



**How CMS can influence your
site's SEO rankings?**

If you are not the maker of BMWs, then most likely you are concerned with your site's rankings on major search engines. In fact, for many businesses (especially online businesses) search engine optimization is becoming the meat and potatoes of their marketing efforts. A site that is not being found by its target visitors is like a restaurant without a sign: you may offer great food and service, but no one knows that you exist!

SEO, or Search Engine Optimization, is a strategy intended to enhance recognition of a site by major search engines.

The goal: to have your website appear on or close to page one of search results on Google and other major search engines for keywords relevant to your business.

The result: being found by your potential customers means more traffic to your site and ultimately more sales.

Search engine optimization is a tough business since its tactics are based on thorough analysis of search engines' algorithms to determine which elements make certain sites rank higher than others. As search engines are constantly refining their algorithms to eliminate spam, the factors that affect site rankings also change. As a result, SEO ends up being an evolving process, especially for broad keywords where competition is very aggressive.

Many organizations today implement content management systems to facilitate the process of making website updates. A CMS typically includes the back-end where authorized users can manage the site content, and the front-end (the public website) where this content is rendered to the site visitors.

When an organization decides to implement a content management system, it typically considers an array of factors that influence the decision of selecting one content management solution over another: cost of the CMS, implementation time, built-in list of features, opportunities for customization, reliability of support. The importance of SEO-friendliness as a factor in the CMS selection process is often overlooked.

However, there are many ways in which a content management can affect the SEO rankings of your website site and either improve or harm your web marketing efforts.

The purpose of this paper is to explain how a content management system can influence the position of your site in major search engines, and things you should look for when evaluating a CMS from a SEO standpoint.

Factor #1: SEO - Friendly URLs

A "SEO-Friendly" URL basically means that the page's URL is descriptive of the page's content. For instance, "designer_clothes.html" is a SEO-friendly URL, and "page.php?page_id=231&topic=48763" is not.

The main reason behind the abundance of these non-friendly URLs is that the content of the pages underneath them is generated dynamically. Instead of creating, storing and maintaining hundreds or thousands of static pages, the system generates these pages on the fly by passing and decoding the URL's query string.

While most search engines are becoming smarter in recognizing and indexing the non-friendly URLs, sites that use descriptive URLs are still at an advantage when it comes to SEO.

A content management system is a dynamic web application. The user-created content is stored somewhere and then rendered on the public website. There are several ways a content management system can accomplish this task:

- A CMS will deliver your pages content using the non-descriptive URLs that are based on query strings.
- A CMS will use the URL-rewrite technique to make a query-based URL appear as in SEO-friendly manner
- A CMS may provide an option to convert your site into a set of physical HTML files with descriptive URLs. The catch here is to be sure that the dynamic portion of your site is not available to the search engines. In other words, your site needs to only contain the static HTML files, not the application files that can render the content of your pages. If both are available, then the search engines will see your site as two duplicate sets of content, which hurts your ranking rather than improves it.

Suggestions:

- When selecting your CMS software, make sure that it supports search engine friendly URLs
 - Ask your CMS vendor for a list of websites that use their content management product, check the internal links on these sites and make sure the URLs of those links are indeed self-descriptive.
 - Make sure that the proper technique is used to generate the SEO-friendly URLs.
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Factor #2: Meta Tags and Keywords

Meta tags are specified in the page headers. Except for the title tag, the contents of meta tags are invisible to your visitors, and their sole purpose is to provide the search engines with information regarding the page.

While populating meta tags is certainly not a guaranteed way to improve the rankings of your site, meta tags still remain one of the factors that impact your SEO rankings and site's visibility.

In the "static" world, meta tags are easy to control, since each page is a separate file and can be edited in Notepad. When CMS is deployed, the pages are generated dynamically, and having control over meta tags can be tricky, if possible at all.

Many content management systems don't allow the users to make the most out of utilizing Alt tags for their SEO purposes. The system may automatically generate the contents of these tags, often filling them in with duplicate content.

Suggestions:

1. When selecting your CMS software, ensure that you can manage the following for each page:
 - Page Title Tag
 - Meta Description
 - Meta Keywords

Factor #3: Placement of JavaScript and Style Definitions

For your site visitors the pages may appear clean and well-organized. The search engines, however, look at the HTML code behind the pages, and how it is structured. The higher at the top the relevant information appears, the better it is from the SEO standpoint.

Since a CMS generates the pages dynamically, you have little or no control over the code structure. A CMS may produce hundreds of lines of javascript code or style definitions before it renders the real content.

Suggestions:

1. Ensure that your next CMS software supports cascading style sheets
 2. Ensure that javascript and CSS definitions are not rendered at the top of each page, and are placed in a separate file instead. To do that, visit the sites that use this particular CMS, click on "View Source" in the browser and analyze the code
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that you see. If the code starts with more than 30 lines of gibberish, it's a clear sign of cluttered HTML code.

Factor #4: Use of WYSIWYGs, CSS and overall code clutter

Other reasons for code clutter are due to the fact that fonts, colors and other styles are defined inline instead of a separate file. WYSIWYG editors are often the core component of many CMS, as they provide your content writers with a powerful way to manipulate the pages' content. WYSIWYG editors, however, are often the strongest contributors of HTML code clutter, as the look and feel definitions they render are often repeated throughout the page.

Consider:

```
<div style="background-color:#dddddd; color:#444444;border-style:solid 1px blue;">  
<font face="Arial"><font size="2">Some text here.</font></font></div>
```

and

```
<div class="class_a">Some text here.</div>
```

In the first example the style and font definitions are embedded right with the content, in the second example the style definitions are placed in a separate location and are only referenced on the page.

Consider that every page can contains hundreds or thousands of places where the fonts, colors and layouts need to be specified. If style definitions are rendered in line every time they are used, the result is a cluttered HTML code that can negatively impact your SEO efforts.

Unfortunately, many WYSIWYG editors will embed these style definitions for each piece of your content instead of re-using the existing styles.

Improving readability of the text on a page is one of the simplest, most-effective SEO techniques. A content management system that is strongly based on CSS will eliminate much of the clutter.

In fact, your content contributors should have limited control over defining styles, fonts and other visual elements. Styling should be set in stone by a web designer. Your content contributors should reuse the styles defined by the designer to ensure that the site reflects the same professional and consistent look and feel.

There are other benefits to disabling the font definitions in the WYSIWYG editor. When you user cannot change the font size, she is more likely to use the pre-defined <H1>, <H2> and <H3> headers in the WYSIWYG control. Text placed between these tags receives a higher level of importance by the search engines. Proper use of these tags to render the headings can facilitate SEO.

Suggestions:

1. Ensure that your next CMS software strongly supports the use of cascading style sheets.
2. Ensure that the WYSIWYG editors reuse the existing style definitions instead of creating new ones for each piece of content.
3. Disable the font definitions in the WYSIWYG editors

Factor #5: W3C Compliant HTML Code

The page may appear to look good in most browsers but the HTML code beneath it may not be 100% valid, meaning that it doesn't comply with the standards of W3C. The code may miss a few HTML tags, or use a few out-dated or simply incorrect tags.

While these discrepancies may not be important to your visitors (assuming the page indeed renders its intended look and feel), W3C non-compliant HTML code can hurt your SEO rankings as search engines may have a harder time crawling your site.

When it comes to CMS, there are several ways to ensure the W3C compliancy of your site:

1. Select a CMS that does not allow users to make significant structural changes to the pages and the overall template. While the ability to update the site's template offers a greater level of flexibility and control over your site, such changes should really be made at a web master level, where the code validity as well as the adequacy of the overall look and feel can be ensured by a professional. Your content contributors are less likely to make mistakes in site's HTML structure, if their editing ability is limited to updating the content area of the pages.
2. Select a CMS that comes with code-validation utilities
3. If code-validation utility is not provided by a CMS, then ensure that your content writers use a 3rd party tool to validate the page's HTML prior to publishing the page.

Factor #6: Sitemap Generation

There are a few factors that determine if search engine robots continue to index the site's pages and follow links. If a robot is having trouble crawling your site because of ill-structured HTML or slow load time, it may start skipping pages and as a result, not index your site properly.

One way to avoid this problem is to provide a generic Site Maps for your site.

Most CMS solutions allow automated generation of site maps.

Suggestions:

- Select a content management system that comes with site mapping capabilities.
- Reference the site map with a link from your index page that includes the visible text "site map" or "sitemap".

Factor # 7: Image Alt Attributes

When it comes to images used by your site, search engines look at the images' Alt tags and filenames to determine the relevancy of the image. Your web contributors need to be allowed to enter the Alt tags and descriptive file names for the images they use in the content areas of the pages. If an image is a link, the Alt tag with the text descriptive of the destination page can be especially helpful in facilitating SEO.

Suggestions:

- Select a CMS that allows your users to have full control over image Alt tags and file names.
- Train your users to label images correctly: for multi-word file names use the keyword1-keyword2.jpg naming convention (with a hyphen or an underscore to separate the two words).

Conclusion:

The importance of how a content management system can impact your site's SEO ranking should not be overlooked. Implementing a content management system designed with SEO in mind, and properly training your content contributors on SEO best practices can make a huge difference in your marketing efforts.

About eIKore

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