On The Page Search Engine Optimization

Mark D. Hess

Wor-Wic Community College

CMP 220

James Kelley

27 October 2012

In simplest terms, a search engine is a piece of software that looks through its own databases of information searching for the search terms that a user has entered. These databases are filled by automated robots, called "crawlers" or "spiders", that use page links to navigate between pages. Every search engine has its own logarithms that are used by these "bots" to evaluate each page and rank it accordingly. Search engine optimization, or SEO, refers to the methods that a site designer uses to help ensure that a website achieves the highest possible ranking in search results. This higher ranking will make the site more visible to people using search engines to look for a product or service. While there are hundreds of different elements that search engines use to calculate the rankings (Nesbit 2012), they can generally be divided in to four major groups, On The Page Ranking Factors, Off The Page Ranking Factors, Violations and Blocking. ("What Is SEO", n.d.) Of these four groups, possibly the most important is On The Page Ranking Factors.

On The Page Ranking Factors can be considered the factors "that are entirely within the publisher's own control." ("What Is SEO", n.d.)These factors can generally be grouped into three categories: Content, HTML, and Architecture.

Content refers to the things that the user sees on your page. For example, does your page offer the viewer something that they are interested in, specifically something unique that they can't find on every other page with the same subject. Because users often leave web pages in less than twenty seconds, (Nielsen, 2011) it is important that your content catch their attention quickly. Providing new and unique material is one way to do that. Another important aspect of content is keywords. Using specific keywords that relate to your subject will make it easier for

search engines to find and evaluate your pages. Using keywords will also keep users on your pages longer as they grab their attention while they initially scan the page.

HTML content refers to the underlying code that you use to construct your page. Some of the most important tags that search engine "bots" look for are "title", "meta" and "header" tags. Most browsers display the content of the title tag in the Title Bar and also use it as the name for bookmarking. Search engines use the title tag for both display and ranking purposes. When the search engine displays the result of its search, it will use the title tag as the headline of the entry. While keywords in your title help with rankings, most search engines truncate long titles, so it is better to focus on two or three keywords that are important to your site rather than trying to fill the title with as many keywords as you can. (Sullivan 2010) Titles also tell search engines what the page is about, which helps the page rankings.

Another tag that can be used to describe the content of a page is the meta tag. While the meta tag is used more to describe a page, rather than directly affect the ranking of the page, it can help entice users to click on the page, which will help increase the frequency of hits which will help move the page up in rankings.

Header tags are "an effective way to communicate to the search engines and readers what the page is about." (Capshaw, 2008) The main header should be an <h1> tag, with each layer of subsections having a decreasing size (<h2>-<h6>). Search engines use these tags as "clues" to what a page is about. Using keywords in the headers can increase the chances that the page will show up in search results for those words. It is not, however, a good idea to overload the headings with keywords, as search engines can detect "keyword stuffing" and will lower the ranking or completely remove it from the results list.

Architecture is the "combination of organization, labeling, search, and navigation systems within web sites" (Morville & Rosenfeld, 1998), in other words, the structure of the website. The "crawlability" of a page is the ability of search engine "bots" to successfully navigate your pages. Because these "bots" use the links on your page to navigate, problems with those links can cause low rankings in search results. One of the biggest problems that search engines have is with Flash and JavaScript. Both of these can hide links, causing the "bots" to not see them and lowering the pages rank. The easiest way to deal with JavaScript is to put your scripts in .js files, that way the "bots" will not have to download it when they access the page. This will greatly increase the speed, and thus, the "crawlability" or your page.

Speed itself is another factor that search engines use when ranking a page. Along with putting JavaScript in separate files, you should also put CSS in separate files rather than embedding it. Using images is another thing that can slow down a website. Rather than not using images, there are ways to handle them that doesn't slow down a page as much. Resizing the images before you upload them will save time, so will using different forms of compression. Storing your images on a different domain (i.e. Flickr) can also make your page run faster. Most importantly, get rid of Flash. Flash is dead (J. Kelley, personal communication, September 5, 2012)

While there are many things that search engines use to rank pages in search results, the one that the developer can most directly affect is On The Page Rankings Factors. A good SEO strategy will involve ongoing content creation and other activities to help your website steadily move up in search rankings. (Johnson, 2012) By designing pages with the content, HTML and architecture geared towards optimizing the search engine results, the developer can greatly increase the chances that the pages will appear higher in results listings.

References

Beginners Guide to SEO. (n.d.). Retrieved from http://http://www.seomoz.org.

Capshaw, J. (2008, July 21*). SEO Header Tags* Retrieved from
http://www.mywebtronics.com/seo-header-tags.

Johnson, S. (2012, October 18).*The Shocking Truth About the Value of Search Engine
Optimization*. Retrieved from http://www.business2community.com/seo/the-
shocking-truth-about-the-value-of-search-engine-optimization-0306969.

Moore, J. (2012, October 25). *Some Advice on Search Engine Optimization* [Web forum
post]. Retrieved from http://www.warriorforum.com/articles/701417.

Morville, P., & Rosenfeld, L. (1998). *Information Architecture for the World Wide Web*.
O'Reilly Media.

Nesbit, P. (2012, October 22). *How Search Engines Work*. Retrieved from
http://ezinearticles.com/7345865.

Nielsen, J. (2011, September 12). *How Long Do Users Stay on Web Pages?* Retrieved
from http://www.useit.com.

Sullivan, D. (2010, December 21). *Writing HTML Title Tags For Humans* Retrieved from
http://searchengineland.com.

What Is Search Engine Optimization. (n.d.). Retrieved from http://searchengineland.com.