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Recommendations

Search engine optimisation

85% of traffic to your website will come from search engines or directories. So make sure that your clients find you!

Several factors influence the position of a site in the search results. They can be divided into external and internal ranking factors. Internal ranking factors are those that are controlled by website owners (text, layout, etc.)

Architecture of search engines

They all contain the following main components:

Spider	A browser-like program that downloads web pages
Crawler	A program that automatically follows all of the links on each web page
Indexer	A program that analyzes web pages downloaded by the spider and the crawler
Database	Storage for downloaded and processed pages
Results engine	Extracts search results from the database
Web server	A server that is responsible for interaction between the user and other search engine components

Internal ranking factors

Amount of text on a page

A page consisting of just a few sentences is less likely to get to the top of a search engine list. Search engines favour sites that have high information content. Generally, you should try to increase the text content of your site in the interest of SEO. The optimum page size is 500-3000 words (or 2000 to 20,000 characters).

Search engine visibility is increased as the amount of page text increases due to the increased likelihood of occasional and accidental search queries causing it to be listed. This factor sometimes results in a large number of visitors.

Number of keywords on a page

Keywords must be used at least three to four times in the page text. The upper limit depends on the overall page size - the larger the page, the more keyword repetitions can be made. Keyword phrases (word combinations consisting of several keywords) are worth a separate mention. The best SEO results are observed when a keyword phrase is used several times in the text with all keywords in the phrase arranged in exactly the same order. In addition, all of the words from the phrase should be used separately several times in the remaining text. There should also be some difference (dispersion) in the number of entries for each of these repeated words.

Let us take an example. Suppose we optimise a page for the phrase "SEO software" it would be good to use the phrase "SEO software" in the text 10 times, the word "SEO" 7 times elsewhere in the text and the word "software" 5 times. The numbers here are for illustration only, but they show the general SEO idea quite well.

Keyword density and SEO

Keyword page density is a measure of the relative frequency of the word in the text expressed as a percentage. For example, if a specific word is used 5 times on a page containing 100 words, the keyword density is 5%. If the density of a keyword is too low, the search engine will not pay much attention to it. If the density is too high, the search engine may activate its spam filter. If this happens, the page will be penalised and its position in search listings will be deliberately lowered.

The optimum value for keyword density is 5-7%. In the case of keyword phrases, you should calculate the total density of each of the individual keywords comprising the phrases to make sure it is within the specified limits. In practice, a keyword density of more than 7-8% does not seem to have any negative SEO consequences. However, it is not necessary and can reduce the legibility of the content from a user's viewpoint.

Location of keywords on a page

A very short rule for SEO experts - the closer a keyword or keyword phrase is to the beginning of a document, the more significant it becomes for the search engine.

Text format and SEO

Search engines pay special attention to page text that is highlighted or given special formatting. We recommend:

- Use keywords in headings. Headings are text highlighted with the «H» HTML tags. The «h1» and «h2» tags are most effective. Currently, the use of CSS allows you to redefine the appearance of text highlighted with these tags. This means that «H» tags
- Highlight keywords with bold fonts. Do not highlight the entire text! Just highlight each keyword two or three times on the page. Use the «strong» tag for highlighting instead of the more traditional «B» bold tag.

«TITLE» tag

This is one of the most important tags for search engines. Make use of this fact in your SEO work. Keywords must be used in the TITLE tag. The link to your site that is normally displayed in search results will contain text derived from the TITLE tag. It functions as a sort of virtual business card for your pages. Often, the TITLE tag text is the first information about your website that the user sees. This is why it should not only contain keywords, but also be informative and attractive. You want the searcher to be tempted to click on your listed link and navigate to your website. As a rule, 50-80 characters from the TITLE tag are displayed in search results and so you should limit the size of the title to this length.

Keywords in links

A simple SEO rule - use keywords in the text of page links that refer to other pages on your site and to any external Internet resources. Keywords in such links can slightly enhance page rank.

«ALT» attributes in images

Any page image has a special optional attribute known as "alternative text." It is specified using the HTML «ALT» tag. This text will be displayed if the browser fails to download the image or if the browser image display is disabled. Search engines save the value of image ALT attributes when they parse (index) pages, but do not use it to rank search results.

Currently, the Google search engine takes into account text in the ALT attributes of those images that are links to other pages. The ALT attributes of other images are ignored. There is no information regarding other search engines, but we can assume that the situation is similar. We consider that keywords can and should be used in ALT attributes, but this practice is not vital for SEO purposes.

Description Meta tag

This is used to specify page descriptions. It does not influence the SEO ranking process but it is very important. A lot of search engines (including the largest one - Google) display information from this tag in their search results if this tag is present on a page and if its content matches the content of the page and the search query.

Experience has shown that a high position in search results does not always guarantee large numbers of visitors. For example, if your competitors' search result description is more attractive than the one for your site then search engine users may choose their resource instead of yours. That is why it is important that your Description Meta tag text be brief, but informative and attractive. It must also contain keywords appropriate to the page.

Keywords Meta tag

This Meta tag was initially used to specify keywords for pages but it is hardly ever used by search engines now. It is often ignored in SEO projects. However, it would be advisable to specify this tag just in case there is a revival in its use. The following rule must be observed for this tag: only keywords actually used in the page text must be added to it.

Number of pages

The general SEO rule is: the more, the better. Increasing the number of pages on your website increases the visibility of the site to search engines. Also, if new information is being constantly added to the site, search engines consider this as development and expansion of the site. This may give additional advantages in ranking. You should periodically publish more information on your site - news, press releases, articles, useful tips, etc.

Navigation menu

As a rule, any site has a navigation menu. Use keywords in menu links, it will give additional SEO significance to the pages to which the links refer.

Keywords in page names

Some SEO experts consider that using keywords in the name of a HTML page file may have a positive effect on its search result position.

Avoid subdirectories

If there are not too many pages on your site (up to a couple of dozen), it is best to place them all in the root directory of your site. Search engines consider such pages to be more important than ones in subdirectories.

One page - one keyword phrase

For maximum SEO, try to optimise each page for its own keyword phrase. Sometimes you can choose two or three related phrases, but you should certainly not try to optimise a page for 5-10 phrases at once. Such phrases would probably produce no effect on page rank.

SEO and the Main page

Optimise the main page of your site (domain name, index.html) for word combinations that are most important. This page is most likely to get to the top of search engine lists. My SEO observations suggest that the main page may account for up to 30-40% percent of the total search traffic for some sites

External ranking factors

Why inbound links to sites are taken into account

As you can see from the previous section, many factors influencing the ranking process are under the control of website owner. If these were the only factors then it would be impossible for search engines to distinguish between a genuine high-quality document and a page created specifically to achieve high search ranking but containing no useful information. For this reason, an analysis of inbound links to the page being evaluated is one of the key factors in page ranking. This is the only factor that is not controlled by the site owner.

It makes sense to assume that interesting sites will have more inbound links. This is because owners of other sites on the Internet will tend to have published links to a site if they think it is a worthwhile resource. The search engine will use this inbound link criterion in its evaluation of document significance.

Therefore, two main factors influence how pages are stored by the search engine and sorted for display in search results:

- Relevance, as described in the previous section on internal ranking factors.
- Number and quality of inbound links, also known as link citation, link popularity or citation index. This will be described in the next section.

Link importance (citation index, link popularity)

You can easily see that simply counting the number of inbound links does not give us enough information to evaluate a site. It is obvious that a link from www.microsoft.com should mean much more than a link from some homepage like www.hostingcompany.com/~myhomepage.html. You have to take into account link importance as well as number of links.

Search engines use the notion of citation index to evaluate the number and quality of inbound links to a site. Citation index is a numeric estimate of the popularity of a resource expressed as an absolute value representing page importance. Each search

engine uses its own algorithms to estimate a page citation index. As a rule, these values are not published.

As well as the absolute citation index value, a scaled citation index is sometimes used. This relative value indicates the popularity of a page relative to the popularity of other pages on the Internet. You will find a detailed description of citation indexes and the algorithms used for their estimation in the next sections.

Link text (anchor text)

The link text of any inbound site link is vitally important in search result ranking. The anchor (or link) text is the text between the HTML tags «A» and «/A» and is displayed as the text that you click in a browser to go to a new page. If the link text contains appropriate keywords, the search engine regards it as an additional and highly significant recommendation that the site actually contains valuable information relevant to the search query.

Relevance of referring pages

As well as link text, search engines also take into account the overall information content of each referring page.

Example: Suppose we are using SEO to promote a car sales resource. In this case a link from a site about car repairs will have much more importance than a similar link from a site about gardening. The first link is published on a resource having a similar topic so it will be more important for search engines.

Increasing link popularity

Submitting to general purpose directories

On the Internet, many directories contain links to other network resources grouped by topics. The process of adding your site information to them is called submission.

- Such directories can be paid or free of charge, they may require a backlink from your site or they may have no such requirement. The number of visitors to these directories is not large so they will not send a significant number to your site.

However, search engines count links from these directories and this may enhance your sites search result placement.

- Important! Only those directories that publish a direct link to your site are worthwhile from a SEO point of view. Script driven directories are almost useless. This point deserves a more detailed explanation. There are two methods for publishing a link. A direct link is published as a standard HTML construction («A href=...», etc.). Alternatively, links can be published with the help of various scripts, redirects and so on. Search engines understand only those links that are specified directly in HTML code. That is why the SEO value of a directory that does not publish a direct link to your site is close to zero.
- You should not submit your site to FFA (free-for-all) directories. Such directories automatically publish links related to any search topic and are ignored by search engines. The only thing an FFA directory entry will give you is an increase in spam sent to your published e-mail address. Actually, this is the main purpose of FFA directories.
- Be wary of promises from various programs and SEO services that submit your resource to hundreds of thousands of search engines and directories. There are no more than a hundred or so genuinely useful directories on the Net - this is the number to take seriously and professional SEO submission services work with this number of directories. If a SEO service promises submissions to enormous numbers of resources, it simply means that the submission database mainly consists of FFA archives and other useless resources.
- Give preference to manual or semiautomatic SEO submission; do not rely completely on automatic processes. Submitting sites under human control is generally much more efficient than fully automatic submission. The value of submitting a site to paid directories or publishing a back-link should be considered individually for each directory. In most cases, it does not make much sense, but there may be exceptions.

- Submitting sites to directories does not often result in a dramatic effect on site traffic, but it slightly increases the visibility of your site for search engines. This useful SEO option is available to everyone and does not require a lot of time and expense so do not overlook it when promoting your website.

DMOZ directory

The DMOZ directory (www.dmoz.org) or the Open Directory Project is the largest directory on the Internet. There are many copies of the main DMOZ site and so, if you submit your site to the DMOZ directory, you will get a valuable link from the directory itself as well as dozens of additional links from related resources. This means that the DMOZ directory is of great value a webmaster.

It is not easy to get your site into the DMOZ directory; there is an element of luck involved. Your site may appear in the directory a few minutes after it has been submitted or it may take months to appear.

If you submitted your site details correctly and in the appropriate category then it should eventually appear. If it does not appear after a reasonable time then you can try contacting the editor of your category with a question about your request (the DMOZ site gives you such opportunity). Of course, there are no guarantees, but it may help. DMOZ directory submissions are free of charge for all sites, including commercial ones.

Recommendations regarding site submissions to DMOZ: Read all site requirements, descriptions, etc. to avoid violating the submission rules. Such a violation will most likely result in a refusal to consider your request. Please remember, presence in the DMOZ directory is desirable, but not obligatory. Do not despair if you fail to get into this directory. It is possible to reach top positions in search results without this directory - many sites do.

Link exchange

The essence of link exchanges is that you use a special page to publish links to other sites and get similar back-links from them. Search engines do not like link exchanges because, in many cases, they distort search results and do not provide anything useful

to Internet users. However, it is still an effective way to increase link popularity if you observe several simple rules;

- Exchange links with sites that are related by topic. Exchanging links with unrelated sites is ineffective and unpopular.
- Before exchanging, make sure that your link will be published on a "good" page. This means that the page must have a reasonable PageRank (3-4 or higher is recommended), it must be available for indexing by search engines, the link must be direct, the total number of links on the page must not exceed 50, and so on.
- Do not create large link directories on your site. The idea of such a directory seems attractive because it gives you an opportunity to exchange links with many sites on various topics. You will have a topic category for each listed site. However, when trying to optimise your site you are looking for link quality rather than quantity and there are some potential pitfalls. No SEO aware webmaster will publish a quality link to you if he receives a worthless link from your directory "link farm" in return. Generally, the PageRank of pages from such directories leaves a lot to be desired. In addition, search engines do not like these directories at all. There have even been cases where sites were banned for using such directories.
- Use a separate page on the site for link exchanges. It must have a reasonable PageRank and it must be indexed by search engines, etc. Do not publish more than 50 links on one page (otherwise search engines may fail to take some of the links into account). This will help you to find other SEO aware partners for link exchanges.
- Search engines try to track mutual links. That is why you should, if possible, publish back-links on a domain/site other than the one you are trying to promote. The best variant is when you promote the resource site1.com and publish back-links on the resource site2.com.

- Exchange links with caution. Webmasters who are not quite honest will often remove your links from their resources after a while. Check your back-links from time to time.

Press releases, news feeds, forums, thematic resources

This section is about site marketing rather than pure SEO. There are many information resources and news feeds that publish press releases and news on various topics. Such sites can supply you with direct visitors and also increase your sites popularity. If you do not find it easy to create a press release or a piece of news, hire copywriters - they will help you find or create something newsworthy.

Look for resources that deal with similar topics to your own site (like forums). You may find many websites that not in direct competition with you, but which share the same topic as your site. Try to approach the site owners. It is quite possible that they will be glad to publish information about your project.

One final tip for obtaining inbound links - try to create slight variations in the inbound link text. If all inbound links to your site have exactly the same link text and there are many of them, the search engines may flag it as a spam attempt and penalise your site.

Indexing a site

Before a site appears in search results, a search engine must index it. An indexed site will have been visited and analysed by a search robot with relevant information saved in the search engine database. If a page is present in the search engine index, it can be displayed in search results otherwise, the search engine cannot know anything about it and it cannot display information from the page.

Most average sized sites (with dozens to hundreds of pages) are usually indexed correctly by search engines. However, you should remember the following points when constructing your site. There are two ways to allow a search engine to learn about a new site:

- Submit the address of the site manually using a form associated with the search engine, if available. In this case, you are the one who informs the search engine about the new site and its address goes into the queue for indexing. Only the main page of the site needs to be added, the search robot will find the rest of pages by following links.
- Let the search robot find the site on its own. If there is at least one inbound link to your resource from other indexed resources, the search robot will soon visit and index your site. In most cases, this method is recommended. Get some inbound links to your site and just wait until the robot visits it. This may actually be quicker than manually adding it to the submission queue. Indexing a site typically takes from a few days to two weeks depending on the search engine. The Google search engine is the quickest of the bunch.

Try to make your site friendly to search robots by following these rules:

- Try to make any page of your site reachable from the main page in not more than three mouse clicks. If the structure of the site does not allow you to do this, create a so-called site map that will allow this rule to be observed.
- Do not make common mistakes. Session identifiers make indexing more difficult. If you use script navigation, make sure you duplicate these links with regular ones because search engines cannot read scripts (see more details about these and other mistakes in section 2.3).
- Remember that search engines index no more than the first 100-200 KB of text on a page. Hence, the following rule - do not use pages with text larger than 100 KB if you want them to be indexed completely.
- You can manage the behaviour of search robots using the file robots.txt. This file allows you to explicitly permit or forbid them to index particular pages on your site.

- The databases of search engines are constantly being updated; records in them may change, disappear and reappear. That is why the number of indexed pages on your site may sometimes vary. One of the most common reasons for a page to disappear from indexes is server unavailability. This means that the search robot could not access it at the time it was attempting to index the site. After the server is restarted, the site should eventually reappear in the index.
- You should note that the more inbound links your site has, the more quickly it gets re-indexed. You can track the process of indexing your site by analyzing server log files where all visits of search robots are logged. We will give details of SEO software that allows you to track such visits in a later section.

Choosing keywords

Initially choosing keywords

Choosing keywords should be your first step when constructing a site. You should have the keyword list available to incorporate into your site text before you start composing it. To define your site keywords, you should use SEO services offered by search engines in the first instance. Sites such as www.wordtracker.com and inventory.overture.com are good starting places for English language sites. Note that the data they provide may sometimes differ significantly from what keywords are actually the best for your site. You should also note that the Google search engine does not give information about frequency of search queries.

After you have defined your approximate list of initial keywords, you can analyze your competitor's sites and try to find out what keywords they are using. You may discover some further relevant keywords that are suitable for your own site.

Frequent and rare keywords

There are two distinct strategies - optimise for a small number of highly popular keywords or optimise for a large number of less popular words. In practice, both strategies are often combined.

The disadvantage of keywords that attract frequent queries is that the competition rate is high for them. It is often not possible for a new site to get anywhere near the top of search result listings for these queries.

For keywords associated with rare queries, it is often sufficient just to mention the necessary word combination on a web page or to perform minimum text optimisation. Under certain circumstances, rare queries can supply quite a large amount of search traffic.

The aim of most commercial sites is to sell some product or service or to make money in some way from their visitors. This should be kept in mind during your SEO (search engine optimisation) work and keyword selection. If you are optimising a commercial site then you should try to attract targeted visitors (those who are ready to pay for the offered product or service) to your site rather than concentrating on sheer numbers of visitors.

Example: The query "monitor" is much more popular and competitive than the query "monitor Samsung 710N" (the exact name of the model). However, the second query is much more valuable for a seller of monitors. It is also easier to get traffic from it because its competition rate is low; there are not many other sites owned by sellers of Samsung 710N monitors. This example highlights another possible difference between frequent and rare search queries that should be taken into account - rare search queries may provide you with less visitors overall, but more targeted visitors.

Evaluating the competition rates of search queries

When you have finalised your keywords list, you should identify the core keywords for which you will optimise your pages. A suggested technique for this follows.

Rare queries are discarded at once (for the time being). In the previous section, we described the usefulness of such rare queries but they do not require special optimisation. They are likely to occur naturally in your website text.

As a rule, the competition rate is very high for the most popular phrases. This is why you need to get a realistic idea of the competitiveness of your site. To evaluate the

competition rate you should estimate a number of parameters for the first 10 sites displayed in search results:

- The average PageRank of the pages in the search results.
- The average number of links to these sites. Check this using a variety of search engines.

Additional parameters:

- The number of pages on the Internet that contain the particular search term, the total number of search results for that search term.
- The number of pages on the Internet that contain exact matches to the keyword phrase. The search for the phrase is bracketed by quotation marks to obtain this number.

These additional parameters allow you to indirectly evaluate how difficult it will be to get your site near the top of the list for this particular phrase. As well as the parameters described, you can also check the number of sites present in your search results in the main directories, such as DMOZ and Yahoo.

The analysis of the parameters mentioned above and their comparison with those of your own site will allow you to predict with reasonable certainty the chances of getting your site to the top of the list for a particular phrase.

Having evaluated the competition rate for all of your keyword phrases, you can now select a number of moderately popular key phrases with an acceptable competition rate, which you can use to promote and optimise your site.

Refining your keyword phrases

Search engine keyword services might sometimes give inaccurate keyword information. This means that it is unusual to obtain an optimum set of site keywords at your first attempt. After your site is up and running and you have carried out some initial promotion, you can obtain additional keyword statistics, which will facilitate some fine-tuning. For example, you will be able to obtain the search results rating of

your site for particular phrases and you will also have the number of visits to your site for these phrases.

With this information, you can clearly define the good and bad keyword phrases. Often there is no need to wait until your site gets near the top of all search engines for the phrases you are evaluating - one or two search engines are enough.

Example: Suppose your site occupies first place in the Yahoo search engine for a particular phrase. At the same time, this site is not yet listed in MSN, or Google search results for this phrase. However, if you know the percentage of visits to your site from various search engines (for instance, Google - 70%, Yahoo - 20%, MSN search - 10%), you can predict the approximate amount of traffic for this phrase from these other searches engines and decide whether it is suitable.

As well as detecting bad phrases, you may find some new good ones. For example, you may see that a keyword phrase you did not optimise your site for brings useful traffic despite the fact that your site is on the second or third page in search results for this phrase.

Using these methods, you will arrive at a new refined set of keyword phrases. You should now start reconstructing your site: Change the text to include more of the good phrases, create new pages for new phrases, etc.

You can repeat this SEO exercise several times and, after a while, you will have an optimum set of key phrases for your site and considerably increased search traffic.

Here are some more tips.

- *According to statistics, the main page takes up to 30%-50% of all search traffic. It has the highest visibility in search engines and it has the largest number of inbound links. That is why you should optimise the main page of your site to match the most popular and competitive queries.*

- *Each site page should be optimised for one or two main word combinations and, possibly for a number of rare queries. This will increase the chances for the page get to the top of search engine lists for particular phrases.*

Creating correct content

The content of a site plays an important role in site promotion for many reasons. We will describe some of them in this section. We will also give you some advice on how to populate your site with good content.

- Content uniqueness; Search engines value new information that has not been published before. That is why you should compose own site text and not plagiarise excessively. A site based on materials taken from other sites is much less likely to get to the top in search engines. As a rule, original source material is always higher in search results.
- While creating a site, remember that it is primarily created for human visitors, not search engines. Getting visitors to visit your site is only the first step and it is the easiest one. The truly difficult task is to make them stay on the site and convert them into purchasers. You can only do this by using good content that is interesting to real people.
- Try to update information on the site and add new pages on a regular basis. Search engines value sites that are constantly developing. Also, the more useful text your site contains, the more visitors it attracts. Write articles on the topic of your website; publish visitors' opinions; create a forum for discussing your website. A forum is only useful if the number of visitors is sufficient for it to be active. Interesting and attractive content guarantees that the site will attract interested visitors.
- A site created for people rather than search engines has a better chance of getting into important directories such as DMOZ and others.

- An interesting site on a particular topic has much better chances to get links, comments, reviews, etc. from other sites on this topic. Such reviews can give you a good flow of visitors while inbound links from such resources will be highly valued by search engines.

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