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SEO Techniques to Increase the Visibility of a Website

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Abstract: Optimization of the website in order to increase the traffic in an organic way is called search engine optimization (SEO) various techniques are adopted to achieve the same. The proposed work discusses about some of the techniques used to perform optimization.

Keywords: Optimization, Search engine, Traffic

I. INTRODUCTION

Searching information online is now everyone's routine. Whether it can be information regarding academic, hobbies, travelling or for their daily needs. The search engine has a complex task of exploring over the internet to get the relevant websites which matches the search data. Since, there are billions of websites for each category of search, the search engines will rank the website & display accordingly[3]. The key to get higher ranking is by Search engine optimization. Where different methodologies are followed to increase the visibility of the website.

II. LITERATURE SURVEY

Lalit Kumar et.al [1] has discussed about the working of search engines and the techniques such as On-page and Off-page optimization. Sandhya Dahake et.al [2] has discussed about crawler based search engines and its execution. Wu Oil et.al [4] has discussed about the factors considered for website optimization such as page title etc. Zhou Hui et.al [5] has discussed about website content optimization and how frequently a website need to be updated which affects the ranking. C. Dinesh et.al [6] has discussed about website structure optimization and the navigation buttons in the webpages should not be too complex.

III. HOW DOES SEARCH ENGINES WORK

Search engines follow 3 basic steps

- 1) *Crawling*: Every search engine has crawlers which are used to scan the web based on the keyword specified by the user. When a web page is scanned then these crawlers will navigate to other web pages based on the links present in the current web page.
- 2) *Indexing*: Once the crawlers render the content of the page they are organized & shown as search result.
- 3) *Ranking*: Includes positioning of the website in the search result depending on the content relevance to the search term.

IV. SEO PROCESS

- 1) *Technical SEO*: Focus is only on Crawling & Indexing. No Importance on content of search
- 2) *On-page SEO*: Concentrates on keywords (tokens) of the web page.
- 3) *Off-page SEO*: Focus is on promotional methods i.e. A page that has back links from other pages will be important

V. SEO TECHNIQUES

Optimization mainly includes keyword optimization, website optimization and link optimization [4]

A. Keyword optimization

Keywords are those using which users will retrieve the required information from the web using search engines. This in turn depends on keyword selection, keyword density and keyword distribution

- 1) *Keyword Selection*: Choosing right keyword is very important as it should satisfy the user requirements. Keywords should not be too complex and special.
- 2) *Keyword Density*: It's a ratio between the numbers of keywords to other text in a webpage. This is directly proportional to the look for related web pages.
- 3) *Keyword Distribution*: Depending on the location(placement) of the keyword in the webpage will increase the accuracy of search result.

B. Website Content Optimization

The content of the website should be original not being the mere copy of other webpage's [5]. Also, every website should be frequently updated so as crawlers will visit those website very often.

C. Website Structure Optimization

Every website should have a good navigation system [6]. Otherwise most of the webpage's will be left unvisited. The website structure should be maintained in such a way that it should not have more link depth by placing all the important webpage links in the home page.

D. Webpage Optimization

The webpage should have the content which is easily accessible by the crawlers. Generally, static webpage's have high priority in indexing and ranking by search engines when compared to dynamic webpage's.

E. Link Optimization

The most important links in SEO are incoming links & outgoing links

- 1) *Incoming Links*: These links are also known as back links. These are the links which is directed towards your website from other websites. The more number of back links indicate that the website has quality content and is viewed by several users thus, increasing the ranking by search engines.
- 2) *Outgoing Links*: These are the links which are used to point other related website from the current website. These will help the user with additional information about the requested data.

VI. DRAWBACKS

- A. There is no standard approach followed by search engines so it is difficult for the website designers to optimize the website based on one search engine.
- B. Fake back links can be created and bluff the search engines in order to increase the ranking.
- C. Since search engines focuses on updated websites it is important to update the website frequently.

VII. CONCLUSION

The objective of this paper is to analyze how search engine works along with the factors considered in the SEO process in order to increase the ranking of the website in search engine. The techniques used in SEO such as Keyword optimization, Keyword selection, Keyword density, Keyword Distribution, Website content optimization, Website Structure Optimization, Webpage optimization and Link optimization are discussed and how it is useful during indexing is also mentioned. The optimized website will be at better ranking during the search engine result.

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