Search Engine Optimization

**Search engine optimization** refers to making an improvement in an on your website in order to gain more exposure in Search Engine results.

There are several search engines available, these include:

* Google
* Yahoo
* Ask
* Wolframalpha
* DuckDuckGo

**Aim of SEO:**

SEO attempts to rank the website in all of the above search engines.

For those training, we shall focus on Google and Bing.

**Note: 1.** SEO is part of Digital Marketing.

There are three main types of SEO. Namely:

* **Offpage SEO-** This is where we focus on outside the website.
* **Onpage-** Focuses on the website itself
* **Technical-** Handles the technical part of the website like Speed etc.

**2.** Not all websites are optimized the same way. But all of them have some common strategies for optimization which we are going to look at. Examples of websites that we have include: CMS/wordpress site, Local website, International website and E-commerce website.

**SEO Fundamentals**

**Important Terms used in SEO**

**Search Engines-** These are software which contains information databases to allow users to access webpages using specific keywords.

**Algorithm**

**Google Algorithm**

**Keyword stuffing.**

This refers to the excessive use of the same keyword in a webpage or sentence.

**Traffic-** This refers to the total number of users visiting a website. Traffic can be either paid or organic. Paidtraffic comes from the ads displayed on SERP (Search Engine Results Pages).

**Organic traffic-** This refers to the traffic coming from clicking links on the search engines.

**Crawler-** It’s also called a **Spider.** It’s a program which reads the source code of the webpages in order for them to be ranked accordingly.

**Googlebot-** It works in the same way as the Crawler and spider (reading source codes), but the difference is it fetches the information and stores them in local database.

**Crawl Frequency**

This refers to the frequency of the search engine/Google Crawls crawling a website. The more the number of times a website is being updated, the more the number of times it’s crawled.Because one can’t determine when their website needs to be crawled next, one can use **Fetch as** **Google option** in the **Google webmaster** so that the search engine may know that the content on the website has been updated.

**Crawl depth-** This refers to the extent to which a crawler indexes a website. There are always many webpages and are usually arranged in Hierarchy. The page which appears at the lowest level of the hierarchy will have a little chance of being ranked.

**Robots.txt-** It’s also known as the Robot exclusion protocol**.** It’s a text that is uploaded to the site’s root directory.

Importance: This file tells search engines crawlers which web pages, folders, or files, are not to be crawled or indexed.

**Sitemap-** This is an XML file that contains all the URL’s of the website. This file also contains information about the priority of the URl’s and also when should be changed or modified.

Importance: It helps to identify and also crawl the urls of the website.

**Page Rank (PR)-** This is a special algorithm being used by search engines in order to rank websites based on the linking algorithm.

**Domain authority (DA)-** Is a scale which search engines uses to determine the authority of a website. It ranges from 1-100, 1 is the lowest while 100 is the highest. The higher the DA, the more trustworthy is your website.

**Site’s root directory-**

**Keyword Density**

This refers to the ratio of the number of times a word appears in a website page to the number of words in that page. The optimal ration of keyword density is always.

**URL-**

**Canonicalization-** This is where similar URLs of a website are converted into canonical or standard form.

E.g. when a user types digitalexperts.co.ke, [www.digitalexperts.co.ke](http://www.digitalexperts.co.ke) all redirect to the standard Url www.digitalexperts.co.ke.

**Blog comment spam-** This is where one comments copied or irrelevant content. Or it may also refer to promotional link or texts in the comments section of the blog. The blog spammers usually targets the websites which automatically approves comments.

**Black hat-** A technique where unethical tactics are used to improve the page rank of a website.

**Gray hat -** This is an SEO technique which uses the black hat strategy but not up to the point of getting penalized.

**White hat-**  This is the technique that follows Google guidelines and it improves the page rank of the website.

**Keyword-** This is a query which a user inserts on search engines.

**SERP (Search Engine Results Pages) –** SERP is a result page of a search engine which displays the answer to the user’s query.

**CTR (Click Through Rate)-** This shows the percentage of the users who click on a specific link usually placed in an ad, website page or in an email. The higher the percentage, the more the people who went through.

**Impressions-** This is where a visitor takes the desired action when they are visiting a website. It includes download or registration, membership sign up or a purchase. **E.g.** one visitor can view 4 pages which translates to 4 impressions. Two visitors can view 4 pages which generates 8 impressions.

**Meta description-** These are a few lines of the website that appears on the SERPs.

**RSS (Really Simple Syndication) -** This is a technology which allows users to subscribe to content and get automatic alerts whenever updates are made. The popular RSS readers available include.

* Feedly
* FeedReader

The users’ needs these readers in order to receive all the updates.

**Landing Page-** This is a page on a website which has been optimized in order to act as an entry to the site. When the users are redirected from external links, this is where the visitors will be led first.

**Search Engine Algorithm**

**Algorithm-** These are step by step instructions used to solve a particular problem.

Google Algorithm follows the same steps and it changes quite frequently.

**Reasons why Search Engines Updates their results.**

Because the priority of the search engines has always been to deliver the best results to the users, hence they frequently update their algorithms. Google also changes it’s algorithms in order to get rid of the content and websites that can harm the users. More so the websites that have used the black hat strategy.

**Reasons why a website can be penalized.**

* Using Black hat strategy. For example keyword stuffing, hidden content and links.
* Excessive use of reciprocal links
* High number of duplicate links. That is, internal 404 errors
* Buying links with the aim of increasing backlinks coming to the website.
* Missing sitemap data
* Broken external links
* Low loading speed
* Excessive blocking of the website using Robots.txt file.
* Overusing the meta tags
* Excess affiliate links in the website
* Hacked content
* Excess outbound links
* Over optimization of the website
* Many error codes on the website like 302 and 500.
* Domain name with a bad reputation
* Link spamming- using multiple links at one place.
* Poor mobile websites

All these reasons might not be the exact reasons why your website is penalized, however, they play a bigger role in the process.

**How to know if the website has been penalized.**

Penalization of the website can either be manual or automatic. If it’s manual you will be told but one can’t know that they have been targeted.

Automatic penalty occurs due to change in algorithms and one can know based on the following:

1. The website isn’t ranking well anymore for any keyword of your brand name.
2. All the pages that used to be in the first page of Google are slipping to other pages.
3. Dropping of the page rank to like a zero.
4. If the website doesn’t appear anymore in the search engine results pages
5. If you run like site:yoursite.com keyword it gives no results
6. If the listing on Google isn’t home page rather a page on your site

**How to recover from a Penalty.**

* Disavow the links that are troublesome. To disavow means telling Google not to consider those links when crawling the ranking the website.
* Try manually remove the links as Disavow isn’t perfect.
* If your penalty was manual, try to appeal for reconsideration.
* Wait- It takes some time for Google to update their algorithm and act on the chances one has made.