

Search Engine Optimization : An overview

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Abstract: In today's world internet is growing with each passing day. Data is very huge and complex. To sort and manage this huge amount of data over large database search engine plays a very important role. Google is the basic and most widely used search engine through which we can optimize the website. With the help of search engine, we can actively gather the visitors to our site. Search engine is the most common part of our daily life. Because of this reason, a search engine plays a very important role as people can search and explore or find according to their needs.

Keywords: Search engine optimization, seo, off-page optimization, on-page optimization, meta tags, google, search engine.

I. INTRODUCTION

Users use most of the queries by searching on the web. According to most of the users they prefer results of top most pages with high rank. If the company website is not listing on the first page then it will be less productive for the business. For successful business the website of company should be listed on the first page or first 3 ranks.

There are millions of search per day. For example, if someone wants to buy a goods in unknown place in that case he uses search engine to search particular goods. With the help of search engine, it will show the top ten results and top links [3]

II. DESCRIPTION – SEO

SEO stands for Search Engine Optimization, which is the action in which it will increase the quantity and quality of traffic to your site through organic search engine results. SEO is the process in which we try to rank our website at the top position.

Ranking is the process in which our website is ranked according to our keywords, it depends upon various factors like our website is updated or not, website should be always updated for proper ranking. There should be proper links are linked to the site.

Links provide various ways to connect our website and brings the traffic towards our website. keywords play an important role in the SEO. Proper keywords are the best match for best ranking. optimized website is always best for high ranking and high traffic.



Fig. 1 Search Engine Optimization

2.1 Search Engine and how it works?

Search engine is the action in which we can search the desired information which we want. Google search engine is the most used one. It is most secure and scalable. It uses various algorithms to give results and performs various actions. Like crawling, indexing, processing. Crawling is the process in which it crawls the whole page for the information. Indexing indexes the information and processing processes the information.

2.2 Page Rank

Page rank is the algorithm which is developed by Google to rank search engine results. Page rank is the measure through which we can measure the importance of web page. Page rank depends on various factors like links to a page. It is an algorithm used by Google [3]. The numerical weight that it E is referred to as the PageRank of E and express by PR (E).

$$PR(A)=(1-d) + d (PR(T1)/C(T1) + \dots + PR(Tn)/C(Tn))[3].$$

III. METHODOLOGY

There are various methodologies using which one can optimize their page and searches, but mainly the most common types of optimization are, On Page Optimization and Off Page Optimization.

3.1 On Page Optimization

Following are the process involved in On page optimization to have enhanced rankings and appearance of page in the search engine.

1. **Page Title:** Title tag is the HTML element that specifies the title of a web page. Example: Title tag used to increase the rank by highlighting the website. [5]

Example:

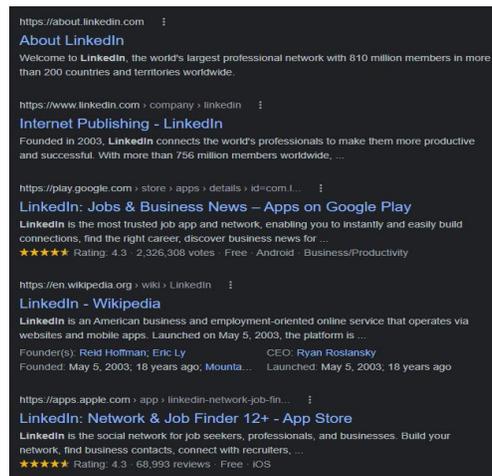


Fig. 2 Meta Description

2. **Meta Keyword:** Meta Keyword is the information which is required to tell the content information in your page. words and phrases that describe what your content is about. [7] It is present in the HTML code. meta keywords provide the actual volume of the keywords and their position among the others, it gives approximately estimated visits and cpc like cost per click. paid difficulty provides the ratio of that keyword to be in favorite to be paid. Search difficulty also provides the comparison between different keywords to be searched. [9]



Fig. 3 Meta Keyword
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3. **Heading tag:** It is the most important tag for search engine optimization .it uses HTML, CSS to handle the process. Heading tags are <h1>to<h6>are used to define heading on a web document. <h1>is the bold and <h6> is the smallest. Heading tags are used to make website readable and attractive. It shows the structure of the website.[10]

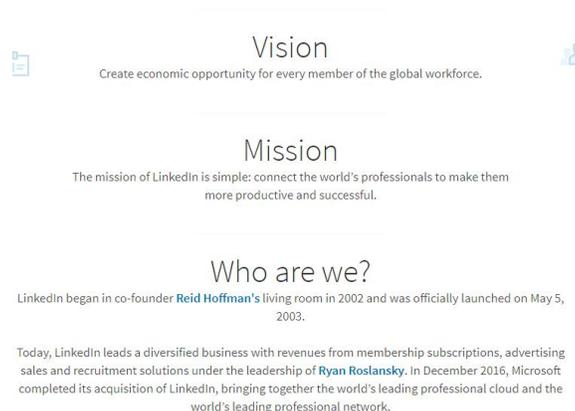


Fig. 4 Heading Tag

3.2 Off Page Optimization

Off page optimization uses the strategy where it not connected directly to the webpage. It is the action where we make a social submission to increase the rank of our site. It is used to improve the performance of our site and keyword research. [11]

1. **Social Submission:** Social Submission is the process in which we submit our website link to different social networking sites. With the help of this our ranking of page is increases as the person visits our site. Quora is the best platform for social activities. It is the platform where we can ask questions and can also give the best answers. Here we can choose the relevant questions and give the answer with our company website for linking. Blog posting is also a very important aspect where we post our blogs to different sites with website url so people can visit our site for reading the blogs.[11]
2. **Link Building:** It is the process in which we tried to link other website links to our site by linking links to their sites. Because of this all the traffic will be directed to our site. [12]

IV. PROS AND CONS

4.1 Advantages of SEO

- Can rank among the top 10 sites
- It will increase the traffic and sales of our business.
- ROI increases as the rank of our site increases.
- It is very cost effective and it increases the marketing ROI. [3]

4.2 Disadvantages of SEO

- SEO process is very much time taking.
- Need to update the information always.
- Over Success-As much as every business wants to be a success there is a real danger of too much and too fast. [3]

4.3 How to increase rank of a website?

- Use proper title tag so it can visible over the other tags.
- Use proper keywords so that people can easily search the desired results.

- The most important is the content. Content should be accurate and correct.
- To improve the rank of site we can post a blogs and new content to improve visibility.
- We can update our site regularly.
- Links plays a very important role to rank high. Try to link sites to our site.
- Use advance tools to tune up the sites.

V. FUTURE SCOPE

In future one can implement the advance tools and techniques to obtain high ranking and performance of the site. Furthermore many different enhancement can be made to made the process of SEO easy and free from black SEO techniques.

VI. CONCLUSION

At last, giving my opinion on search engine optimization that it is the most important and most advance process through which we can find what we want. With the help of SEO more optimized websites are created. Because of this we can rank our website very high. I suggest that every organization will opt for SEO for their sites to improve their ranking.

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