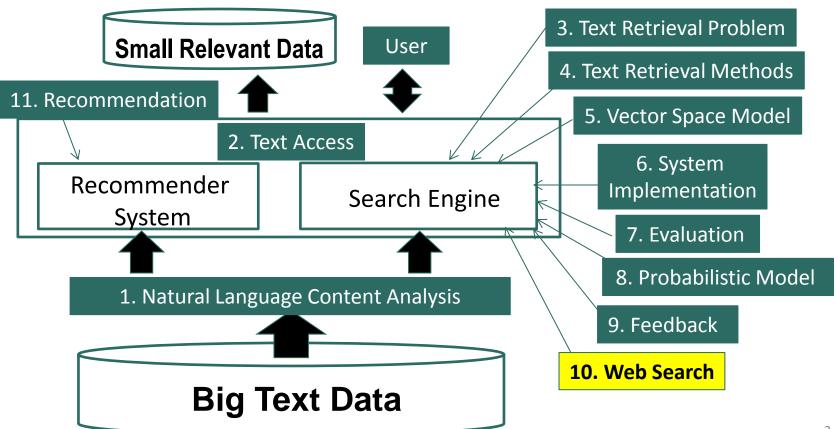
# Text Retrieval and Search Engines

Web Search: Future of Web Search

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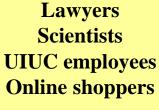
#### Web Search: Future of Web Search



### **Next Generation Search Engines**

- More specialized/customized (vertical search engines)
  - Special group of users (community engines, e.g., Citeseer)
  - Personalized (better understanding of users)
  - Special genre/domain (better understanding of documents)
- Learning over time (evolving)
- Integration of search, navigation, and recommendation/filtering (full-fledged information management)
- Beyond search to support tasks (e.g., shopping)
- Many opportunities for innovations!

## The Data-User-Service (DUS) Triangle



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Web pages
News articles
Blog articles
Literature
Email

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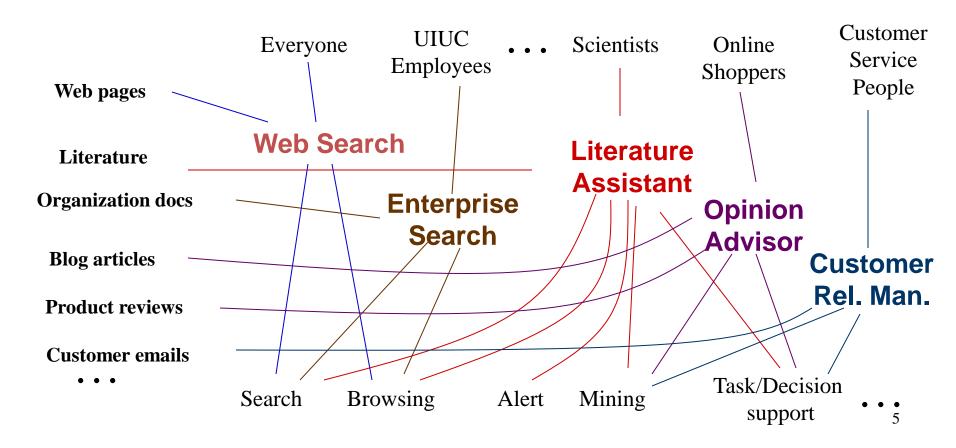
Search
Browsing
Mining
Task support

. . .

**Services** 



## Millions of Ways to Connect the DUS Triangle



#### **Future Intelligent Information Systems**

