

THE IMPORTANCE OF SEARCH ENGINE OPTIMIZATION FOR INCREASE RANKING FOR E-COMMERCE WEBSITES

^{1st} Dr Khushbu Jain, ^{2nd} Manoj Kumar Bishwkarma

^{1st} Assistant Professor, ^{2nd} Assistant Professor

^{1st} Department of Commerce, ^{2nd} Department of Computer Science,
Shri Jain Diwakar Mahavidyalaya , Indore, India.

Abstract: In this paper we initially present the importance of search engine optimization (SEO) E-Commerce Websites. We present the most important metrics that affect SEO such as browsing speed, quality content and valuable quantity of content, responsiveness, inbound links and the technologies that they use. All these metrics greatly affect search engine rankings and consequently online orders and bookings. To assess how SEO is implemented on a E-commerce domain we examine a sample of almost millions of E-Commerce websites in India. We provide cumulative results for more than 20 consequential SEO metrics for this Websites. SEO is the method of optimizing your website for the purpose of getting free traffic from search engine and increase the rank. SEO has popular in the last decades in digital marketing with the increase in the use of computers, laptops mobile phones and tablets. And increasing the craze for online shopping with E-Commerce sites.

Keyword - E-Commerce, Search Engine Optimization, Google ranking, Internet Marketing, Online Marketing, Online Shopping.

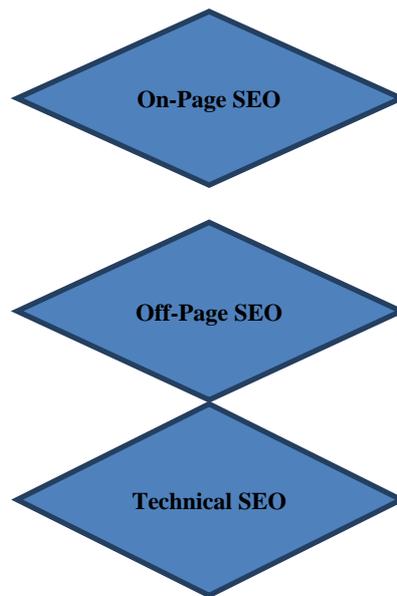
I. INTRODUCTION

SEO (Search Engine Optimization) is the development of subsequent the principle of the search engine such as website structure, web page language and content and interaction diplomatic strategies for the balanced orchestrating to amend the site search performance in the search engine and incrementing the opportunity of customer revelation and access to the website. SEO is the step by step process of improving the visibility and quality of a web page or a website for the users on a search engine. SEO helps websites achieve a higher ranking in search engine results when people search for particular keywords related to their products and services. So, it is a practice of increasing the quantity and quality of traffic to a website through organic search engine results.



See the above image to understand the basic activity in the SEO.

There are mainly three types of SEO techniques used to achieve the best ranking in search engines-



On-Page SEO -In On-Page Optimization SEO method need to put the keyword phrase in the title tag and the meta description in the HTML page. You additionally need to have keywords phrase included inside your main content in all your webs-pages.

This method mainly fixates on website content, keyword utilization in denominations, headings, site structures along with internal and external links. These are some tags for improving searching and ranking like as Title tag, Meta tag, anchor tag and etc.

Off-Page SEO- In off-page SEO is the technique for making back links. Back links are customarily termed as link back from other website to our website. Back links are consequential for SEO because search engine algorithms give credit, if any website has sizably voluminous number of back links. As well as back links increase, website popularity will increase. [1]

Technical SEO- Technical SEO- Technical SEO is a method of optimizing your website for the crawling and indexing phase. It is called as "technical" because it does not concern the actual content of the website or with the part of your website.

II. LITERATURE REVIEW

The literature review process is developed through the following stages

- a. Bibliography collection and search strategy: For the needs of the search, we have adopted “brief search” and “citation the first strategy helped us to collect a series of research works (quite fast). In order to achieve an integrating value in the search process, a second search strategy is adopted, which availed us to identify some key research works in order to adopt the subsisting terminology and concepts, quite utilizable for the search of other research works.
- b. Based on the first stage, an extension of the literature review will be achieved progressively
- c. Abstractive synopsis and homogenization, based on the keywords, will allow us to categorize the research works. [2].

Based on the research papers previously proposed and work research papers are-

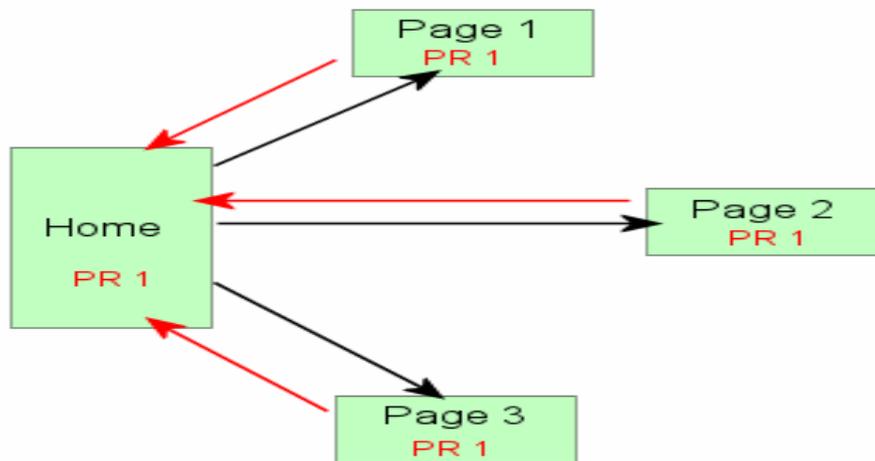
Page Rank is an algorithm that measures the transitive influence or connectivity of nodes. It can be computed by either iteratively distributing one node’s rank (pristinely predicated on degree) over its neighbours or by arbitrarily traversing the graph and counting the frequency of hitting each node during these walks.

PageRank is defined in the original Google paper as follows:

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

Where,

- we assume that a page A has pages $T1$ to Tn which point to it
- d is a damping factor which can be set between 0 and 1. It is usually set to 0.85.
- $C(A)$ is defined as the number of links going out of page A .



Hill Top Algorithm-The Hilltop Algorithm is one of the most important algorithms in search engine applications today. The key difference consists in the fact that we are only considering "expert" sources - pages that have been engendered with the concrete purport of directing people towards resources. In replication to a query, we first compute a list of the most germane experts on the query topic. Then, we identify pertinent links within the culled set of experts, and follow them to identify target web pages. The targets are then ranked according to the number and pertinence of non-affiliated experts that point to them. Thus, the score of a target page reflects the collective opinion of the best independent experts on the query topic.

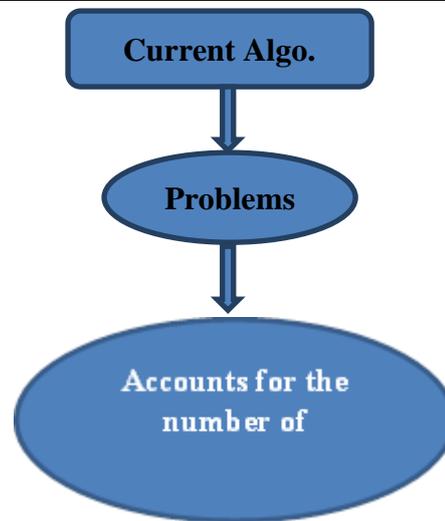
Hill Top algorithm consists of two broad phases:

- (i) Expert Lookup
- (ii) Target Ranking



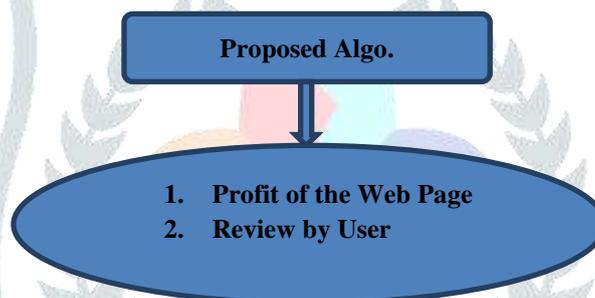
III. PROBLEM FORMULATION

The algorithms take into account the number of clicks on the page of an e-commerce site which has been visited for probing a product despite the fact that the concrete product has been bought from that same site or not. It is predicated on the number of clicks rather than profit earned from the site or web page. For example a customer searches more number of pages of a product and hence clicking more number of times on a particular website, while the same product is available more facily on some other website and the hence the number of clicks on the latter are less in comparison to antecedent one. In search engine the advantage is given to those e-commerce sites which has higher number of clicks, no algorithm counts the profit of e-commerce site by counting the profit clicks. No algorithm checks that the item is probed have been bought or not by checking the profit clicks that is the "confirm payment" click or "place order" click.



IV. PROPOSED WORK

The main objective can be achieved by taking into account only the click which results into checkout click or the clicks that make it to the cart and are further processed for placing an order for the specific product. After the customer clicks on the 'place order' icon the customer will then be directed to a page where the customer will be required to fill in the necessary details for the distribution of the product and hence consummate the order. Once the order is placed prosperously, this click for that categorical product which has been bought is shown as a 'yes' in the 'converted' column and 'no' if the order was not consummated. The information about all the clicks will be stored in a database for further reference and evaluation. These clicks can be acclimated to calculate the click through ratio (CTR) which is the ratio of number of yes to total number of yes and no.



V. CONCLUSION

Higher rank will be given to those e-commerce websites in a search engine which have a higher profit or earning this can be done by counting the profit clicks like the place order or the checkout. If profit is same then the reviews will be taken into consideration, this can be done by checking which e commerce site has got more and preponderant.

VI. ACKNOWLEDGMENT

he preferred spelling of the word "acknowledgment" in America is without an "e" after the "g". Avoid the stilted expression, "One of us (R.B.G.) thanks..."

Instead, try "R.B.G. thanks". Put applicable sponsor acknowledgments here; DONOT place them on the first page of your paper or as a footnote.

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