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A Featured Article from Our SEM Blog

Latent Semantic Indexing Changes SEO

By Nick Yorchak

The [search engine optimization \(SEO\)](#) industry continues to grow everyday. In just the past three years, SEO spending has increased in the neighborhood of 400%, and this trend is forecasted to grow even more in the near future. This year alone, over \$1 trillion will be allocated to online marketing efforts.

Yet while search engine optimizers (SEO's) have continued to use many of the same methods to increase the visibility and positioning of their clients' websites in search results, the search engines themselves have continued their evolution. Now SEO's must do the same in order to keep up with the constantly evolving search engine algorithms of Google, Yahoo, MSN, and a number of others.

Within the past year, many companies have no doubt noticed large relevancy fluctuations in the search engine rankings. While most SEO's keep scratching their heads and wondering what happened, others research and test to identify the cause of these changes. Then they use these findings to alter their online [SEO strategic process](#). But just how have these algorithms evolved? More importantly, what can we as SEO's do to retain top positioning?

One reason for this shuffling of results has been attributed to the inclusion of **latent semantic indexing (LSI)** technology into the search engine algorithms. Google, in fact, implemented LSI into its algorithm a few years ago and has continued to use it since.

But what is LSI and how does it affect the organic rankings? LSI is a system that allows search engines to identify what a page is about beyond matching the specific search query text. In other words, LSI looks for word relationships within page content, just like a human being would do. It determines the keywords of a page and then looks for related words that are semantically close. Therefore, LSI grants related words within page content a higher importance and value, while lowering the value of pages that only contain specific keywords and lack related terms.

Yet while LSI technologies don't understand the meaning of any of these words, the phrase relationships they identify *between* words are a major determinant of organic search engine positioning. For example, a page about McDonald's will naturally contain terms such as "hamburgers" or "Happy Meals." For this reason, pages that target a range of related keywords within the page content often have higher and more stable rankings for their primary keywords.

But how do we know what words or phrases Google would consider to be related? The best way to discover these semantic relationships is to perform a search of Google with the tilde (~) character in front of your query. For example, type "~hamburgers" into the search box and Google will return pages with bolded related terms. A search for "~hamburgers" returned the related terms "fast food," "ground beef," "burger," and even "fast food restaurant." Thus, Google expects to see related words like these within the contextual content of a page targeting the term "hamburger."

As you can see, when performing [SEO](#), it is advantageous to error on the side of too much information than not enough due to the fact that LSI expects to see related words and phrases.

This is especially true because Google uses LSI to evaluate the relevancy of your website's link profile. This means that Google identifies how relevant each of your external and internal links are to your keywords and website as a whole. This fact is another great reason to mix the anchor text of your links. If all your links are based around a particular phrase and never mention any related or similar phrases, your site's ranking will suffer thanks to Google's LSI algorithm.

As search engine algorithms continue to evolve and come ever closer to mimicking human behavior in order to return the most relevant results, we as SEO's must do our best to present page content in a way that is most [user-friendly](#).

The power of latent semantic indexing to identify relationships between words, within content, and even between pages is changing the way search engines determine relevancy results and position. As SEO's, we must utilize the power of latent semantic indexing to diversify our pages or we'll be forced to watch them slowly fade away.

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