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GOOGLE.

GOOGLE PAGERANK ALGORITHM EXPLAINED

What is PageRank ?

PageRank is Google's measure of importance assigned to a web page on a scale of 1 to 10. You can check the PageRank *value* ([http://www.evancarmichael.com/Worksheets/5-Charge-More-\\$-php](http://www.evancarmichael.com/Worksheets/5-Charge-More-$-php)) of any page by downloading the Google Toolbar.

This article is intended at understanding PageRank and providing an insight into its different aspects.

History of Site Ranking

In the early 1990's when the web was emerging, several sites having industry specific content were being added to the web each day. Web surfers, on the other hand, had very few tools to locate such sites, which they believed were out there but did not have a clue about their domain names or web addresses. With the birth of Yahoo in 1993 , surfers were offered some relief. Yahoo classified each site it discovered in a neatly organized directory list and also embedded a search engine in its site to search for sites based on 'keywords' existing in its database. Several other search engines like AltaVista, Excite, Lycos etc. followed the search trends offering site search facilities to users. Most of these search engines relied heavily on Meta Tags to classify the relevance of websites based on the keywords they found in the tags.

Things seemed to work out fine before site owners and webmasters realized the value of how they can 'embed' industry specific keyword phrases in their Meta Tags and other site code, thus manipulating their way to show up higher in search results. Over a period of time, search engine results started getting cluttered with sites that spammed their content with relevant keywords but had poor site content for the visitor. The very essence, credibility and importance of search engines was now being challenged to deal with how they could offer a more refined search output to their users.

Emergence of Google PageRank

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Google realized the problem conventional search engines faced in dealing with this situation. If the control of relevance remained with the webmasters, the ranking results would remain contaminated with sites artificially inflating their keyword relevance. Web, by its very nature is based on hyperlinks, where sites link to other prominent sites. If you take the logic that you would tend to link to sites that you consider important, in essence, you are casting a vote in favor of the sites that you link to. When hundreds or thousands of sites link to a site, it is logical to assume that such a site would be good and important.

Taking this logic further the Google founders, Sergey Brin and Larry Page formulated a Search Engine algorithm that shifted the ranking weight to off-page factors. They evolved a formula called PageRank (named after its founder Larry Page) where the algorithm would count the number of sites that link to a page and assign it an importance score on a scale of 1-10. More the number of sites that link to a page, higher its PageRank.

Note: The scale of 1-10 on Google is not linear. It is exponential in nature, believed to be a base of 6 to 7, that is, PR 7 [website \(http://www.evancarmichael.com/Worksheets/16-Build-A-Lead-Generating-Website.php\)](http://www.evancarmichael.com/Worksheets/16-Build-A-Lead-Generating-Website.php) is 6 times more important than PR 6 website.

Sergey Brin and Larry Page deployed their PageRank algorithm with the [launch \(http://www.evancarmichael.com/Worksheets/10-Launch-With-No-Money.php\)](http://www.evancarmichael.com/Worksheets/10-Launch-With-No-Money.php) of Google in 1998 . The result was a grand success. Google surpassed its competition by serving superior and relevant results using a formula that was difficult to manipulate. This new algorithm not only helped in providing authentic and quality information, but also made it very difficult for site owners and webmasters to cheat their way to a top rank.

Google's PageRank is important because it is one of the primary off-page factors that influences your page's ranking in the search engine result pages.

PageRank in Google's own Words

Google explains PageRank as follows (<http://www.google.com/technology/>): PageRank relies on the uniquely democratic nature of the web by using its vast link structure as an indicator of an individual page's value. In essence, Google interprets a link from page A to page B as a vote, by page A, for page B. But, Google looks at more than the sheer volume of votes, or links a page receives; it also analyzes the page that casts the vote. Votes cast by pages that are themselves "important" weigh more heavily and help to make other pages "important."

Important, high-quality sites receive a higher PageRank, which Google remembers each time (<http://www.evancarmichael.com/Worksheets/#Section3>) it conducts a search. Of course, important pages mean nothing to you if they don't match your query. So, Google combines PageRank with sophisticated text-matching techniques to find pages that are both important and relevant to your search. Google goes far beyond the number of times a term appears on a page and examines all aspects of the page's content (and the content of the pages linking to it) to determine if it's a good match for your query.

For more information on Google PageRank, go to

* <http://www.google.com/webmasters/4.html>

* <http://www.google.com/technology/>

Relationship between Search Engine Ranking and PageRank

While the exact algorithm of each search engine is a closely guarded secret, search engine analysts believe that the search engine results (ranking) is some form of a multiplier factor of 'Page Relevance' and 'PageRank' . Simply put, the formula would look something like -

Ranking = (Page Relevance) x (PageRank)

ranking sites in their search engine result pages.

Since the early days of the web, search engines have constantly tried to evolve better algorithms to rank relevant web pages. Most search engines give significant importance to "link popularity" as a criterion for evaluating importance of web pages ranking and indexing purposes.

The Google Toolbar

You can download Google Toolbar (free) and install it in your Internet Explorer within minutes. Amongst other useful features, it displays the PageRank of each web page you visit. The Google toolbar appears just below your Internet Explorer browser and can be used for making a search on the web from any page. Google toolbar displays the PageRank of each web page on a scale of 1-10. If you have the Google toolbar installed in your browser, you would be used to seeing each page's PageRank as you browse the web. Google does not display the PageRank of web pages that it has not indexed. Please note that the Toolbar displays the PageRank of individual pages and not the site as a whole.

Note: Ideally, a higher PR value means you can expect to take on (or expect to beat) more competition (number of existing web pages) for that search term to land a good ranking position.

Therefore, we recommend making PR based selection of your keyword phrases.

What is Link Popularity?

"Link Popularity" system is based on the number and quality of links you get to your web site pages. This means, higher the number of links pointing to your page, the more important your page would be considered. The 'numbers' on stand-alone basis are not the only factor that determines your site's importance. The other related factors that determine your site's importance are the quality of sites that are linked to yours, quality of their content as well as their industry relevance to your site. A web page that links to your site passes on a portion of its own PageRank value to your site. The higher the PageRank of the linking page, the higher is the value passed on to your page.

PageRank also gets divided over the total outgoing links of the linking page. For instance, you get a higher value from a link on PR5 web page that has only 15 outgoing links as against, from a PR5 web page that has 100 outgoing links.

It is therefore important to pursue securing links from higher PR web pages that have lesser number of total outgoing links.

Link Popularity Check

There are simple ways you can use to check the link popularity of your web site. The simplest way is to type the following in Google Search.
link:www.yoursite.com

Other major search engines have different syntax to search for your link popularity. You can use the Link Popularity Analyzer tool on our site to check the link popularity of your site across various search engines in one shot.

Building Link Popularity to Increase PageRank

Building Link Popularity is one of the most critical aspects of search engine marketing. While manipulation of PageRank is not easy, it is not difficult to enhance it by improving your link popularity. By undertaking a long-term link building campaign, you can boost your site's PageRank and improve your site ranking significantly.

In the recent past, Google and other Search Engines have deployed other components of algorithm similar to PageRank (like TSPR- Topic Sensitive PageRank and Hilltop- Links from expert documents) and further, taken the ranking weight to off-page factors.



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