

Content Management and Search Engine Optimisation White Paper

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1. Introduction

This paper will attempt to highlight some of the areas that any website owner should be looking into if you are serious about search engine optimisation, and how these areas can be managed by a decent SEO friendly [content management system](#) (CMS).

There are a number of factors that affect the rankings within search engines although the actual details are kept secret by the companies (Google, Yahoo! etc) so that people can't manipulate the rules and falsely accelerate their own ranks; this manipulation is often known as black hat SEO techniques. The danger is that the implementation of black hat techniques can often have the opposite effect; search engines don't appreciate people employing these techniques and if they feel you are guilty of doing so may well drop your pages down the rankings.

Some of these factors are more difficult to manage than others, such as other websites linking to your site. You can try and contact other websites and ask for links back to your site, but largely those links are just going to build up over time if you have decent fresh content that people are actually going to visit your site for.

So this paper is going to concentrate on the factors that you can manage. If you are using a CMS to power your site, it should be able to handle most or all of these factors. If it can't, it might be time to look for a new CMS!

1.1. Fresh Content

Adding fresh and relevant content to your site is essential. Websites tend to move on quite rapidly, especially in the age of blogging and user generated content. Blogging sites or news aggregation sites like digg.com which link to your white papers regularly archive their pages and so the number of links back to your website may disappear over time. You need to write regular white papers that are topical, incisive and full of good search engine optimised key words, rather like this one ;-).

Obviously a [content management system](#) will help you no end in managing fresh content on your site. Features like automatic archiving, publishing workflow and ease of editing will ensure that the content you create is not only fresh but error free and approved by the appropriate people. If it is easier for you to add content to your site, you are more likely to do just that. If the process is laborious and prone to error, it's going to get done less often.

1.2. In context linking

Whilst writing your next page or white paper, be sure to include links to other areas of your site. Intra page linking will increase the relevance of each page and create good solid links to similar content. Most search engines favour in page linking to linking through a constant navigation bar, although obviously you still need the navigation for usability purposes.

Make sure you are linking on descriptive keywords rather than the ubiquitous "click here". An example of a good link would be along the lines of;

WebDeck is a [content management system](#) that excels in search engine optimisation.



Here we are linking on the keywords “content management system”, one of our main keyword phrases, and the rest of the sentence has other relevant keywords in close proximity such as “search engine optimisation” and “WebDeck”. Those keywords are also indexed by Google. Also notice that the same keywords appear in the page title and the heading (H1) tag of the page that is being linked to, making this a strong link.

Again a good CMS will encourage good in context linking making linking easy to internal pages and suggesting phrases for good keyword linking. It will allow the editing of page titles, page meta data and heading (H1, H2, H3 etc.) tags.

1.3. Searchable content

When creating content for your website, make sure that it's in a searchable format. The best format for content is obviously web pages but many companies still upload white papers and presentations in PDF or MS PowerPoint format. If you do feel the need to retain a file based format make sure that the content is duplicated on the web or at least use a CMS that indexes popular file formats such as PDF, PowerPoint, Word and Excel.

The worst thing you can do is display all of your case studies or white papers as a list of documents to download. You have all that lovely relevant content that the search engines just can't index, and that is such a waste.

1.4. Search Engine Friendly URL's

This is an easy point. Search engines won't index pages that are hidden behind query strings. That means that if your web address URL looks like this one below, Google will have a far harder time finding any content on that page.

<http://search.bbc.co.uk/cgi-bin/search/results.pl?q=chemistry&tab=all&recipe=all>

Fortunately for the BBC the whole word links to their website, so their page rank will still appear fairly high up. What you really want is a nice clean URL like this;

<http://www.solidstategroup.com/Products/WebDeck>

This page will easily be indexed by Google and other search engines with no additional effort required.

All decent content management systems should generate all their content without query strings. They should also generate pages with multiple words in the URL with hyphens, not underscores or spaces, replacing spaces in the actual content. Like in this example from PropertyInvestment.co.uk, another site running our WebDeck content management system.

<http://www.propertyinvestment.co.uk/Finance/Buy-to-Let>

1.5. Page titles that link to Heading 1

When creating content for your site it's very important that the title of the pages relates to the content on that page. The best way of doing this is to make the page title (the bit between <title> and </title>) the same keywords as the main heading on the site (the bit between <H1> and </H1>).

If these two phrases are the same it confirms that the page is indeed talking about the same subject as the title of the page. It also helps to have only one heading <H1> tag on



each page so that there is no confusion about the actual subject (and keywords) on that page.

Obviously it helps if those keywords are listed elsewhere in the page along with other relevant content to increase the density of those keywords within that page.

Again any decent CMS will allow you to control page titles and headings, giving you ultimate control over the keywords and subject of your pages.

1.6. Defined headings

Headings are defined in XHTML as H tags. Typically websites use <H1>, <H2>, <H3> for indented headings, for bold, <I> for italic and other tags for lists and tables of information.

Use headings carefully within your content, the main heading tag <H1> should really only be used once per page. That is the subject of the page and other subheadings can be nested using the other H tags.

Your content management system should have these headings pre-defined in the styles agreed by the design and marketing departments and should appear in the standard corporate style. If your CMS allows you to change things like font sizes and colours it is likely you are going to have problems with headings, XHTML validation and design consistency.

1.7. Valid XHTML

This is a huge one. Make sure your site validates. Go to this URL and type in your website URL.

<http://validator.w3.org/check?uri=http%3A%2F%2Fwww.solidstategroup.com>

You can see that our site validates to XHTML 1.1. For SEO purposes it doesn't really matter which version of HTML or XHTML your site validate to just as long as it is valid.

If there is just one thing that your CMS should do for SEO it should generate valid XHTML and CSS. It should force content editors to upload valid content and should throw errors if the content they enter (like pasting in directly from MS Word) has non standard characters. True SEO CMS's will take content and transpose it into nice, valid XHTML.

WebDeck uses a plug-in editing pane called XStandard to achieve this, and therefore each site produced by Solid State Group validates to the latest web standards.

1.8. Style sheets

Your website should be created using cascading style sheets (CSS). This allows the actual site content to be separated from presentation and layout of the site. Google is really only interested in the content on the site, not the layout or styling. There are a number of default style sheets that can be used to style the content for specific applications. For instance when you click on print preview in modern browsers you may notice that the page that appears in the preview window does not have the navigation and other page elements. That is because the site has been defined to remove those elements when viewed through the print style sheet.



There is also a robot or spider style sheet. This allows us to detect a search engine spider and remove all the styling from the site showing only the pure content. We can also play around with the order of the site putting the content first and leaving the navigation links to last.

[SEO content management systems](#) will have tools to change the content available to robots as opposed to human visitors to make the most of the content, removing and reordering elements for the best overall effect.

1.9. Configurable Meta data

Standard web Meta data can be applied to the Meta tags in the head of an XHTML document. Most people now believe that this Meta data is rarely used for the purposes of ranking pages on popular search engines. Some believe that it is still used for summary text on some engines and some believe it is actually used for ranking on the smaller search engines.

Either way it doesn't hurt to have this information added into the site. Meta data comes in the form of description, author and keywords. A good CMS will allow you to modify this data per page of the site.

1.10. Content tagging

All content on a website should be able to be tagged with keywords that describe that content. Tagging content with relevant keywords allows that content to be used in very different ways. Take for instance the new Amnesty International Report website. All pages of the report are tagged with relevant keywords and those tags are then listed at the bottom of each article.

<http://thereport.amnesty.org/eng/Regions/Americas>

Scroll to the bottom of the page to see the use of article tags.

By clicking on each tag the system returns a list of results that are also associated with that tag allowing users to browse the content by topic rather than the enforced standard navigation.

The result for SEO is clear. By adding a high concentration of relevant keywords to each article the relevance of that article and therefore page rank will be higher. The extra intra page linking also helps with the page rank.

Tagging can also be used to improve the internal search engine by returning results based on content tags as well as indexed keywords in the content.

Most good SEO content management systems will allow for content tagging. Specifically, WebDeck uses the tags for SEO, improved search, page and feed personalisation and new content alerts.

1.11. Search engine XML sitemaps

Many modern search engines will look for an [XML generated sitemap](#) in order to be able to spider the site more easily. These XML sitemaps can be created by programmers and placed on the site, but a good SEO CMS will automatically create this sitemap and make it available to the search engine spiders.



2. Summary

If you are looking for a [content management system](#) that is going to help your search engine optimisation rather than hindering it, you want to make sure it has the following features:

- Intuitive and easy to use so that fresh content can be added to the site periodically
- Link management, allowing internal and external linking with SEO tips
- Indexing of popular documents like PDF, Word and PowerPoint
- Search engine friendly URLs
- Editable page titles and headings
- Maintains valid XHTML and style sheets
- Configurable Meta data and content tagging
- Generates XML sitemaps

These features along with a good knowledge of SEO tips will enable you to boost your website into the first few pages of any search engine. Don't just take my word for it; take a look at these rankings of some of our clients running WebDeck.

PropertyInvestment.co.uk - keywords property investment - Number 1 worldwide
<http://www.google.com/search?hl=en&q=property+investment>

National Aids Trust – keyword AIDS – Page 1 Worldwide
<http://www.google.co.uk/search?hl=en&q=AIDS>

Amnesty International – keywords human rights report – Page 1 Worldwide
<http://www.google.com/search?hl=en&q=human+rights+report>



About Solid State Group

Solid State Group is a content management, web applications and services consultancy, who focus on making your online presence dynamic and easy to manage, at a reasonable price. Our primary goal is to complete innovative and robust websites for our clients whilst maintaining a service second to none.

WebDeck content management system

Solid State Group's products allow you to completely control your company's brand on the internet. WebDeck is a complete [accessible content management](#) system but it's easier to think of it as the remote control for your website.

It is accessible - WebDeck produces WACG level A, Double-A, and Triple-A websites.

It is flexible - WebDeck can work with any kind of website design.

It is multi-user - WebDeck enables teams to work securely and seamlessly on a site.

It is secure - WebDeck has been tested by Deloitte consulting for FSA accreditation.

It is sticky - WebDeck comes with interactive tools such as forums, polls, quizzes, etc.

It has management tools - WebDeck has real-time integrated web statistics.

It has marketing tools - [OutReach](#) is an email marketing plug-in for WebDeck.

It uses open standards - WebDeck uses open standards like XML, RSS, CSV and SOAP.

It is platform independent - WebDeck runs on Java with a web front end.

Bespoke build services

Solid State Group also offer [bespoke systems design and development](#). Some websites need a little extra functionality that simply won't be available out of the box from any product. We specialise in capturing the exact requirements and translating them into a working site with stylish design.

Our special offer

Solid State Group offer a free consultancy meeting to capture requirements and give a 'no strings attached' estimate for systems design and construction. If nothing else, you will at least gain a well documented specification of your requirements, so if you are interested in our services, please do get in touch.

Contact us

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