SEO is the activity of optimizing Web pages or whole sites in order to make them more search engine friendly, thus getting higher positions in search results. Search engine optimization (SEO) involves designing, writing, and coding a website in a way that helps to improve the volume and quality of traffic to your website from people using search engines. While Search Engine Optimization is the focus of this booklet, keep in mind that it is one of many marketing techniques. A brief overview of other marketing techniques is provided at the end of this booklet.

Keywords: SEO, Meta tags, optimization, site

I. Introduction

SEO is sometimes also called SEO copyrighting because most of the techniques that are used to promote sites in search engines deal with text.

- SEO Stands for Search Engine Optimization.
- SEO is all about optimizing a web site for Search Engines.
- SEO is the process of designing and developing a web site to rank well in search engine results.
- SEO is to improve the volume and quality of traffic to a web site from search engines.
- SEO is a subset of search engine marketing.
- SEO is the art of ranking in the search engines.
- SEO is marketing by understanding how search algorithms work and what human visitors might search.
- If you plan to do some basic SEO, it is essential that you understand how search engines work and which items are most important in SEO.

In order to be listed in the search engines, your most important content should be in HTML text format. Images, Flash files, Java applets, and other non-text content are often ignored or devalued by search engine spiders, despite advances in crawling technology. The easiest way to ensure that the words and phrases you display to your visitors are visible to search engines is to place it in the HTML text on the page. However, more advanced methods are available for those who demand greater formatting or visual display styles:

The W3C (World Wide Web Consortium) has provided the guidelines by which websites and web pages should be structured and created. Here are the links to validate your web pages:

- Validate HTML/XHTML File against W3C Standard HTML/XHTML Validator.
- Validate CSS File against W3C Standard CSS Validator.

While doing verification you will get errors along with appropriate reasons. All the validations will be done using XHTML DTD which is a refined version of HTML.

2. Search Engine Optimization

There are two key aspects to any SEM (Search Engine Marketing) strategy: SEO (Search Engine Optimization), and PPC (Pay-Per-Click).

- Search Engine Optimization (SEO) is the process of refining your website so that it will be indexed and ranked by search engines, as well as leveraging your links from other sites
- Pay Per Click (PPC) advertising is advertising within search results and user only pays when the user clicks.
Your page title is used as a suggestion for the title in Google's search results. Describe your business in a concise, informative phrase.

Domain names are an important part of Google's search results. Choose a descriptive and easy-to-read domain name for your website. Sub-pages should also be easy to read. For example, use www.test.ro/custom-cakes instead of www.test.ro/prodid712345.

Meta descriptions are page summaries often used by Google and other search engines on the search results page. Write unique descriptions for each page in 160 characters or less.

Give your images short, descriptive file names.

The “alt” attribute describes the image. This helps Google understand what’s in the image.
SEO techniques are classified into two broad categories:
1. Techniques that search engines recommend as part of good design referred to as White Hat SEO
2. Techniques that search engines do not approve and attempt to minimize the effect of referred to as Black Hat or spamdexing.

**White Hat SEO**
An SEO tactic, technique or method is considered as White Hat if it follows the followings:
- If it conforms to the search engine’s guidelines.
- If it does not involves any deception.
- It ensures that the content a search engine indexes and subsequently ranks is the same content a user will see.
- It ensures that a Web Page content should have been created for the users and not just for the search engines.
- It ensures the good quality of the web pages
- It ensures the useful content available on the web pages

Always follow a White Hat SEO tactic and don’t try to fool your site visitors. Be honest and definitely you will get something more.

**Black Hat or Spamdexing**
*Spamdexing*: The use of manipulative techniques (e.g. repeating unrelated phrases, keyword stuffing, link farms) designed to increase the page rank of a website. Many search engines check for instances of spamdexing and will remove these pages from their indexes. Search engine organizations may block an entire website if it has used *spamdexing*. Keyword stuffing occurs when a web page is loaded with keywords in the Meta tags or in content. A link farm is also a form of spamdexing. A link farm is a Web page that is nothing more than a page of links to other sites. You should be wary of service providers who promise to help you boost your link popularity by automatically entering you into link exchange programs linking your page with websites that have nothing to do with your content.

An SEO tactic, technique or method is considered as Black Hat or Spamdexing if it follows the followings:
- Try to improve rankings that are disapproved of by the search engines and/or involve deception.
- Redirecting users from a page that is built for search engines to one that is more human friendly.
- Redirecting users to a page that was different from the page the Search Engine ranked.
- Serving one version of a page to search engine spiders/bots and another version to human visitors. This is called Cloaking SEO tactic.
- Using Hidden or invisible text or with the page background color, using a tiny font size or hiding them within the HTML code such as "no frame" sections.
- Repeating keywords in the Meta tags, and using keywords that are unrelated to the site’s content. This is called Meta tag stuffing.
- Calculated placement of keywords within a page to raise the keyword count, variety, and density of the page. This is called Keyword stuffing.
- Creating low-quality web pages that contain very little content but are instead stuffed with very similar key words and phrases. These pages are called Doorway or Gateway Pages.
- Mirror web sites by hosting multiple web sites all with conceptuually similar content but using different URLs.
- Creating a rogue copy of a popular web site which shows contents similar to the original to a web crawler, but redirects web surfers to unrelated or malicious web sites. This is called Page hijacking.

3. **On site optimization**

*Title Tags*
The title tag of any page appears at the top of Internet browsing software, and is often used as the title when your content is shared through social media or republished. Using keywords in the title tag
means that search engines will "bold" those terms in the search results when a user has performed a query with those terms. This helps garner a greater visibility and a higher click-through rate.

The title element of a page is meant to be an accurate, concise description of a page's content. It is critical to both user experience and search engine optimization. As title tags are such an important part of search engine optimization, the following best practices for title tag creation makes for terrific low-hanging SEO fruit. The recommendations below cover the critical parts of optimizing title tags for search engine and usability goals.

Be mindful of length Search engines display only the first 65-75 characters of a title tag in the search results. (After this length, the engines show an ellipsis "..." to indicate when a title tag has been cut off). This is also the general limit allowed by most social media sites, so sticking to this limit is generally wise. However, if you're targeting multiple keywords (or an especially long keyword phrase) and having them in the title tag is essential to ranking, it may be advisable to go longer.

Place important keywords close to the front The closer to the start of the title tag your keywords are, the more helpful they'll be for ranking and the more likely a user will be to click them in the search results.

Meta Tags
Meta tags were originally intended to provide a proxy for information about a website's content. Several of the basic meta tags are listed below, along with a description of their use.

Meta Robots
The Meta Robots tag can be used to control search engine spider activity (for all of the major engines) on a page level. There are several ways to use meta robots to control how search engines treat a page:

- index/noindex tells the engines whether the page should be crawled and kept in the engines' index for retrieval. If you opt to use "noindex", the page will be excluded from the engines. By default, search engines assume they can index all pages, so using the "index" value is generally unnecessary.
- follow/nofollow tells the engines whether links on the page should be crawled. If you elect to employ "nofollow," the engines will disregard the links on the page both for discovery and ranking purposes. By default, all pages are assumed to have the "follow" attribute. Example: <META NAME="ROBOTS" CONTENT="NOINDEX, NOFOLLOW">
- noarchive is used to restrict search engines from saving a cached copy of the page. By default, the engines will maintain visible copies of all pages they indexed, accessible to searchers through the "cached" link in the search results.
- nosnippet informs the engines that they should refrain from displaying a descriptive block of text next to the page's title and URL in the search results.
- noodp/noydir are specialized tags telling the engines not to grab a descriptive snippet about a page from the Open Directory Project (DMOZ) or the Yahoo! Directory for display in the search results.

Meta Description

```
<meta name="robots" content="noindex,nofollow">
```
The meta description tag exists as a short description of a page’s content. Search engines do not use the keywords or phrases in this tag for rankings, but meta descriptions are the primary source for the snippet of text displayed beneath a listing in the results.

The meta description tag serves the function of advertising copy, drawing readers to your site from the results and thus, is an extremely important part of search marketing. Crafting a readable, compelling description using important keywords (notice how Google "bolds" the searched keywords in the description) can draw a much higher click-through rate of searchers to your page. Meta descriptions can be any length, but search engines generally will cut snippets longer than 160 characters, so it’s generally wise to stay in these limits.

In the absence of meta descriptions, search engines will create the search snippet from other elements of the page. For pages that target multiple keywords and topics, this is a perfectly valid tactic. There are few important tips for good meta description tags:

- Use keywords in your meta description tag.
- Try not to repeat the words overly often, but try to use multiple syntaxes of your key words.
- There should not be more than 150 characters in a description meta tag of a single web page.

Meta Keywords

The meta keywords tag had value at one time, but is no longer valuable or important to search engine optimization.

URL Structure

URLs, the web address for a particular document, are of great value from a search perspective. They appear in multiple important locations. Since search engines display URLs in the results, they can impact click-through and visibility. URLs are also used in ranking documents, and those pages whose names include the queried search terms receive some benefit from proper, descriptive use of keywords. URLs make an appearance in the web browser’s address bar, and while this generally has little impact on search engines, poor URL structure and design can result in negative user experiences.

Canonical Content

Duplicate content is one of the most vexing and troublesome problems any website can face. Over the past few years, search engines have cracked down on “thin” and duplicate content through penalties and lower rankings. Canonicalization happens when two or more duplicate versions of a webpage appear on different URLs. This is very common with modern Content Management Systems. For example, you offer a regular version of a page and a “print optimized” version of the same content. Duplicate content can even appear on multiple websites

```html
<link rel="canonical" href="http://www.test.ro/blog"/>
```

This tells search engines that the page in question should be treated as though it were a copy of the URL www.test.ro/blog and that all of the link & content metrics the engines apply should flow back to that URL.

Robots.txt

The robots.txt file, a product of the Robots Exclusion Protocol, is a file stored on a website’s root directory (e.g., www.google.com/robots.txt). The robots.txt file gives instructions to automated web crawlers visiting your site, including search spiders. By using robots.txt, webmasters can indicate to search engines which areas of a site they would like to disallow bots from crawling as well as indicate the locations of sitemap files and crawl-delay parameters. You can read more details about this at the robots.txt Knowledge Center page. The following commands are available:

- Disallow - Prevents compliant robots from accessing specific pages or folders.
Sitemap - Indicates the location of a website's sitemap or sitemaps.
Crawl Delay - Indicates the speed (in milliseconds) at which a robot can crawl a server.

An example of Robots.txt
#Robots.txt www.test.ro/robots.txt
User-agent: *
Disallow: # Don’t allow spambot to crawl any pages
User-agent: spambot
disallow: /
sitemap:www.test.ro/sitemap.xml

References