Using Search Engine Optimization Technique Increasing Website Traffic and Online Visibility

Geetanjali Tyagi
M.tech CSE& SRM University
Tamil Nadu, India

Megha Sharma
M.tech CSE& SRM University
Tamil Nadu, India

Kumar Kaushik
Assistant Professor& D.J College
Uttar Pradesh, India

Abstract— SEO is the process to get your site higher rankings in search engines. SEO is a necessary service as the Internet is evolving at a rapid pace and there is greater than before competition for market go halves to the top positions in various search engines to reach. Through research help, it was shown that most people prefer the first ten search outcome as if they traverse the list of search engines and rarely go for results. SEO is one of the most overlooked areas of marketing today. You are having the older generation still trying to advertise on billboards, TV commercials, advertisements or radio. in the meantime the younger age group consumed with the hype of Face book, Twitter and additional sites of social networking. There are lots of SEO techniques with best quality that are able to achieve the desired results. SEO is the best publicity method that is much longer term. You can never climb in the rankings of Google within days. Typically it takes several months before seeing a boost in your position. But on one occasion you can even get to the peak of the search engines and you can even receive a constant stream of hundreds. The objective of this research paper was to prove that implementing search engine optimisation elements that are increasing Website traffic and online visibility. For Website usability seo attributes is essential to improve rankings.

Keywords—on page, off page, Meta keyword, Search Engine Optimization, SEO Techniques, Page Rank

I. INTRODUCTION

Search engine optimization (SEO) has been around since the mid-1990s with database. “SEO is a system which facilitates search engines find your website and rank it higher than the millions of other websites in response to a search question. SEO, therefore, makes it easier for you to get more traffic on your website. Basically, it’s about enhancing your site’s ranking in various popular search engines such as Google, Yahoo! and MSN. Search Engine Optimization is one of the most effective ways to attract more and more relevant visitors towards your website.”

Search Engine Optimization (SEO) is just the first step of promoting your web site. A combination of proactive broad-spectrum, yet tightly targeted Internet marketing efforts is essential to getting your message to your potential customers. With an estimated 1.2 million Web pages being added to the Internet every day this has become a brutally competitive arena with everyone clamouring for a first page position on search engines SEO is divided into two types. The first type is called white hat SEO or white SEO. The second one is called black hat SEO or black SEO. Those types are opposite each other. White SEO refers to a type of SEO technique which involves legal methods to improve the visibility of a website or web page in search engines. In other side, black SEO refers to SEO technique that uses illegal methods to improve a website’s visibility in search engine. Some concrete examples of black SEO are link farms and keyword stuffing search engine. Some concrete examples of black SEO are link farms and keyword stuffing.

How does a Search Engine Work?

Search engines perform several activities in order to deliver search results.

Crawling - Process of fetching all the web pages linked to a website. This task is performed by a software called a crawler or a spider (or Googlebot, in case of Google).

Indexing - Process of creating index for all the fetched web pages and keeping them into a giant database from where it can later be retrieved. Essentially, the process of indexing is identifying the words and expressions that best describe the page and assigning the page to particular keywords.

Processing - When a search request comes, the search engine processes it, i.e., it compares the search string in the search request with the indexed pages in the database.

Calculating Relevancy - It is likely that more than one page contains the search string, so the search engine starts calculating the relevancy of each of the pages in its index to the search string.

Retrieving Results - The last step in search engine activities is retrieving the best matched results. Basically, it is nothing more than simply displaying them in the browser. Search engines such as Google and Yahoo! often update their relevancy algorithm dozens of times per month. When you see changes in your rankings, it is due to an algorithmic shift or something else beyond your control.

Although the basic principle of operation of all search engines is the same, the minor differences between their relevancy algorithms lead to major changes in the relevancy of results.
What is Search Engine Rank?
When you search any keyword using a search engine, it displays thousands of results found in its database. A page ranking is measured by the position of web pages displayed in the search engine results. If a search engine is putting your web page on the first position, then your web page rank will be number 1 and it will be assumed as the page with the highest rank. SEO is the process of designing and developing a website to attain a high rank in search engine results.

II. SEO PROCESS
There are several segments of SEO strategy seen as optional that are actually absolutely imperative to the success of an SEO campaign
Website analysis.
Competitive Analysis.
Proper Keyword Research.
Content Development.
On-page Optimisation.
Off-page Optimisation.
Return on Investment Analysis.
Local SEO.
Daily, weekly and monthly reports.

TYPES OF SEO:
Main two types of SEO are:
On page optimization
Off page optimization

On page optimization
On page optimization is the process of making a website SEO friendly and lot of points keep in mind when we doing the on page of any website like title tag optimization, meta description of that website, navigation structure of a website and more.

Off page optimization
Off Page Optimization is the activity that is done on other sites for our site to increase search engine ranking. Off page is what you do to promote your website like link building, social bookmarking, blog posting, directory submission, smo etc. SEO techniques are classified into two broad categories:
White Hat SEO – Techniques that search engines recommend as part of a good design.
Black Hat SEO – Techniques that search engines do not approve and attempt to minimize the effect of. These techniques are also known as spamdexing.

Latest SEO Techniques to Drive Targeted Traffic to Your Website
Even though people spend a lot of their online time on social network sites, search engines like Google, Bing and Yahoo are still the primary drivers of traffic to lots of websites. Approximately 80% of traffic on the internet is due to search engines. One of the best SEO techniques is Keep Updating Your website as search engines index those websites quickly.
& rank them higher which are updated regularly. After Google Panda Update content is termed as King to rank higher on the search engines. Be careful about the density of keywords and phrases and maintain a balance between what visitors and search engines looking. You need to always talk about your blog or website. Organizing online contests giving a prize for the best web design, or the best design for a logo, always gives publicity to the organizer. So use your own ways to be famous as this will increase traffic to your website. Publish about your website or blog in newspapers, magazines, etc., Attend conferences and seminars. If somebody read your article in the newspaper is very probable that visits your site. Word of mouth is still an effective technique to promote your website.

Fig 2 show traffic drive different category

How does Modern SEO technique work?
Search engines have existed for about 2 decades now, and many people know how they work. Up until a few years ago, SEO used to be a simple case of finding some keywords and then building links based on them. This resulted in a lot of spam and low quality search results on Google.

Search engines have updated their algorithms to detect unethical SEO tactics. Most websites that used shady methods to increase their ranks on search engines were severely penalized. Here are some SEO techniques that used to work but do not anymore: queried.
Building links through link farms
Building links through content farms
Stuffing articles and web pages with keywords
Building an excessive number of links in a short period of time
Using various article marketing techniques and ignoring all other legitimate techniques
There are better ways to optimize your website and make them more popular on search engines. Here are some techniques that do work.

Guest posting
This is a very recent technique and it has grown very popular over the last 3-4 years. Guest posts are published on websites and blogs other than yours. They have interesting content for readers of the website.

Why Do I Need Guest Blogging?
Positive and constructive comments from consumers help maintain a respectable business image, and they are also a valuable advertising method. Improve your site’s rankings and increase your incoming traffic. The guest post contains links to your website that readers can follow. Your website is exposed to a wider audience, which can drive further traffic. Guest posts are usually of higher quality. Guest posting improve rank through search engine holders.
Blogging
Even though social network has supplemented blogging to a large extent, it is still the best way to increase readership. Social network posts are very casual and they are great for conversations. However, when you post blogs that have genuine and interesting content, people are more interested in reading them.

Facebook activity
Facebook is a constant in people’s lives. They use the network to find out what’s going on around the world. They use it to find interesting news and you can use this to promote your products as well. Posting regular discounts and offers on Facebook will garner more attention and drive traffic to your website.

Leveraging Twitter
Twitter is probably the most impactful SEO tool in the last 3 years. It started as a small status update network, Tweets are short and they are more easily digestible for visitors.

Link building
Along with proper keyword research, link building forms one of the pillars of search engine optimization. The basic principle used by all search engines to gauge your popularity is still counting the number of links that point to your website. However, the rules have changed considerably over the last 3 years.
Here is what search engines want from your website:
Backlinks to your website must be organic (and not part of an excessive strategy)
Links should appear on quality websites (as determined by their PageRank)
If many links are found on your website on link farms and content farms, Google and Bing will downgrade your rankings severely
High quality link building will lead your web pages to appear in the top 10 or 20 search results on search engines

Using niche long tail keywords
People increasingly search on mobile devices. Earlier, people used to only look for information about certain topics on the internet. Today, they use it to look for:
Products and services
Nearby restaurants, movies and other places
Search is becoming increasingly localized. Therefore, if your business is based on Melbourne, you need to include those locations in your keyword research as well. Examples include:
Red running shows in Melbourne (rather than simply “red running shows”)
You need to use generic keywords as well as long tail niche keywords as mentioned above. This will help your website appear on top when people are looking for local places and businesses.

Upgrade your website
The last 3 years have seen modern web standards including HTML5 and CSS3 emerge. These technologies make it easier for search engines to parse your website content and index information. Upgrading our website is the single best thing you can do to increase your visibility on search engines.

Maintain your links
As time goes on, many websites are simply not updated. Some websites go down. Even in existing websites, some pages are deleted. However, the links to these pages are not always taken down. These are called dead links and the resulting state is called link rot.
You need to ensure that all the links on your websites are active and that dead links are removed. You do not need to go hunt for individual links because there are many tools that can help you automate this process. Running through this process every week will help ensure that search engines always find your website to be high quality.

**Update your website activity**

Lastly, search engines want websites to be active. If your site is not regularly updated with new content, it is considered to be inactive and therefore of little value to search engine users. Keep your website fresh with new posts and design, so Google and other engines will index your website on a daily basis.

This way, users will also get the latest content on your website from search engines. SEO has indeed become a very time consuming job, but that is because there are so many factors in play. You might want to hire a reliable SEO company to help you form a concrete strategy.

III. **WHY IS SEO IMPORTANT?**

As an SEO expert, we are well acquainted with the fact that developing your business online is not just having a website. SEO is like electrical energy for your online firm, and making business through your site does not take place on its own. Most of the users who are in search of your products or services utilize a Search Engine such as Google to come across you and your contenders. Now, if your website does not have an ongoing / current SEO strategy, you obstruct the ability for your site to be located over the search engines like Google. If your opponents are becoming visible more than you on key terms relating to your business, do not forget to ask your SEO advisors as to what all can be done regarding it.

**Why do we need Ongoing SEO?**

As an SEO expert, we are well acquainted with the fact that developing your business online is not just having a website. SEO is like electrical energy for your online firm, and making business through your site does not take place on its own. Ongoing SEO is important because the search engine industry changes very often.

It helps organizations to proactively build links over time.

It helps you to frequent view and analyze the analytics.

Regular reporting and evaluation ensure objectives are being achieved or at least moving in the right direction.

**Is on-page SEO more important than off-page SEO?**

On-page is anything you directly control in the code or content of your site. On-Page or on-site optimization can be beneficial initially as you are looking for good rankings for your website or blog and can be crucial when you are close to getting that ultimate number one position in Google. But all through the process of getting your site to number 1 you should still pay close attention to on-site optimisation. However it is Off-Page or off-site optimization that is really critical to getting good rankings in Google. In order to start thinking on how you can promote your website you need to be sure that the website is optimized and in good condition. So the first step is to work with on-site SEO first and then go off-site. All your website content – pages, blogs, articles, etc.

- Title tags, meta tags, and H1 tags
- Your user interface, layout, and all aspects of design
- Alt text for your images
- The keywords you use, and their usage density (do not assume more is better!)
- How fresh, unique, and current your content is
- The time it takes for your website to load
- URL structure, and whether or not the URLs contain your keywords
- XML sitemap – it should be comprehensive and dynamic
- A full indexing of your site (you can select pages that you do not wish to be indexed by search engines)
- Internal linking (linking to other pages within your site) and navigation
- Robots.txt file (this tells the search engines to index your site)
- 301 redirects

**Off-site SEO**

SEO is therefore all the link building and marketing techniques you employ outside the context of your own website.

These include (but are not limited to):

- Link building; back-linking and inbound
- Press releases and other media articles that directly reference your website
- Any article directory submissions you have made
- Competitor analysis
- Your social media posts and related marketing
- Keyword analysis – the popularity and accuracy of your keywords
- Leaving comments and links on other sites, blogs, forums, and videos
- Submissions to SEO-friendly directories
- Videos placed on sites like YouTube, properly optimized
- RSS feeds
IV. ADVANTAGES OF SEO

FREE TARGETED TRAFFIC
The primary advantage of SEO over any other type of internet marketing. Once your site is ranked in the top 10 for your keyword phrase, you should be able to keep it there with a minimum of fuss. This means that you will receive free traffic as long as you keep it up

Superb ROI
Return on investment is one of the major advantages of SEO over paid advertising. A site takes some time to get rank and after the site ranked, the ROI will be great.

COST Effectiveness
SEO is one of the most cost-effective ways of marketing. If the site is properly designed and optimized then it has a longer standing s compared to the Pay Per Click Advertising.

Better Usability
The site is easily available to the large portion of the online users. A better optimized and designed website always attracts lot of visitors

Higher Sales
Increased visibility, cost effectiveness and accessibility leads to the higher sales.

60% Of Clicks Go to the First Result
This means that only 40% of clicks are left for the second through the millionth result on google for the keyword. Securing that top spot on Google is a sure fire way to gain thousands upon thousands of visitors. SEO is certainly the tool needed to gain that top spot as well. For a small up front investment you are looking at potentially millions of sales.

The Results are Low Cost (In Comparison to Adwords and PPC)
Organic listings are essentially free. When you are listed at the top, you don’t need to pay per click or allocate a budget for advertising, one of the main benefits of SEO is that it is the gift that keeps on giving. With a little bit of effort (and some money upfront to pay for SEO costs) you can watch your website get consistent traffic. You don’t have to pay $10 for every person who clicks on your ad. Unlike paid ads, your traffic will not drop to nothing when it stops. SEO gets rid of the need to have thousands of ads across the web.

V. CONCLUSION
In this paper, We use some technique on page and off page for improve ranking site and we presented some challenging problem faced by existing search engines. For Better Search Engine Ranking, There is importance of both on-page and off-page SEO. There are many of Off-Page Search Engine Optimization Techniques. This research is based on reviewing different available techniques for optimizing individual web-pages or the entire website to make them search engine friendly. Finally, we have also suggested our own observed methods for search engine optimization. As a future dimension to this research, we intend to develop an effective and accurate system for search engine optimization for obtaining a higher rank for the websites in the search results webmaster how top rank their website using google panda search engine update to enhance their website web page ranking in top position.

ACKNOWLEDGEMENT
I would also like to acknowledge this research paper to my father Late Sh. shiv raj tyagi (Delhi), His memories and Motivational thoughts inspired me to do this paper work more effectively. Very special thanks to Mr Akhilesh pal PPC manager in vamani overseas subsidiary of maharani paints Pvt ltd and Mr. kumar kaushik, Assistant professor D.J College to their practical support for this research paper.

REFERENCES


M. Cui, S. Hu “Search Engine Optimization Research for Website Promotion” Information Technology, Computer Engineering and Management Sciences (ICM), 2011 International Conference on (Volume: 4 ) © 2011 IEEE, DOI 10.1109/ICM.2011.308 Page(s): 100 - 103