

Comparative Analysis of Search Engine Optimization Using Auto Search Tool

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Abstract—Due to unawareness of search engine optimization techniques, people do not use these techniques in newly formed websites. Auto search tool is used to increase the ranking of their websites automatically. It is efficient to get the Result in a timely manner. Two approaches were inferred; firstly selection of keywords and deep analysis method in SEO is apply to deal with the problems like low speed, deprived reliability and not flexible optimization in SEO processing. Secondly, Web Meta Data (WMD) is apply to real situation using different approaches to deal with low visibility in Search Engine. Traffic generated by this tool is more as compared to real traffic. In this study, the auto search tool can increase the web site ranking automatically. Traffic generated by this tool is more as compared to real traffic.

Index Terms— *Search Engine Optimization, Web Meta Data, keywords optimization, content optimization, and link optimization*

1 INTRODUCTION

Several resourced can be fetched from the internet, either it is structured or unstructured data. Each query response with valuable results, coming from different search engines such as Google, Yahoo, Bing, Yandex and Baido. These search engines give a result higher rank according to the user requirement matching, along with the hyperlink. To satisfy user query it ranks the more relevant data on the first page. According to SEOBOOK keyword research tool, ten thousand users use Google search engine to get their results, where four thousand users use Yahoo and Bing altogether [1].

Tens to hundreds freelancing companies are available for SEO. The basic idea behind all of these to get the website on the first page of the search engine. Black hat techniques are also used to increase the ranking of a website so that it can be displayed on the first page of different search engines. These techniques have no legal work, and in these techniques, the rules of SEO are disobeyed [2]. For a temporary time these websites get higher ranking on the page, however whenever these websites are under the notice of search engine, then they are removed from their index page. In order to manipulate a site ranking, keyword stuffing involves over loading a web page with keywords or irrelevant keywords [2].

By getting the experience of search engine optimizer, it can define that SEO techniques are analyzed with four methods: structure optimization, keywords optimization, content optimization, and link optimization. For better SEO, users who want to increase ranking must have sufficient knowledge of programming, representation schemes and architecture, and planning which is going to be implemented. Whenever someone visits a page, an HTML file is loaded. As the number of users accesses the website, they are globally counted [3]. A ranking system is coming out from the curtain, which posts their requirements to the Google search engine, and obtains results, and save these results in a ranking engine for better learning and experience. Linear and polynomial models are used for better learning experience. In positive view, ranking system is also viewed for the significance of SEO to get the position on the first page. The lines which contain resources required for help, evaluate, find the usage and preserve them

is known as Meta-data.

Therefore, the main objective is to increase site ratio. Thus the tool automatically calculates effective booster scenario based on the site visitor statistics for effective mix real traffic with traffic generated by this application.

The rest of the paper is organized as: Section 2 provides an overview on Search Engine Optimization and its techniques. Section 3 comprises of research methodology and features of proposed auto search tool. Implementation of auto search tool, results and discussions are discussed in Section 4. Lastly, conclusion is described in Section 5.

2 OVERVIEW ON SEARCH ENGINE OPTIMIZATION

The process of techniques, strategies and tactics which increases the number of visitors on website in order to make high ranking is called search engine optimization (SEO). Almost every website is unique in its SEO, especially in the case of e-commerce [4]. The process of SEO works in such a way that the higher the rank of the page, the greater will be the visitors and hence the sales will be greater as a result of more site visits. In e-commerce or SEO industry, different websites can have different optimization goals but they all revolve around the method of improving the web content and HTML code by including the specific keywords. This is the most commonly used tactic by the online businesses by which the page may come into the top list of the search page just by the inclusion of specified keywords.

Besides, including keywords, increasing the number of inbound links in the web content is also a widely used tactic by the website owners. These inbound links are also useful for website promotion in addition to increase the ranking [5]. Includes the approach of web metadata for the content analysis of Google search engine and the suggestion of the most suitable SEO factors for all the content. The content analysis includes URL, HTML, and Page-Rank. The URL structure has the ability to match category hierarchy and increase relevancy and avoid URL which contains symbols and URL should sim-

ple and static [6]. The Page-Rank technique figures out the ranking level of the page which mean that it determines whether the page is linked or referenced by other pages or not and if the page is referenced, then the number and popularity of the pages which have referenced the page. All these factors are taken into account in Page-Rank technique. This can be explained by taking the example of pages for instance A and B, where A is the page referenced by the page B. Google will recognize that B votes for A and will check if A is important by examining its votes. If B has more weightage then A will get more votes. From this example, it is clear that if a page is referenced by different pages then it is increasing in importance and hence increases in the ranking. This is the principle of PageRank technology [7].

2.1 On-Page Optimization

On-site optimization, also known as on-page optimization, is about modifications and development process of page and design to increase its performance and experiment on search engine result page (SERPs). It contains planning steps which are critical such as SEO web strategy, considerate niche, and keyword research [8].

On-page optimization process contains those components which are directly relevant to the website

- Code optimization: It is related to changing and addition to the title, metadata, alt, miscellaneous tags.
- Content: It is related to display content of the website? It contains keyword density factors, keyword rich content, and tweaking.
- Link/Directory: It contains URL/Directory.

2.2 Off-Page Optimization

Off-site optimization, also known as off-page optimization, is related to the features which have an impact on website ranking at the time of search results. These factors are not located on the website itself and are related to outside situations affecting the SEO [8]. Off-page optimization is divided into two main components which are; a) History of the website, b) Outbound links to the website.

2.3 Google Analytics

Google Analytics is a web analytics service that produces metrics for measurements which help in targeting desired results. Google Analytics takes raw data in the form of JavaScript code and produces comprehensible information from it which can be used to improve the performance of a website [9].

Google Analytics is a tool used for monitoring web traffic and measuring the web performance. It can perform the following functions [10];

- It provides keywords list or search query that the visitors use to reach the website with certain information e.g. page views, geographical and internet [9].
- It gives the maximum viewed content of the websites and pages.
- It shows the bounce rate of a term which indicates the time spent on the website by users.
- It put forth the trends of visitors, credibility, the potential of the browser, and properties of the network.

3 AUTO SEARCH TOOL

The auto search tool used in this research allow increase in search engine ranking of site in five search engines namely: Google, Bing, Baido, Yahoo, Yandex. Research methodology consists of 8 steps where fig1.autosearch shows the flow chart of auto search tool.

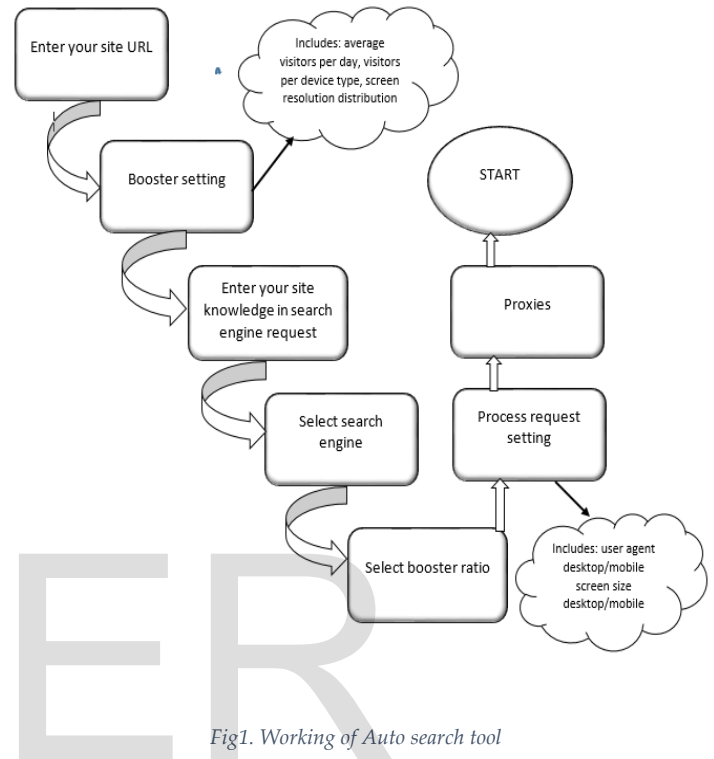


Fig1. Working of Auto search tool

All processing is done in **real-time** and configure input flow. Setting up proxies screen resolution waiting intervals, user agents, and other configuration to combine resulting visitors fully supported.

3.1 Full Configuration of Browser Settings

Browser Setting

In browser setting, it includes configuration of browser settings, screen resolution, user agent, proxy and other.

Site URL

Enter site URL in query box to boost its ranking

Visitors per day

Give an average number of visitors who visit site on daily basis. e.g. 30-50

Hour range of the day

Select hour range of the day where the site has about 80% visitors. e.g. 9:30

Percent visitors by device type

Select percent relation of device type. Like how many are desktop visitors and how many are mobile visitors e.g. 80%-20%

Screen resolution distribution (Desktop)

Select screen size distribution parameter from high to low. E.g. 70%-30%

Screen resolution distribution (Mobile)

Select screen size distribution parameter from high to low. e.g. 50%-50%

User agent desktop/mobile

Select file with user agent string that will be used randomly per each visitor

Screen size desktop/mobile

Select file with screen resolution string that will be used randomly per each visitors.

Proxies

Select different proxies for each visit

Following are the features of auto search tool.

3.2 Ranking Booster

When system calculates effective scenario of booster based on site analytic to have good-mixed real traffic with generated site traffic. Booster ratio and percentage of boost greater than the current visit per day is chosen. In case of proper usage, the real traffic has mixed with traffic through the tool. By changing booster ratio control bar the better traffic distribution is defined.

3.3 Traffic Blast

Traffic blast is the feature where desired traffic percentage is defined, just like another such application.

3.4 Multi-threading

Multi-threading includes setting up screen resolution, user agents, proxies, waiting intervals, target site link clicking and other configuration to unify resulting visitors fully supported.

4 RESULTS AND DISCUSSIONS

The results gather after applying auto search tool are discussed in this section.

4.1 Test Site

Fig2.testsite shows test site in which information is given about automatically increase site ranking. This site is developed just to check this tool or it is a test site to test the booster tool.



Fig 2 .Test site

4.2 Google Analytics

As described earlier that to check the performance of auto search tool we use Google Analytics to check the traffic of our

site. As in above section we see that the tool visited our site 11 pm to 12 am (according to above) so we use Google analytics to see the traffic at 11 pm to 12 am on 08-jan-2017 to 09-jan-2017.

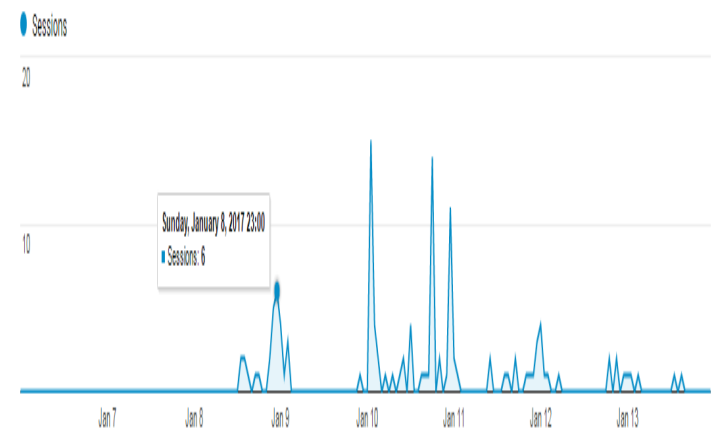


Fig 3, traffic of site

In fig3. the traffic at 11 pm on 08-jan-17 can clearly be seen, which means the performance of our tool is good. It is shown that it is on the hourly basis.

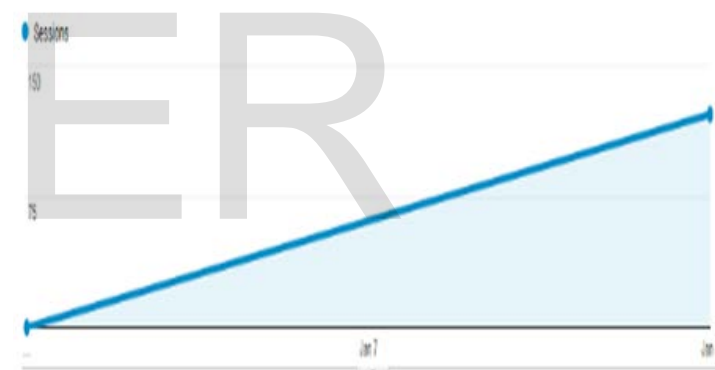


Fig4. Weekly basis graph

Fig 4 shows weekly basis graph which shows a very satisfy result. As mentioned above tool select random user agent per each visit.

4.3 Comparison

As described earlier that in order to check the performance of auto search tool, Google Analytics is used to check the site traffic. Auto search tool is used for a week. So the comparison of the traffic before using auto search tool and after applying auto search tool is given in this section. Figure (4.4) shows the traffic of test site before using auto search tool. It is clear in figure that the traffic situation is poor before using auto search tool.

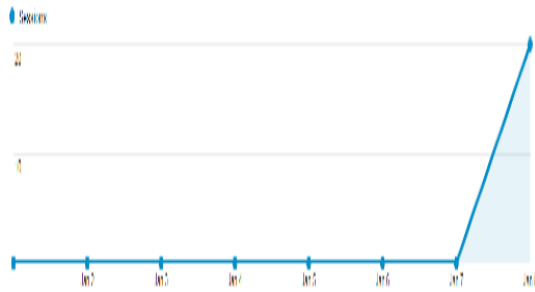


Fig 5 Traffic before and after using auto search tool

Fig6 shows statistical comparison of traffic before applying auto search tool.

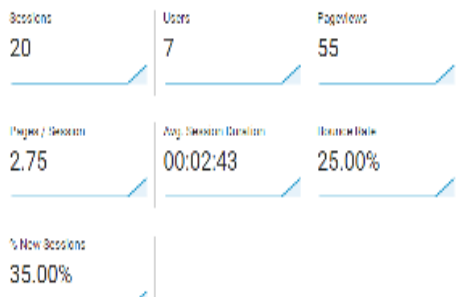


Fig 6 Statistics before using auto search tool

In fig 7 an obvious change has been shown after applying auto search tool. Before using it the session contain just 20 visitors. Where after using this tool session has 122 visitors. It is a weekly based table.

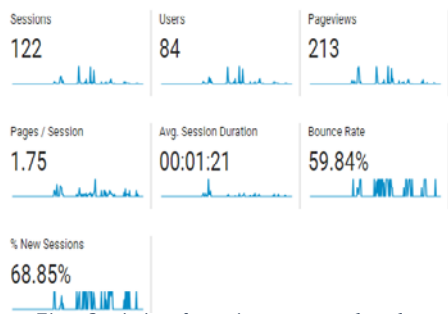


Fig 7 Statistics after using auto search tool

5 CONCLUSION

Search Engine Optimization could be enhanced effectively and it can produce better benefits for all those stakeholders. The increase in number of visitors results in increase in ranking. In this study, the auto search tool can increase the web site ranking automatically. Traffic generated by this tool is more as compared to real traffic. Like, there are 50 visitors per day and set auto search ratio = 150% and when tool is applied $50 * 1.5 = 75$ visitors are added. Tool traffic will be mixed with real traffic and will look natural. In this study, the auto search tool can increase the web site ranking automatically. Traffic generated by this tool is

more as compared to real traffic.

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions. Authors are strongly encouraged not to call out multiple figures or tables in the conclusion—these should be referenced in the body of the paper.

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