

Introduction to SEO Optimization for Enhanced Digital Marketing Outcomes

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Abstract- There are billions of people all over the world who are using search engine for any query if they want to search. They are mostly interested in the top most results they hardly go to the next pages. The main objective behind doing SEO in a website is to get more number of visitors and getting more and more traffic to the website. Following SEO rules designed by each search engine may help in good ranking of the website otherwise it may lead to penalization of the site. SEO is all about optimizing your website in an effective and efficient manner.

Keywords- Search Engine Optimization (SEO), On-page, Off page, Black hat SEO, White hat SEO, Google updates, Google tools, Website ranking.

I. INTRODUCTION

Internet Marketing refers to advertising, promotion of products or service using internet. In this service refer to any kind of service like web service. And product refers to sale of any product. Online advertising can be done with:

- Search Engine Optimization (SEO)
- Social Media Optimization(SMO)
- Pay Per Click(PPC)
- Affiliate marketing
- Email marketing

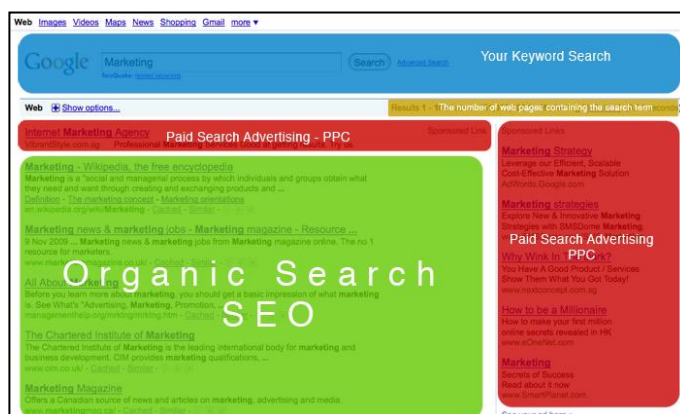


Fig. 1 – Page layout of a normal google search

II. TERMINOLOGY

- (i) Search Engine: A search engine is a software system which is designed to find the information on the internet world wide. The search engine results usually displayed within a line of outcomes often referred to as search results pages

(SERPs). The result displayed is often a mixture of websites, photographs, along with varieties of documents [1].

- (ii) Organic results: The result which directly comes through SERP and not through any Off Page Optimization is known as organic results [2].
- (iii) The task of gathering information regarding web pages or websites is carried out by an agent referred to as any crawler, spider, or robot. The crawler actually examines every link and websites, along with it gathers crucial content in each and every websites, which are then subsequently within the database which powers a search engine [1].
- (iv) Googlebot: Googlebot is the search bot computer software used by Google to list a new website or a webpage. Crawling, Caching and indexing of a website takes place through Googlebot by obtaining information specifics by that website or a webpage [3].
- (v) Anchor Text: Anchor text is usually a clickable hyperlink that is generally known as link text, link label and link title. The keyword within the anchor text might increase the ranking of a web page which will get the particular incoming links [4].
- (vi) Keyword: Whatever we type in the search engine is known as keyword. It might be anything. Keyword is a word that is used for searching through Search Engines in order to get results related to your searched query [4].

III. PREPARE YOUR PAPER BEFORE STYLING

- Search engine optimization (SEO) is the technique of changing the position of a website or a web page in a search engine's search results (Organic or Natural results). It is free of cost.
- It takes minimum 6 months for a site to come to the top position.
- And to come to top it depends on keyword and the work done [5].

IV. SEO TECHNIQUES

There are two types of SEO Techniques are

- White Hat SEO
- Black Hat SEO (Negative SEO)

A. Black Hat SEO

Black Hat SEO or Negative SEO is a popular term for Spamming Tactics. This means that when we do not follow the rules and regulation of search engine. Some of the black hat SEO techniques are [6]:

- Providing duplicate content on the page
- Getting back links from spammed sites.
- Giving keyword stuffed
- Cloaking
- Google Bowling
- Doorway pages
- Hidden text

B. White Hat SEO

White Hat SEO is one of the SEO techniques that a Search engine always likes. Use of SEO techniques, tricks and tactics by following search engine rules and regulations, algorithm and policies are known as White Hat SEO [7].

V. ON PAGE OPTIMIZATION

On-page optimization is one of the types of SEO that refers to factor that gives outcome to a website or web page ranking on SERP (Search Engine Results Page).

On-Page Optimization means controlling a webpage by you or by your page coding.

A. Site Analysis

In this we analyze the website in terms of what kind of site it is and what all services it is providing along with all the work does the website do or is providing to the user and finally what is its category which may be E-commerce or any service website [8].

Jabong, flipkart: - E-commerce website. These websites provide online shopping and store.

Educational website (college or school website) - service website.

OLX- classified website

In site analysis we also check that how's the website looking from an SEO point of view and is it attracting new prospects or selling products and services.

B. Keyword analysis and Keyword research

Keyword analysis is the process of finding the popular search terms which the user usually type in search engine.

There are a few keywords which the user usually type while searching any product or service:-

- New
- Best
- Online
- Cheap
- Latest
- Services
- Name of the product then any place like in India/Delhi NCR.

Keyword research is when we find the keywords for our website using a tool Google Ad word. In this we see the competition and number of searches.

There are three types of keywords:

- Major: In this we only see more and more searches. We do not see competition.
- Middle: In this we more searches and less competition.
- Long: It is the mixture of above two keywords. In this we find such words which have less searches and less competition [8].

C. Meta Tag Creation

There are several Meta tags used in HTML for SEO are Meta Title, Meta Description, Meta Keywords and Robot tags.

Syntax-

```
<Title>..... </title>
<Meta name="description" content="....."/>
<Meta name="keyword" content="....."/>
```

Meta Title- Title is the most important tag for a good SEO of a webpage. These tags should be located within head section. A good title tag should contain 65 characters.

Google won't penalize your page if it contains title with more than 60 characters and it skips the remaining characters.

Meta Description and Keyword

A description tag should explain a webpage and it should contain keywords but don't stuff all the keywords. Useless description would affect your webpage [9].

- A description tag should contain 150 – 170 characters.
- Meta keywords should contain less than 250 characters. Now Google won't consider Meta keywords as one of the ranking factor.



Fig. II – Demonstration of Title tag and Meta description

D. Image Optimization/ ALT Tag

Search engine only reads content. They don't read images as images generate a lot of traffic. If we want search engine to read our images for that we must know how to optimize images to score more of its traffic. This can be done with the alt tag. Search engine reads alt tag as a name for the image.

One of the easy processes to optimize the content of a page is to focus on the images. But most SE doesn't read images for that we need to optimize it [8].

E. Web Page Code Optimization

Html has two standards for division:

- Table (tr,td): According to the SEO point of view this is not the correct way. It is basically used for bulk email.
- Div tag: According to the SEO point of view this is the correct way. Div tag should be used for optimization.

F. Backlinks

Back link means incoming links to a website or webpage. Those links are also known as incoming links, in links, inward links etc. Those back links which are putted in different websites for better ranking of your site.

Getting back links from high PR and relevant site is always good. In links from .org, .edu sites would increase your website or webpage ranking on SERP. Do-follow links are better than No-follow links.

We can check the backlinks with a tool "open site explorer".

- Domain authority: what is the importance of domain according to the backlinks.
- Page authority: It means page importance according to the backlinks .
- Total links: It shows the total number of backlinks putted in the different website [10].

G. Page Rank and Alexa Rank

- This Page Rank is an Algorithm used by Web Search Engine. PR of a web page is calculated by number of backlinks that received from other high PR webpage.
- In starting it gives NA (not available).
- It shows ranking from 0-10.
- We can check the page rank by a tool "prchecker.info".

Alexa rank is an actionable analytics for web which ranks a website country wise and worldwide. It gives value according to the user [11].

H. Header Tag

The header tag specifies heading for the document or section. It is used for SE. This tag is used to provide heading on a webpage. In this tag we use major keyword because crawler takes the keyword and provide the importance.

H1-H6 headings are used. H1 is the most important heading. H6 is the least important heading.

```
<div id="tagline">  
  <h1>Inbound Internet Marketing Blog</h1>  
  <h2>SEO, Blogging, Social Media, Landing Pages, Lead Generation and Analytics</h2>  
</div>
```

Fig. III – Syntax for applying headings in HTML

I. URL Structure

There are two types of URL

Dynamic URL:- A dynamic URL is-

- Long URL (=,?, %, &)

- Google does not give priority to this type of URL as it is too long and in this type of URL keyword is used.
- Search engine do not read such URL.



Fig. IV – Example of a dynamic URL

Static URL:- A static URL is-

- Short URL do not use such characters (=, ?, %, &).
- Google gives priority to such URL in which these keywords are used.
- Search engine read such URLs [12].



Fig. V – Example of a static URL

VI. OFF PAGE OPTIMIZATION

Off Page Optimization is also one of the types of SEO that are not controlled by the page coding [13].

Off-page optimization can be done by:

- Directory submission
- Social bookmarking
- Local listing
- Classified
- Yahoo answers
- Press release

VII. GOOGLE ALGORITHMS (UPDATES)

- Penguin - The goal of Penguin is to reduce the trust that Google has in sites that have cheated by creating unnatural back links in order to gain an advantage in the Google results. While the primary focus of Penguin is on unnatural links, there can be other factors that can affect a site in the eyes of Penguin as well. Links, though, are known to be by far the most important thing to look at.
- Panda Algorithm - The purpose of Panda was to try to show high-quality sites higher in search results and demote sites that may be of lower quality. Often stealing the information from other sites, in order to create large numbers of pages with the sole purpose of ranking well in Google for many different keywords [14].
- Pirate – Pirate update is like a filter which catches the users or their websites who use or reproduce another's work deemed to be violating copyright law.
- Authorship - Over the past year, you may have noticed that search engine results pages (SERPs) have increasingly become more visual, with little pictures of the author next to the articles. The images are pulled from the author's Google+ profile, along with some other information, like their name

and the number of Google+ followers they have [15].

- Hummingbird – It is a search algorithm used by Google to know the whole query and show the desired output to the user so that the crawler frames the meaning of the whole query and show the desired output to the user [16].

VIII. TECHNIQUES

Google Tools

- Analytics: extensive website statistics
- Webmaster Tools - Google Webmaster Tools is another free tool which improves and optimizes websites by giving a clear picture of exactly what is going on the site. You can track your website's keywords, sitemap, links, errors, crawling statistics, etc.
- Ad words: search engine marketing.
- Trends: what are people searching for?
- Insights for Search: helps find keywords

IX. METHODS TO IMPROVE WEBSITE RANKING

Link building is a process of increasing SE ranking and traffic by generating inbound links to a particular Website. These are some of the methods to improve website ranking and visibility.

- Make the page titles unique and accurate.
- Improve the structure of URLs.
- Make website easier to navigate.
- We should offer quality content and services.
- We should make use of the "description" Meta tag.
- Use heading tags appropriately.
- Optimize use of images.
- Make effective use of robots.txt.

X. CONCLUSIONS

The main objective is to tell the user how can they optimize their website in a better way and also how the ranking of a website can be improved so that the website comes to the top pages and improve its accessibility in order to gains more of traffic and sales. As nothing is perfect in this world and there is never an end for anything, so there is always a scope for the development and its enhancement. SEO also has some limitations and drawbacks that do not permit the system to be 100% accurate. So these things can be removed up to certain stage in PPC (Pay Per click). As in SEO there is always the search engine that is responsible for each and thing.

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