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Optimizing Web Search Engine

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ABSTRACT

This paper focused is an analytic review of literature on search engine and search engine optimisation techniques from period 2005 to 2016. The paper focuses on various features of search engine optimization that will help the users to get the relevant and adequate information needed. The search engine optimisation techniques examines on the ranking of the search engine based on different features like page hit ratio, frequency of hits, on site optimization, off-site optimization, keyword optimization, layout, webpage optimization, hyperlink cited status, search query expansion, frequency of keyword, text statistics, popularity, freshness, and physical location of the user, availability of item, content property, user background, size of website, number of printed pages, zoning information, link analysis, user logs, meta tags, user recommendation, user web service visit, average page view per visit, average number of conversion obtained per visitor, pay per click, website structure, pages and code optimization, link structure analysis, web content, web page description through content analysis methodology, approach taken is longitudinal, funneling approach. Various databases were

searched using 'search engine' and 'search engine opti techniques' as keywords. The findings indicate that search engine optimization is widely used technique which helps the users by providing relevancy, adequacy, timeliness and convenience to get correct information by generating search engine result using different features mentioned above.

Keywords: Search engine, search engine optimisation techniques, page rank, web usage, keyword selection, search ranking, keyword analysis.

Introduction

Search engine optimization is important in all the aspects like management, marketing, production, strategy etc. It helps users to get right and new information through different features like Website URL, Keywords and Keyword groups, Code structure, Link. Search engine optimization also includes root dictionary, site map, site navigation, usage of social media. (Yalcona & Koseb, 2010). According to internet world stats June (2016), Asia has the leading position (49.6%) among all other countries for internet users world-wide followed by Europe

(17%), Latin America/carib, (10.7%), Africa (9.4%), North America(8.9%), Middle east(3.7%) and Oceania/Australia (0.8%).

The report also states that there are 462,124,989 Internet users in India (June 2016) which makes it second highest among all the Asian countries after China. Currently the Internet penetration in India is 36.5%. According to Net market share report (April, 2016), the total market share of google is 71.11% followed by Bing (10.65%), Baidu (8.73%), Yahoo (7.52%), Ask (0.23%), AOL (0.13%) and Excite (0.02%).

Search engine queries frequently have duplicate terms in the search string. Several companies use duplicate words to name their brand or website. For example, pizza is a popular brand name of a very large chain of pizzerias in Canada. Another example is the official website “www.thethe.com” of the English musical and multimedia group “The”. Similarly, there are many examples where duplicate terms have a special meaning when a user is searching for information through a search engine. Currently Yioop search engine does not distinguish between duplicate terms in a search query.

Methodology

This research uses descriptive methods to analyze the strategies in maximizing website visibility and branding by utilizing SEO. The researchers conduct the study by using primary and secondary data. Data collection in this research is from three main sources

(literature reviews of books, online material, and articles). The data are used to gather information for the theoretical aspects of SEO by visiting the website and seeing the results of their research. The main reason for choosing a website source from experts is because it has good knowledge in the field and provides relevant information. Likewise, data are extracted by Google Analytics tools, which contains all website performance statistics since the SEO's

inception. Then, the researchers use Moz ProSEOtools(<https://moz.com/products/pro>) and SEOChecker (<https://neilpatel.com/SEO-analyzer/>). Those are used to analyze the

current site search engine. Moz Pro and Neil Patel are the most commonly used SEO tools for the analysis process.

A. Framework

Figure explains how the website optimization process uses SEO. First, it analyzes the keywords for the website. Second, it determines the main keywords, derived keywords, and supporting keywords. Third, it is creating content or article used for the website.

Fourth, the process is also combined with the on-page SEO process, which is entering the code (title, meta description, and content). Fifth, it is website tracking. It is also very important for analyzing and monitoring websites. Last, it is to monitor the website using online Serprox tools.

B. Research Flow

The implementation of SEO on the website is very important. The process must be systematic. It aims to increase the volume and quality of traffic visits through search engines to certain websites by utilizing the action mechanism. The flow of research is in Fig.

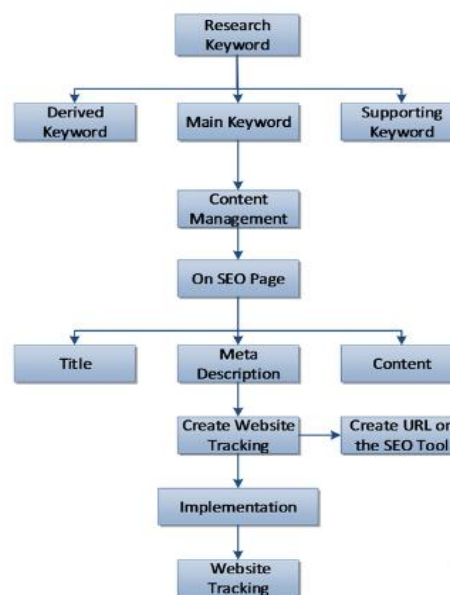


Fig. The Framework of search Engine Optimization

Conclusion

The goal of optimizing a web search engine is achieved in this project. The search engine optimized through this project is the open source PHP search engine Yioop!. Yioop is being used by users to search the internet and create custom crawls of the web. The Yioop optimization will help the users to search and retrieve relevant results in a more efficient and effective manner. This

would enhance the productivity and precision for the users of the search engine. With support for duplicate terms in Yioop, users will now get more relevant results for queries with duplicate terms.

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