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# Comparative Analysis of Google Panda and Penguin SEO Algorithms on Blogs

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**ABSTRACT**:In this Paper, a Comparative Study of the Google Search Engine Optimization Algorithms i.e. Panda and Penguin is done. Panda is Content Based Algorithm and the Penguin is the Linking based Algorithm. We have created two Blogs on the Google's Blogger to analyse the algorithm effects on the Blogs. The Factors of the SEO Algorithm are implemented with the help of the Online SEO tool available. This Research will be helpful for those who want to study the Algorithms effects to get the Higher Rank in the Search Engine Result..

KEYWORDS:SEO, Off-Page, On-Page, Panda and Penguin.

## I. Introduction

**Search Engine Optimization:** Search Engine Optimization (SEO) is a technique that refers to process of improving traffic to website by increasing the visibility of site in search engine results. SEO helps search engine to give highest ranking to a particular website so that it could be shown at the top of search engine result page in response to user search query. And the searched data must be relevant to user query. If a website get place at top of results then there are more chances of user visiting that web site. To do so websites uses no. of optimization methods. Although search engines use many algorithms and techniques to produce the results on time, it is difficult to crawl around billions and billions of pages. To help the search engines retrieve the results faster the website developers use many search engine optimization tactics. [1]

Conceptually, there are two ways of doing SEO are:

- On-Page SEO- On-site optimization focuses on factors affecting the website to do with its hosting, structure, accessibility and content. [3]
- Off-Page SEO- Off-site optimizations factors are all to do with links and how well integrated the users are into the networks online. [2]

#### Panda (Content Based)

Panda is a SEO Algorithm that affects the Blogs and website publishing the Duplicate Content. The Duplicate Content can be from any source i.e. from Journals, Online Websites and Research works. No website or the Blog can get the high SERP without following the Algorithmic factors. Google Penalize the sites that have the duplicate content. Websites having the Poor Backlinks will not be directly affected by the Panda unless the Links on the website should not be from the sites having the Low- Quality Content. Panda affects sites that pass a threshold for low-class or duplicate content on your site. So the Prime concern of the Panda Algorithm is on-site content i.e. to eliminate or replace any content that is redundant, poorly written, or that does not do a decent job of resolving problems for visitors.



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## Penguin (Links Based)

Penguin is the Google SEO Algorithm that focuses on the Quality Backlinks. Google Penalize the Websites or the Blogs having the Backlinks from the sources having very low page rank. The Websites and the Blogs should have the large Number of High Quality Back Links from the Authorized Sources to achieve the High Rank in the Google Search. [6].

### II. RELATED WORK

- 2.1 Using Search Engine Optimization Technique Increasing Website Traffic and Online Visibility: Some technique on page and off page for improve ranking site and some challenging problem faced by existing search engines are presented in this paper. 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.
- 2.2 Using SEO techniques Google Panda to Improve the Website Ranking: SEO is the process of taking actions to gain unique traffic from search engines your ranking and place on a search engine website depends on user queries which in turn on what your web page have done for Search Engine Optimization. The Web search engine is faced with a much difficulties, problems in maintaining or enhancing the quality of their performance. This paper focused on the different Popular Search Engines and Study traffic behaviour of the Search Engines.
- 2.3 Evolution of Search Engine Optimization and Investigating the Effect of Panda Update into it: The past, present and future of SEO industry are revolving around Google. Every now and then Google has to change its strategies as to updates its search algorithm because to combat poor quality content and minimize the use and effectiveness of keywords. And due to its widespread influence SEOs have no choice but to evolve and adapt, or risk failure to deliver. And, this trend will likely to be continued. For the last couple of years two of the Google algorithm updates have struck fear into the hearts of webmasters the world over and the way it effect the web contents and strategies are important.
- 2.4 Analysis of Search Engine Optimization (SEO) Techniques: Web search is an integral part of our daily lives. Search engines help users locate particular information within large stores of content developed for human consumption. Search engines are developed using standard sets of realistic test cases that allow developers to measure the relative effectiveness of alternative approaches. A search engine is a tool that allows a user to enter keywords and retrieve information on websites contained in its catalogue or database. Search engine tools like Google is run by search engine software that allows the database to be searched. The process of searching in the search engine is very efficient and more accurate. This paper surveys about how the search engines reduce the number of unwanted search results in the searching process.

## III. OBJECTIVES

- To conduct a brief literature review to analyse and research on Google searching behaviour, its Algorithms and optimization standards for webmasters.
- To find and analyse new and existing Search engine optimization techniques, tools and their effect on CMS applications and web **2.0**.
- Comparatively Analyse the Effects of Panda and Penguin SEO Algorithms in terms of Traffic on the Blogs.



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#### IV. RESEARCH METHODOLOGY

The methods used for getting information and knowledge for this document are literature readings such like books, articles, research papers & journals, internet pages, technical white papers and experts views. The study is kind of review of existing literature in the field of search engine optimization and SEO Algorithms.

This study is a descriptive, analytical, reviewing and doing post-mortem on existing theories and knowledge in the field of Search Engine Optimization Algorithms. It discovers strength, weaknesses, advantages and disadvantages of this field. Here are some Research Methodologies on which this Research will be focused:

- **Keyword Research:** First Objective was to choose the Low Competition Keyword with the help of Google Keyword Planner Tool to get the fast Indexing in the Google Search Results.
- **SEO Tools:** Find the Online SEO Tool Package i.e. <u>www.smallseotools.com</u> to implement the factors of both Panda and Penguin Algorithms.
- **Plagiarism Checker:** To Implement the Panda's focused factor, use Plagiarism Checker of the SEO Tool Package to Check the Duplicity of the Content.
- **Backlinks Checker:** To Implement the Penguin's focused factor, Use the Backlinks Checker Tool of the Small SEO Tools Package to check the Quality of Backlinks that were made on the Blog.
- Traffic Analysis: Compare the Panda's and Penguin's Factors effect on the Blogs Traffic i.e. Number of Views and Conclude the Final Result.

#### V. EXPERIMENTAL RESULTS

We have created Two Blogs to analyse the effects of the Panda and Penguin SEO Algorithms on the Traffic of the Blogs. The Blogs are created on Blogger.

- 1. <a href="http://www.suthra.blogspot.com">http://www.suthra.blogspot.com</a>
- 2. http://www.babyhazelgamesindia.blogspot.com

On the First Blog, We have implemented the Concept of the Panda Algorithm i.e. No Duplicate Content. On the Second Blog, We have implemented the Concept of the Penguin SEO Algorithm i.e. Quality Backlinks. In Starting without SEO, the Blogs have very low traffic i.e. 1 or 2 views in a day. But After starting SEO, the traffic on the Blogs is increased. The table 1.1 shows the weakly Traffic Record of each blog with the targeted algorithm applied on the Blogs. The Traffic Records are collected with the help of the Blogger's Statistics which provides the Graphic format details of the Blogs.



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#### Results

Name of Blog	Dates	Targeted Algorithm	No of Visits
suthra.blogspot.com	25 April, 2016 – 01 May, 2016	Panda	18
Babyhazelgamesindia.blogspot.com	25 April, 2016 – 01 May, 2016	Penguin	40
suthra.blogspot.com	02 May, 2016- 08 May, 2016	Panda	25
Babyhazelgamesindia.blogspot.com	02 May, 2016- 08 May, 2016	Penguin	70

Table 1.1: People Visited on the Blogs

Percentage Increase in the Visits on http://www.babyhazelgamesindia.blogspot.com is approx. 75-80% much higher than the http://www.suthra.blogspot.com Blog.

## VI. CONCLUSION

From this Research Work, We have concluded that the Penguin Algorithm works better than the Panda Algorithm by providing approx. 80% better Results in the terms of traffic. So the Web Masters should focus on the Link level SEO than the Content level SEO as it can help them to get increase the SERP of their Blogs or websites.

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