

# Search Engine Optimization

## How Search Engines Work

- Crawling the Web with Bots or Spiders. Of the estimated 20 billion web pages, bots have crawled 8 – 10 billion
- Indexing the Content. Once crawled a web page's content is indexed into giant databases.
- Query the Results: The database is queried hundreds of millions of times per day with search phrases. The engines determine which pages match the query using algorithms.
- Ranking the Results: The advanced algorithms created by the search engines rank search results based on what they see as the most topical, targeted results for the search performed.

## Relevance and Popularity

- Modern search engines are based on the science of Information Retrieval (IR)
- IR has been around since the beginning of the 20<sup>th</sup> century when libraries, research facilities, and the government used it for documents.
- The two staples of IR are Relevance and Popularity
- Search Engines use their algorithms to figure out Relevance
- Instead of Citations, Search Engines use links to determine Popularity

## First – Relevance: On Page Optimization

- Begin by researching Keywords: Find Keyword Difficulty – Non-Competitive Terms
  - Brainstorming
  - Survey Customers
  - Keyword Research Tools: How many potential searches? – Wordtracker, SEOMoz & Google (<http://freekeywords.wordtracker.com/> <http://www.seomoz.org> )
  - Target the Right Terms: Conversion Rate (high), Predicted Traffic (high), Value Per Customer (high), Keyword Competition (low) are the four items to take into account.
  - Find Keyword Competition: Query Google: Broad Search, Phrase Search, allintitle:

## Next: On-Page Optimization Best Practices

- Accessibility: No broken links, valid HTML and CSS, File Size (150K)
- URLs: Brief and Explanatory – Domain Name Too!
- META: Title is KEY. Keywords and Description
- Search Friendly text – Good, natural English is KEY. 500+ words if possible.
- Header (H1, H2) Tags
- Links – Name of them and topical pages linked to.
- Placement & Prominence of Keywords
- Bold keywords
- Use Google Sitemaps – MSN and Yahoo use them too. XML Document

## **Second: Popularity – Show me the LINKS!**

- The key to getting a high SEO score is showing the engines that your site is popular. To do this, you need popularity votes – links.
- Check your popularity: `link:www.yoursite.com`. Google Pagerank
- How to get links:
  - Article submission
  - Link exchange requests within your community. Topical.
  - Link exchange web sites (automated)
  - Link Bait: Free Resources, Free Tools, Web 2.0 Apps, Collaborative Work Documents, Top 10 Lists, Humor, Reviews or products or events, video & animation, interviews, surveys, contests, etc.
  - Community building. Be the expert. Post on blogs, forums, wikis, etc.

## Top 10 Positive SEO Factors

1. Keyword Use in Title Tag
2. Anchor Text of Inbound Link
3. Global Link Popularity of Site
4. Age of Site
5. Link Popularity with the Site's Internal Link Structure
6. Topical Relevance of Inbound Links to Site
7. Link Popularity of Site in Topical Community
8. Keyword Use in Body Text
9. Global Link Popularity of Linking Site
10. Topical Relationship of Linking Page