

Not All Search Engines Are Built Alike

Popular Search Engines and Alternatives

You're probably already familiar with Google, Yahoo! and Bing, but did you know that there are also more specialized search engines? DuckDuckGo (duckduckgo.com) doesn't track your digital footprint the way the major search engines do. Quora ([quora.com](https://www.quora.com)) is a community-based search engine that will answer your questions. Dogpile ([dogpile.com](http://www.dogpile.com)) searches other search engines—including Google and Yahoo!—and removes advertising results. There are other search engines that search specifically for travel info, videos or images.

<https://duckduckgo.com/>

<https://www.quora.com>

<http://www.dogpile.com>

Algorithms Make Search Engines Work

Search engines use algorithms—complex mathematical equations that figure out which sites most closely match the search term. Search engine companies closely guard the details of how their algorithms work. Each search algorithm is unique, but they do have some things in common.

There are basically two types of search engines: directories and indexes. Directories—like Yahoo!—are good at identifying general information. Directories classify websites into categories, such as clothing stores, rock music, or athletics. When you search a directory, the result is a list of websites related to your search term.

Indexes use software programs called crawlers or spiders that roam the internet indexing the words in billions of web pages, blog posts and news groups. Search engines like Google and Bing identify text that matches your search terms. Because so many words are examined in a typical search, you can sometimes get unexpected results or irrelevant information.

How Search Engines Search

When you enter a search term, the search engine looks for three things: how the terms are used on a webpage, where they are located within a webpage and the frequency of the terms on the webpage. Because each search engine operates differently, you may receive different results or different rankings even though the search engines were given the same term or phrase.

Search results are also affected by how many and with what frequency webpages are analyzed by a search engine. Use factors—how often a web page is clicked—can also cause an algorithm to rank a webpage higher or lower.

The value of a search engine to you depends on how often it returns the information you're looking for. Knowing how to search effectively can save you time and provide the accurate information you need.

Discussion Questions

- What are some of the differences between the more popular search engines and specialized search engines like DuckDuckGo or Dogpile?
- How can is an algorithm the “brain” of a search engine?
- Describe three ways a search engine evaluates webpages.
- Give two reasons search engines may return different results for the same term.
- How might the information you learned from this handout change the way you search for information?
- Why is it important to know how search engines work?