

What Makes a Search Engine Good?

All search engines consist of three parts: (1) a database of web documents, (2) a search engine operating on that database, and (3) a series of programs that determine how search results are displayed. Because the search engine business is competitive, most search engines also offer additional features that are convenient or fun. The table below shows what can vary within each of the three basic parts in search engines.

Parts of Search Engines	Variables, and their implications for your searches
<p>1. Database of web documents</p>	<ul style="list-style-type: none"> ● Size of database: <ul style="list-style-type: none"> ○ How many documents does the search engine claim it has? ○ How much of the total web are you able to search? ● Freshness ("up-to-dateness"): <ul style="list-style-type: none"> ○ Search engine databases consist of copies of web pages and other documents that were made when their crawlers or spiders last visited each site. How often is the database refreshed to find new pages? ○ How often do their crawlers update the copies of the web pages you are searching? ● Completeness of text: <ul style="list-style-type: none"> ○ Is the database really "full" text, or only parts of the pages? ○ Is every word indexed? ● Types of documents offered: <ul style="list-style-type: none"> ○ All search engines offer web pages. ○ Do they also have extensive PDF, Word, Excel, PowerPoint, and other formats like WordPerfect? ○ Are they full-text searchable? ● Speed and consistency: <ul style="list-style-type: none"> ○ How fast is it? ○ How consistent is it? Do you get different results at different times?
<p>2. The search engine's capabilities All search engines let you enter some keywords and search on them. What happens inside? Can you limit in ways that will increase your chances of finding what you are looking for?</p>	<ul style="list-style-type: none"> ● Basic Search options and limitations: <ul style="list-style-type: none"> ○ Automatic default of AND assumed between words? ○ Accepts " " to create phrases? ○ Is there an easy way to allow for synonyms and equivalent terms (OR searching)? Can you OR phrases or just single words? ● Advanced Search options and limitations: <ul style="list-style-type: none"> ○ Can you require your search terms in specific fields, such as the document title? Can you require some words in certain fields and others anywhere? ○ Can you restrict to documents only from a certain domain (org, edu, gov, etc.)? Limit to more than one or only one? ○ Can you limit by type of document (pdf or excel, etc.)? More than one? ○ Can you limit by language? ○ How reliably and easily can you limit to date last updated? ● General limitations and features: <ul style="list-style-type: none"> ○ What do you have to do make it search on common or stop words? ○ Maximum limit on search terms or on search complexity? ○ Ability to search within previous results? ○ Can you count on consistent results from search to search and from day to day? ○ Can you customize the search or display? ○ Is there a "family" filter? Does it work well? Is it easy to turn on or off?
<p>3. Results display All search engines return a list of results it "thinks" are what you are looking for. How well does it "think like you expect it think"?</p>	<ul style="list-style-type: none"> ● Ranking: <ul style="list-style-type: none"> ○ Are they ranked by popularity or relevancy or both? ○ Do pages with your words juxtaposed (like a phrase) rank highest? ○ Do you get pages with only some of your words, perhaps in addition to pages with them all? ● Display: <ul style="list-style-type: none"> ○ Are your keywords highlighted in context, showing excerpts from the web pages which caused the match? ○ Some other excerpt from the page? ● Collapse pages from the same site: <ul style="list-style-type: none"> ○ If it shows only one or a few pages from a site, does it show the one(s) with your terms? ○ How easy is it to see all from the site? ○ Can this be changed and saved as your preferred search method?
<p>4. Other features</p>	<p>Search engine designers try to come up with all kinds of features and services that they hope will allure you to their services.</p>