

Search engine optimisation

By Nick Holmes, Information for Lawyers Limited
March 2006

Search is big business - the driver of e-commerce. In the early days of the web most users used portal sites and directories to navigate their way to what interested them. Today the web is so vast and users' needs so precise that most use search to find what they want; indeed the Pew Internet & American Life Project reports that search is edging up on email as the primary internet activity. http://www.pewinternet.org/PPF/r/167/report_display.asp

Search engine marketing

Given this reliance on search, search engine marketing is the most cost-effective way to generate site traffic and sales activity or other value. Research shows that most users don't look past the first two or three pages of results returned by a search engine, so it is critical to boost your site's ranking, as otherwise you are all but invisible to those who don't already know you. How can this be achieved?

There are broadly two ways to increase your site's visibility on search engine results pages:

- search engine optimisation
- keyword advertising

Search engine optimisation (SEO) is the process of analysing your website and individual pages and then adjusting content and design to achieve top search engine rankings. There is much ill-informed advice and sales hype about it. Contrary to the hype, no software product can automate the search engine optimisation process; each page must be search engine friendly and rich in relevant content.

This article seeks to explain the concepts and guide you through the basics of search engine optimisation. This is, necessarily, a somewhat technical topic, but the intention has been to present the information in a way that is understandable to decision makers, who will then be in a better position to brief their webmasters.

Keyword advertising (which is not covered in this article) is the display of your textual advertisements on search engine results pages, triggered when keywords you have "purchased" are used in a search.

The difference between SEO and keyword advertising is that while search engine optimisation involves time and effort and hence cost, the resulting click-throughs to your site are free. Keyword advertising on the other hand can involve little effort (though if done properly it will take time) but incurs cost-per-click. These costs-per-click are small (except for very high-demand keywords), but can mount up to a significant spend. And multiplied many millions of times, they are now producing huge revenues for the search engines, with Google now the largest media company in the world thanks principally to its Adwords scheme.

Who are the search engines?

There are at least 60 sites that offer full internet search. However, as the figures below illustrate, the vast majority of searches are handled by the big three: Google, Yahoo and MSN Search. The table shows the percentage share of searches performed on internet search sites as reported by three leading research companies and published on SearchEngineWatch.

<http://searchenginewatch.com/reports/>

Search site	Hitwise (25m users) Jul 2005	Nielsen (1m users) Nov 2005	comScore (1.5m users) Jul 2005
Google	39	46	37
Yahoo	18	23	31
MSN Search (powered by Yahoo*)	15	11	16
AOL (powered by Google)	1	7	10
Ask	2	2	6
Others (approx 60)	25	11	2

* MSN Search was powered by Yahoo up to the end of 2005 (when the above figures were produced). It is now powered by Microsoft's own search engine

It will be seen that the big three dominate; the others are either insignificant players or take their results from one of the big three. In analysing your rankings and optimising your pages, you can therefore concentrate on just these three.

As well as their main (.com) sites, the search engines also operate local (.co.uk) search sites. In analysing your rankings for particular searches it is recommended you use the UK search sites, and select the "UK pages" option as this reduces the number of competing results and identifies more clearly where you stand in relation to your UK competition.

The anatomy of a results page

A typical search engine results page is divided into distinct areas, generally as follows:

Logo and search box	
Sponsored results	Sponsored results/ editorial links
Special index results (Google)	
Organic (natural) results, consisting of:	
<u>Title</u>	
Description or excerpt	
URL	
Sponsored results/editorial links	

Search engine optimisation is concerned with improving your organic or natural ranking, ie the results returned from the search engine's web crawl index. These are the most important and prominent results on the page (highlighted in the diagram above). Nevertheless, increasingly there is competition on the page from sponsored results returned from the search engine's advertisements index. Indeed, the Pew Internet & American Life Project, reported in January 2005 that:

Only 38% of users are aware of the distinction between paid or "sponsored" results and unpaid results. And only one in six say they can always tell which results are paid or sponsored and which are not. This finding is ironic, since nearly half of all users say they would stop using search engines if they thought engines were not being clear about how they presented paid results.

http://www.pewinternet.org/PPF/r/146/report_display.asp

Search engines may also display results from other indexes. For example, Google displays relevant results from its Book Search, from Google Local (Yellow Pages listings) and from its Desktop Search (its index of your own hard drive, if you've enabled that). Editorial links may also be displayed. For example, Ask suggests links to help you narrow or expand your search.

Is your site search engine friendly?

The first step in analysing your site's performance in the search engines is to determine to what extent they are indexing your pages.

To find all the pages on your site that are in a search engine's index, enter your domain in the search box in the following form: **site:yourdomain.co.uk**. How does the number of results compare to your expectations?

For a quick check across the search engines you can also use a service such as Marketleap's search engine saturation tool.

<http://www.marketleap.com/siteindex/default.htm>

Do you exist?

If your site is not indexed at all by a particular search engine, proceed post haste to submit your site to it. This is free, but does not guarantee whether or within what timeframe the search engine will start to index your pages.

<http://www.google.co.uk/addurl>

<http://uk.search.yahoo.com/freesubmit>

<http://search.msn.co.uk/docs/submit.aspx>

You should also submit your site to the Open Directory Project as this directory feeds Google, AOL, Ask, Netscape and other search engines.

<http://dmoz.org/add.html>

In fact the search engines will usually start to index your site more quickly if it is linked from any existing page in their indexes, so now is the time to start your link-building campaign (referred to more fully later).

Problem pages

Next, do the search engines return far fewer results than you would expect? This will be the case if they can't or won't follow all of your links. If your site suffers from one of the following, discuss the problem immediately with your webmaster to see how it can best be resolved.

Your site uses frames

A framed page consists of several separate pages displayed concurrently in different frames on the main page (frameset): typically, for example, a header, a menu and a main document.

Some search engines fall at the first hurdle, having trouble accessing the individual pages via the frameset. If they can access them, they will generally index them separately, so they appear out of context. And if the main content pages do not include menus, the other pages on your site may effectively be inaccessible to the search engine.

Your site uses dynamic pages

A dynamic page is a page that compiles the displayed content of the page based on instructions inside the page, typically pulling in information held in a database. The URL of a dynamic page will look something like this:

`http://www.widgets.co.uk/products/product.asp?id=2345`

Search engines used to have problems following dynamic page links. That is not the case today, but they are picky about following them as they may lead to many hundreds of almost identical pages; or the URL may be subject to change or include a unique session identifier. As a rule of thumb, the longer and more complex the parameters at the end of the URL, the less likely the pages are to be indexed.

Your site uses JavaScript menus

JavaScript is a computer language that is widely used on web pages to add functionality. Commonly it is used to generate navigational menu structures. The problem here is that search engines can't read JavaScript and thus can't follow the menu links. The solution is to ensure that static menus are also provided at the foot of the appropriate pages.

Targeting keywords

Although there are site-wide changes you can make to all pages to improve your general rankings, search engine optimisation is primarily concerned with optimising individual pages so that they rank highly in response to particular search terms. Your task is to determine which words are most commonly used in searches for the services you offer (keywords) and then to target the most likely combinations of those words (key phrases). It is difficult to achieve high rankings for wider, more general search terms, so you will need to target more specific terms.

If you offer a range of services, you should optimise the main section pages describing each of those services. Within those service areas you may offer particular specialisms or there may be particular aspects that you cover on separate pages; you should optimise each of these pages for the more specific terms. For example if you are solicitors undertaking personal injury work, you should optimise your personal injury main section page for appropriate phrases related to personal injuries; and if you have particular expertise, say, with DVT claims, you should optimise the DVT page for phrases related to DVT.

First compile a list for each product/service type and each specialism of all the search terms you think *your target audience* might use in seeking those services. It is imperative you research this: brainstorm with your colleagues, read correspondence from your clients, read the press directed at your potential clients, visit your competitors' websites.

Use a service such as Wordtracker, or Yahoo or Google's keyword tools, to help you think about keywords. They suggest alternatives that are most commonly used in practice.

<http://www.wordtracker.com/>

<http://searchmarketing.yahoo.com/rc/srch/>

<https://adwords.google.co.uk/select/main?cmd=KeywordSandbox>

Rationalise your terms into two or three word key phrases: research shows that this is the most common number of words used in search terms. Then prioritise the phrases in the list.

Now test each key phrase on your site using the search term `site:yourdomain.co.uk key phrase`. This will show you how the pages on your site rank for that key phrase and may throw up some surprises. Examine the pages that already rank highly and decide which you should optimise.

Writing content for the web

At this point it may be tempting to head for the next section and dive straight into optimising your pages. But consider first that the search engines are trying to determine which pages are the most relevant and important for a given topic. Although it may appear that they are writing the rules for what is a good web page, in fact they are attempting to reduce well-established criteria to a "calculation" they are able to perform. So you will make a good start to optimising your pages by firstly ensuring your page content follows established good web journalistic practice:

- Use a short high-impact title.
- Provide a concise, descriptive introduction.
- Provide textual substance.
- Do not use images in place of text.
- Use short sentences and short paragraphs.
- Break up the text with clear subheadings and bulleted lists.
- Include references to supporting sites and pages.
- Provide a concise conclusion.

How search engines rank pages

Having chosen the keywords you wish to target and reviewed your content, you are now ready to consider how your pages can be optimised.

Search engines rank pages according to how relevant they are to the search term entered by the user. They determine relevancy by following sets of rules, known as algorithms. Exactly how a particular search engine's algorithm works is a closely-kept trade secret, but the major factors considered are well established: first, keyword relevance - the **location** of keywords on a web page and their **density** on the page; and, secondly, "off-the-page" factors - which cannot be influenced directly by the page's author - including principally **link analysis** and **click-through analysis**.

Each search engine will weight these factors differently. Further, some search engines index more web pages than others; some also index web pages more often than others. Search engines may also penalise pages or exclude them if they detect attempts to trick them. These factors naturally produce differences when comparing the results between search engines.

The following section give guidance on optimising your pages. Throughout the process you will want to test out the pages to see how they rank and how they have improved. As mentioned earlier, it is recommended you test searches on the search engines' UK sites, selecting the "UK pages" option to narrow the range of results. Allow at least a few days after each change for the search engines to re-index your pages.

Thankfully, there are a number of sites that will help you quickly test your rankings across a range of search engines, for example Spannerworks and Marketleap. These services generally only analyse the first 30 results, so you already have to be performing well.

<http://www.spannerworks.com/seotoolkit.0.html>

<http://www.marketleap.com/verify/default.htm>

Keyword location

Search engines weight keywords according to where they occur on a page. This means, principally, within what element (ie html tag or other identifiable element) do they appear? Some elements are regarded as high value; some as neutral; some as of no value; and some as of negative value. The other location factor is the keyword's prominence or absolute position: how near to the beginning of the page or element is it?

The following sections give guidance on where to place your keywords for optimum weighting. But always bear in mind that the wording needs to be intelligible when viewed on the page.

Title

The page title is the wording contained in the html <title> tag. In a browser window it appears in the blue title bar at the top. Because this is not very prominent to the viewer, it is often paid little regard by inexperienced webmasters. But it is *by far* the most important element for page optimisation purposes: the search engines give far more weight to words in the title than to words anywhere else on the page.

The page title is also displayed in the search engine results, linked to the page, so it should be intelligible and high impact to maximise your chances of a click-through.

Place your primary keywords at the beginning of the title. Keep it short; about 60 characters maximum.

Do not repeat keywords. Do not stuff a title too full of keywords: it is likely to exceed the 60 character maximum; the keywords will be wasted and it's possible the search engines will penalise you.

Do not use the words "welcome" or "home page" or similar; this is a complete waste and does nothing to assist the viewer.

URL

The page's URL is regarded as describing the page and is given weight by the search engines. It is also prominently displayed in the search engine results.

Use keywords in the page's URL (folder and filename), preferably separated by hyphens.

Meta tags

Meta tags are optional hidden elements within the <head> element of a web page that can be used to describe the content of the page.

Meta description

The meta description is given weight by the search engines and in some instances is displayed in the results.

Not all pages need or would benefit from a meta description, but certainly your home page and the main section pages of your site should include one.

The description should be intelligible and high impact and include your primary keywords near the start and all your secondary keywords. Limit it to 20 to 25 words.

Meta keywords

Meta keywords were intended as a means for webmasters to classify their pages by using descriptive words and phrases that were not necessarily present in the page content. However, this purpose was quickly and comprehensively subverted by webmasters including irrelevant but popular keywords as meta keywords. Because of this wide-scale abuse, meta keywords are given little or no weight; Google and some others ignore them completely.

Use them properly, by all means, but don't waste time on them.

Opening words

Search engines weight highly words near the top of a page. This includes any readable text, so bear in mind that menus etc will be included. If your pages use a tabular layout, text on the left will be "above" text on the right.

Your introductory 25 words should include your primary keywords near the start and all your secondary keywords.

Headings

Search engines give weight to words in headings, that is words contained in the <h1>, <h2> etc elements.

Use the <h1> and <h2> tags, rather than fixed font sizes and weights, for the main subheadings on the page and ensure that your keywords are used optimally within these.

Emphasised text

Search engines give weight to words in bold.

Use the tag (not the tag as this is being phased out) to emphasise your keywords where appropriate.

Link text

Search engines regard link text (the text you click on, which is contained in the <a href...> element) as describing the page referred to and weight words within link text highly, with benefits both to the page on which the link appears and the page referred to.

Always link descriptive text, rather than associated wording, using your keywords wherever appropriate. For example, if you are pointing to a document numbered A4, entitled *Property Prices* by John Summers, link "Property Prices" not "A4" or "John Summers". At all costs avoid link text such as "click here".

In menus, where link text may be brief or even cryptic, use the title attribute associated with the tag to provide the fuller description.

Images

Search engines cannot read images.

Avoid using images in place of textual content. Always (for accessibility reasons) use the alt attribute associated with the element to describe the image. If the image is of high relevance to the content of the page, use your keywords in the alt description.

Keyword density

If you have followed the advice above, you will have used your keywords frequently on the page. The frequency with which particular keywords are used as a proportion of the overall text on the page is known as keyword density. Search engines will weight your page according to this density: too low and your page will rank poorly; too high, on the other hand, and you may be penalised (see below). Optimum density is generally regarded to be in the region of 4 to 7%.

You can test out the density of particular keywords on a page using a tool such as Webjective's keyword analyser.

<http://www.webjectives.com/>

Penalties

For as long as search engines have been in existence, eager webmasters have been finding ways to give the search engines what they want without taking the trouble to produce relevant content. Many of these practices are perfectly legitimate, but have the effect of degrading the value of results; others are downright sneaky or even evil. The search engines are in business to deliver relevant results to users and thus are constantly tweaking their algorithms and updating their blacklists to ensure that irrelevance goes unrewarded and trickery is punished.

This is not the place to discuss the morality of so-called "black hat" practices or debate the legitimacy of more innocuous methods, but simply to point out that if you are trying to trick the search engines, they are almost certainly already aware of your wheeze and you risk, at best, falling in their rankings, or at worst, being removed from their indexes altogether.

Common examples of bad practice for which pages may be penalised are over-long titles, over-use of keywords, meta keywords that bear no relevance to the content of a page, text in the same colour as the page background and other tactics that disguise the true content of a page.

Off-the-page factors

Finally, we look at the factors that you can't influence on the page: judgments made by the search engines based on how others see you.

Link analysis

By analysing how pages link to each other, search engines can both determine what pages are about and whether pages are important. This system of page ranking was pioneered by Google and was responsible for its rapid rise in popularity; it is used now by all the main search engines.

Links to your site are by far the most important. The ranking of your site in general and of specific pages is strongly influenced by how many other pages link to yours and how important the referring pages are. A link from any page, even an unimportant one, will count, but the more important the referring page, the greater the increase in the rank of your page will be.

You can check out the number of links into your pages using tools provided by the search engines (see their advanced search or help pages) or using a service such as Marketleap's link popularity check.

<http://www.marketleap.com/publinkpop/>

An essential part of your overall search engine marketing strategy should therefore be to influence the number of inbound links by conducting a structured link-building campaign, including link-swaps and directory submissions. Start with your associates, clients and suppliers who are most likely to favour you with a link.

Links *from* your pages are important too as the search engines will give weight to links to important external pages. So it will always pay to link important references which support the topic of your page (see further under Link text in Keyword location above).

Bear in mind that sophisticated techniques are used by the search engines to screen out attempts by webmasters to build artificial links designed to boost their rankings.

Click-through analysis

A search engine may watch what results users click for a particular search, then in time drop high-ranking pages that aren't attracting clicks, while promoting lower-ranking pages that do. As with link analysis, systems are used to compensate for artificial links generated by eager webmasters.

Further reading

There is a plethora of websites on search engine optimisation, a number of which have already been referred to. However, these are often daunting for the less experienced.

A wide range of straightforward articles on SEO is published by Webcredible, a web usability and accessibility consultancy based in London.

<http://www.webcredible.co.uk/user-friendly-resources/search-engine-optimisation/>

Search Engine Optimization for Dummies is an inexpensive paperback in the Dummies series which provides detailed coverage of all the issues. It is somewhat dated now (April 2004) and too jazzy for some tastes, but well worth the price.

<http://www.amazon.co.uk/exec/obidos/ASIN/0764567586>

About Nick Holmes and infolaw

Nick Holmes is a publishing consultant specialising in the legal sector and Managing Director of Information for Lawyers Limited (infolaw).

infolaw is expert in the application of current information standards and publishing technologies and we work with publishers, law firms and other organisations to leverage maximum value from their information resources.

Contact Nick to discuss any aspect of your web publishing or internal information management requirements.

Email nickholmes@infolaw.co.uk, telephone 020 8878 3033, web <http://www.infolaw.co.uk>.