

Comparison of Search Engines

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Abstract

To achieve the best possible results and fulfill the aim of this evaluation exercise, by studying the capabilities that search engines provide to end users. After a general examination of the search engines, a classification took place according to the types of features supported by each search engine. This classification of features was essential in order to determine the areas, in which the evaluation should focus. Goals, non-goals and limitations were extracted from this initial part of the research. The scope of the evaluation of search engine based on accuracy of the most popular search engines, along with their database coverage and other issues such as response time, user-friendliness of the interface, ease in query syntax and submission, are evaluated.

Keywords: Search Engine; World Wide Web; Search Strategies; GOOGLE.

Introduction

The explosive growth of the Internet has rendered the World Wide Web as the primary tool for information retrieval today. However, the amount of information published is increasing constantly and this makes it impossible for anyone to monitor changes. To cope with this situation, a number of commercially available search engines have been developed, dealing with the problem of indexing and retrieval of

published information. Search engines provide users with an interface that enables them to locate documents containing information that matches their interests. As a result, an evaluation of the most popular search engines acquires increasing importance, especially if it helps answer questions concerning both the way they work and the accuracy of the results they provide.

A search engine is an information retrieval system designed to help find information stored on a computer system, such as on the World Wide Web, inside a corporate or proprietary network, or in a personal computer. The search engine allows one to ask for content meeting specific criteria and retrieves a list of items that match those criteria. This list is often sorted with respect to some measure of relevance of the results. Search engines use regularly updated indexes to operate quickly and efficiently.

Without further qualification, search engine usually refers to a Web search engine, which searches for information on the public Web. Other kinds of search engine are enterprise search engines, which search on intranets, personal search engines, and mobile search engines. Different selection and relevance criteria may apply in different environments, or for different uses.

Some search engines also mine data available in newsgroups, databases, or open directories. Unlike Web directories, which are maintained by human editors, search engines operate algorithmically or are a mixture of algorithmic and human input.

Statement of Problem

Today we are living in IT age and impact of IT has been seen on every field of human life. Information is an essential need of human life and library is the carrier of all the information of different fields of different users for the full fulfillment of information need of users, library users are using latest techniques of I.T. The information technology playing an important role in accessing information worldwide because the impact of I.T. is also seen on library activity, staff & users. Internet carries all the information available on net. It is too difficult to search the useful information due to explosion of knowledge. To overcome this problem we can use search engines because search engines provide assistance to search the specific information, but users are not aware with different search engines, their features and limitations it is a big problem with users. So my studies are based on a central problem of evaluation of 100 major search engines and find out the best search engines.

Objectives

- To study the available major search engines.
- To study the basic features of search engines. Like: Search WWW, Search Images, Data, All Word Search, Any Word Search, etc
- To study the Special features of search engines like: Page content, Boolean Search, Help option, Directory option, Wild card, Phrase search, Language option, Advanced search etc.
- To study of which search engines is best.
- To study the merits and demerits of major search engines.
- To complete the major search engines

Limitation

- The study based only on 100 search engines.
- Study covers features and limitation in different search engines.

Methodology

The study of the major search engines in this deliverable is divided in two phases. During phase one, a set of queries is given to the search engines and the results are ranked according to the accuracy of response, variety, and proximity to the interest of the user. Phase two of the study reflects an effort to specify the criteria used by the search engines to match a specific query. In the current section of the deliverable, the methodology used in both phases of the research, is presented.

Meaning

Software that searches for data based on some criteria. Although search engines have been around for decades, they were brought to the forefront after the Web exploded onto the scene. Every Web search engine site uses a search engine that it has either developed itself or has purchased from a third party. Search engines can differ dramatically in the way they find and index the material on the Web, and the way they search the indexes from the user's query. Although a search engine is technically the software and algorithms used to perform a search, the term have become synonymous with the Web site itself. For example, Google is a major search site on the Web, but rather than being called the "Google search site," it is commonly known as the "Google search engine." See Web search engines, vertical search engine, organic search, search engine optimization and social search engine .Search engines are online services that allow users to scan the contents of the Internet to find Web sites or specific information of interest to them. A user inputs a search term, and the search engine attempts to match this term to categories or keywords in its catalog of World Wide Web sites. The search engine then generates a list of sites that match the search criteria, ranked in order of relevance. Search engines help organize the more than two billion pages of information on the World Wide Web and make them accessible to Internet users. Search engines are the primary method Internet surfers use to locate information on the Web. In fact, Karl Greenberg noted in Brand week that 85 percent of Internet surfers use search engines to locate information online. Search engines generate the largest percentage of new traffic to Web pages, followed by links from other sites, printed media, and word of mouth. For this reason, small businesses hoping to establish a presence on the Internet should make sure their Web sites are listed with a number of search engines.

Challenges faced by Search Engines

- The Web is growing much faster than any present-technology search engine can possibly index (see distributed web crawling). In 2006, some users found major search-engines became slower to index new webpage's.
- Many webpage's are updated frequently, which forces the search engine to revisit them periodically.

- The queries one can make are currently limited to searching for key words, which may result in many false positives, especially using the default whole-page search. Better results might be achieved by using a proximity-search option with a search-bracket to limit matches within a paragraph or phrase, rather than matching random words scattered across large pages. Another alternative is using human operators to do the researching for the user with organic search engines.
- Dynamically generated sites may be slow or difficult to index, or may result in excessive results, perhaps generating 500 times more webpage's than average. Example: for a dynamic webpage which changes content based on entries inserted from a database, a search-engine might be requested to index 50,000 static webpage's for 50,000 different parameter values passed to that dynamic webpage.
- Many dynamically generated websites are not index able by search engines; this phenomenon is known as the invisible web. There are search engines that specialize in crawling the invisible web by crawling sites that have dynamic content, require forms to be filled out, or are password protected.
- Relevancy: sometimes the engine can't get what the person is looking for.
- Some search-engines do not rank results by relevance, but by the amount of money the matching websites pay.
- Secure pages (content hosted on HTTPS URLs) pose a challenge for crawlers which either can't browse the content for technical reasons or won't index it for privacy reasons.

Papular Search Engine

Google

Around 2001, the Google search engine rose to prominence. Its success was based in part on the concept of link popularity and Page Rank. The number of other websites and webpage's that link to a given page is taken into consideration with Page Rank, on the premise that good or desirable pages are linked to more than others. The Page Rank of linking pages and the number of links on these pages contribute to the Page Rank of the linked page. This makes it possible for Google to order its results by how many websites link to each found page. Goodge's minimalist user interface is very popular with users, and has since spawned a number of imitators.

Google and most other web engines utilize not only Page Rank but more than 150 criteria to determine relevancy. The algorithm "remembers" where it has been and indexes the number of cross-links and relates these into groupings. Page Rank is based on citation analysis that was developed in the 1950s by Eugene Garfield at the University of Pennsylvania. Google's founders cite Garfield's work in their original paper. In this way virtual communities of webpage's are found. Teoma's search technology uses a communities approach in its ranking algorithm. NEC Research Institute has worked on similar technology. Web link analysis was first developed by Jon Kleinberg and his team while working on the CLEVER project at IBM's Almaden Research Center. Google is currently the most popular search engine.

Yahoo! Search

The two founders of Yahoo!, David Filo and Jerry Yang, Ph.D. candidates in Electrical Engineering at Stanford University started their guide in a campus trailer in February 1994 as a way to keep track of their personal interests on the Internet. Before long they were spending more time on their home-brewed lists of favorite links than on their doctoral dissertations. Eventually, Jerry and David's lists became too long and unwieldy, and they broke them out into categories. When the categories became too full, they developed subcategories ... and the core concept behind Yahoo! was born. In 2002, Yahoo! acquired Inktomi and in 2003, Yahoo! acquired Overture, which owned Allthe Web and AltaVista. Despite owning its own search engine, Yahoo! initially kept using Google to provide its users with search results on its main website Yahoo.com. However, in 2004, Yahoo! launched its own search engine based on the combined technologies of its acquisitions and providing a service that gave pre-eminence to the Web search engine over the directory.

Microsoft

The most recent major search engine is MSN Search (evolved into Windows Live Search), owned by Microsoft, which previously relied on others for its search engine listings. In 2004 it debuted a beta version of its own results, powered by its own web crawler (called msnbot). In early 2005 it started showing its own results live. This was barely noticed by average users unaware of where results come from, but was a huge development for many webmasters, who seek inclusion in the major search engines. At the same time, Microsoft ceased using results from Inktomi, now owned by Yahoo!. In 2006, Microsoft migrated to a new search platform - Windows Live Search, retiring the "MSN Search" name in the process.

Search Strategies

There are three steps to effective information finding. The first step is to define the search. What is the topic? The second step is to decide how to access the Web. Will a web directory give the best results? Is a search engine going to be more efficient? Finally, the third step, involves creating the actual search query. A simple query uses one word, while a more precise query would link several words. For a query that links several words, most directories and engines use Boolean logic. Boolean logic utilizes four primary operators: AND, OR, NOT and NEAR. Using the word AND narrows the results, while using the word OR broadens the results. The word NOT narrows the results by excluding terms and the word NEAR is a proximity operator which finds words within a certain number of characters. Different search engines incorporate Boolean logic in different ways. It is important to read the instructions for each directory, search engine, or meta-engine before entering your search terms. AND narrows the search results because it specifies that all elements must appear in the search results. A search for *dogs and cats* would access websites in which both the word dogs and the word cats appear. OR broadens a search because it allows either element to appear in the search results. A search for *would* would access websites in which either the word or the appears. The Boolean operator OR can be very useful when there are many synonyms for a concept. For example, teenagers OR adolescents OR

youth will yield many more citations than any of these words by itself. NOT limits search results because it eliminates an element. A search for would access websites in which only the word dogs appears; the word cats will not appear because it has been excluded in the search.

How Search Engine Works

A program that searches documents for specified keywords and returns a list of the documents where the keywords were found. Although search engine is really a general class of programs, the term is often used to specifically describe systems like Alta Vista and Excite that enable users to search for documents on the World Wide Web and USENET newsgroups. Typically, a search engine works by sending out a spider to fetch as many documents as possible. Another program, called an indexer, then reads these documents and creates an index based on the words contained in each document. Each search engine uses a proprietary algorithm to create its indices such that, ideally, only meaningful results are returned for each query. Search Engines for the general web (like all those listed above) do not really search the World Wide Web directly. Each one searches a database of the full text of web pages selected from the billions of web pages out there residing on servers. When you search the web using a search engine, you are always searching a somewhat stale copy of the real web page. When you click on links provided in a search engine's search results, you retrieve from the server the current version of the page. Search engine databases are selected and built by computer robot programs called spiders. Although it is said they "crawl" the web in their hunt for pages to include, in truth they stay in one place. They find the pages for potential inclusion by following the links in the pages they already have in their database (i.e., already "know about"). They cannot think or type a URL or use judgment to "decide" to go look something up and see what's on the web about it. (Computers are getting more sophisticated all the time, but they are still brainless.)

There are thousands of different search engines to help people navigate the Internet. These include major commercial search engines—like Yahoo!, Lycos, AltaVista, and Excite—as well as many smaller, industry-specific directories. There are even met searchers, which work by querying a number of other search engines and processing the results. Many of the major search engines are created through an automated process in which a program called a spider "crawls" across the Web to gather information about existing sites. The spider captures this basic information and organizes its findings into categories, which are then used to generate search results for users. Small businesses hoping to list an existing Web site with a major search engine may find that the process has already been completed for them by an automated spider. The largest and most popular search site, Yahoo!, is an exception to this rule. The Yahoo! listings are prepared by real people who actually look at each Web site, analyze its contents, and assign it to various classifications. Like most other commercial search engines, Yahoo! routinely seeks out new Web sites to include in its listings. However, small business owners may wish to change or add to the information that has been gathered about their sites. Many of the smaller directories are compiled using data submitted by individuals and businesses who want their site to be listed. Web page designers submit a form describing their sites, including

keywords to describe the contents, in order to get a listing. Most important among these are making sure keywords appear early and often, and following the registration process for each search engine carefully. But experts caution against trying to trick the search engines into ranking your Web page highly. Known as "search engine spamming," this practice is frowned upon and may cause your site to be rejected by some of the major search engines. The methods considered spamming include repeating a keyword multiple times on a Web page (for example, printing the word over and over in colored type that is invisible against the background of the page) and duplicating the same Web page with several different domain names in order to get multiple listings.

Several commercial services exist to help businesses register sites with search engines. Many of these services simplify the process by listing a Web site with a number of search engines at once. For example, Submit-It allows you to post the details of a Web site to 20 different directories from one central location. There are also search engine optimization firms whose purpose is to make Web pages more relevant in search engine results.

Comparison of Search Engines

| Comparison | Google | Yahoo | MSN | Rediff | Gigablast | Dogpil | Altavista |
|------------------|--|--|---|--|--|--|--|
| Search www | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Search images | Yes | Yes | No | yes | no | No | no |
| Related search | Yes | Yes | No | yes | yes | Yes | yes |
| Any word | Yes | Yes | No | Yes | yes | No | yes |
| All word | Yes | Yes | Yes | Yes | yes | Yes | yes |
| Boolean | Yes | No | yes | yes | no | Yes | yes |
| data | 10 Pages | 10 pages | 5 page | 6 pages | 2 pages | 4 page | 10 pages |
| Limit on Time | Yes | Yes | Yes | no | no | No | no |
| Help screen | No | yes | Yes | yes | yes | No | yes |
| Directory option | No | Yes | Yes | no | yes | No | no |
| Language option | Yes | yes | Yes | no | no | No | yes |
| Advanced search | Yes | Yes | yes | no | yes | No | yes |
| Page contents | Language, Advanced search, I'm Feeling lucky, Prefrence, | My yahoo, yahoo mail, Answeras, sports, Images,Radio, News,Sports, yahoosearch | Map,shopping, news,Weathre, Games, cityguide Horoscopes, Images | Images, jobs, marketing, Ring tones, classified , more | Blastoff, advanced search, about, add url,contects, career,product | Web, images, video, white page, yellow page, news, audio | Images. Mp3audioi, video, news settings, toolbar |
| Wild card | *, += | * | *,+ | * | + | * | =,+,* |
| Phrase search | Yes | Yes | Yes | yes | yes | Yes | yes |
| Date doc update | Yes | No | yes | no | no | No | yes |
| Comparison | Clusty | Hotbot | Info.com | Mamma | Metacrawler | Answer.com | Askmenow |

| | | | | | | | |
|------------------|--|---|--|--|---|--|---|
| Search www | Yes | yes | yes | yes | yes | Yes | Yes |
| Search images | No | no | no | yes | No | No | yes |
| Related search | Yes | yes | yes | yes | no | Yes | Yes |
| Any word | Yes | no | yes | yes | No | Yes | yes |
| All word | Yes | yes | yes | yes | yes | Yes | Yes |
| Boolean | Yes | no | yes | no | No | Yes | yes |
| Data | 10 pages | 10 pages | 2 pages | 3 pages | 3 pages | 10 pages | 7 pages |
| Limit on Time | No | no | no | no | no | No | No |
| Help option | No | yes | yes | no | no | No | yes |
| Directory option | No | no | yes | no | yes | No | no |
| Language option | No | no | no | no | no | No | no |
| Advanced search | Yes | yes | yes | no | yes | Yes | yes |
| Page contents | News, Images, Wikipedia, job, preference, shopping, gov. | Ask.com, msn, yellow pages, privacy policy, adversities | Preference, contact, map/directories, weather, white page, about | Power search, images, web, video, yellow pages, mamma desktop search, mamma health | Exact phase, preference, dictionary, best buy, audio, video, yellow pages, white pages, search to your site | Web page and search engine, E-Mail window, business entertainment, place, people, words, reference, health | How to use, FAQ's, alert me now, services |
| Wild card | * | + | * | * | +/- | *,=,+ | *,+,-,/ |
| Phrase search | Yes | Yes | yes | yes | yes | Yes | yes |
| Date doc update | yes | NO | yes | yes | no | Yes | yes |

| Comparison | Zoominfo | Grooker | Quintura | Kartoo | Myspace search | Netscape | Aolsearch |
|------------------|----------|----------|----------|---------|----------------|----------|-----------|
| Search www | yes | yes | yes | yes | yes | yes | yes |
| Search images | no | yes | no | no | yes | yes | yes |
| Related search | yes | yes | no | yes | yes | yes | yes |
| Any word | no | yes | no | no | yes | yes | yes |
| All word | yes | yes | yes | yes | yes | yes | yes |
| Boolean | yes | yes | no | no | yes | yes | yes |
| Data | 10 pages | 10 pages | 10 | 7 pages | 10 pages | 10 pages | 10 pages |
| Limit on Time | no | no | no | no | no | no | no |
| Help option | yes | yes | yes | yes | yes | yes | yes |
| Directory option | no | yes | no | yes | yes | yes | yes |
| Language option | no | yes | no | no | yes | yes | yes |
| Advanced search | no | yes | yes | yes | yes | yes | yes |

| | | | | | | | |
|-----------------|---|---|---|-------------------------|---|-------------------------------------|--|
| Page contents | Entertainment. Shopping, travels, finances, | Language, Advanced search ,most popular, bookmark | Shopping, war, religion, business, pollitictis.car, sport, celebration. Etc | Bookmark, other product | Preference, contact, map/ directories, weather, white page, about | Settings, local beta, video, images | Language, Advanced search, I'm Feeling lucky, Preference |
| Wild card | * | */+= | No | no | *, +. | *.=, | *,+,+ |
| Phrase search | yes | yes | Yes | yes | yes | yes | yes |
| Date doc update | no | yes | Yes | no | yes | yes | yes |

| Comparison | Yahooanswer | Goodsearch | Nutch | Zettire | Yacy | Ht://dig | Branboost |
|------------------|---|--|---------------------------------------|--|---|----------|---|
| Search www | Yes | Yes | yes | yes | yes | Yes | yes |
| Search images | Yes | Yes | no | No | No | -- | No |
| Related search | Yes | Yes | no | No | Yes | --- | Yes |
| Any word | Yes | Yes | no | No | No | --- | No |
| All word | Yes | Yes | yes | Yes | Yes | --- | Yes |
| Boolean | Yes | Yes | no | No | Yes | ---- | Yes |
| Data | 10 pages | 10 pages | 1 page | 3 page | 2 pages | --- | 10 pages |
| Limit on Time | No | No | No | No | No | --- | no |
| Help option | Yes | Yes | no | Yes | Yes | --- | Yes |
| Directory option | Yes | Yes | no | No | Yes | --- | No |
| Language option | Yes | Yes | no | No | No | --- | No |
| Advanced search | Yes | Yes | no | Yes | Yes | --- | Yes |
| Page contents | My yahoo, yahoo mail, Answers, sports, Images,Radio, News,Sports, yahoosearch | Images,Radio, News,Sports, yahoosearch | Commercial search engine and web page | Bookmark, other product Commercial search engine | Proxy server, online games, Downlode games, movie | --- | Geography, people, history, entrtrmnt, science, computer, |
| Wild card | *, = | * | *./,+= | No | * | --- | * |
| Phrase search | Yes | Yes | no | No | Yes | --- | Yes |
| Date doc update | Yes | Yes | no | No | No | --- | No |

| Comparison | Quicklaw | Westlow | Autonomy | Sportlight | Windodesktop | Ducco | Matetracer |
|----------------|----------|---------|----------|------------|--------------|-------|------------|
| Search www | yes | yes | yes | yes | yes | Yes | yes |
| Search images | No | No | No | No | No | No | No |
| Related search | No | No | No | No | No | No | No |
| Any word | No | No | No | No | No | No | No |
| All word | Yes | No | No | No | No | No | No |
| Boolean | Yes | No | No | No | No | No | No |
| Data | ----- | ----- | 10 pages | ----- | ----- | ----- | No |

| | | | | | | | |
|------------------|--------------------------|-------------------------|---|--------------------------------------|---|---|-------|
| Limit on Time | No | No | No | No | No | No | No |
| Help screen | No | No | Yes | No | Yes | No | No |
| Directory option | Yes | No | No | No | Yes | No | No |
| Language option | No | No | Yes | No | No | No | No |
| Advanced search | No | No | Yes | No | No | No | No |
| Page contents | Site is related only law | It is legal site of law | Query language, relevancy, website category, autonomy | It is a commercial site of spotlight | It is a computer related sites for all kinds of computer parts and desktop. | The service and expertise of Duco technologies. | No |
| Wild card | No | No | No | No | No | No | No |
| Phrase search | ----- | ----- | No | ----- | ----- | No | No |
| Date doc update | ----- | ----- | ----- | ----- | ----- | ----- | ----- |

| Comparison | Vegal | Geoportil | Nextag | Thomasnet | Searchmedica | Mininova | Picsearch |
|------------------|--------------------------------------|-----------------------------------|-------------------------------------|--|--|---|--|
| Search www | yes | yes | yes | yes | yes | yes | Yes |
| Search images | No | No | No | No | No | No | Yes |
| Related search | No | Yes | Yes | No | yes | No | Yes |
| Any word | No | Yes | Yes | No | No | No | Yes |
| All word | No | Yes | Yes | Yes | yes | No | No |
| Boolean | No | No | Yes | No | Yes | No | Yes |
| Data | No | 1 page | 1 page | 1 page | 10 pages | 1 page | 20 pages |
| Limit on Time | No | No | No | No | No | No | No |
| Help screen | No | No | Yes | Yes | Yes | Yes | Yes |
| Directory option | No | No | Yes | Yes | Yes | Yes | Yes |
| Language option | No | No | No | No | No | No | No |
| Advanced search | No | No | No | Yes | Yes | Yes | Yes |
| Page contents | It is a otter language search engine | Why I am seeing this site? search | Product, mortgage, travels, degree, | It is a industrial product service search engine | It is a professional medical search engine | Usenet, web search, Statistics, Popular torrent-today - yesterday | Image directory, About picsearch, Search help, |
| Wild card | No | No | + | No | No | No | *,+ |
| Phrase search | No | Yes | yes | Yes | Yes | No | Yes |
| Date doc update | ----- | ----- | Yes | No | Yes | Yes | Yes |

| Comparison | Bloglines | Omigli | Hotjobs | Dataparksearch | Wittysearch | Ixuiect |
|---------------|-----------|--------|---------|----------------|-------------|---------|
| Search www | yes | --- | yes | yes | yes | Yes |
| Search images | Yes | --- | No | No | Yes | --- |

| | | | | | | |
|------------------|--|------|---|---|--|------|
| Related search | Yes | --- | No | No | Yes | ---- |
| Any word | Yes | --- | Yes | No | Yes | --- |
| All word | Yes | ---- | No | No | Yes | --- |
| Boolean | Yes | --- | Yes | No | Yes | --- |
| Data | Yes | --- | 10 pages | --- | 1 page | --- |
| Limit on Time | No | --- | No | No | No | --- |
| Help screen | Yes | --- | Yes | Yes | Yes | ---- |
| Directory option | Yes | --- | Yes | Yes | Yes | --- |
| Language option | Yes | --- | Yes | Yes | Yes | --- |
| Advanced search | Yes | --- | Yes | Yes | Yes | --- |
| Page contents | Cool feature, what people are saying, Register, related to Ask.com | ---- | It's a job search engine related to yahoo.com | It's a Dataparksearch forum search engine | Search engine, job search engine, fairytales, internet search engine | --- |
| Wild card | *,- | --- | No | No | *,+ | --- |
| Phrase search | Yes | --- | Yes | No | Yes | --- |
| Date doc update | Yes | --- | Yes | Yes | Yes | --- |

| Comparison | Mozdex | Recruit.net | Career builder | Sphere | Eluta | Simpleyhiered | Yandex |
|------------------|--|--------------------------|--------------------------|--------------------------------|---|--|---------------------------------------|
| Search www | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Search images | Yes | No | No | No | No | No | --- |
| Related search | Yes | No | No | No | Yes | Yes | --- |
| Any word | No | No | No | No | No | No | --- |
| All word | Yes | No | No | No | No | No | --- |
| Boolean | Yes | Yes | Yes | No | Yes | Yes | --- |
| Data | 2 pages | 1 page | 1 page | 1 page | 1 page | 1 page | --- |
| Limit on Time | No | No | No | No | No | No | --- |
| Help screen | Yes | Yes | Yes | Yes | Yes | Yes | --- |
| Directory option | Yes | Yes | Yes | Yes | Yes | Yes | --- |
| Language option | No | Yes | Yes | No | No | Yes | --- |
| Advanced search | Yes | Yes | Yes | No | Yes | Yes | --- |
| Page contents | Open search , queries, advanced queries, feedback. | It's a job search engine | It's a job search engine | It's a blog news search engine | It's a Canadian job search engine, jobs for Canada only | Its also a job search engine, what you need, when you need it! | It's a Russian language search engine |
| Wild card | + | No | No | No | No | No | --- |
| Phrase search | Yes | Yes | Yes | No | No | No | --- |
| Date doc update | No | Yes | Yes | Yes | Yes | yes | ---- |

| Comparison | Polymeta | Turbo10 | Sidestep | eHow | Newslookup | Topix.net |
|------------------|-----------------------------------|----------------------------------|---|---|---|---------------------------------|
| Search www | yes | yes | yes | yes | yes | Yes |
| Search images | Yes | Yes | No | No | Yes | No |
| Related search | Yes | No | No | No | No | No |
| Any word | No | No | No | No | No | No |
| All word | Yes | Yes | No | Yes | Yes | No |
| Boolean | Yes | No | No | No | Yes | No |
| Data | 6 pages | 1 page | No | 2 pages | 10 pages | ---- |
| Limit on Time | No | No | No | No | No | No |
| Help screen | Yes | No | Yes | Yes | Yes | Yes |
| Directory option | No | No | Yes | Yes | Yes | Yes |
| Language option | No | No | No | No | Yes | No |
| Advanced search | Yes | No | Yes | No | Yes | Yes |
| Page contents | Smart search, Web, images, Vides, | Ringtone, dvds, digital cameras, | It's a commercial site for Airline, Hotel,Cars, Vacations | Article, top 10 eHow's, popular categories, | It's a news site and news is update continently | Your town, Your news, Your take |
| Wild card | * | No | No | No | Yes | No |
| Phrase search | Yes | Yes | No | No | Yes | No |
| Date doc update | No | No | Yes | No | Yes | No |

| Comparison | Podscop | Rightmove | goHome.hr | Pubsub | Yeah | Zillow.com | WebMD |
|------------------|---------|-----------------------------------|------------------------|--------|------------------------|------------|--|
| Search www | yes | yes | yes | yes | yes | yes | Yes |
| Search images | | No | No | | No | No | No |
| Related search | | No | No | | No | No | Yes |
| Any word | | No | No | | No | No | No |
| All word | | No | No | | Yes | No | Yes |
| Boolean | | No | No | | No | No | Yes |
| Data | | ---- | ---- | | 2 pages | No | 6 pages |
| Limit on Time | | No | No | | No | No | No |
| Help screen | | Yes | Yes | | Yes | No | Yes |
| Directory option | | Yes | Yes | | Yes | No | Yes |
| Language option | | No | No | | No | No | Yes |
| Advanced search | | Yes | Yes | | No | No | Yes |
| Page contents | | It's a site for home search in UK | It's a Commercial site | | It's a Commercial site | No | It is a professional medical search engine |
| Wild card | | No | No | | *,+ | No | Yes |
| Phrase search | | No | No | | Yes | No | Yes |
| Date doc update | | ---- | Yes | | No | No | Yes |

Analysis of Search Engine

Search WWW

| Yes | No | % |
|-----|-------|-----|
| 70 | ----- | 100 |

Out of 70, All Search Engine is providing Search WWW. & the percentage of search WWW is 100%.

Search Images

| Yes | No | % |
|-----|----|-----|
| 21 | 49 | 30% |

Out of 70, 21(30%) search engines are providing Search Images and 49 search engines are not providing search images..

Related Search

| Yes | No | % |
|-----|----|-----|
| 36 | 34 | 51% |

Out of 70, 36 (51%) search engines are providing Related Search and 34 search engines are not providing Related Search.

Any Word Search

| Yes | No | % |
|-----|----|-----|
| 26 | 44 | 37% |

Out of 70, 26 (37%) search engines are providing Any Word Search and 44 search engines are not providing Any Word Search.

All Word

| Yes | No | % |
|-----|----|-----|
| 47 | 23 | 68% |

Out of 70, 47(68%) search engines are providing All Word Search and 23 search engines are not providing All Word Search.

Boolean

| Yes | No | % |
|-----|----|-----|
| 36 | 34 | 51% |

Out of 70, 36 (51%) search engines are providing Boolean Search and 34 search engines are not providing Boolean

Data

| Pages | Search Engine |
|-----------|---------------|
| 20 Pages | 1 |
| 10 Pages | 16 |
| 6-9 Pages | 7 |
| 5-3 Pages | 22 |
| 2-1 Pages | 12 |
| 0 Pages | 9 |

Out of 70, 1 search engine are providing 20 pages, 16 Search engines are providing 10 pages, 7 Search are providing 6-9 pages, 22 Search engines are providing 5-3 pages, 9 Search engines are providing 2-1 pages and 9 Search engines are providing 0 pages.

Limit on Time

| Yes | No | % |
|-----|----|-----|
| 0 | 70 | 100 |

Out of 70, All Search Engine is not providing Limit on time. & the percentage of the Limit on time is 100%.

Help Option

| Yes | No | % |
|-----|----|-----|
| 53 | 17 | 75% |

Out of 70, 53 (75%) search engines are providing Help Option and 34 search engines are not providing Help Option.

Directory Option

| Yes | No | % |
|-----|----|-----|
| 43 | 27 | 62% |

Out of 70, 43 (62%) search engines are providing Directory and 34 search engines are not providing Directory.

Language

| Yes | No | % |
|-----|----|-----|
| 25 | 45 | 36% |

Out of 70, 25 (36%) search engines are providing Languages Option and 45 search engines are not providing Languages Option.

Advanced Search

| Yes | No | % |
|-----|----|-----|
| 49 | 21 | 70% |

Out of 70, 49 (70%) search engines are providing advanced search and 21 search engines are not providing Advanced search.

Page Contents

Out of 70. Mostly search engines are providing Page contents are, News, White Yellow pages Directory , Videos, Audio, Radio, Sports, mail window, Help option, Preference, Horoscopes, Images, Games, Jobs, Web, Weather, Languages, Travels, Products Etc.

Wild Card

| Yes | No | % |
|-----|----|-----|
| 33 | 37 | 33% |

Out of 70, 33 (33%) search engines are providing Wild Cards and 37 search engines are not providing Wild Cards.

Phrase Search

| Yes | No | % |
|-----|----|-----|
| 44 | 26 | 63% |

Out of 70, 44 (63%) search engines are providing Phrase Search and 26 search engines are not providing Phrase Search.

Date Document up Date

| Yes | No | % |
|-----|----|-----|
| 38 | 32 | 63% |

Out of 70, 38 (63%) search engines are providing Date Document Up date and 32 search engines are not providing Date Document Up date..

Out of 70, 25 Search Engines are providing all facilities and information are mostly useful for the user, 10-12 search engines are providing jobs services for required person who need jobs, and other 35 search engines are likely to work different types are Commercial, Business, Educational, Some search engines are Different countries and Different Languages, Different type are Home, Cars, and the percentage of search engines are different of different work.

Conclusion

- 100% Search Engines providing search WWW. It's shows the importance of search www in searching.
- Search images: Mostly users of search engines expected to search images facilities in search engines, But only few search engines have the facilities to search images.
- On the basis of Data collected we can say that 51% search engines have related search facilities.
- Any word search is very useful for new users but result show that only few search engines are providing any word search facilities.
- Heights percentage of search engines provided all word searches.
- Boolean search is very useful for researcher to save his time but only 51% search engines provided these facilities.
- Mostly search engines provided 10 pages at a time.
- All search engines are not providing Limit on Time.
- Mostly search engines have Help Option
- Language option is very useful for different types of users but only few search engines have these facilities.
- On the basis of analysis we concluded that mostly search engines are providing wild card and Phrase Searches.
- On the basis of analysis last conclusion that mostly search engines are provided current and up date document

Suggestion

- Search Engines should provide Images.
- Any word search is very useful for user so search engines should provide this facility.
- To increase the use of internet, Search engines should have facility to search in different languages.
- Mostly search engines have Help option but I suggest that all search engines should provide this facility.
- All search engines should provide advanced search.
- All search engines should provide Wild card and Phrase search.

References

- [1] World-Wide Web Servers.
- [2] Internet History - Search Engines" (from Search Engine Watch), Universiteit Leiden, Netherlands, September 2001, web: LeidenU-Archie.
- [3] Oscar Nierstrasz (2 September 1993). "Searchable Catalog of WWW Resources (experimental)".http://groups.google.com/group/comp.infosystems.www/browse_t

- hread/thread/2176526a36dc8bd3/2718fd17812937ac?hl=en&lnk=gst&q=Oscar+Nierstrasz#2718fd17812937ac.
- [4] Yahoo! And Netscape Ink International Distribution Deal". http://files.shareholder.com/downloads/YHOO/701084386x0x27155/9a3b5ed8-9e84-4cba-a1e5-77a3dc606566/YHOO_News_1997_7_8_General.pdf
 - [5] *Browser Deals Push Netscape Stock Up 7.8%*. Los Angeles Times. 1 April 1996. http://articles.latimes.com/1996-04-01/business/fi-53780_1_netscape-home
 - [6] Gandal, Neil (2001). "The dynamics of competition in the internet search engine market". *International Journal of Industrial Organization* **19**.
 - [7] Google Remains Ahead of Bing, But Relevance Drops". August 12, 2011. <http://news.yahoo.com/google-remains-ahead-bing-relevance-drops-210457139.html>.
 - [8] Segev, Elad (2010). *Google and the Digital Divide: The Biases of Online Knowledge*, Oxford: Chandos Publishing.
 - [9] Vaughan, L. & Thelwall, M. (2004). Search engine coverage bias: evidence and possible causes, *Information Processing & Management*, 40(4), 693-707.
 - [10] Steve Lawrence; C. Lee Giles (1999). "Accessibility of information on the web". *Nature* **400** (6740): 107–9. doi:10.1038/21987. PMID 10428673.
 - [11] Bing Liu (2007), *Web Data Mining: Exploring Hyperlinks, Contents and Usage Data*. Springer.
 - [12] Bar-Ilan, J. (2004). The use of Web search engines in information science research. *ARIST*, 38, 231-288.
 - [13] Levene, Mark (2005). *An Introduction to Search Engines and Web Navigation*. Pearson.
 - [14] Hock, Randolph (2007). *The Extreme Searcher's Handbook*. ISBN 978-0-910965-76-7
 - [15] http://rationalwiki.org/wiki/Template:RationalWiki_MainPage/About.
 - [16] http://en.wikipedia.org/wiki/List_of_online_encyclopedias.
 - [17] http://en.wikipedia.org/wiki/Web_search_engine.
 - [18] <http://www.metamend.com/search-engine-bots.html>.
 - [19] John Battelle: *The Search, How Google and Its Rivals Rewrote the Rules of Business and Transformed our Culture*, Portfolio, New York 2005.
 - [20] Croft, Bruce; Metzler, Donald & Strohman, Trevor. *Companion Website for Search Engines: Information Retrieval in Practice*. Addison-Wesley.2010.
 - [21] Jain Ravi Kumar. *Internet Search Engines*. ICFAI University Press.-Hyderabad.2007.
 - [22] Oudinet, Johan.(2007) *Search Engine Ranking : Technical Report*: <http://pdfsb.com/readonline/596c644c6567422f5858563941486c6855513d3d-955>