

e-ISSN: 2319-8753 | p-ISSN: 2320-6710

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## International Journal of Innovative Research in SCIENCE | ENGINEERING | TECHNOLOGY

# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 9, Issue 10, October 2020

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

### Impact Factor: 7.512

9940 572 462

6381 907 438

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| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

|| Volume 9, Issue 10, October 2020 ||

### Tools and Techniques to Get your Website Ranked

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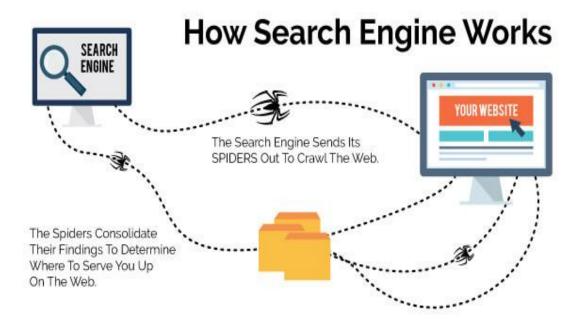
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**ABSTRACT:** Search Engines are widely used for finding any information across the internet. The primary aim of any website is to rank at the top of Search Engine Result Pages (SERP). To get ranked, websites utilize a methodology commonly known as search engine optimization (SEO). There are a variety of tools and techniques under SEO that play role in ranking a website. This paper is a detailed description of those tools and techniques under SEO.

KEYWORDS: search engine optimization, search engine result pages, on-page and off-page SEO, mobile SEO

#### I. INTRODUCTION

Search Engine Optimization is the process of making changes in a website's content to make them more search engine friendly, eventually making them rank high in SERPs. By designing a website to rank well in SERPs, the volume and quality of traffic on the website through a search engine gets significantly improved. As most of the techniques that are applicable for website ranking are text-based, SEO is sometimes called SEO copyrighting.





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#### **II. MODUS OPERANDI OF SEARCH ENGINES**

Several processes are worked out to deliver search results.

Crawling: A crawler (Googlebot, in case of Google) crawls to all the available resources on a website.

**Indexing:** Process of creating indexes for all the crawled resources (webpages) and storing them in a Database. Can be retrieved for later use.

**Processing:** whenever a user searches something, the search engine compares it. In technical terms, it compares the search string in the search request with the indexed pages in the database.

Calculating Relevancy: The search engine starts calculating the relevancy of indexed pages to the searched string.

#### **III. MEDLEY OF SEARCH ENGINE**

Following multifurcation takes place in a search engine:

**Full-Text Search Engine:** fetches information from the internet, sets off the database, and fetches records by user search. It is further bifurcated as possessing its crawler and hiring other engine's database.

Vertical Search Engine: hovers on specific search fields as well as search demand.

Meta Search Engine: in line with the user's query, displays results from multiple search engines concertedly.

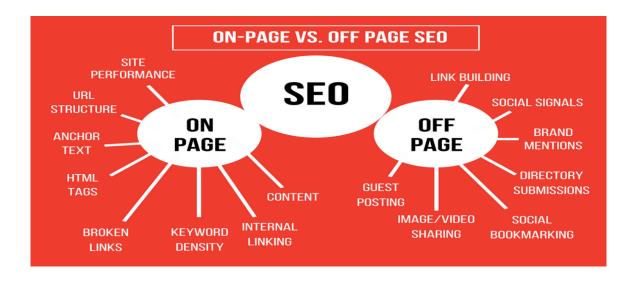
**Directory Search Engine:** retrieves all the records of the directory listing. However, it cannot be called a true search engine.

#### **IV. TYPES OF SEO**

Divided into the following two types contextually:

**Off-Page SEO:** deals with links. Inbound, outbound, follow, no-follow links fall under this category. It is concerned with link building, increasing link recognition by submitting open directories.

**On-Page SEO:** As the name suggests, it is concerned with the matter present on the page. SEO Title, slug, Meta description, accurate keyword selection, excellent content are all parts of on-page SEO.





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#### V. TECHNIQUES

#### Black Hat SEO

An SEO is labeled as Black Hat/ Spamdexing if it possesses the following characteristics:

- Performs Cloaking SEO tactic i.e. versions of a page served to humans and search engine bots don't match.
- Keyword repetition in Meta description and use of irrelevant keywords. It is commonly known as Meta tag stuffing.
- Creating Doorway or gateway passages. These are content-wise poor webpages stuffed with similar keywords and phrases.
- Page Hijacking. It includes creating a duplicate copy of a famous website and showing contents which are more or less similar to the original ones to a web crawler, but reroutes/ redirects humans to malicious or unsafe websites.
- Mirror websites. Multiple websites are concept-wise alike but have different URLs.
- Follows Keyword stuffing to raise keyword count, the density of the page.
- Redirecting humans to a page other than the page ranked by the search engine.
- Attempts at improving ranking which involve deception.
- Redirecting users to a more human-friendly page instead of the one which was built for search engines.

#### White Hat SEO

- Quality-wise rich web pages.
- Web pages provide relevant content.
- Abides by the guidelines set by search engines.
- Deception free
- Includes web pages which are designed keeping in mind user satisfaction.
- Users will see the same content a search engine indexes and ranks.

#### **Gray Hat SEO**

The use of irrelevant techniques for the website's optimization is gray hat SEO. Put in simple words, buying or exchanging links with other websites for getting ranked. This is however not accepted by search engines.

#### VI. GOOGLE SEO TOOLS

Google provides some of its tools for SEO research. These play a core/ vital role in website ranking. These tools are Google Ad Words, Google Ad Planner, Google Trends, and Google Webmaster Tools.

#### 1.5.1 Google Ad Words

It allows the purchase of ads on Google's SERPs, which will then be featured in colored boxes along the right side of the page under the head "Sponsored Links". It's necessary to note that the ads will appear only on searches through Google's homepage.

Some advantages of Google Ad Words are:

- Ads run instantly after submission.
- Freedom to make changes in the ad to get the most out of money. For instance, if someone runs a travel agency, the keyword tool may come up with keywords such as 'tourism', 'travel'. Including these suggested keywords may boost sales by bringing in new customers.

#### 1.5.2 Google Webmaster Tool

This tool helps in understanding how Google interacts with the website and provide valuable insights into the website/web page. It allows webmasters to:

- Remove URLs already indexed by bots.
- Highlight content-based issues like SEO Title, Meta tags, etc.



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- Analyze and generate robot.txt files.
- Upload an XML sitemap file.

#### 1.5.3 Google Analytics Tool

Google Analytics is a tool for keeping a check on the website's incoming traffic. It provides details about:

- The most popular content on the website
- Ways through which traffic reaches the website and the way it behaves while on the website
- The changes taking place through any optimizations done to the website

Google Website Developer is another tool that allows users to experiment with the website. For instance, some alterations made on any page results in enhancement of conversion rates. The above-mentioned tools form a powerful triad to help improve any website.

#### 1.5.4 Google Trends

Google trends provide statistical data about the popularity of keywords over a duration of time. It enables the partition of data on linguistic and regional lines. It also allows plotting multiple keywords on a singular graph. It can prove to be very useful for targeting a specific duration like the winter season, black Friday, etc.

#### **1.5.5 Google Recommendations**

Google itself recommends measures and ways to optimize websites/web pages and eventually enhance their ranking.

- Submit your webpage to Google at <u>https://www.google.com/addurl.html</u>.
- Using the webmaster tools, upload the webpage and its sitemap in XML format. Google uses a sitemap to learn about the website's structure and to increase the coverage of web pages.
- Verification of the website is of prime importance.



#### VII. MOBILE SEO AND ITS VARIATION FROM DESKTOP SEO





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The importance of mobiles in today's market is widely known. Mobiles are more often used to surf the internet as compared to desktops or laptops. In such a scenario, mobile SEO has attracted enough limelight and will continue in the foreseeable future. It is a common perception that mobile SEO is more or less similar to desktop SEO as the underlying motive stands the same. However, that's not true. Mobile SEO has a separate entity and is very specialized. Below mentioned are three aspects in which mobile SEO differs from standard SEO and how to optimize for mobile searches.

#### Engagement

A substantial difference between a mobile user and a desktop user is the level of engagement. Mobile users are highly engaged. They are not interested in scrolling results. They need information quickly. So it becomes very easy to infer that they won't be digging into pages to find an answer. Therefore, topping the SERPs becomes more important or Mandatory in mobile SEO.

#### **Ranking Algorithm**

The largest difference which exists between mobile SEO and desktop SEO is the ranking algorithm. Mobiles were invented to make human lives easier. So, mobile user experience has to be better than desktop user experience. It becomes possible only through major changes in the algorithm. One of the largest factors that change for mobiles was the location.

#### Search Behavior

Mobiles have enabled users to search while they roam. They search more often and at different times than on a desktop and usually have varying contexts for their search.

#### VIII. CONCLUSION

Search Engines are no doubt very powerful tools for surfing purposes in the present era of technology. Search Engine Optimization (SEO) is very important for getting featured at the top of SERPs. On-page and Off-page SEOs play an equally important role in ranking a website. White Hat SEO is by far the best option both in terms of ethics and durability. Google provides the most reliable tools for a complete analysis of the website. Surprisingly, mobile SEO and desktop SEO are different from one another while mobile SEO is more specialized to promote user-friendliness. Fortunately, more and more site owners are becoming aware of SEO and getting their websites ranked, thus creating opportunities for the white hat as well as black hat SEO practitioners.





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