Review on Search Engine Optimization

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Abstract – Search Engine Optimisation (SEO) is the activity of optimising and affecting the visibility of a website and its webpages in the organic(unpaid) results of a search engine in order to increase its web traffic. Major search engines such as Google, Bing, Yahoo, all have web crawlers that look into certain factors that affect search visibility of web pages on them. SEO is a process in which it takes months for the results or the changes in ranking to be seen. It may target different kinds of search, including but not limited to map search, news search, video search, image search and local search. Basically it's about competing with other websites of the same or similar niche and working on towards making your website rank higher and show up above other websites in the search engine results page. This has become a major tool in today's digital marketing strategies to pull out relevant visitors or customers to your website. This technique can also be used for reputation management of brands online by making sure web pages with relevant and good information about brands and their respective products rank higher than others. This research is based on reviewing various techniques and practices that are used to make websites search engine friendly.

Index Terms – Search Engine Optimization, Search Engine Ranking, Digital Marketing, Web Crawling.

1. INTRODUCTION

Search Engine Optimization is a part of Digital Marketing that has been around in use since 1990. The dynamics in the development of techniques over the years for optimized search results has made it significantly different from what it has been over the past decade or two. SEO is the process of optimizing your website in such a way that a search engine ranks your website higher than millions of others competing in the same niche. Basically it is about making your website rank higher on popular search engines like Google, Yahoo! and Bing. This process is helpful in driving relevant and organic traffic to your website. [1]

SEO is a process that shows visible results in the scope of months and years. It is among the first steps taken to market your website within the spectrum of efforts made in the Digital Marketing strategy to get the message to your potential customers. SEO has become an extremely competitive are with every website competing with others to get themselves on the first page of search engine results for their respective niche. This lead to division of SEO practices into legal or white SEO and illegal or black SEO which are both contrast to each other.

A search engine involves different activities which help in delivering relevant results.

1.1 Crawling

It is the process of fetching and indexing web pages linking to a website on the world wide web. It is performed by a program called web crawler or automatic indexer (Googlebot in case of Google).

1.2 Indexing

It is the process of feeding the crawled web pages in a huge data warehouse. This is done for assigning the web pages relevant keywords for later retrieval by the search engine for specific search queries.

1.3 Processing

For specific search queries, the search engine looks up on the data warehouse of its indexed web pages, matching the search string to the associated keywords. [2]

1.4 Calculating Relevancy

In the real world scenario, there would be many web pages relevant to the given search string. Each search engine has its own unique algorithm that calculates the relevancy of a web page to the given search string. Most popular factors used my major search engines that affect the relevancy of a web page are put forth under the SEO processes. [3]

1.5 Retrieving Results

It is simply the process of displaying the relevant results in the web browser. Major search engines keep on updating their relevancy algorithms often which may result in a shift in their search engine rankings over time. Although the fundamental operations used by all search engines are the same, minor differences in the algorithms between them lead to major differences in the subsequent results.

2. SEO PROCESS

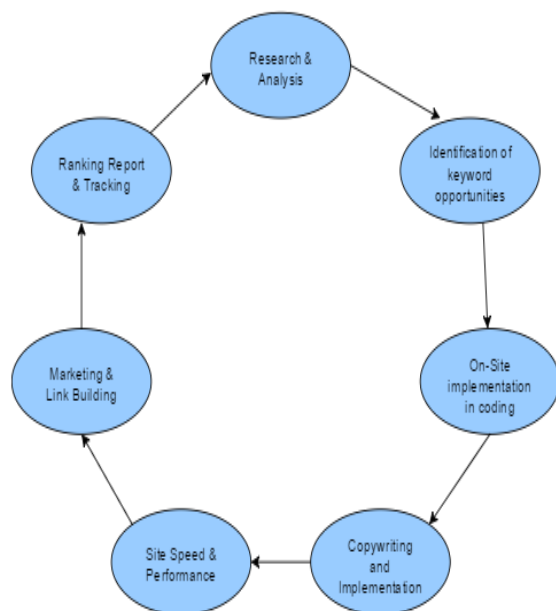SEO process involves many steps, all of them are described in Figure 1.

Figure 1 : SEO Process

SEO is mainly of two types:

1. ON PAGE SEO:

On page SEO refers to the SEO practices implemented internally i.e. within the scope of the webpage, its websites and its code. Keywords in Title, Description and Meta Tags, Sitemap, Mobile Optimisation, Quality and Uniqueness of content, Frequent Content Updates, Internal Links, Outbound Links are all factors affecting it.

2. OFF PAGE SEO:

Off page SEO refers to the SEO activities done externally or on other sites to increase its search engine ranking. Common Off page SEO factors include Server Location, Speed and Latency, Webmasters Tool integration, Quality and Quantity of Back links, Social Bookmarking, Page rank of website, Link Relevancy, Link Anchor, Blog Posting, Guest Blogging, Leveraging Twitter & Facebook, SMO.

3. METHODOLOGY

3.1 Free Directed Traffic

The main advantage of SEO is that once you get to achieve the ranking of your website to the first page of the search engine rankings, you start to get free organic traffic as long as you keep it running. This free traffic can be further used to monetize your website using AD's, e-commerce or some other source.

High Roi

Long term Return On Investment is one of the main advantages of SEO. Although would take significant amount of time and effort to make your website rank among the top search results, the constant stream of cashflow that it returns in long term is significantly higher than the initial investment.

High Sales

Increase in visibility and accessibility leads to higher sales.

Cost Effectiveness

Marketing using SEO does not involve much cost. A properly designed and optimised site brings relevant traffic organically for no cost in contrast to paid traffic though advertisements. When compared to PPC or Adwords, using SEO to rank on top involves much lower promotion cost in the long term perspective.

Better Usability

The site is easily available to a large population of users online, making it possible to reach out to masses.

4. USE OF SEO IN SEARCH ENGINE REPUTAION MANAGEMENT (SERM)

The perception of a brand image in the mind of customers is dependent on the content, reviews, feedback and ratings that they look up online and make their investment decision accordingly. This makes your brand reputation one of your most valuable asset. SERM is all about maintaining your brand reputation on the search engine results.

KEY BENEFITS OF SERM

- Primary benefit of SERM is works towards removing unwanted and negative mentions about your brand, getting the negative press to shift off the first page in search engine results. SEO practices are used in order to bring the high quality, and high rated content rank above the negative ones in the search results.

- Continuous monitoring of your brand online via Google and social media makes you aware of what's being said about your brand in the online space so action can be taken accordingly if needed.

- Managing online reputation can lead to higher visibility in search engine rankings. Search engine such as Google tend to place businesses with higher ratings above the lower ones while displaying results using their knowledge graph, resulting in promotion of your brand online.

- Working on SERM to achieve a high brand reputation online leads to higher sale volumes, larger cash flows and a stronger business.

5. CONCLUSION

Optimized websites rank higher on search engines and get higher number of organic visitors. This paper is based on reviewing various available techniques for optimizing websites

and their web pages and make then search engine friendly. It also focuses on using the SEO process to build a good brand image online by working on optimizing good quality pages in order to make them rank higher than the bad ones. Finally, I have also suggested my own observed methods for search engine optimization. As a future dimension to this research, I intend to develop an effective and accurate system for search engine optimization for obtaining a higher rank for the websites in the search results.

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