

Web Search: The Next Generation

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A Brief History of Search

- Phase 1 (early 1990's)
 - Is there a page on the web that has the information I'm looking for?
 - **Problem: web content availability**
- Phase 2 (1995-2005)
 - There is a web page out there that has what I'm looking for
 - **Problem: Find the most authoritative page**
 - Needle in the haystack

A Brief History of Search

- Phase 3 (2005 onwards)
 - There are millions of pages on any conceivable topic
 - **Problem: Organize and present them in a useful manner**
 - Bottleneck is human cognition

Today's Web Search is Linear



Top Ten of 6 million

- requires lots of query reformulation
- users have to learn how search works to be good at this
- for many searches, the “top ten” is a frustrating paradigm

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Search User Goals

- Navigational searches (65%)
 - Take me to the homepage of the company, institution, group, individual, or resource
 - "aloha airlines", "kelly blue book"
 - More generally, searches that have one "correct" result (or a few interchangeable ones)
 - "kazaa lite", "weather palo alto"
- Informational searches (35%)
 - Goal is to learn something about a topic
 - "weight loss", "amsterdam", "help quitting smoking"