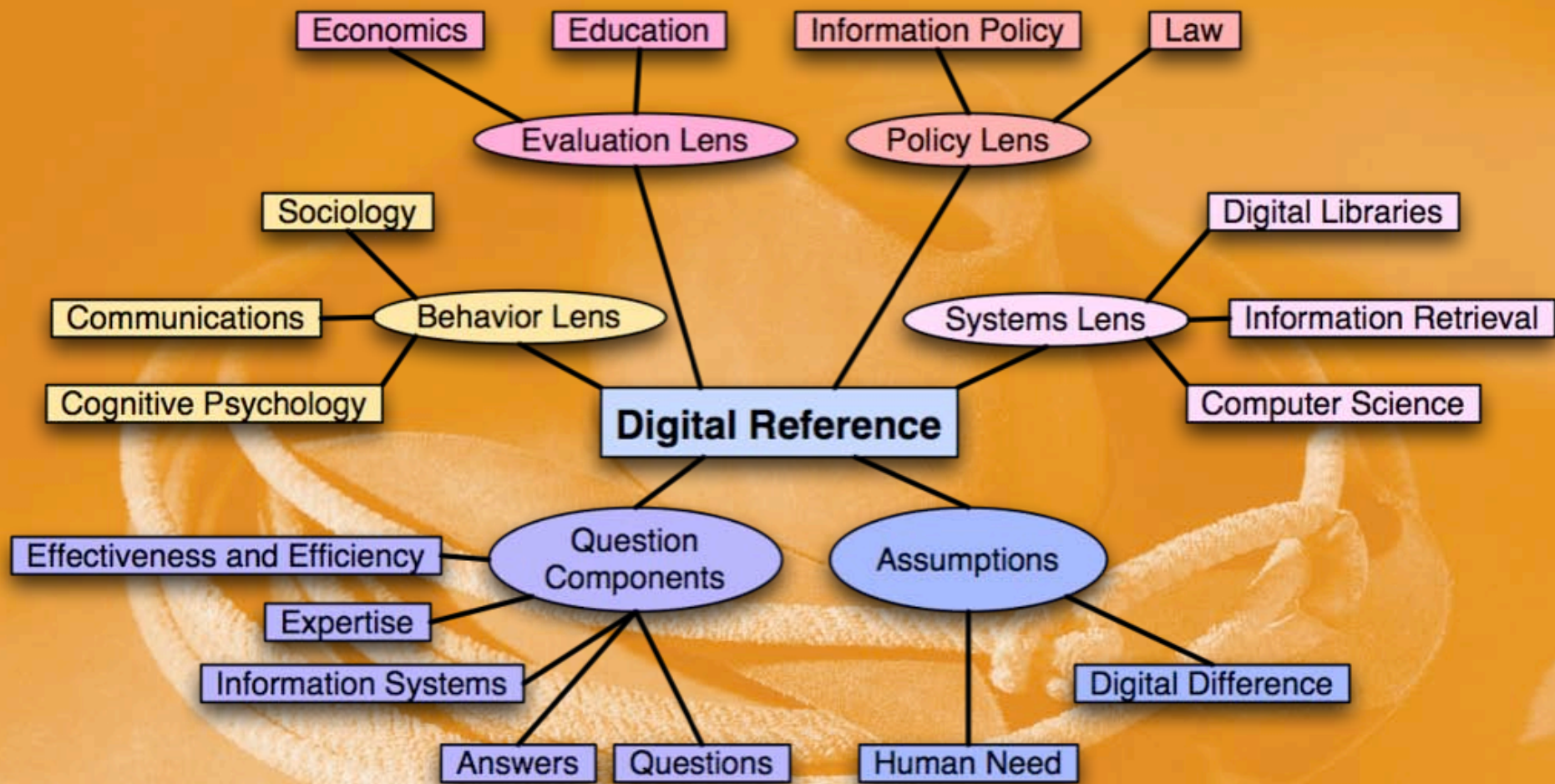
Definition & Question

- The use of human intermediation to answer questions in a digital environment
- How can human expertise be effectively and efficiently incorporated into information systems to answer user questions?



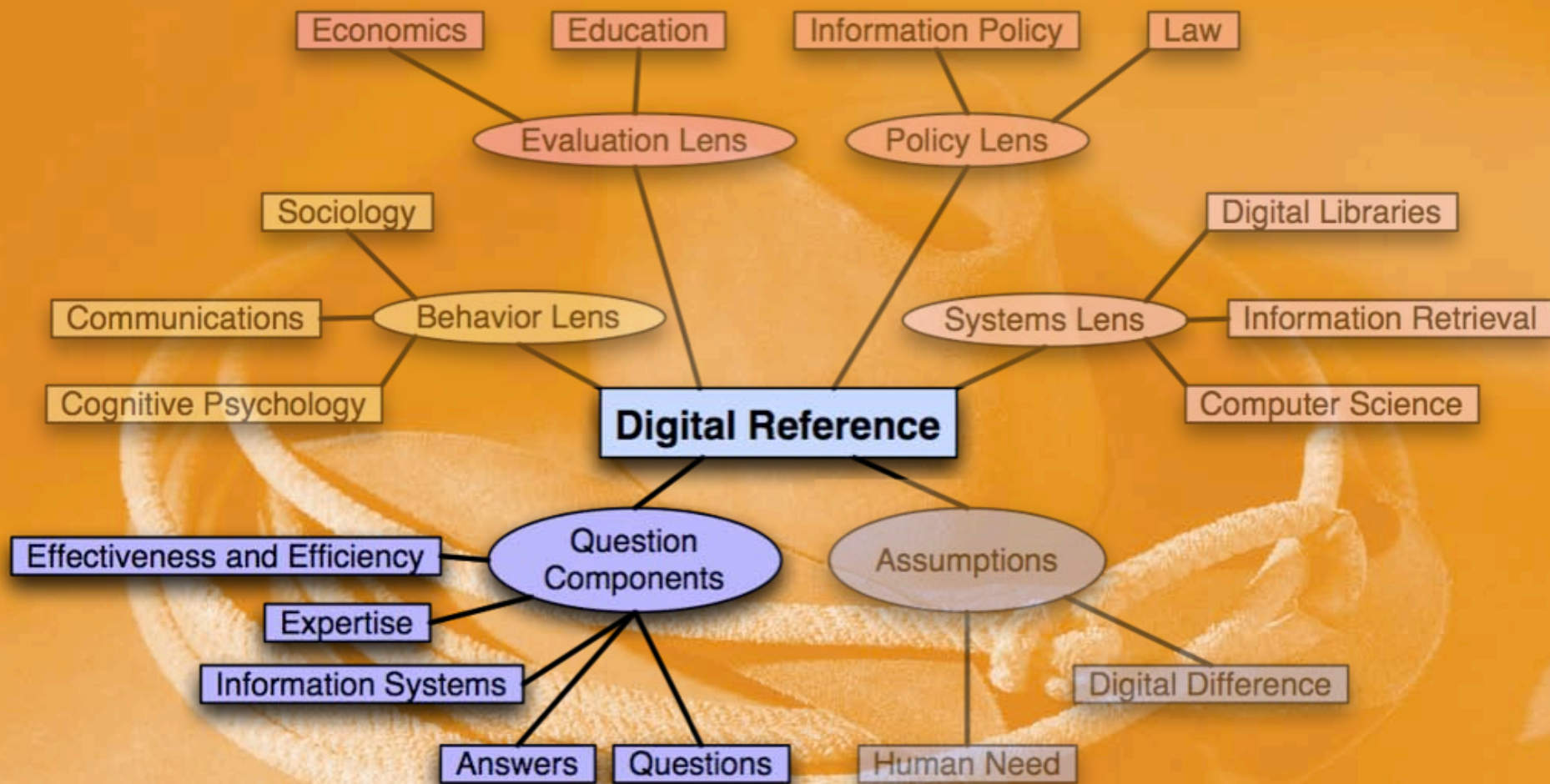


The Model





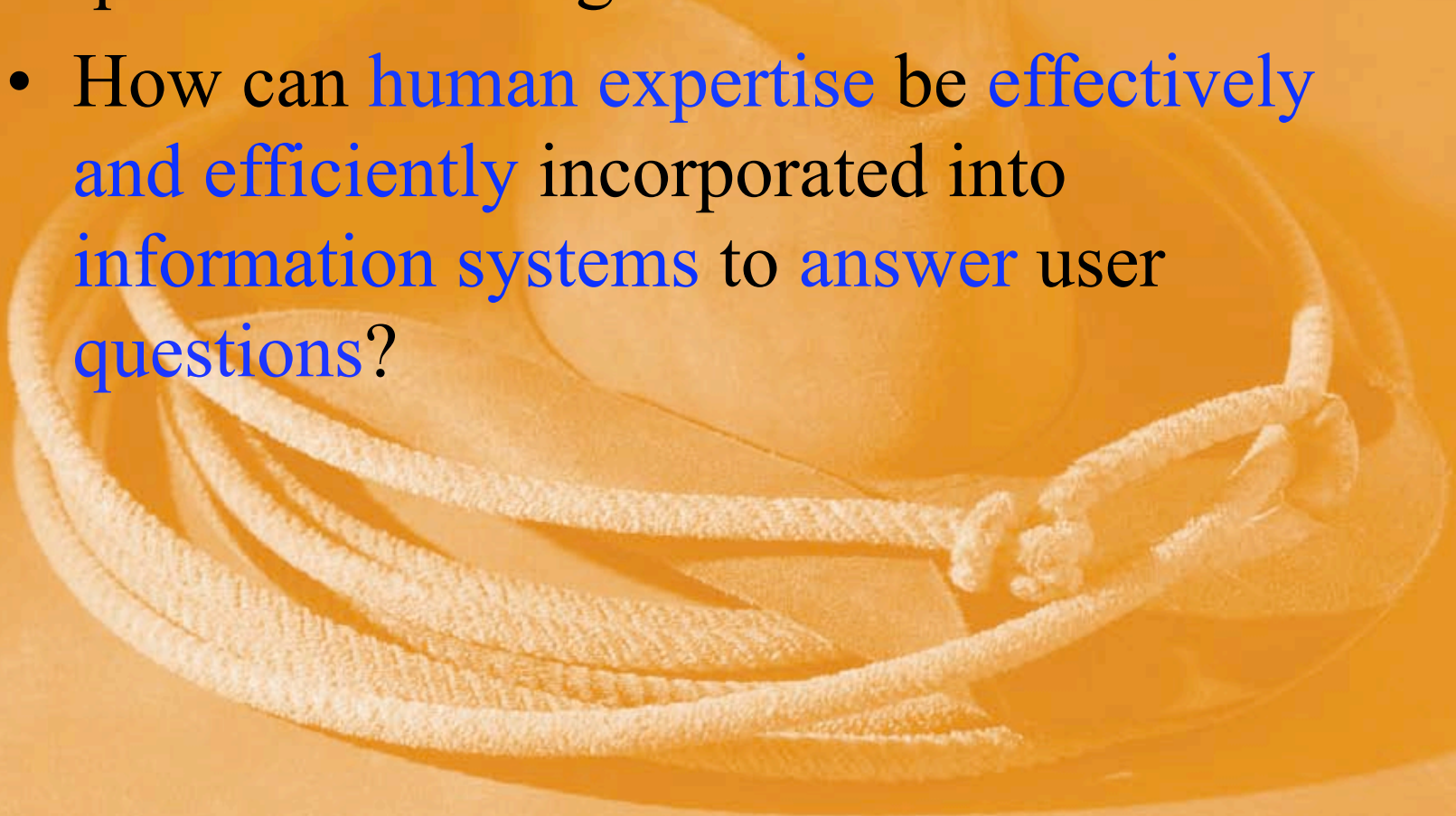
Question Components





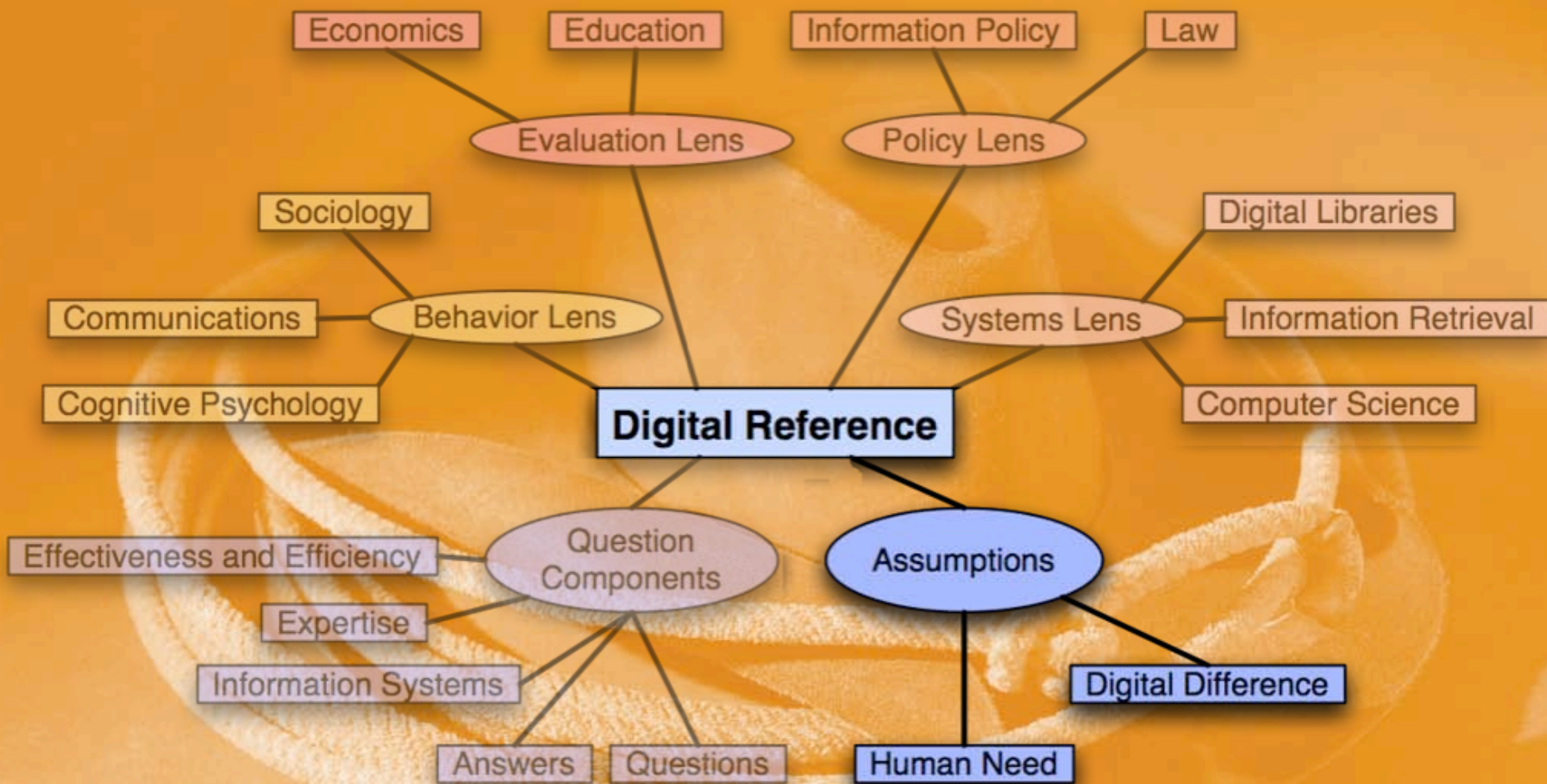
Definition & Question

- The use of human intermediation to answer questions in a digital environment
- How can **human expertise** be **effectively and efficiently** incorporated into **information systems** to **answer** user questions?



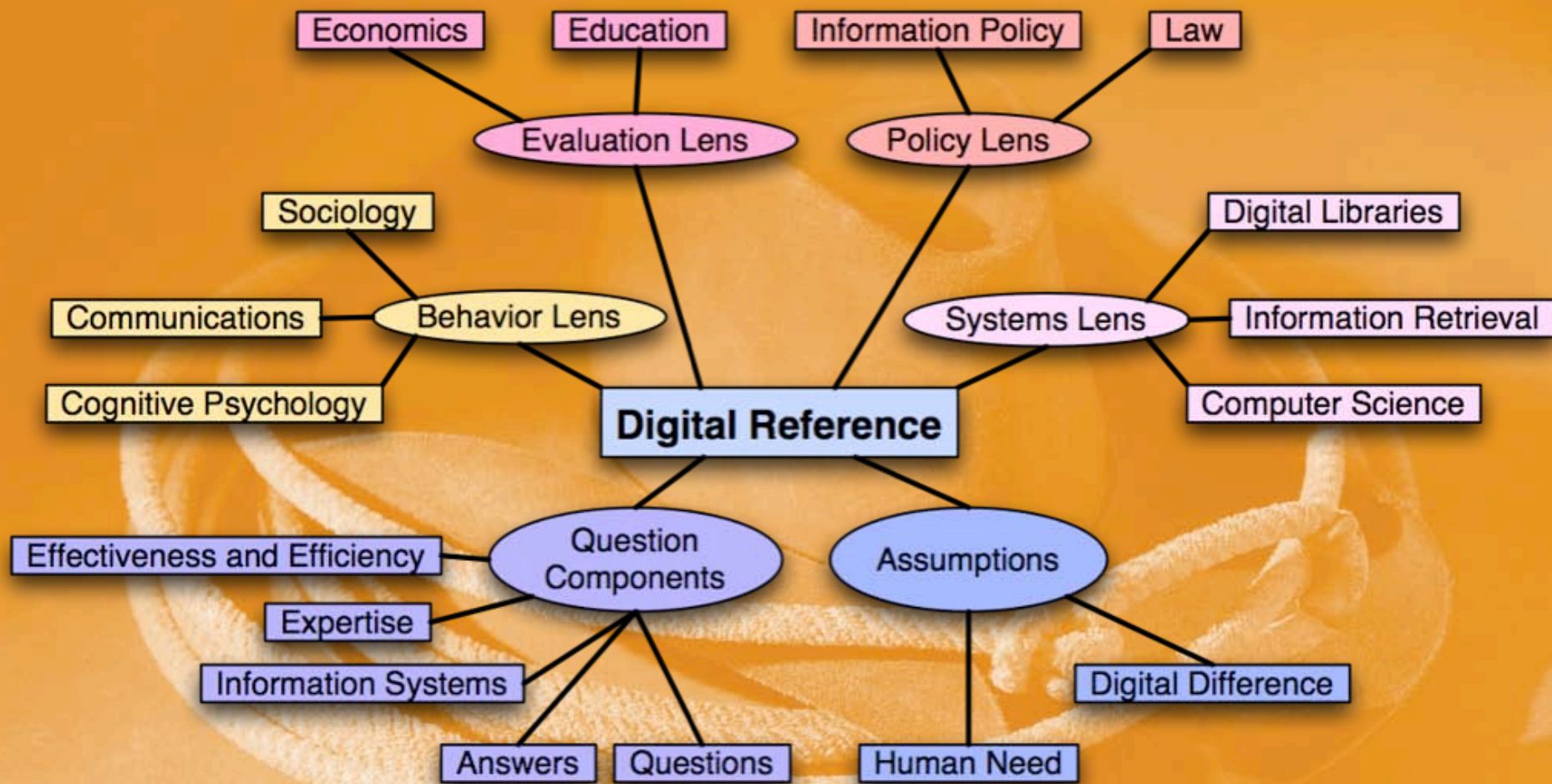


Assumptions

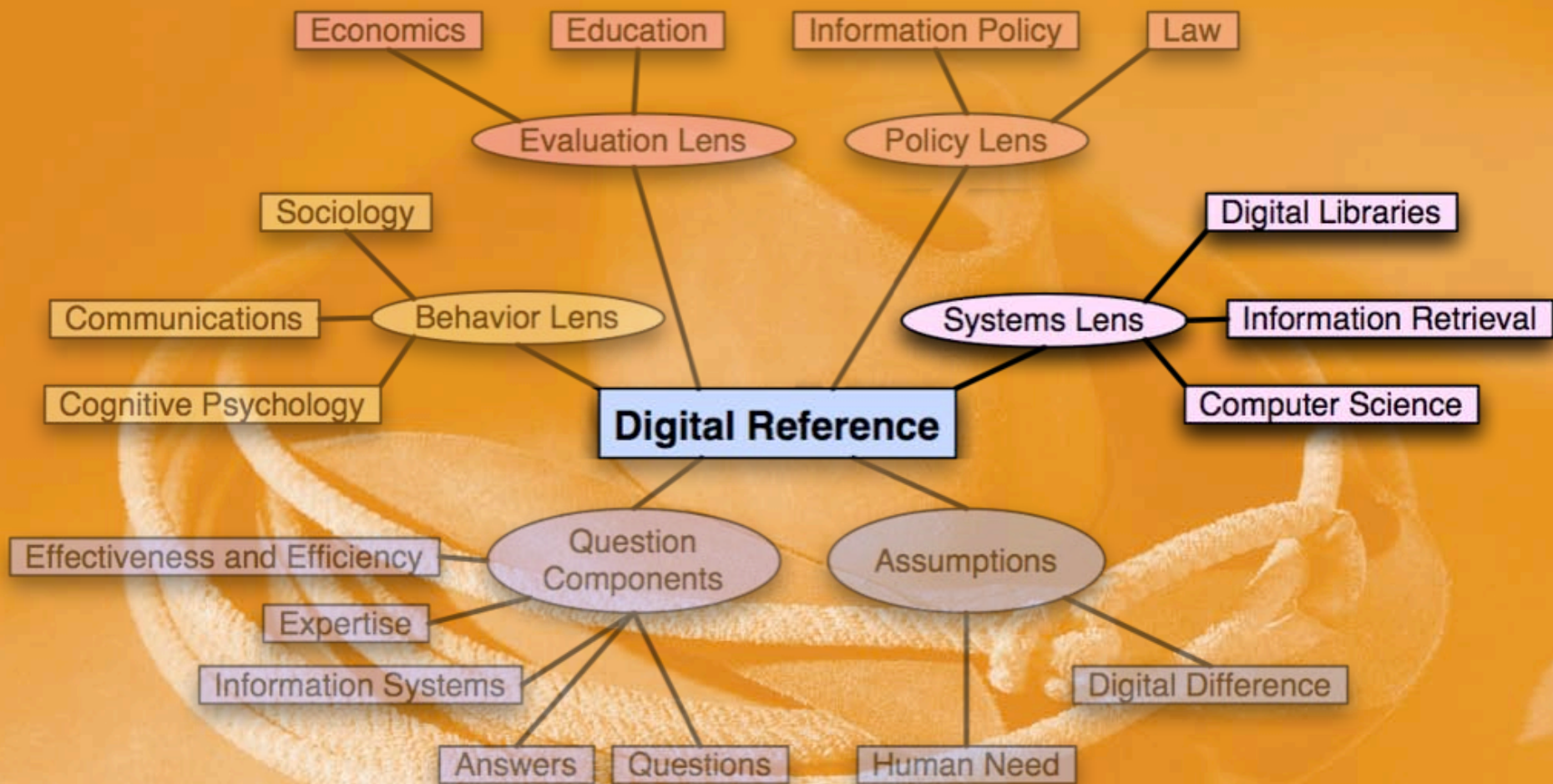




The Model



Systems

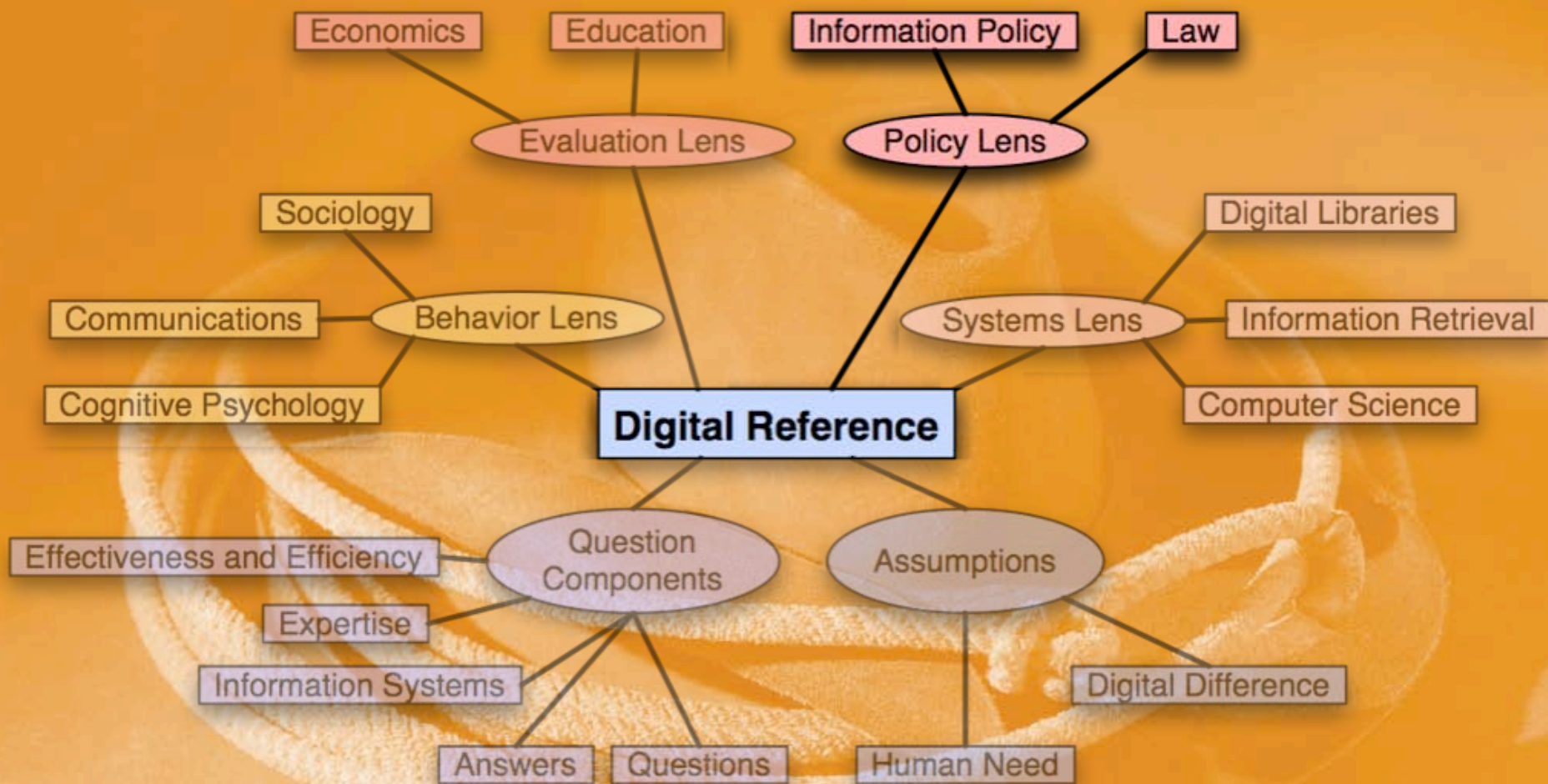




One System Model

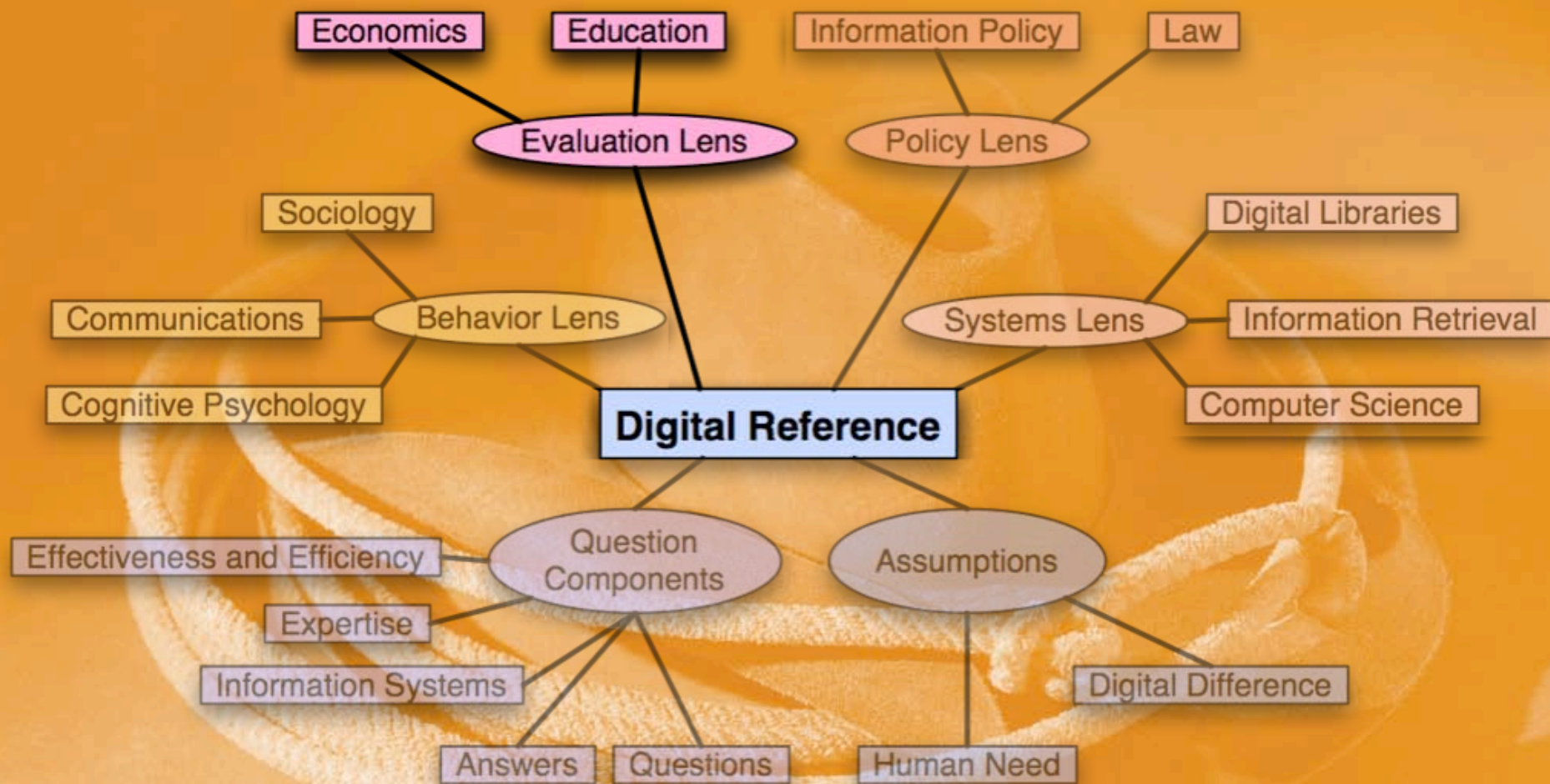


Policy



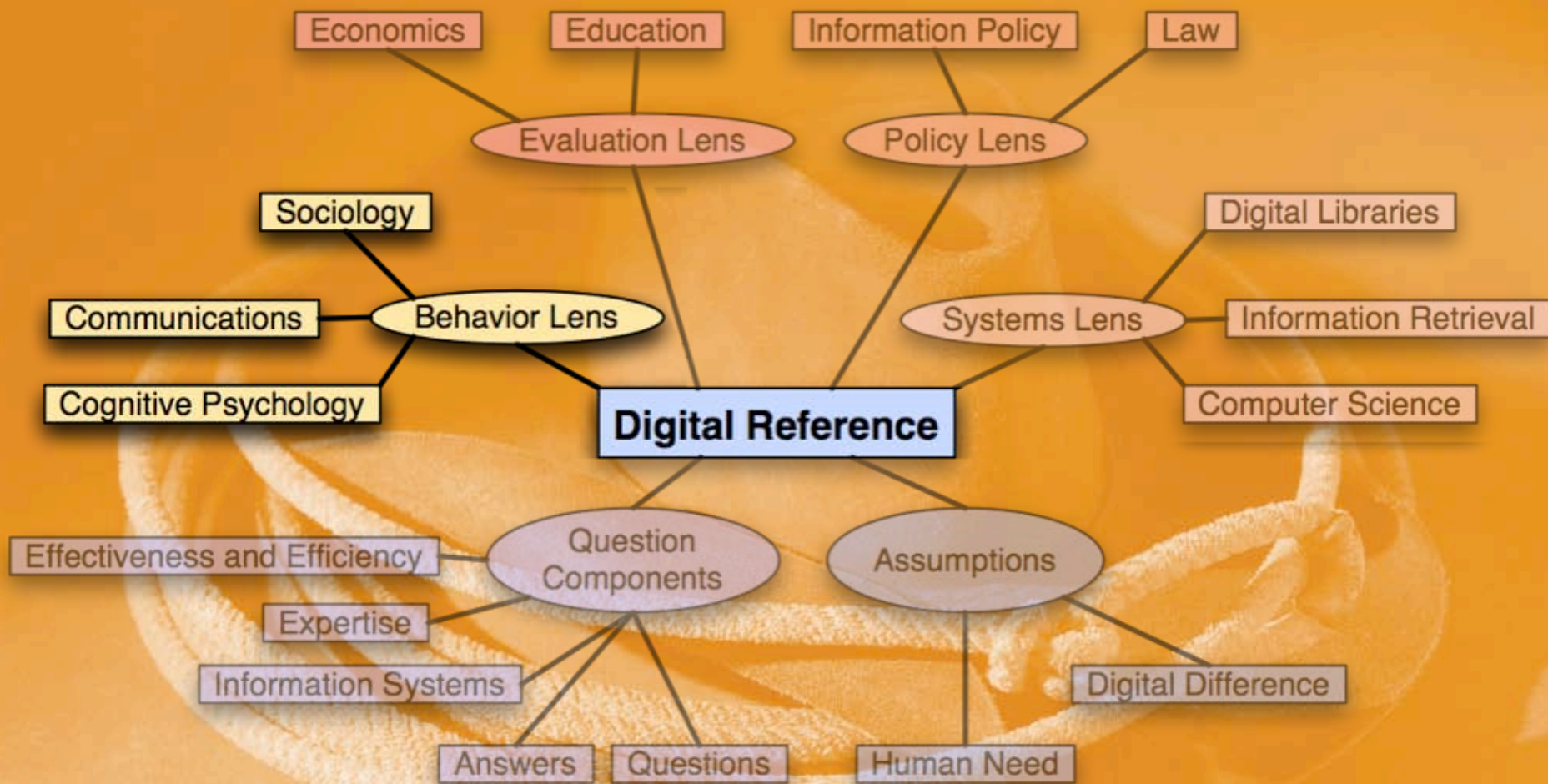


Evaluation





Behavior





Research Matrix

	Policy	Systems	Evaluation	Behavior
Human Expertise	Needed Staff Level Expertise and Training	How is human output incorporated into systems components (such as a knowledge base)	What is the perceived benefits of human mediation (familiarity of human voice? content expertise? instruction?)	Do users ask questions differently when they know a human intermediary is involved?
Efficiency and Effectiveness	What limits should be placed on a service and how are they determined?	What level of automation can be used in digital reference?	What metrics are needed to determine cost/value in digital reference	Does knowledge of cost in digital reference effect behavior?
Information Systems	How can digital reference systems be constructed to protect individual privacy, and licensing while achieving maximum benefit for an intended community?	What are the required components of a digital reference system?	What are appropriate performance metrics for system evaluation?	How do experts and users interact in a digital reference system?
Questions	How do services determine out of bound questions?	What systems work best as an interface to get at user questions?	Have questions qualitatively changed over time in digital reference (gotten harder)?	What digital aids can be used to aid users construct questions?
Answers	What policies do or should bind service responses (copyright)?	Can knowledge bases be better used to provide answers to some types of questions?	How do you determine “right” and “wrong” answers?	What are the necessary components of an answer needed to meet a user’s information need?



Research Matrix

	Policy	Systems	Evaluation	Behavior
Human Expertise		Croft, et. al.	Silverstein	Janes, et. al.
Efficiency and Effectiveness	Abels	Nicholson	McClure et. al.	
Information Systems		Lankes, McClennen		
Questions		Pommerantz		Smith
Answers			White	Goodrum



Research Matrix

	Policy	Systems	Evaluation	Behavior
Human Expertise	Staffing Requirements	Specifications for Knowledge Bases	Better Feedback and Evaluations	Staffing and Marketing
Efficiency and Effectiveness	Service Level Policies	Greater Scale	Better Economic Evaluation	Marketing
Information Systems	Automated Policy Enforcement and Protection	Better Software Options	Benchmarking for Software	Better Interfaces
Questions	Consortia Specifications	Better Interfaces	Staffing and Budgeting	Better Websites
Answers	Consortia Rules	Greater Scale	Better Evaluation (55% Rule?)	Better Answers



Research and Practice

- Is Research Important to Practitioners
 - Research without Practice is Ineffective
 - Limited utility to academics
 - Impossible to truly verify results in a “professional” context
 - Practice without Research is Inefficient
 - Constant reinvention of practice
 - Lack of benchmarks and best practices
 - Lack of economies of scale
- Development Process was Model of Joint Practice/Research Development



Can't We All Just Get Along?

- One Use of the Agenda is to Cross Academic and Practice boundaries
 - Library Type, Division, Institutions, Etc.
- Digital Library-Empowerment
 - “Research” Focus versus “Library” Focus
 - “Old Style Librarians” Equivalent to “Ignore”
 - NO Digital Library without a Digital Librarian!



Questions?