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Search Engine Optimization
Best and Worst Practices

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1. Introduction

Many consider search engine optimization (SEO) - the process of enhancing your Web site's visibility in the search engines through ways other than paid search ads – as a sort of black box. But once the essential features of a search-engine-optimal Web site are laid out in a concise list, SEO is not nearly as mystifying.

That's where these checklists comes in. They are designed for web marketers and web developers so that they can easily understand search engine optimization and start tackling it. You can read a full description of each best and worst practice at the bottom of this document, after the two checklists.

2. Best Practices

Implementing the 15 best practices below (or at least some of them!) and avoiding the worst practices should offer you a straightforward approach to better visibility in search engines, including Google and Yahoo!

Best Practice	Doing it now	Will do it soon	Won't or N/A
1. Are the keywords you are targeting relevant and popular with searchers?			
2. Do your page titles lead with your targeted keywords?			
3. Does your site employ H1 heading tags for content titles?			
4. Is your body copy sufficiently long (250 words) and keyword-rich?			
5. Does the hyperlink text pointing to various pages within your site include good keywords?			
6. Do you have keyword-rich alt tags for all navigation graphics and all product images?			
7. Do you employ text links from your home page to your most important secondary pages?			
8. Does your web site have a site map with text links?			
9. Do the URLs of your dynamic (database driven) pages look static?			
10. Does your site have a flat directory structure?			

	N/A	Will Stop	Won't Stop
11. Does your home page and other key pages of your site have high PageRank scores (at least 5 out of 10)?			
12. Is your site listed in Open Directory?			
13. Do your pages have keyword-rich meta descriptions with a compelling call to action?			
14. Does your site have a custom error page?			
15. Do your filenames and directory names include targeted keywords?			

3. Worst Practices

Partially indexed, poorly ranked, penalized and possibly banned: such is the unpleasant fate of a Web site that's not duly optimized for search engines. Even if you mastered all 15 best practices above, your site may not be safe.

The mission of search engines is to supply their visitors with relevant results, so penalizing or banning sites that appear to interfere with that mission is a necessity. Understanding which practices adversely impact your search engine rankings is a prerequisite to a well-optimized site.

Whether inadvertent or not, any of the following worst practices could doom your site to suboptimal traffic levels. Here are 28 critical "must nots" in SEO:

Worst Practice	N/A	Will Stop	Won't Stop
1. Do you use drop down boxes for navigation?			
2. Does your primary navigation require Flash, Java or Javascript to function?			
3. Is your web site done in Flash or overly graphical with very little textural content?			
4. Is your home page a "splash page" or otherwise content-less?			
5. Does your site employ frames?			
6. Do the URLs of your pages include "cgi-bin" or numerous ampersands?			
7. Do the URLs of your pages include session IDs or user IDs?			
8. Do you spread your site across multiple domains?			

9. Are your title tags the same on all pages?			
10. Do you have pop-ups on your site?			
11. Do you have error pages in the search results ("session expired", etc.)?			
12. Does your File Not Found error return a 200 status code?			
13. Do you use "click here" or any other superfluous copy for your hyperlink text?			
14. Do you have superfluous text like "Welcome to" at the beginning of your title tags?			
15. Do you employ auto-redirects?			
16. Do you have any hidden or small text meant only for the search engines?			
17. Do you engage in "keyword stuffing"?			
18. Do you have pages targeted to obviously irrelevant keywords?			
19. Are you engaging in automated submitting, resubmitting or deep submitting?			
20. Do you incorporate your competitors' brand names in your meta tags?			
21. Do you have duplicate pages with minimal or no changes?			
22. Does your content read like "spamglish"?			
23. Do you have "doorway pages" on your site?			
24. Do you have machine-generated pages on your site?			
25. Are you "pagejacking"?			
26. Are you cloaking?			
27. Are you submitting to FFA ("Free For All") link pages and link farms?			
28. Are you buying expired domains with high PageRank scores to use as link targets?			

4. Best and Worst Practice Explanations

Curious about the importance or relevance of some of the questions on the checklists? Read on for full descriptions of the implications of these questions.

Best Practices Explanations

1. Are the keywords that you are targeting not only relevant but also popular with searchers?

There is no point going after high rankings for keywords that no one searches for. Compare relative popularity of keywords using WordTracker or Overture's Search Term Suggestion Tool before deciding what keywords to employ on your Web pages. One drawback of Overture's tool is that it combines singular and plural forms together, along with popular misspellings, and only displays the aggregate number.

Despite the popularity of individual words, it's best to target two- or three-word phrases. Because of the staggering number of Web pages indexed by the major search engines, competing for a spot on the first or second page of search results on a one-word keyword will be a losing battle. This should go without saying, but the keywords you select should be relevant to your business.

2. Do your page titles lead with your targeted keywords?

The text within your page title (also known as the title tag) is given more weight by the search engines than any other text on the page. The keywords at the beginning of the title tag are given the most weight. Thus, by leading with keywords that you've chosen carefully, you make your page appear more relevant to those keywords in a search.

3. Does your site employ H1 heading tags for content titles?

In HTML, there are six heading tags, H1 through H6. The search engines consider H1 tags to be much more important than the rest of the body copy. Text within an H1 tag gets more weight than text within an H2 tag, which gets more weight than text within an H3 tag, and so on.

Some Web developers believe that H1 tags "look ugly"—big, bold text that sticks out like a sore thumb. That doesn't have to be the case. The H1 tag's font, size, color and amount of surrounding white space can all be defined using style sheets.

4. Is your body copy sufficiently long and keyword rich?

Ideally, incorporate at least 200 to 250 words on each page so the search engines have enough "meat" to determine the theme of the page. Include relevant keywords, particularly near the top of the HTML, as they will be weighted more heavily by the search engines. Be careful not to go overboard, to the point that your copy doesn't read well.

5. Does the hyperlink text pointing to various pages within your site include good keywords?

Google associates the anchor text in the hyperlink as highly relevant to the page being linked to. So, use good keywords in the link text to help Google better ascertain the theme of the page you are linking to. Keep the link text relatively succinct and tightly focused on just one keyword or key phrase. The longer the link text, the more diluted the overall theme conveyed to Google.

6. Do you have keyword-rich alt tags for all navigation graphics and all product images?

An alt tag is the text that appears in a small box when you hover your cursor over an image. Alt tags should contain relevant keywords that convey the key information from the image that the user would not receive if she had image loading turned off.

7. Do you employ text links from your home page to your most important secondary pages?

Text links are, by far, the better option (versus alt tags) in conveying to Google the context of the page being linked to. Alt tags may have an effect, but it's small in comparison with that of text links. If you have graphical navigation buttons, switch them to keyword-rich text links; if that's not an option, at least include text link navigation repeated elsewhere on the page, such as in the footer.

8. Does your Web site have a site map with text links?

A site map is good "spider food" in that it provides the search engine spiders (i.e., the search engine's computers that periodically explore your Web site) with a number of links to key pages to explore and index. Use text links, since they are more search engine optimal than graphical links, as already mentioned. Bear in mind that about 100 links per page is the maximum you should put on a page, according to Google.

9. Do the URLs of your dynamic (database-driven) pages look static?

Pages with URLs that contain question marks, ampersands, or equal signs don't have as good a chance of getting indexed by the search engines. Either install a server module/plug-in that allows you to "rewrite" your links, or recode your site to embed your variables in the path info instead of the query string; or, if you need to minimize resource requirements by your IT team, you can enlist a "proxy serving" solution such as GravityStream.

10. Does your site have a flat directory structure?

The deeper in your site you hide key content, the less likely search engines are to find it. Some search engine spiders won't go deeper than a certain number of subdirectories. A flat directory structure (where you minimize the number of slashes in the URL) helps ensure more pages of your site get indexed.

11. Does your home page and other key pages of your site have high PageRank scores (at least 5 out of 10)?

PageRank is Google's way of quantifying the importance of a Web page, and it's a key criterion for ranking pages. In very rough terms, PageRank is based on the page's "link popularity" (i.e., the number of links pointing to a given Web page), but with a crucial twist: links from more important (i.e., higher PageRank-endowed) pages are weighted more heavily.

That weighted "vote" gets divvied up among all the links on the page. Check PageRank scores using the Google toolbar, a free add-on to Microsoft Internet Explorer, available for download. Mouse over the toolbar's PageRank meter to display the numerical rating, an integer value between 1 and 10.

Note that PageRank is on a logarithmic scale; meaning that integer increments are not evenly spaced. Thus, garnering more links and gaining in PageRank score from 3 to 4 is easy, but from 6 to 7 is a lot harder.

A PageRank score for your home page of 7 or 8 is a laudable goal. PageRank is then passed on from your home page (which is typically the highest PageRank-endowed page on your site) to your internal pages through your site's hierarchical linking structure. Yahoo's importance-scoring equivalent to PageRank is called Yahoo! Web Rank.

12. Is your site listed in Open Directory?

If you aren't already listed in the Open Directory Web site, you should identify the category most relevant to your business and submit your site. A listing in Open Directory also ensures a listing in Google Directory and numerous other directories powered by Open Directory. Links from authoritative sites such as Google Directory improve your PageRank importance score and, thus, your rankings; they also drive visitor traffic directly from those directories.

13. Do your pages have keyword-rich meta descriptions with a compelling call to action?

A meta tag is hidden information tucked away in the HTML of a Web page for the purpose of providing search engine spiders meta-information about that page. One such piece of meta-information is a description of the page (e.g., its content and its purpose), known as a meta description.

Although defining a meta description will not improve your rankings, it is useful from the standpoint of influencing what text appears within your listing in the search results, in order to better persuade the user to click through to your site.

Yahoo will frequently employ the meta description as the description in your search results listing. MSN, in its upcoming new version of its search engine (MSN Technology Preview), is also displaying the meta descriptions in the search listings. Google may incorporate some of your meta description in to the snippet displayed in your search listing if keywords that the user searched on are present in that meta description.

14. Does your site have a custom error page?

Don't greet users with the default "File not found" error page when they click through from a search engine results page to a page on your site that no longer exists. Offer a custom error page instead, with your logo and branding, navigation, site map, and search box. No matter what the reason for the page's unavailability (e.g., discontinued product, site redesign, file renamed), you shouldn't be driving visitors away with an ugly error page that doesn't provide a path to your home page and other key areas of your site.

15. Do your filenames and directory names include targeted keywords?

This is a contentious issue among search engine experts. But if it's easy to do, why not? Separate keywords with hyphens, not with underscores. Don't put more than two or three keywords into a filename or directory name, as it could look spammy to the search engines.

Worst Practices Explanations

1. Do You Use Dropdown Boxes for Navigation?

Search engine spiders can't fill out forms, even short ones with just one dropdown. Thus, they can't get to the pages that follow. If you're using dropdowns, make sure there is an alternate means of navigating to those pages that the spiders can use.

2. Does Your Primary Navigation Require Flash, Java or Javascript?

If you expect search engine spiders to execute Flash, Java or Javascript code in order to access links to further pages within your site, you'll usually be disappointed with the results. Some search engines have a limited ability to deal with Flash and Javascript. But, nonetheless, it's not search engine friendly way to go.

3. Is Your Site Done in Flash or Overly Graphical with Very Little Textual content?

Text is always better than graphics or Flash for search engine rankings. Page titles and section headings should be text, not graphics. Page content should not be embedded within Flash files.

4. Is Your Home Page a "Splash Page" or Otherwise Content-Less?

With most Web sites, the home page is weighted by the search engines as the most important page on the site (i.e., given the highest PageRank score). Thus, having no keyword-rich content on your home page is a missed opportunity.

5. Does Your Site Employ Frames?

Search engines have problems crawling sites that use frames (i.e., where part of the page moves when you scroll but other parts stay stationary). Google advises not using frames: "Frames tend to cause problems with search engines, bookmarks, emailing links and so on, because frames don't fit the conceptual model of the Web (every page corresponds to a single URL)."

Furthermore, if a frame does get indexed, searchers clicking through to it from search results will often find an "orphaned page": a frame without the content it framed, or content without the associated navigation links in the frame it was intended to display with. Often, they will simply find an error page.

6. Do the URLs of Your Pages Include "CGI-Bin" or Numerous Ampersands?

As discussed, search engines are leery of dynamically generated pages. That's because they can lead the search spider into an infinite loop called a "spider trap." Certain characters (question marks, ampersands, equal signs) and "CGI-bin" in the URL are sure-fire tip-offs to the search engines that the page is dynamic.

Worse yet, if the URLs have long, overly complex "query strings" (the part of the URL after the question mark), with a number of ampersands (which signify that there are multiple variables in the query string), then your page is not likely to get included in the search engine's index.

7. Do the URLs of Your Pages Include Session IDs or User IDs?

If your answer to this question is yes, then consider this: search engine spiders like Googlebot don't support cookies, and thus Googlebot will be assigned a new session ID or user ID on each page on your site that it visits. This is the proverbial "spider trap" waiting to happen, so search engine spiders are likely to skip over these pages. If such pages do get indexed, there will be multiple copies of the same pages each taking a share of the PageRank score, resulting in PageRank dilution and lowered rankings.

If you're not quite clear on why your PageRank scores will be diluted, think of it this way: Googlebot will find minimal links pointing to the exact version of a page with a particular session ID in its URL.

8. Do You Spread Your Site Across Multiple Domains?

This is typically done for load balancing purposes. For example, the links on the JCPenney.com home page point off to www2.jcpenney.com, or www3.jcpenney.com, or www4.jcpenney.com and so on, depending on which server is the least busy. This dilutes PageRank score in a way similar to how session IDs in the URL dilute PageRank.

9. Are Your Title Tags the Same on All Pages?

Far too many Web sites use a single title tag for the entire site. If your site falls into that group, you're missing out on a lot of search engine traffic. Each page of your site should "sing" for one or several unique keyword themes. That "singing" is stifled when the page's title tag doesn't incorporate the particular keyword being targeted.

10. Do You Have Pop-Ups on Your Site?

Most search engines don't index Javascript-based pop-ups, so the content within the pop-up will not get indexed. If that's not good enough reason to stop using pop-ups, you should know that people hate them - with a passion. Also consider that untold millions of users have pop-up blockers installed. (The Google Toolbar and Yahoo Companion toolbar are pop-up blockers, too, in case you didn't know.)

11. Do You Have Error Pages in the Search Results ("Session Expired" Etc.)?

First impressions count . . . a lot! So make sure search engine users aren't seeing error messages in your search listings. Hotmail.com takes the cake in this regard, with a Google listing for its home page that begins: "Sign-In Access Error." Not exactly a useful, compelling or brand-building search result for the user to see. Check to see if you have any error pages by querying Google and Yahoo! for

site:www.yourcompanyurl.com. Eliminate error pages from the search engine's index with a meta robot tag no-index tag.

12. Does Your File Not Found Error Page Return a 200 Status Code?

This is a corollary to the tip immediately above. Before the content of a page is served up by your Web server, a HTTP header is sent, which includes a status code. A status code of 200 is what's usually sent, meaning that the page is "OK." A status code of 404 means that the requested URL was not found. Obviously, a file not found error page should return a 404 status code, not a 200. You can verify whether this is the case using the Server Header Checker and then into the form input a bogus URL at your domain, such as http://www.yourcompanyurl.com/blahblah.

13. Do You Use "Click Here" or Other Superfluous Copy for Your Hyperlink text?

Wanting to rank tops for the words "click here," eh? Try some more relevant keywords instead. Remember, Google associates the link text with the page you are linking to, so make that link text count.

14. Do You Have Superfluous Text Like "Welcome To" at Beginning of Your Title Tags?

No one wants to be top ranked for the word "welcome" (except maybe the Welcome Inn chain!) so remove those superfluous title tags!

15. Do You Employ Auto-Redirects?

A redirect (where the URL changes automatically while the page is still loading) can cause a page to not get indexed or its PageRank to dissipate - particularly if the redirect is temporary (status code of 302) rather than permanent (301). Temporary redirects don't pass PageRank, and links that go through a click-through tracker first tend to use temporary redirects. Don't redirect visitors when they first enter your site at the home page; but if you must, at least employ a 301 redirect. Especially don't redirect visitors immediately as they enter your site from a search engine, as that is deemed a "sneaky redirect" and can get you penalized or banned.

16. Do You Have Any Hidden or Small Text Meant Only for the Search Engines?

It may be tempting to obscure your keywords from visitors by using tiny text that is too small for humans to see, or as text that is the same color as the page background. However, Google and Yahoo! are on to that trick.

17. Do You Engage in "Keyword Stuffing"?

Putting the same keyword everywhere, such as in every alt tag, is just asking for trouble. Don't go overboard with repeating keywords or adding a meta keywords tag that's hundreds of words long. Google warns not to hide keywords in places that aren't rendered, such as comment tags. A good rule of thumb to operate under: if you'd feel uncomfortable showing to a Google employee what you're doing, you shouldn't be doing it.

18. Do You Have Pages Targeted to Obviously Irrelevant Keywords?

Just because "britney spears" is a popular search term doesn't mean it's right for you to be targeting it. Relevancy is the name of the game. Why would you want to be number one for "britney spears" anyway?

19. Are You Doing Automated Submitting, Resubmitting or Deep Submitting?

In other words, are you simultaneously submitting multiple pages deep within your site? If you're going to submit your site to a search engine, search for your site first to make sure it's not already in the search engine's index and only submit it manually if it's not in the index. Most sites submitted to search engines are spam. It would be easy for the search engines to assume that your site is spam, too.

20. Do You Incorporate Your Competitors' Brand Names in Your Meta Tags?

Unless you have their express permission, this is a good way to end up at the wrong end of a lawsuit.

21. Do You Have Duplicate Pages with Minimal or No Changes?

Although you might like occupying multiple spots in the search results, the search engines don't appreciate duplicate pages clogging up their indices. Be forewarned: the engines can spot offenders very easily.

22. Does your content read like "Spamglish"?

Crafting pages filled with nonsensical, keyword-rich gibberish is a great way to get penalized or banned by search engines.

23. Do You Have "Doorway Pages" on Your Site?

Doorway pages are pages designed solely for search engines that aren't useful or interesting to human visitors. Doorway pages typically aren't linked to much from other sites or much from your own site. The search engines strongly discourage the use of this tactic, quite understandably.

24. Do You Have Machine-Generated Pages on Your Site?

Such pages are usually devoid of meaningful content. WebPosition Gold can churn out keyword-rich doorway pages for you, automatically. Yuck! Don't use it; the search engines can spot such doorway pages.

25. Are You "Pagejacking"?

"Pagejacking" refers to hijacking or stealing high-ranking pages from other sites and placing them on your site with few or no changes. Often, this tactic is combined with cloaking so as to hide the victimized site's content from search engine users. This is a big no-no! Not only is it very unethical, it's illegal; and the consequences can be severe.

26. Are You "Cloaking"?

"Cloaking" is the tactic of detecting search engine spiders when they visit and varying the HTML code specifically for the spiders in order to improve rankings. This is only acceptable in a very limited use: namely, as a way of simplifying search engine unfriendly links. If you are in any way selectively modifying the page content, this is nothing less than a bait-and-switch. Search engines have undercover spiders that masquerade as regular visitors to detect such unscrupulous behavior.

27. Are You Submitting to FFA ("Free For All") Links Pages and Link Farms?

Search engines don't think highly of link farms and such, and may penalize you or ban you for participating on them.

28. Are You Buying Expired Domains with High PageRank Scores to Use as Link targets?

Google underwent a major algorithm change a while back to thwart this tactic. Now, when domains expire, their PageRank scores are reset to 0, regardless of how many links point to the site.

Final Thoughts

If you've read this article and thought, "Hmm, that was interesting, but I didn't actually tick any marks on the above checklists," then you have extracted only a fraction of the checklists' value. The simple action of printing out the checklists and checking the appropriate boxes one by one is the first step to doing things differently. Remember: if you always do what you've always done, you'll always get what you've always gotten.

If you adhere to the advice laid out for you above, you'll be well on your way to a "best practice," search-engine-optimal Web site. Go astray, and your rankings and perhaps even your reputation with the search engines could suffer.

About the Author
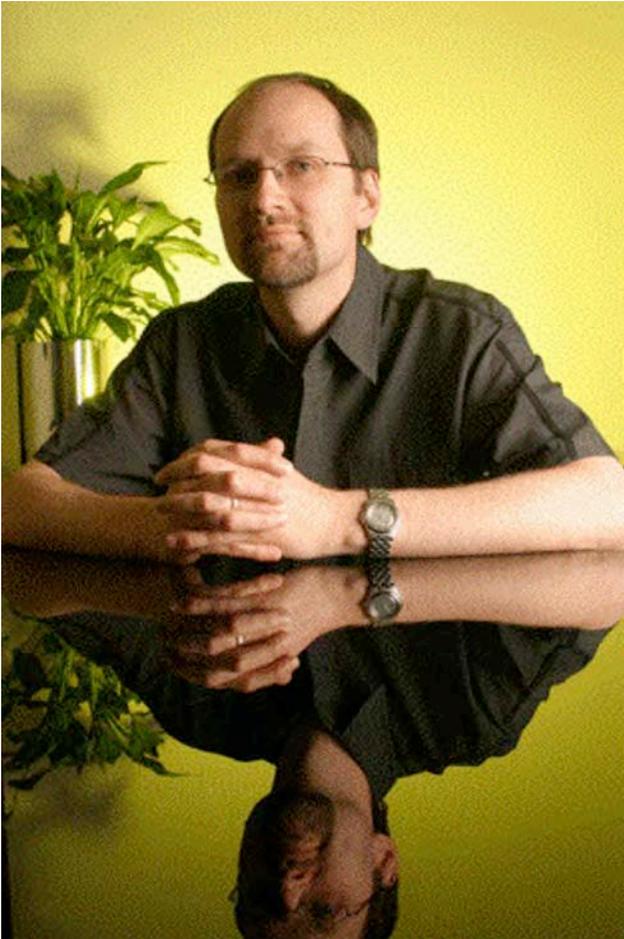
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Mr. Spencer is a contributor to Unlimited Magazine, Catalog Age magazine, NZ Marketing Magazine, and others. In 2000, he served as a columnist for the now-defunct U.S. magazine Building Online Business. Last year, he co-authored the analyst report "The State of Search Engine Marketing 1.0 – New Strategies for Successful Cataloging" published by Catalog Age.

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