#### Recap

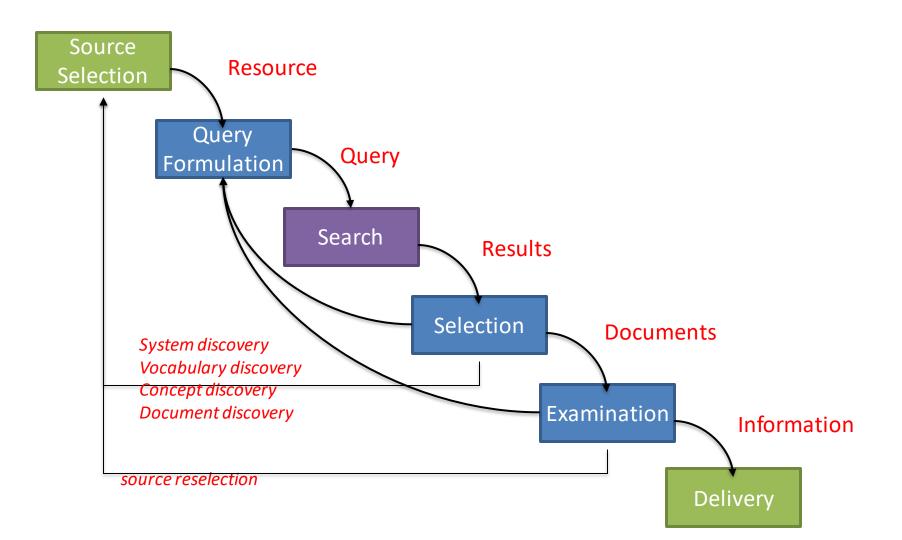
- Unstructured content is increasing so is commercialization (market cap) of such content
- IR is a science of finding material (documents) of unstructured nature that satisfies some information need within large collections
- Search engines are the Key to the knowledge kingdom
- Role of paid search
- Search wars conventional and new set of players
- History/Evolution of Search engines

2

# **Evolution of Search Engines**

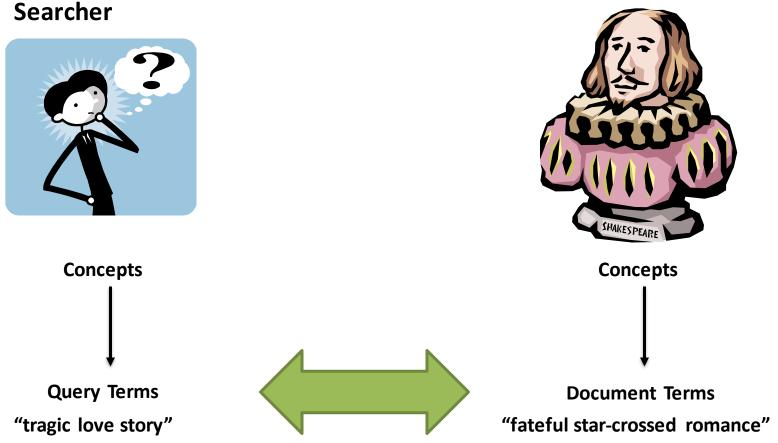
- Crawling and Indexing
- Topic directories
- Clustering and Classification
- Hyperlink analysis
- Resource discovery and vertical portals
- Semantic Web
- ???

## information retrieval cycle

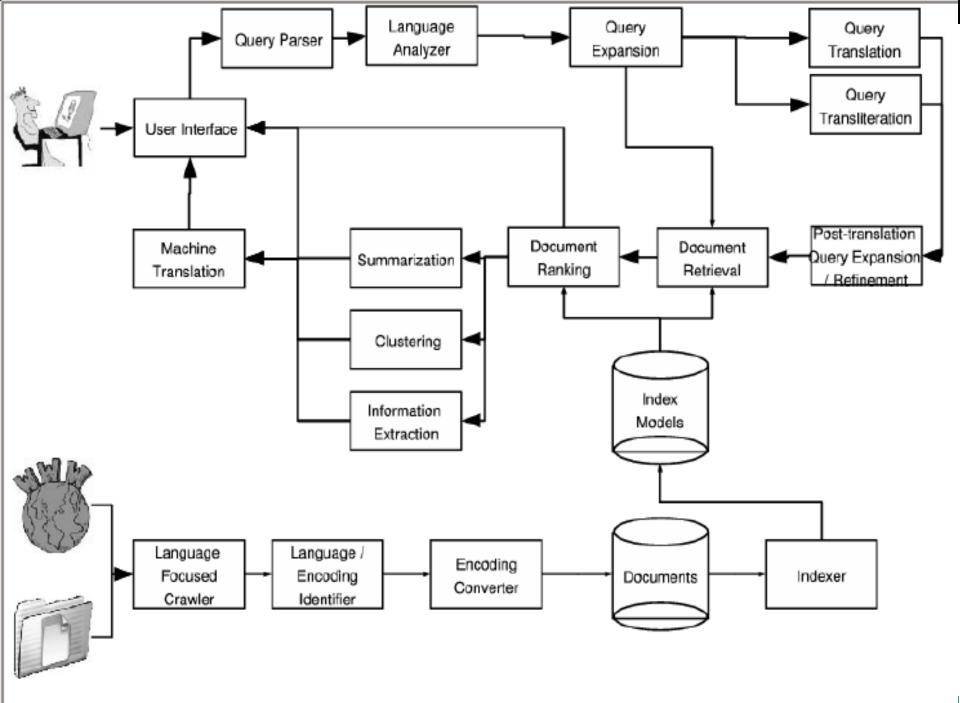


## The central problem in search

Author



Do these represent the same concepts?



### abstract ir architecture

