Search Engine Optimization (SEO) | Basics

Difficulty Level : Medium   •   Last Updated : 30 Dec, 2021

Search engine optimization (SEO) is the process of improving the ranking (visibility) of a website in search engines. The higher (or more frequently) a website is displayed in a search engine list (like Google), the more visitors it is expected to receive.

SEO considers how search engines work, what people search for, and which search terms (words) are typed. Optimizing a website may involve editing the content to increase its relevance to specific keywords. Promoting a site to increase the number of links, is another SEO tactic.

Effective search engine optimization may require changes to the HTML source code of a site and to the site content. SEO tactics should be incorporated into the website development and especially into the menus and navigation structure.

HTML   CSS   JavaScript   jQuery   PHP   Bootstrap   NodeJS   ReactJS   AngularJS   ExpressJS

results of a search engine.

2. **Important for social promotion of a website:** if a website appears in top results of a search engine such as Google, Bing, etc. then it gains instant popularity and to some extent trust of a user.

3. **It plays an important role in improving the business of a commercial site:** if two websites are selling the same product, for example, both Myntra and Koovs focus on selling fashion clothing, then the site having a better position in the search result of a search engine has chances of getting more users as compared to the other.

Basic principles in the working of a Search Engine

Following are majority steps involved in the working of a search engine:

1. **Crawling:** Process of fetching all the web pages linked to a website. This task is performed by a software, called a crawler or a spider (or Googlebot, in the case of Google).
2. **Indexing:** Process of creating index for all the fetched web pages and keeping them into a giant database from where it can later be retrieved. Essentially, the process of indexing is identifying the words and expressions that best describe the page and assigning the page to particular keywords.
3. **Processing:** When a search request comes, the search engine processes it, i.e. it compares the search string in the search request with the indexed pages in the database.
4. **Calculating Relevancy:** It is likely that more than one page contains the search string, so the search engine starts calculating the relevancy of each of the pages in its index to the search string.
5. **Retrieving Results:** The last step in search engine activities is retrieving the best matched results. Basically, it is nothing more than simply displaying them in the browser.

Do all search engines work on the same principle?

Although the basic principle of operation of most of the search engines is the same there are minor differences between them which lead to major changes in their results. For example, for search engines like Yahoo and Bing, on-page keyword factors are of primary importance, while for Google, links and hyperlinks are more important. Also, for Google, rankings of a website depend largely on their primitiveness i.e. how old a website is as compared to Yahoo which gives less or no preference to the primitiveness of the website and hence to improve the ranking of a website in different search engine, slightly different procedure needs to be followed.

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