1. Introduction

Search Engine is the most used in the internet to retrieved informations [1]. The major search engine have their own algorithm to retirived information from the internet. Search Engine Optimization is a technique to help user to make their website visible on the search result [2]. There are two common SEO techniques: black hat and white hat. *SEO techniques: black hat and white hat are required in order to survive and achieved higher traffic from search engine's result* [3] [4] [5]. Search engine's unpaid result often referred as "natural", "organic", or "earned" result [6]. Therefore SEO Plugin help user easier to make their website visible on the search result and prominence in organic searches made by the search engine. *in this final project we will create a plugin for wordpress website and help the user easier to achieved higher traffic for their website/webpage using White Hat technique only and improving On-Page Optimization (Meta-Data) only. The white hat technique will not make the user's website banned by the search engines, because most people doesn't know how to improve their SEO without being banned by the search engines* [7] [5]. *With the plugin that we will create help user to improve their SEO easily and achieved higher traffic than before.*

1.1 Background

Search Engine Optimizations (SEO) is the core of a website for obtaining higher traffic. In definition, Search Engine Optimization is a process that uses search engine principle to acquire higher rank for web-page or entire website to enchance the probability of website access [8]. SEO affecting the visibility of a website or web-page in search engine. In general a frequent website appears in the search results list is a higher ranked website on the search engine. The more traffic will affected the website's rank, and these visitors can be converted into customers [6]. Nowdays people are having difficulties on achieving higher traffic, because most people doesn't know how to optimized their SEO [7] [3] [4].

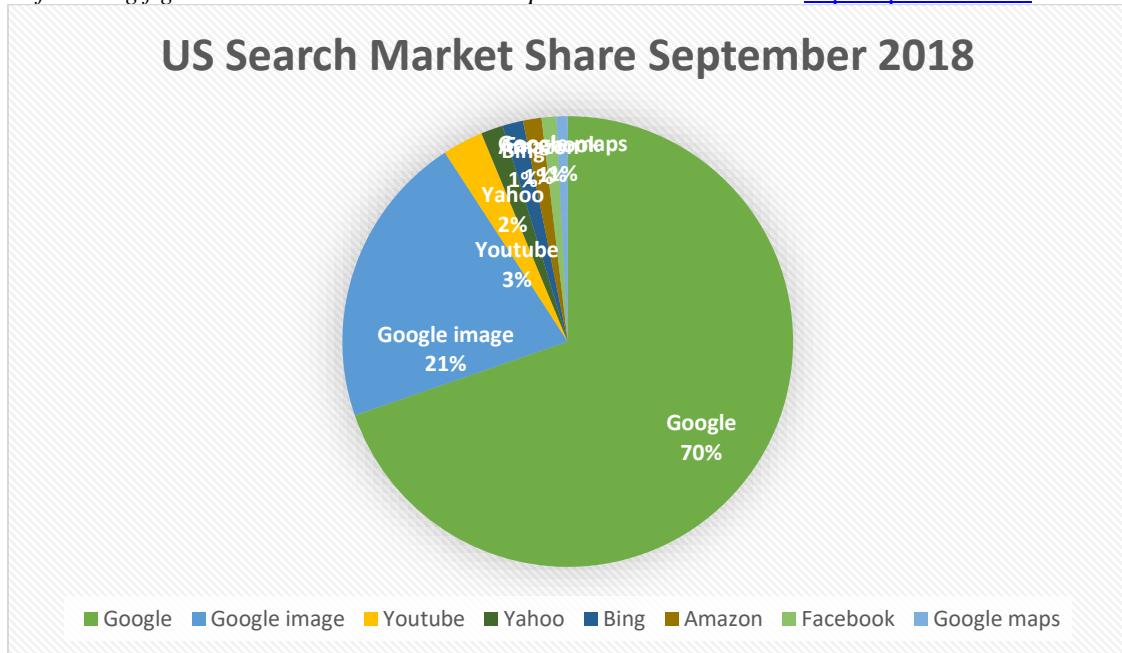*The following figure is US search market share September 2018 on website* https://sparktoro.com

Figure 1 - US Search Market Share September 2018

Source:https://sparktoro.com/blog/2018-search-market-share-myths-vs-realities-of-google-bing-amazon-facebook-duckduckgo-more/

Based on the figure 1, Google is the leading search engine to retrieved information from the internet, and followed also by Google's products which are google image and youtube, that means Google is the biggest search engine to retrieved information from the internet. Google voted four times Most Outstanding Search Engine by Search Engine Watch. Google is using the crawler-based serviced provides both coverage of the web along with great relevancy [9]. Furthermore Google also provides user to find more than webpages such as images, locations, and videos from across the internet at the same time, and Google doesn't have any ads on the front page [9].

Wordpress is the most used web based website builder in the internet [10]*,* emphasizing accessibility, performance, security, and ease of use. Wordpress a good web based website builder software should work with minimum set up, so user can focus on sharing their content, product, or services. The basic WordPress software is simple and predictable so you can easily get started. It also offers powerful features for growth and success [11].

Plugins are program that can easily be installed and used as part of your Wordpress. The wordpress either from the .org / .com are allowed you to download, install, and define supplementary programs/plugins. A plugin in wordpress is recognized automatically by the wordpress itself either its from .org / .com and its function is integrated into the main PHP file that is being presented.

According to Plugins section above, SEO Plugins are required in order to survive search engine's result because every year SEO algorithm are improving. If your website doesn't used SEO or doesn't used a single SEO Plugin then your website or webpages will not be appear in the search engine's result. Every year experts are creating a new algorithm for SEO in order to create a friendlier, easier, and efficient [3] [4].

Nowdays most people used White Hat to improve their traffic for their website or their webpages [7]. why people doesn't used black hat instead? Because Black Hat hide their keywords inside their content, it's called Spamdexing. Spamdexing is violating search engine's guidelines, that will blocked/banned by the search engine any website that used Black Hat technique [2] [5]. White Hat is friendlier than black hat because White Hat is following search engine's guidelines [2] [5]. White Hat is directing the audience/user/customer, by not spamdexing the search engine's index [6] [5].

1.2 Problem Statement
Today, many businesses are using the web to support sales of the products or services offered by the company. If the company have a good Search Engine Optimization (SEO), their products or services will always be on the first page of the search result, and from that the company that offered the products or services will obtained traffics from search engines. With the right content and the right Meta-Data the company will be visited by customers that are from the search result.

Traffic affects the ranking on Alexa.com, if the traffic value of a web is high then the ranking value that gets on a web is low. Quoted from research compiled by Arjun Thakur, A. L. Sangal, and Harminder Bindra, on "Quantitative Measurement and Comparison of Effects of Various Search Engine Optimization Parameters on Alexa Traffic Rank". The higher the traffic, the lower the ranking that will be obtained.

To increase traffics, Search Engine Optimization is needed. In general, Search Engine Optimization takes a long time, about 1 year to improve Search Engine Optimization and predict the next year's trends. To do so the company needs experts in SEO, and this is quite expensive to hire a SEO experts / SEO auditors. For small and medium companies will have difficulty in hiring SEO experts / SEO auditors.

The SEO Plugin makes it easy for people or companies to easily improvise their SEO. SEO Plugin will be more efficient and save the cost of hiring SEO experts / SEO auditors. The SEO Plugin will easily and quickly replace the "meta-data" on user's website as desired. Google always refreshes the database with a period of 3-7 days, after Google refreshes the database, the user's website will appear in the search results.

There are several problems about SEO, such as:
1. How does the SEO Plugin work in getting higher traffic?
2. How does content and brand affect traffic?

1.3 Goals
The main goal of this research is to build a plugin that will help user achieved higher traffic in search result through SEO Plugin and used the most popular technique the White Hat technique [6] by modifying its **Meta-Data**.