

# **Modern Search Engine Techniques**

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## ABSTRACT

To be at the top in the world of www, every website needs to be standardized and well format as per standards defined. SEO has many new algorithms & indexing ways that helps user to get best results for their searches. Search Engine Optimization (SEO) is important for websites to improve the rank for search results and get more page views resulting into large user traffic. The search engine ranks provide the better and optimized result to user's query, which help them to view the exact contents they are looking for from list of popular web pages among the number of pages available on the web. My case study will focus on some advanced techniques that are helpful to the website owner for better page rank in search result. This will focus on simple modern SEO techniques that can be add on to your website designing which will indirectly help into SEO page rank. Keywords: SEO, Search Engine Optimization, Search Engine, Page Ranking

## I. INTRODUCTION

Practice of increasing the quantity and quality of traffic to a website through organic search engine results is what Search Engine Optimization is all. Search Engine Optimization i.e. SEO in simplest words is an art and science of driving targeted traffic to your website from search engines.

Important points to be focus while designing a website for better page rank include creating high-quality content, optimizing content around specific keywords and building back-links. This research work is about studying and understanding modern techniques to be considered while designing a website. Listed techniques will help one to improve their page ranks in search results indirectly diverting user traffic to the website.

To ensure your website appeals to the right audience, and visited by wide audience, SEO is your digital calling card. It will help you in getting your site to the top front of the target audience. It will multiply your impact and help you turn your audience to your customers. SEO is a remote control you have to dictate your business to web users the way you want and on the path choose is best for your growth. First point to connect with the

Audience online is your website, SEO will help you out to connect with target audience. SEO in modern age of internet where millions of searches are done in fraction of seconds is no longer about getting number of clicks and views or ranking your site in the search results but it's something more than what we know about it. It gets your business noticed and loved. SEO helps you build your own brand stronger, sharper and trusted over the internet. If you are at the top of search results this boosts your business market. Who all is not addicted to the social network sites like Facebook, Twitter etc. Posts shared by users on social networking platforms are bridge to the SEO parameters like meta descriptions and titles. Online marketing and targeting audience is about being at the click of the visitors search and giving them the solution and SEO can make this possible for you and business.

There are number of algorithms that perform data analysis for search results and number of tools available to test how healthy your website is to compete.

#### II. MOBILE OPTIMIZED AND MOBILE FRIENDLY

One common assumption is that because a website is responsive is that it is also mobile-friendly. Most of the organizations are not aware that their website is been classified as unfriendly by Google search; With Mobile devices ranging from handhelds to tablets, understanding how your website will display on the variety of formats is critical. Many Businesses and Organizations developing a new website have the high priority for making a website mobile friendly. Increase in number for mobile user along with cheaper internet services has contributed to the mobile friendly website demands in last few years.

Mobile friendly website are the one that displays accurately between your desktop/laptop computer and a mobile device such as handheld phone like IPhone, Android devices or Blackberry phones or tablets like IPad, Kindle, Galaxy etc. There may be case that it will appear smaller on a phone and may not work perfectly on a touchscreen tablet, a mobile friendly website will be perfectly functional. Ensuring your website is mobile friendly is critical hence to ensure the developed website is also mobile friendly certain key points listed below should be considered by developers as good formatting elements.

- Avoid making users type of unless absolutely necessary.
- Give user the option to view the desktop version of the website.
- Thumb friendly with large touch points for simplifications.
- Keep your pages under 5mb to ensure it loads rapidly.
- Set letter spacing greater than equal to 0px to avoid overlapping.
- Enable AMP for blog pages.
- Use correctly proportioned elements like buttons.

It takes time to optimize your mobile experience, and some of the points in the above list do sound less than easy. To see how your site displays on mobile view, visit it on a mobile device, or use Device View to preview how it looks exactly on the devices with different resolutions and size. One can also use Google's Mobile-Friendly Test to get a quick assessment of you site's mobile compatibility.

#### **III. RESPONSIVE DESIGN**

Responsiveness of website is all about managing your web contents according to the screen size it is viewed on by the visitor. Responsive web design is a method of developing a site that is completely flexible regardless of device. The website automatically orientates itself based on the screen size of the device, rather than detecting specific browser type or device type. Re-optimization and reformatting the site gives a practical flexibility beyond imagination.

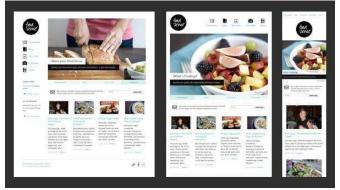


Figure 1. Responsive website look and feel on different screen sizes.

If your website users are more used to mobile device and often visit through them it is better to have a responsive web design for better user friendly experience and that will surely help more visitors for the next time and scrolling down the contents thoroughly.

Responsive design is costly but wisest development investment if the target audience is base that is active on mobile devices or need to make purchases on the go. One can have a look over different responsive website in the link here and can get an idea about how they all look and how to html elements change over the different screen sizes.

https://www.tripwiremagazine.com/respon sive-website-design/.

Key points to start with responsive designs:-

A. Low fidelity wireframes and prototypes

The longer you work with low fidelity wireframes and prototypes the better chance you have of identifying places where the page layout breaks in the browser before a major commitment to a high-fidelity design is Undertaken.

B. Mobile First

Designing for smaller screens first encourages you to think about content in terms of priorities. It helps to make a judgment upon all the elements of the page to decide which one are to be replaced or are need to be changed.

# C. Atomic Design

Website is a collection of pages, start designing it as with component level design. Designing components Across different viewports will help to make a plan for how those components should reflow as the width of the viewport changes.

# IV. STRUCTURED DATA

Search Engines have to deal with millions of web pages contents that has ton of information in number of formats. Crawling through huge data set they need to understand the subject on every page they visit hence, in order to make their jib easier they have agreed to set of schemas.

Schema is just a way to describe the content that is available on a page in a more structured way. Here, structured way is adding your pieces of code in html of a page in such a way that they are more readable to search engines. There are schemas for all types of content, from articles to reviews, products for sale, breadcrumb menus and a lot more. Google and other SE are using schemas for their knowledge graph, rich snippets in search results, ad words shopping campaigns and ad words extensions.

Optimization here is to make the job of search engine crawlers easier by giving them the right signals so that they can understand your website better. Engines use lot of factor in their ranking algorithm and to achieve high ranking one need to focus on lots of small changes to the website. One can review their own website, examine html code, test pages with tools like Google testing tool and if you find your web design is not up to the mark, this where you to improve for better SEO.

#### V. SEO TOOLS

One need to check traffic levels, ranking positions, incoming links, social media results and a bunch of other metrics that play a key role in SEO Ranking. If you have a small website maybe this is easy to do but if you have big websites (or manage more than one websites) then trying to do this kind of monitoring Manually will be too difficult.

There are number of useful tools that are free to check how healthy your website is, following are few tools listed.

## A. Google Search Console

Google Search Console officially known as Google Webmaster Tools, it monitors your website's performance in Google Search.

#### B. Bing Webmaster Tool

Bing's Webmaster tool monitors your website's performance in Bing.

## C. Google Analytics

Google Analytics tracks & reports website traffic, currently as a platform inside the Google Marketing Platform brand. Analytics helps you understand how people use your site, so you can take action to improve their experience.

## D. Long Tail Pro

One can manually do keyword research using Google Keyword tool, Google Trends, Google and Bing suggestions etc. but to have everything at one place one can use Long Tail Pro that will save time not free but one-time off cost which makes it affordable for all types of users search.

#### VI. CONCLUSION

Focusing on the tiny part of the website development right from the initial step and considering above point during development will help one's website to attract better traffic and giving higher search engine rank in the world of www. Modern techniques are basic key points that are at the root of website for a better health results once your website is live for the visitors or end users.

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