



Reason8 Search engines guides

Guide 1 of 3 : Overview of Search Engines

Optimisation Basics

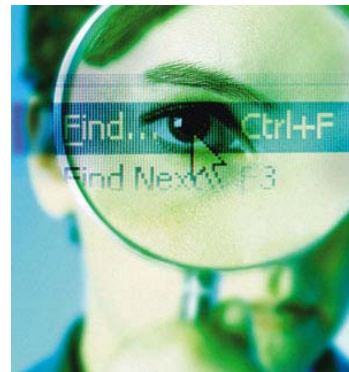
Basically, our goal is to organize the world's information and to make it universally accessible and useful.

Larry Page – co-founder of Google

1 Purpose of this guide

This guide is the first guide in a series of three produced by Reason8.com.

- This guide explains what search engines are and how they work.
- The second guide explains what you need to do to get a good search engine position.
- The third guide explains how to use the Reason8.com system to optimise your website and get a great search engine position.



There are 4 questions this guide aims to answer.

1. What are search engines?
2. How do search engines find you?
3. How do search engines make money?
4. How can you make money from search engines?





2 Introduction

If you have spent any amount of time on the Internet you will almost certainly have used search engines.

But what exactly are search engines ? how do they work ? how do you use this knowledge to get your website found by your customers ? and how will the reason8 technology and services help you in this quest ?

After reading the guides you will understand how search engines work and be able to

- choose ideal keywords for your website;
- optimise and modify your website around these keywords;
- submit your site to directories and organisations and increase the number of inbound links to your site.



3 What are search engines ?

At the time of writing there are more than 8 Billion webpages on the internet. That is 8 **BILLION**. (8,000,000,000) and at the current rate, over 1 **BILLION** new web-pages being created each year.

3.1 How do search engines work ?

If you were to spend just 5 seconds looking at every page it would take you more than 1000 years to visit them all. **Relax**. Search engines have already done this, many times over.

Search Engines use 'robots' that crawl over the entire Internet reading EVERY **connected** webpage. When they find a new webpage (or a webpage that has changed) they make a copy of it and place all the content they are able to read into their own powerful database. This database uses some of the most powerful computing power available to deliver lightning fast results. [You can leave little messages on your website that give these robots instructions and tell them where to look for webpages and even where not to look.]

3.2 Which are the best search engines ?

Search Engine Optimisation:

The Internet has been likened to a huge car boot sale. There are lots of things to see, but much of it is junk. Search engines help you search through the junk and find the items of real value.

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The world of Internet Search Engines is mysterious and exciting. With the Internet being not much more than 10 years old there is still a great deal of flux and the major search engine companies are using both technology and corporate finance skills to beat their competition.

Although it is not certain who the eventual winners will be, the current top tier of search engines are:

- Google
- Yahoo
- MSN

Without doubt the biggest and most powerful player is Google. It uses a very sophisticated algorithm. It continually updates and refines this algorithm with the sole intention of being able to deliver results their users require. Google is relied on by more internet users than any other.

Closely following Google is Yahoo. Yahoo initially used the search engine technology from Google. However, as Google extended and refined it's technology, they sold an older version to Yahoo. Yahoo continued their development and has become a close second to Google. Their search engine is powered by technology from Inktomi.

In early 2005, Bill Gates targeted MSN search to be one of Microsoft's major foci. MSN has been backed by television advertising and extensive internet advertising. It is rapidly gaining ground helped largely by its MSN community base.

The second tier are:

- Hotbot
- Ask (jeeves)
- Lycos
- Excite
- Altavista



3.3 Why is it important to get a good listing

When you enter a search phrase, search engines tend to display their results in pages of 10 results at a time. A user will scan the first page for results that seem relevant. Occasionally they will flick to the next page. However, rarely will a user look through more than two pages of results for a site that interests them.

If you can get your web-site in the first page of results for keywords relevant to your business (on a number of the search engines) then you stand a great chance of getting large quantities of focused, interested visitors to your website. The more visitors you get, the more chance your business has of becoming successful.

This sounds quite straight forward until you realise that most search results yield hundreds of thousands of webpages that match common search phrases and every website owner wants to be on this first page.

**Search Engine
Optimisation:**

The one factor over all others that will determine where you finish up is the number of quality links that come INTO your website from other sites of authority.



4 How do search engines find you



There are two ways to be found by search engines.

One way is to register directly with all the major search engines. However, it can take many months before your webpages are scheduled to be visited. Only a few web-pages from your site are visited each time. If you have many pages on your site it will not be fully indexed for several months.

A much better way to be found is to be linked-to by a website that is already well regarded and visited regularly. When the search engine 'robot' visits a site that is linked to you it follows the hyperlinks on that site straight to you. Your site will be found and credited with being linked to by an external website.

4.1 What factors affect your position in a search engine

No two search engines use the same formula and many alter the algorithms they use on a regular basis. However, over the years it has become clear that there are three factors that will improve your search engine position for a particular search phrase.

It is worth mentioning that the sister guide in this series (Search Engine Optimisation) offers a much more comprehensive discussion of this very extensive subject.

1. Meta tags

When you view a website using an Internet browser (such as Microsoft Internet Explorer) the browser is told by the webpage how it should be displayed. These instructions are part of a number of instructions embedded in webpages that are not intended for human eyes but are there for the browsers and search engines.

Some of these instructions are known as meta-tags. Search engines love meta tags.

With meta tags, you can give a clear concise description of your webpage give it a title and even tell the search engines what you want the keywords for the page to be. Having the correct meta tags is important to getting a good search engine position.



2. Content

As you might expect the content of the website must reflect the search terms that have been entered. Putting keywords in headers, alt tags, hyperlinks anchor text, bold text and other highlighted tags all help to tell the search engines that this is the phrase that you want to be found with.

The *ontology* (or the context in which the search terms appear within your website) is considered by some search engines, as is the number of occurrences and the keyword density. This provides website owners with lots of opportunities to tweak a website and make it more appealing to search engines and more likely to rank well in the results.

However, it is quite easy for the unwary, eager search engine rookie to fall into traps and get banned by over-optimising your website.

3. Hyperlinks **FROM** other webpages.

The first two factors are pretty obvious. You might expect a big database to be able to store every webpage in the world and then have some fancy way of searching it and finding the site that had the highest density of that particular keyword.

Well in fact this is only a small part of the story. Having good relevant content is really just a tick in the box. It is expected that you do have this in place



The one fact over all others that will determine where you finish up is the number of quality links that come INTO your website from other sites of authority.

Your site is able to inherit the ranking of a website that links to you. So, for example if you were a building company and managed to convince the website managers from Jewson, Bovis and CITB to link directly to your site you would get a wonderful page rank boost and sail up the search engine rankings. Not only

would you be inheriting the absolute value of very well respected websites, you would also be receiving on-topic related links (i.e links from sites that are in the same industry as your site and having related content). This is a very valuable and important aspect of improving your search engine position.

4. Other factors.

Other factors that will affect your site getting a good ranking include:

- the speed of the server on which it is hosted. If your server communicates with the robots at high speed they will happily recommend your site to their customers.
- How often you change your site. Search engines love to see change on a site. Even if you are just making minor changes.



5 How do search engines make money

In our description of search engines we have so far considered the service they provide to the Internet population. However, their robots crawling over your site and their databases storing all the information about your pages takes up valuable resources.

They are not a charity and ultimately they aim to make money.

The major source of revenue of search engines is PayPerClick (PPC)

5.1 Pay per click



The concept of pay per click (ppc) is that website owners in highly competitive markets, who are unable to get a good *organic* position on search engines will pay to get the positions they need and get the customers they want. PPC can be a great source of revenue or a great way to blow a marketing budget fast !

As the name suggests website owners pay every time a customer *clicks* their ppc advert. Click costs can vary from 5p upwards, but what makes it interesting is that the website owner decides in advance what the cost-per-click charge will be. The higher the cost-per-click bid, the higher up the paid rankings the advert appears.

The basic steps in the PPC process are:

- List all the key words and phrases that your customers are likely to use.
- Decide on your daily budget.
- Decide how much you are willing to pay per click.

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- Write out your advert(s). You may wish to create a few different versions and attach them to different keywords
 - Watch the traffic come rolling in and your marketing budget being used up



6 How to make money from search engines

Google and other search engines are always looking to extend their reach. They understand that well established websites attract dedicated communities of visitors. These dedicated customers are highly likely to click on adverts which have appropriate content.

A number of search engines have therefore developed a way to incentivize website owners to place search engine ppc adverts on their websites.

When a visitor goes onto an **agent** website, sees an ad and clicks it, the owner of the destination website who placed the ad is charged a click fee. A percentage of this click fee is then passed back to the **agent** website that hosted the ad. For very busy websites, this can lead to may thousands of click-throughs and a lucrative income stream for that agent.

