

## Improving the Page Rank of Web Site

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### Abstract

As the demand of web is increasing, the issue for website owner is to provide useful information to the users as per their requirement and fulfil their needs. The search engine Google used hyperlink structure for the ranking of web sites [2]. In this paper it is shown that how a web site is optimized. There are two major factors which are used for web site optimization. These are On Page factor and Off Page factor. In On page factor some tags are set for a web site which has to be optimized and the rules of w3c are used for developing a web site. Off page factors are those factors which are not include on the pages. These are not controlled by site developer but these have an important role for improving page rank of a web site. The main Off page seo factors are incoming links from other websites to a website [11].

**Keywords:** Website performance, on-page factors, off-page factors, page rank.

### 1. Introduction

Now a day's the numbers of web pages on internet are increasing. So there is a challenge for website owner to provide proper and relevant information to the internet user. Fig-1 shows a working of a typical search engine, which shows the flow graph for a searched query by a web user. A good ranking of query words has a major role in best searching for query words. There are various factors are associated with the ranking of web pages[10].How and where the keyword are set on a web page so that when user search the web by input the keyword in search engine. it is found best result according to user interest. The factor which are used for better indexing of a web pages are keywords , meta tags, header tags and directory submission etc. but increasing the page rank of a site depends on how much are incoming links for a site are coming from another site which also have a good rank[4]. A formula is given by Sergey Brin and Lawrence Page[1] who are inventor of Google that how the page rank of a web site is calculated. Which use the incoming link of another site to a site and another site have good rank. The algorithm is given below  $r(a) = (1-d) + d (pr (t1) /c(t1) + \dots + pr (tn) /c(tn))$ .

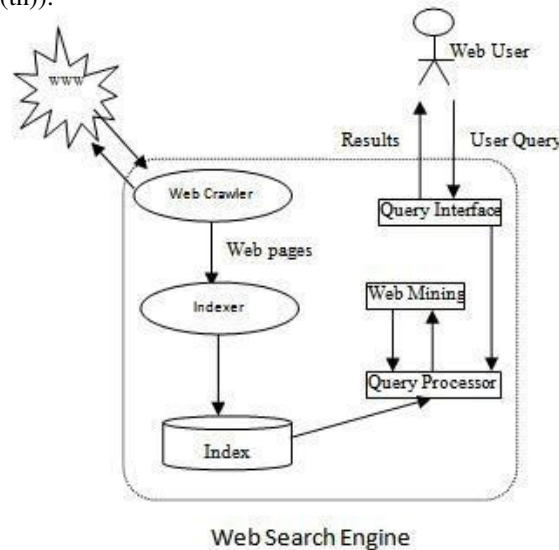


Fig 1: Working of Search Engine

### 2. How page rank and search results are increased of a web site?

All the factors which are considered by Google for indexing a web site and used to improve page rank of a web site. There are mainly two types of factors on page and off page which are used for rank improvement. Work is done on web site [www.creativebloggingideas.com](http://www.creativebloggingideas.com). First any factor which increases page rank of web site is not set. Page rank is checked by online tools which are given below and the rank is found 0. Result is shown in fig-1 generated by on

tools. [http://www.prchecker.info/check\\_page\\_rank.php](http://www.prchecker.info/check_page_rank.php) The main factor which is shown in this paper to increase the rank of a web site is incoming link.

### Check PAGE RANK of Web site pages Instantly

In order to check pagerank of a single web site, web page or domain name, please submit the JRL of that web site, web page or domain name to the form below and click "Check PR" button.

http://

Web Page URL: <http://www.creativebloggingideas.com/>

The Page Rank:  /10

Fig-2: show page rank of a web site.

### 3. Searching in Google

Now a web site is searched in the Google by entering the Query “seo training in Chandigarh”. First when it is searched in Google it is found the link of the web site on the 9<sup>th</sup> page in the Google search index[20]. After that the on page factors are set for a web site and after setting these, again by this query result which are found are shown in the fig-8. For this result the many on Page factor are to be setted. Mostly is how the keyword of a site are set in which tags it is shown. Because when any query is input in the search engine than the result which are generated by search engine are totally based on the keyword which are setted by the site developer. These key word are related to site mean what kind of information is provided by the site and what type of query is put by user, it is also guessed by the site developer. Then keywords are set for a web site.

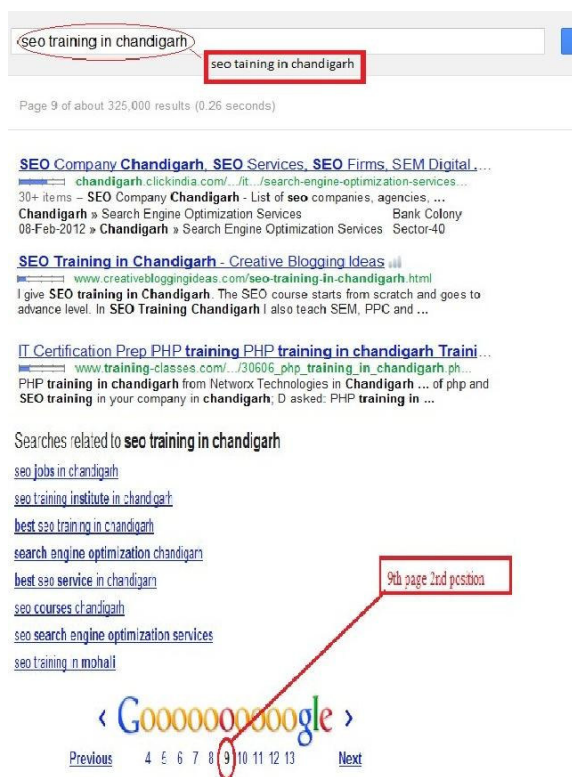


Fig-3: showing the result of Google search after entering query “seo training in Chandigarh”.

**A. Keyword in title tag**

The title tag is possibly most important consideration when it is try to raise search engine rankings for a particular keyword or keyword phrases. Search engines use the text contained within the title tag as a primary factor to determine what the content of a certain web page is about. Search engines will display the title tag at the top of each item in the search engine results page (SERPs). The words are used for the title tag is also the text that is displayed at the top left corner of the browser window. In this website coding title tag is used in every webpage of this website [5].  
<title> seo training in Chandigarh </title>

**B. Keyword in Meta tag**

Meta description tags are part of the display information that visitors see when web site is listed in the search engine results pages. Even though the meta description tags are not important to search engine rankings, they are extremely important in gaining user click-through from search engine result pages (SERPs). This is checked by the online tools which link Is given below[7] <http://www.seocentro.com/tools/search-engines/metatag-analyzer.html>.  
< meta name="description" content="I give seo training in Chandigarh. The seo course starts from scratch and goes to advance level. In seo Training Chandigarh I also teach sem, ppc and online earning."/>

Meta tags report for: http://www.creativebloggingideas.com		
meta tag	length	value
Title:	23	Creative Blogging Ideas
Description:	149	Free website with blog tutorials, blog tips, blog tools and blog ideas. Everything bloggers need on WordPress blogs and start blogging.
Keywords:	94	blogging,make money online, blogger, wordpress, thesis theme, blogging tips, social networking
Robots:	13	noodb, noydir

Fig-4: show the result for meta tag by online tools <http://www.metachecker.net/>

**C. Optimize Keywords in heading tag:**

The heading tags are headlines for a articles and it is mentioned in the title tags area, user have less than 10 seconds to attract user’s attention. The words written for title is shown in the search engine result index pages. When it is structuring the html coding for a Web page, it can look a little like an outline, with main headings and subheadings. For best [SEO](#) results, it is important to place [keywords](#) in those headings, within heading tags. This tag is written as given below.

```
<h1 style="font-size:15px;margin:0px;" title="seo training in chandigarh"></h1></div>
```

Another element of organic seo that can be classified as important as web site content is cross-linking, anchor text on a web page is written as which is shown in the anchor tag <a href="http://www.creativebloggingideas.com/unlimited-hosting-truth-internet-fraud-series" title="Permalink to Unlimited Hosting Truth Internet Fraud Series Part 1">Unlimited Hosting Truth : Internet Fraud Series Part 1 <span>35</span></a>

**E. Alt tag optimization**

Anchor text is the visible characters and words that hyperlink display when linking to another document or location on the web. If many sites think that a particular page is relevant for a given set of terms, that page can manage to rank well even if the terms never appear in the text itself[8].

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**F. Write Robots.txt for a web page**

Robots.txt files inform search engine spiders how to interact with indexing your content. By default search engines are greedy. They want to index as much high quality information as they can, & will assume that they can crawl everything unless you tell them otherwise. Robot.txt file is written for that web site. it is checked by on line tools which is given below[13] .<http://tools.seobook.com/robots-txt>



Fig-5: shows that result for robots.txt

**G. Submission on dmoz Text**

Dmoz is a website that brings together and features the best of the Internet by using the submissions and votes for thousands of users. Members of dmoz, find and submit interesting, newsworthy, funny or useful pages from around the internet. There are various rules about what and how you submit this content, mostly to try and avoid spammers making too much noise on the site[9]. Web is large, and one way to reach the Web documents is to use directory services, such as Yahoo (<http://www.yahoo.com>), or the open directory project (<http://www.dmoz.org>). Typically directories are manually created, and the judgments of which category a page belongs to are done by human editors.



Fig-6: shows submission on dmoz

After doing

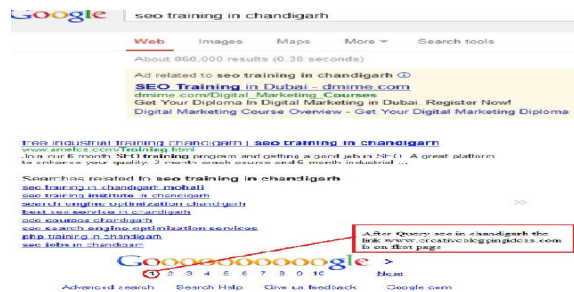


Fig-7: show the result index of google search

Till now the web site does not have any back link. The web site which is used [www.creativebloggingideas.com](http://www.creativebloggingideas.com). So after setting many parameters it has enhanced search engine visibility for a web site which is shown in Fig-7. But cannot increase page rank of the web site. For increasing the page rank of a web site it is visited by many users or that web site has many incoming link from another site. So the further work is done on incoming link for a site.

Your website has not backlinks to report. -- Go on .. and build backlinks first ;) btw.. you can look into following few options to build backlinks

- [Links From PR9 Sites](#)
- [PR-7 links on Actual PR pages](#)
- [1000 visitors GUARANTEED @ \\$7.99](#)
  - [PR 6 links @ Just \\$11](#)
  - [PR5 Links -or Only \\$44](#)
- [Google PR Formula Revealed!](#)
- [11 Incredibly Crstly SEC Mistakes](#)

Fig-8: show that site not have any back link



Fig-9: show page rank is 0.

#### 4. Off page ranking factor

Page rank is a numeric value that represents how important a page is on the web. Google figures that when one page links to another page, it is effectively casting a vote for the other page. The more votes that are cast for a page, the more important the page must be. Also, the importance of the page that is casting the vote determines how important the vote itself is. Google calculates a page's importance from the votes cast for it. How each vote is taken into account when a page's rank is calculated? Many algorithms are used to calculate page rank like salsa and hits etc. Page rank is Google's way of deciding a page's importance. It matters because it is one of the factors that determine a page's ranking in the search results. It isn't the only factor that Google uses to rank pages, but it is an important one[15]. Since the early stages of the World Wide Web, search engines have developed different methods to rank web pages. Until today, the occurrence of a search phrase within a document is one major factor within ranking techniques of virtually any search engine. The occurrence of a search phrase can thereby be weighted by the length of a document (ranking by keyword density) or by its accentuation within a document by html tags. For the purpose of better search results and especially to make search engines resistant against automatically generated web pages based upon the analysis of content specific ranking criteria (doorway pages), the concept of link popularity was developed. Following this concept, the number of inbound links for a document measures its general importance. Hence, a web page is generally more important, if many other web pages link to it. The concept of link popularity often avoids good rankings for pages which are only created to deceive search engines and which don't have any significance within the web, but numerous webmasters include it by creating masses of inbound links for doorway pages from just as insignificant other web pages.[3]

##### A. Back Link

Contrary to the concept of link popularity, page rank is not simply based upon the total number of inbound links. The basic approach of page rank is that a document is in fact considered the more important the more other documents link to it, but those inbound links do not count equally [18]. First of all, a document ranks high in terms of page rank, if other high ranking documents link to it. So, within the page rank concept, the rank of a document is given by the rank of those documents which link to it. Their rank again is given by the rank of documents which link to them[19]. Hence, the page rank of a document is always determined recursively by the page rank of other documents. Since even if marginal and via many links the rank of any document influences the rank of any other, page rank is, in the end, based on the linking structure of the whole web. Although this approach seems to be very broad and complex, Page and Brin were able to put it into practice by a relatively trivial algorithm [16].

##### B. Algorithm

The original page rank algorithm was described by Lawrence Page and Sergey Brin in several publications. It is given by[6]

$PR(a) = (1-d) + d (p(t1)/c(t1) + \dots + PR(n)/c(tn))$  PR(a) is the page rank of page a,  
PR(ti) is the page rank of pages Ti which link to page a  
c(ti) is the number of outbound links on page ti  
d is a damping factor which can be set between 0 and 1.

### **C. How medium quality links are got**

This is first step towards link building. A blog is submitted to high PR blog directories. Submitting a site to blog directories is worth beneficial because search engines index sites very quickly that is accepted on trusted directories. Below is list of trusted directories to submit a blog on. Instead of begging for links from high PR sites[17]. Back links are given from these sites which are given below:

Check out the list:

1. <http://www.dmoz.org/>
2. <http://www.iromania.com>
3. <http://www.feedage.com>
4. <http://www.abc-directory.com>
5. <http://www.hotvsnot.com>
6. <http://www.business-directory-uk.co.uk>

### **D. How high quality links are got**

Now comes the main part of this paper. Getting high quality links are a bit difficult. The evergreen method of getting high quality back links that is guest posting. Guest posting is done on the following blogs:

1. [www.QuickOnlineTips.com](http://www.QuickOnlineTips.com)
2. [www.HowToMakeMyBlog.com](http://www.HowToMakeMyBlog.com)
3. [www.ShoutMeLoud.com](http://www.ShoutMeLoud.com)
4. [www.TricksDaddy.com](http://www.TricksDaddy.com)
5. [www.Techpp.com](http://www.Techpp.com)
6. [www.DevilsWorkshop.com](http://www.DevilsWorkshop.com)
7. [www.blogcreate.com](http://www.blogcreate.com)

### **E. How some back links from high page rank sites are taken**

After doing link exchange, directory submission and guest posting It concentrated on writing that content with which a site can get a lot of back links and at last a site got the best way with which a site can get huge high quality back links very easily. What is done for it, a series of articles are written on website design and four articles are written under this series. Below is a list of those articles[14].

1. Top 10 inspirational comment box designs.
2. Inspirational sidebar designs.
3. Designing a perfect navigation menu bar.
4. Inspirational & attractive header designs.

After writing these articles, these are submitted to following sites. These all sites are design related sites and have high page rank. List is:

1. Inspiration Feed <http://inspirationfeed.com/design/> (Located on Sidebar)
2. 10steps.sg <http://10steps.sg/wp-content/themes/10StepsBlue/communitylink#submit> feed  
CreativeBloggingIdeas
3. ThemeFlash <http://www.themeflash.com/user-feed-link/#add>
4. Graphic Mania <http://www.graphicmania.net/news-archive/>
5. DesignrFix <http://designrfix.com/category/news/>
6. DevSnippets  
<http://devsnippets.com/submit>
7. Colorburned  
<http://colorburned.com/link-feed#submit>



After doing these page rank is checked of a web site which is found increased

Symbol	Definition
PR	Pagerank of backlink giving url.
OBL	Outbound Links which means total external links found on backlink giving webpage.
Flag	Any abnormal flag like nofollow tag used on your backlink.
	This is Blank which means no Anchor text found for this url so PR+OBL+FLAG would not be checked.
Total Backlinks	12179 (CHECK MORE BACKLINKS)

After all results are loaded you can click column headers to sort the results.  
 \* You can click anchor text to 'further' analyze the keyword competition to improve your ranking.

No.	Backlink URL	
1	<a href="http://blogzezeive.com/blogging-tips/20-corporate-free-...">http://blogzezeive.com/blogging-tips/20-corporate-free-...</a>	SEO Training in Ch
2	<a href="http://www.bbeme.info/">http://www.bbeme.info/</a>	
3	<a href="http://cotbluemor.blogspot.com/">http://cotbluemor.blogspot.com/</a>	
4	<a href="http://www.wchinaya.com/2010/05/promote-facebook-fan-pa-...">http://www.wchinaya.com/2010/05/promote-facebook-fan-pa-...</a>	How To Display Cu Form In Thesis The
5	<a href="http://selinapoi.blogspot.com/">http://selinapoi.blogspot.com/</a>	How To Display Cu Form In Thesis The
6	<a href="http://blog.kissmetrics.com/landing-page-design-infographic/">http://blog.kissmetrics.com/landing-page-design-infographic/</a>	SEO Training in Ch
7	<a href="http://www.quickonlinetips.com/archives/2010/04/first-8-...">http://www.quickonlinetips.com/archives/2010/04/first-8-...</a>	SEO Training in Ch
8	<a href="http://www.probloger.net/archives/2010/05/12/if-you-cha-...">http://www.probloger.net/archives/2010/05/12/if-you-cha-...</a>	SEO Training in Ch
9	<a href="http://kikolani.com/fetching-friday-resources-mashup-bl-...">http://kikolani.com/fetching-friday-resources-mashup-bl-...</a>	Few Tips To Make 1

Fig-10: show list of backlines by online tools <http://www.backlinkwatch.com/index.php#>

### Check PAGE RANK of Web site pages Instantly

In order to check pagerank of a single web site, web page or domain name, please submit the JRL of that web site, web page or domain name to the form below and click "Check PR" button

Web Page URL: <http://www.creativebloggingideas.com/>  
 The Page Rank:  2/10

Fig-11: show result of page rank

### 5. Tools which are used for improving page rank of a site

1. [http://www.prchecker.info/check\\_page\\_rank.php](http://www.prchecker.info/check_page_rank.php)
2. <http://www.seocentro.com/tools/search-engines/metatag-analyzer.html>.
3. <http://www.metachecker.net/>
4. <http://tools.seobook.com/robots-txt>

5. <http://www.backlinkwatch.com/index.php#>

## 6. CONCLUSION

In this paper it is found that there are many factors which affect the performance of web site. And time to time the most popular search engine Google changes its page rank algorithm. How much the web site is popular it is shown by its page rank which is 1 to 10. The more page rank the more popular the web sites. And another approach is that the link comes on to the web site from another web sites which are called incoming link. These Incoming links show the popularity of web site and increase the page rank for a site. After analysing the result which are generated by this paper, any web site which has high page rank is the site that has many visitor and many inbound link. It can be said if a site avoids the entire on page factor and has many visitors and inbound link then page rank for that site will be high. So to improve traffic on the site first of all we have to put good content on that site.

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