

By: Josell Esmino, Samantha Hui, Courtney Makua, Tiffany Mo, Kylie Plett

Early Days of Search Engines

- As the Web blew up in the mid-90s, information became unorganized and made a loose structure to the Internet
- Search Engines blew up and led to people easily accessing information through keywords
- Searches were vastly different from other countries
 - Ex: Search results for "democracy" are vastly different in China than in the U.S.



Search

- New:
 - paradigm for learning information (user)
 - form of control over information (controller of the search engine)
- Web = marketplace of ideas and facts
 - Information producers & Information consumers
- "power of a third kind"
 - Recording search queries



How A Search Engine Works

- 1. It gathers information by visiting sites and learning its contents
- 2. Copies of the site are made and stored
- 3. An index is made showing which words appear on which web pages
- 4. When a query is too ambiguous, the engine supports advanced queries (Ex: Using quotations to specify the search)
- 5. The relevance of each result to the query is determined
- 6. The ranking of the results is determined. Which site is best for the

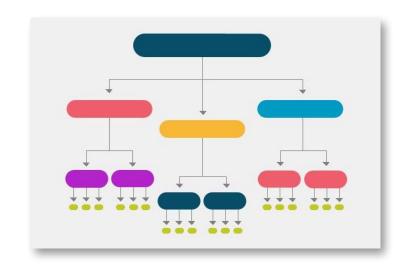
query?

7. Results are presented



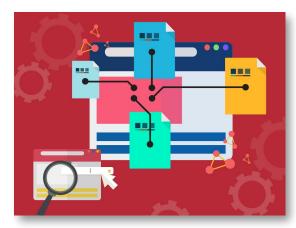
Hierarchy

- Hierarchy: a classification system
 - Organizes different information into categories
- Start with home page, followed by subcategories until you find what you are looking for
- Aristotle had been the first to start classifying objects
 - Started with animals, classifying them by blood, whether they swam or flew, etc.



How information is processed

- Google's CEO Eric Schmidt stated that out of 5,000 terabytes processed through the index, only 130 terabytes would be saved into the index. Only 3% would be processed rather than the 97% that remain.
- Google is processing information throughout countries, search engines still have to abide by international laws regarding which information is acceptable to the government and which are not.





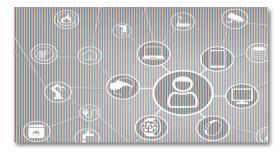
Controversy over Searches and Websites





- As the Internet grew, information that was processed through were false and not credible
- A judge in San Francisco ordered the site "WikiLeaks" to be shut down as it contained sensitive information meant not to be publicized. As a result, it made many mirror websites similar to Wikileaks and blew up across the Internet.

Forbidden Knowledge



- With the internet, forbidden knowledge is only one click away
- Patients with drug developed diabetes claimed that it was caused while using Zyprexa and sued company for hiding side effects
- A document that was never meant to be seen outside the company was discovered through the internet
- Attempted to have all the documents returned, have all copies destroyed, and take down all websites that had any copies
- It wasn't possible for the sites to be taken down
- Overall, when sensitive information is leaked on the internet, it can't be taken down or recaptured

Questions this Chapter caused us to ask

- Why would companies compete on which search engine is superior if Google is the superior search engine?
- Do search companies ever—without consent—record and store personal/confidential information about us?
- What makes a search engine superior over another?
- How do certain websites get to search result number one?
- Is there a way for search engines to keep track of illegal content? If so, how?