The Digital Reference Transition

R. David Lankes

Presentation

University of Maryland Digital Dateline Lecture, College Park, MD.

Digital Reference has gone from a loose affiliation of experiments to a full blown mode of reference in about 8 years. Those years have seen the rapid development of a digital reference community that has generated technical standards, quality metrics, events and consortia. It has also seen the rapid rise, and apparent fall of large scale digital reference projects such as AskERIC and the Internet Public Library. The library community has gone from fear of AskA services to seeing some of these services struggle to find a place in the new digital reference environment. This talk will look briefly at the ever evolving landscape of digital reference projects and explore concepts of sustainability and business models. Have libraries put AskA services out of business?

Virtual Dave Lankes

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KEYWORDS: virtual reference, digital reference
The Digital Reference Transition

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Agenda

• A Quick Trip Through the AskA World
• The AskERIC Case
• What Libraries can Learn from AskAs
• Digital Reference Evolution
• Evolving from Deduction to Induction, or Dave Visits Left Field
Some Definitions

• Digital Reference: The use of human intermediation to answer questions in a digital environment

• AskA Service: A non-library affiliated digital reference service (normally not for profit)
The Google Answers Exception

• We’re not Going to Talk about Google Answers
  – Not Enough is Known

• “Earnings and Ratings at Google Answers”
  -Benjamin Edelman, Harvard University
  – http://cyber.law.harvard.edu/people/edelman/pubs/GoogleAnswers-011404.pdf
Have Libraries put AskA Services Out of Business?
Some AskA Stories

- The Dr. Math Case
  - NSF, WebCT (.com), NSF/Drexel
- The IPL Case
  - Class Project, Library Poster Child, Class Project?
The AskA Locator

- ~90 Services
- Constant Range for 5 Years
The AskERIC Case

AskERIC
A Decade of Answers
AskERIC Collections (Hits)

Web Hits

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AskERIC Collections (Visits)

Visitors

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AskERIC at the End

• 11 Years
• First 100 Gopher Sites, First 100 Web Sites, First U.S. Department of Education Site
• Over 300,000 Digital Reference Questions Answered
• 17,648,218 Unique Visitors
• 948,441,778 Web Hits
So Why Did it Go Away?

- Resources Shifted to Database Building
  - Direct Support Costs Reduced
- Focus of ERIC Shifted to Education Research
  - “High-Quality”
- ERIC Brand Confusion
Object Lessons

• Success is a Multivariate Phenomena
  – just because one user population likes you, not all do

• The Education Community is Looking for Synthesis
  – Now on the Shoulders of the Library Community
AskERIC and Adaptation

• Arrival at Cost of Question through Market Forces
• Use of Banners to Control Question Load
• Inductive Collection Development
  • Not Field of Dreams Model
    • “Let Them Come and THEN Build Like Crazy”
Have Libraries put AskA Services Out of Business?

No, In Fact we Can Learn From Them
## Advantages/Disadvantages

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<tr>
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<th>AskA</th>
<th>Library</th>
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<tr>
<td><strong>Scope</strong></td>
<td>Subject Oriented</td>
<td>General</td>
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<tr>
<td><strong>Size</strong></td>
<td>Small (and Agile)</td>
<td>Institutional</td>
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<td><strong>Provenance</strong></td>
<td>Born Digital</td>
<td>Hybrid</td>
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<td>Process Experts</td>
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<td><strong>Approach</strong></td>
<td>Inductive</td>
<td>Deductive</td>
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Some Object Lessons

• Libraries Need to Act more like AskAs...but

• No Digital Reference Business Model
  – AskA Services have shorter life cycles because they often exist at the periphery
  – AskAs only highlight this issue...exists in libraries too
    • Economic, “Value Equation”

• Look to AskAs for Other Learning: Induction
Induction versus Deduction

• Induction
  – Where the whole is unknown until it is made up by interactions of component parts

• Deduction
  – Where the component parts are placed or controlled in relation to the whole
Induction in Digital Reference

• AskA Services that Stand on their own have short life-cycles

• Networks and Volunteer services actually have long life spans
  – IPL and Dr. Math are Still Answering Questions
  – Inductive Organizations
Induction in DR Knowledge Bases

• Building an Inductive Knowledgebase as a Complex System
  – Treating Transcripts as Agents in a Space
    • Each Agent has Static and Dynamic Attributes
      – Questionner, Answerer, Date, References, Subject
    • Cluster by “Similarity” of Agents
Induction in Digital Libraries

• Building a Collection through Digital Reference
• Pomerantz - Accretion Model
• Make a Collection More or Less Representative of the Users?
Induction in the Library

• Floating Collections
• Readers Advisory
• Cataloging/Metadata Development
Conclusions

• Libraries Live in an Ambiguous Environment
  – Complex Adaptive Environment

• Causes Great Stress, but Also Presents Great Opportunities

• Time for Libraries to Re-Inject Science into Library Science
  – Instead of Fretting over Data, Embrace It
    • Bibliomining, Inductive Systems
  – Use Technology to Preserve Values and Gain Greater Understanding of our Users.
1. Distrust
2. Excitement
3. Astonishment
4. Enthusiasm
5. Love
6. Disillusionment
7. Fright
8. Horror
9. Fury
10. Frustration
11. The End