OPTIMIZING WEB PAGES USING DIFFERENT SEARCH ENGINE OPTIMIZATION TECHNIQUES

Dr. R.G.PAWAR

Professor & Director SIBACA (Sinhgad Institute of Business Administration & Computer Application) MCA, Lonavala, Dist Pune.

email: director_mca.sibaca@sinhgad.edu , rgpawar@rediffmail.com,

Cell: 9881476714, 9422605103

Abstract: Nowadays it's a world of internet marketing, and Search engine optimization (SEO) forms an integral part of marketing over the web all around the globe. This paper shows the importance of some techniques of Search Engine Optimization (SEO). This paper covers previous work done on the subject of SEO, the early beginning of SEO, Types of optimization techniques in SEO. Considering various types of SEO techniques this paper will also put forth some suggestions regarding which SEO technique can be credible and optimum for a particular type of business organization or firm.
Keywords: White-hat SEO, Black-hat SEO

Introduction: Search engine optimization (SEO) is the process of increasing and enhancing website's degree of exposure to the public. SEO can be implemented to increase the potentiality of a website of being discovered, or to make it easily searched by the users. Certain modifications can be made to your website to make it search friendly with the use of some keywords. Any website appearing on the top positions of the search engine results is likely to be accessed by the maximum number of users and receive a large number of hits. SEO optimizes webpage code by implementing its own relevant algorithm in order to assist the search engine to fetch out that web page from the entire internet traffic for all web users. It implies the Meta tag to the variable and extended variable of the web pages. It is more about Strategy, Structure, method and implementation. Some SEO techniques are brought under light with humble suggestions which can be fruit full for any business organization willing to have an optimized website.

How Search Engines Work: Search engines have different perception of website than humans. Conceptually, web Crawlers of the search engines crawl the web looking at the adequate content. The entered keywords in the text Driven search bar of search engines are searched by these crawlers in order to fetch some resembling websites. The crawler fetches most of the websites by following the hyperlinks of the websites which are already in its database. The search engine mechanism is so designed to filter out internet traffic in fraction of seconds and bring over only user desired results.

Importance of SEO: The main importance of SEO is in internet marketing because most of the people don't go beyond 20-30 webpage while searching on the search engine. If the customer has intention to buy some products on the internet and if your website is not listed on top of the search engine results then its high probability that u would lose your business. They simply visit some other website. So SEO helps to achieve the ranking and increases the chances of spectators coming to your website. SEO plays a vital role in marketing of your business or your product on the web for certain target clients. The business website needs to be

on the top listings in order to keep its hold on its customers.

History of SEO

: Site owners started to recognize the value of having their sites highly ranked and visible in search engine results, creating an opportunity for both white hat and black hat SEO practitioners. By 2004, search engines had incorporated a wide range of undisclosed factors in their ranking algorithms to reduce the impact of link manipulation. On May 2, 2007, Jason Gambert attempted to trademark the term SEO by convincing the Trademark Office in Arizona that SEO is a "process" involving manipulation of keywords, and not a "marketing service." The reviewing attorney basically bought his incoherent argument that while "SEO" can't be trademarked when it refers to a generic process of manipulated keywords, it can be a service mark for providing marketing services in thefield of computers. Graduate students at Stanford University Larry Page and Sergey Brin, developed "Backrub," a search engine that relied on a mathematical algorithm to rate the prominence of web pages. Page and Brin Founded Google in 1998. In 2005, Google began personalizing search results for each user. Depending on their history of previous searches, Google crafted results for logged in users.In December 2009, Google announced it would be using the web search history of all its users in order to populate search results. On June 8, 2010 a new web indexing system called Google Caffeine was announced. Designed to allow users to find news results, forum posts and other content much sooner after publishing than before, Google caffeine was a change to the way Google updated its index in order to make things show up quicker

on Google than before. According to Carrie Grimes, the software engineer who announced Caffeine for Google, "Caffeine provides 50 percent fresher results for web searches than our last index. Google Instant, real-time-search, was introduced in late 2010 in an attempt to make search results more timely and relevant. Historically site administrators have spent months or even years optimizing a website to increase search rankings. With the growth in popularity of social media sites and blogs the leading engines made changes to their algorithms to allow fresh content to rank quickly within the search results. In February 2011, Google announced the Panda update, which penalizes websites containing content duplicated from other websites and sources. Historically websites have copied content from one another and benefited in search engine rankings by engaging in this practice, however Google implemented a new system which punishes sites whose content is not unique. In April 2012, Google launched the Google penguin update the goal of which was to penalize websites that used manipulative techniques to improve their rankings on the search engine. In September 2013, Google released the Google Hummingbird update, an algorithm change designed to improve Google's natural language processing and semantic understanding of web pages.

Process of SEO

: Process of SEO starts with identifying relevant phrases that can be used for optimization. This process can be framed as Keyword Research. After the Keyword Research the next step is Goal setting. It means identifying area in the website to work on, like popular contents. This widens the success line of any website. After then it's the step of Page

optimization. Page optimization can be termed as enhancing or add influencing contents to the web page in order to make it search friendly. There are Two type of page optimization i.e. ON-PAGE optimization and OFF PAGE optimization. Successive step is of Link building wherein numbers of relevant links to your websites of other webpages are linked together.

Categories of SEO:-

1) **White-hat SEO**: The ethical or legal way of applying SEO to your webpage by staying under some rules or ethical guidelines of the search engine are known as the white hat or ethical SEO.

2) **Black-hat SEO**: This technique on other hand is unethical way of adapting SEO techniques to your webpage. These categories of SEO not only increase the chance of your website being more visible but also have a major probability of being removed from the Search engine's Database.

Most popular Black-hat SEO techniques are as follows:-

- Hidden Text or Links same as the background color of the webpage.
- Keyword Stuffing
- Doorway Paging
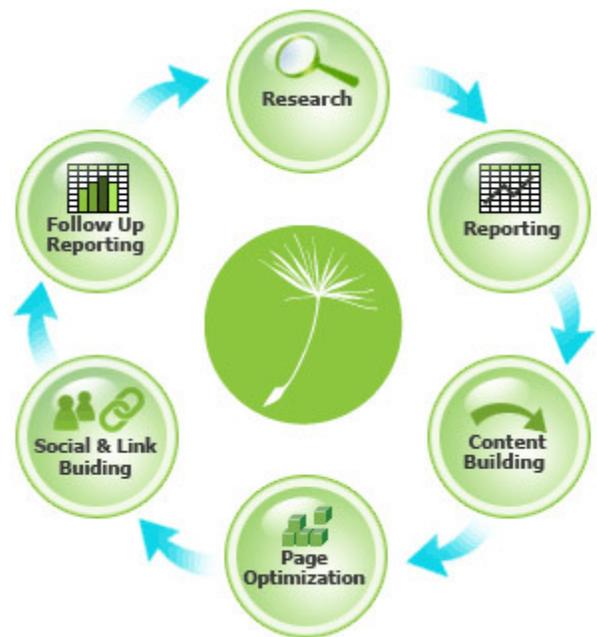
- Consultancy services can use keyword and Meta tagging for obvious reasons that is to be easily become an optimum website and receive a top place in search engine results.

In nutshell, the techniques which are mentioned and discussed above have their advantages and hurdles, but depending upon the theme and motive behind business, help to use the respective techniques.

SEO is primarily used to enhance the search-ability of any website and so while using any of the techniques one should be concerned about their business motive.
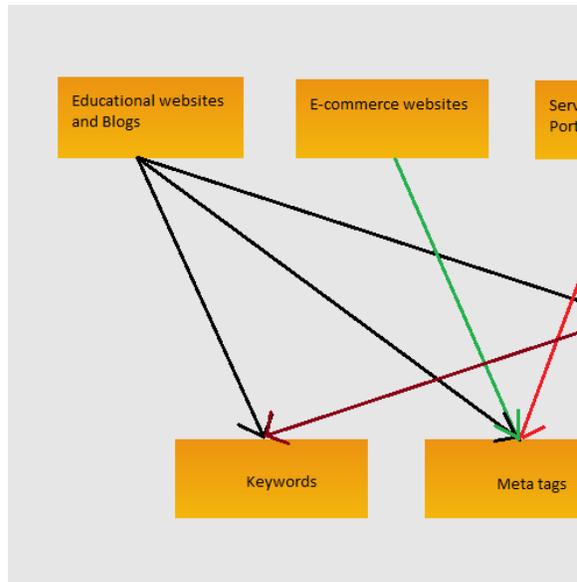
Techniques of SEO: Optimization of a webpage can be done by various techniques. Each technique is unique on its own and isn't fruitful for each website or blog. Some techniques through which probability of your website to be ranked at the top of search engine results are stated below

1. Keywords: - A startup number one marketing goal should be to identify at least a handful of potential SEO keywords to target within the natural search results and then optimize the page accordingly. This list should include keyword phrases that the customers are likely to enter into the search engines. Once identified, these keywords should be integrated to your site in key areas including your page titles, heading tags and also the body content of the website.

2. Meta-Tags: - Meta tags are a great way for webmasters to provide search engines with the information about their sites. They can be used to provide information to all sorts of clients and each system

processes. In SEO Meta tags still play an important role. Especially the use of the Meta description is very important. This tag is shown by search engines as the small text item in the search results. Meta tags should be unique on each and every page of the web site. Both a relevant title tag and the description tag will have to persuade a visitor to click on the link in the search result.

3. Social Media Marketing (SMM):- The most active element of the entire internet world is the social media. It's not enough to have a popular website with good content any more if you want better search engine results for your business. Social media often feeds into the discovery of new content is a user search activity. Social media can also help build links that in turn support into SEO efforts. Many people's also performs searches at social media sites to find out content. Social connections may also impact the relevancy of some results, either within a social media network or at a mainstream search engine.

4. Interlinking: - Interlinking is establishing various internal links to your page. Internal links are most useful for establishing site architecture on an individual page. Search engines need to see content in order to list pages in their massive keyword-based indices. They also need to have access to a crawl able link structure-a structure that lets crawlers of search engines to browse the pathways of a website in order to find all of the pages

on a website. Hundreds of thousands of sites make the critical mistake of hiding or buying their main link navigation in ways that the search engine cannot access. So in order to avoid this interlinking concept should be adapted to make your page optimum.

Objective: We have seen various types of SEO implementation methods. So the objective of this paper is to propose a humble suggestion for various business firm, organizations, portals or blogs to adapt certain SEO method due to which their website or blog maybe search friendly and mark a place in the results of any search engine. The business that the entire firm make based on their website is directly proportional on its search engine rankings. The more optimum the webpage is more likely it is to hold a place in top rankings of any search engine and which results in maximum number or hits or visits on that webpage.

Conclusion: SEO is essential and integral for any website or blog. An idea of which SEO technique should be adapted by a particular portal is put forth below

- E-commerce website that is online shopping portal should adapt the Meta tagging technique. As tags like "online", "shopping" etc. are most of the times entered by the users which will help this website to be visible in the search list of search engines.

- Service providing organizations or portals which provide its service to other businesses (B2B) should use Meta tagging and Social Media marketing (SMM). As

the organization's marketing is required so that other web pages can buy its service. It is very much recommended to market it on any social media on use Meta tags which will helps seekers of such service to find these portals easily on search engines.

- Product based portals i.e. the firms which sell or promote a particular product are recommended to highly rely on SMM. It will help enhance its marketing and help in increase its business outcome.

- Educational websites or blogs can use keywords or interlinking. Defining certain keywords in the page optimization helps it in order to be discovered. Interlinking like having different links inside the website helps the search engine crawler to browse the path way of that website increasing its discovery rate.

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