Search Engine Optimization

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What is a Search Engine?

- Any software that locates information on a search query.
- Example, in e-commerce you may work within the Amazon search engine
- Every search engine works slightly differently. But overall they work on some common principles.

Examples of some major Search Engines

- Google
- Yahoo! Search
- Bing
- Baidu
- Duck Duck Go

How does Google work?

- Crawling
  - Process of finding new and updated webpages.
  - Google explores the Internet with automated programs called crawlers.
  - These crawlers find new and updated webpages, and once the crawlers discover a new or updated webpage, Google then stores these page URLs in a big list to review later.
- Indexing
  - Once the new pages are crawled, Google then stores them in an index.
  - Think of an online index as similar to an index in the back of a book. A book index is a list of content and its associated pages.
  - Similarly, Google stores web content with its location: the URL for each webpage.
- Serving
  - After the webpage content is indexed, the Google Search algorithm helps locate information to answer a user's query.
  - The Google search algorithm sorts through billions of webpages to deliver the most relevant content for a given search.

Algorithms

- An algorithm is just a set of instructions for solving a problem or accomplishing a task.

- Websites and platforms use different algorithms to decide what to show users.

- Example: A search algorithm for an e-commerce site may display the most likely products a shopper would purchase.

How does Google rank the multiple pages that it found relevant in return to a query?

Ranking of various search results

- Google wants to really return results that meet the needs of users with a great user experience

- Thus, for ranking it considers five key factors, which are:
  - Meaning of the query,
  - Relevance of the webpages,
  - Quality of the content,
  - Usability of the webpages,
  - And, overall context and user settings.

Meaning/Intent of a query

- A query is simply the words typed into a Google search bar.

- To return relevant results, the search algorithm needs to establish what the user is searching for— in other words, the intent behind the query.
  - A marketer's task is to create content that addresses the searchers needs.

Relevance of web pages

- Determining what content is relevant to the search.
  - The most basic signal that information is relevant is that the webpage contains the same keywords as the search query.
  - A keyword is a word or multiple words that people use to find information, products, or services online.
  - The keyword either matches, or is similar to, this searchers query.
  - For example, if the keywords appear in the headings or body text of a webpage, the search algorithms may determine that page to be more relevant.

Quality of the content

- Google determines quality content is understanding if prominent websites link or refer to the content

- Google uses a number of factors to try to work out the quality of a piece of content, as well as the quality of a website overall.

Usability of the webpages

- Google algorithms also consider the content's ease of use.

- In case of two webpages with exactly the same content, the webpage that has a better user experience may perform better. Google calls this the page experience ranking factor

- Mobile friendly, loading speed are some of the ease of use factors

Overall context and user settings

- Information such as the location, past search history, and search settings help the search algorithm deliver relevant and useful results
- Google may tailor results based on activity in your Google account

Search Engine Optimisation

- SEO, also called organic or natural optimisation, involves optimising websites to achieve high rankings on search engines for certain selected keywords

- SEO can be divided into two main strategies:

  1. On-page optimisation, achieved by making website SEO friendly. changes to the HTML code, content and structure of a website, making it more accessible to search engines and by extension, easier for users to find.

  2. Off-page optimisation, generally focused on building links to the website and covers activities like social media and digital PR.

On-page Optimization

Make your website accessible to Search Engines

- Substantial portion should be in the form of HTML text form or get pulledin by Java Script that executes on the intitial page load. Content that gets pulled n only after the user clicks on it, causing Javascript to then download it, cannot be indexed.

- Image file names/ alt attributes should be given

- Link structures that can be crawled:
  - Links in submission-required forms
  - Links in powerpoint and pdf files
  - Links on pages with hundreds of links

- Use XML site maps
  - XML sitemap is a Sitemaps protocol where you supply search engines with a list of all the URLS you would want them to crawl and index

On-page Optimization

- IndexNow
  - Bing/Yandex's inititiative that pings the search engine directly whenever the content on the website is modified

- Investing in website's Optimal Information Flow
  - Logical, category based flow

- Keyword Targeting:
  - Include the most popular keywords in your pages
  - Beware of *keyword stuffing*!

Beginner SEO terms

- Bounce rate: The percent of visitors that view one page and then leave the site.

- Breadcrumbs: A row of internal links at the top or bottom of the webpage that allows visitors to quickly navigate back to a previous section or the home page. Also known as a breadcrumb trail.

- Broken link: A link that leads to a webpage that no longer exists. For example, the webpage may have been deleted, or the content may have been moved to a different location.

- Domain: The core part of a website's URL, or internet address. For example, in the URL www.google.com/ads, the domain name is google.com.

- Keyword research: The process to find terms and phrases that potential customers are typing into search engines.

- Meta description: Provides the search engines a summary of what the page is about. In some situations, this description is used in the snippet shown in search results.

- **Organic search:** Unpaid results a search engine produces when a search is performed.

- **Rank:** A webpage's position in the search engine results pages (SERPs), which is determined by an algorithm.

5 Main areas of SEO

1. A search engine friendly website structure
2. A well-researched list of keywords
3. Content optimised to target those keywords
4. Link popularity
5. User insights

A search engine friendly website structure

- A search engine friendly website structure
- A good site structure is hierarchical, which means web pages fall under and are associated with another webpage
- Tips to improve site structure:
  - Use https:// whenever possible
  - Create a navigational page for users. A navigational page is a simple page on the website that displays the website structure. It usually consists of a hierarchical listing of all the pages on the site. Users may visit this page if they're having problems finding pages on the site
  - Show useful 404 pages. A 404 page is a URL that tells the user that the webpage does not exist. An user may come to this page either by following a broken link or typing in the wrong URL. Creating a custom 404 page for the website kindly guides visitors back to a working page on the website.
  - Make website navigation Google crawler friendly. To help Google find all pages on a site, make sure that the pages are reachable by following links through the site's navigation

A well-researched list of keywords

- Several tools available for keyword discovery
- Most will let you enter keywords and will then return suggestions based on past research data, along with:
  - Similar keywords
  - Common keywords used with that keyword
  - Common misspellings
  - Frequency of the keywords in search queries
  - Industry-related keywords
  - Keywords that are sending traffic to your competitors
  - How many sites are targeting your keywords

Content optimised to target those keywords

- Title tag: Use the keyword in the title and as close to the beginning as possible.
- H1 header tag: Use the keyword in the header tag and as much as possible in the other H tags.
- Body content: Use keywords as it makes sense in context. Remember to use synonyms rather than focusing on one specific version of a keyword. You should aim for about 350 words of content. But don't overdo it or it could look like spam to the search engines.
- Bold: Use **tags around the keyword at least once.**
- **URL: Try to use the keyword in your page URL.**
- **Meta description: Use it at least once in the meta description of the page, which should entice users to clickthrough to your site from the SERP.**
- **Link anchor text: Try to ensure that the keyword is used in the anchor text of the pages linking to you.**

Link popularity

- The purpose of a link is to allow a user to go from one web page to another. Search engines, mimicking the behaviour of humans, also follow links.

- Links are a way of validating relevance and indicating importance. When one page links to another, it is as if that page is voting or vouching for the destination page

- Generally, the more votes a website receives, the more trusted it becomes, the more important it is deemed and the better it will rank on search engines.

About Links

- Anchor Text is the visible text that forms the link. This is the text that should contain the keyword you are targeting
- Not all links are created equal
- While link volume is the number of links coming to a specific page of your site, link authority looks at the value of the links. Some sites are more trusted than others. Since they are more trusted, links from those sites are worth more. Likewise, some sites are more relevant than others to specific terms. The more relevant a site, the more value is transferred by the link.
- Manipulated links are worth very little compared to natural links and may even lead to a drop in search engine rankings

User insights

- Search engines use cookies to maintain a history of a user's search activity. This will include keywords used and websites visited from the search engine. Search engines gather data on the clickthrough and bounce rates of results.

- Thus a website must: •
  - Be valuable enough to attract both visitors and links naturally.
  - Retain visitors and make sure they return to the website.
  - Convert visitors.

Off-Page SEO Techniques

- Off-page SEO refers to all the activities you do away from your website to raise the ranking of a page with search engines.

How Search Engines Use Off-Page Signals

Google Ranking Factors

- Backlink Quantity & Quality

- Brand Mentions

- Google's PageRank algorithm values quality backlinks as votes of trust.

Pillars of Off-Page SEO

1. **Link Building**

2. **Content Distribution**

3. **Social Proof & Reviews**

4. **Brand Mentions**

5. **Community Engagement**

Link Building in Practice

Types of Backlinks:

- **Editorial:** From news/media (e.g., Forbes)
- **Guest Posts:** Blogs in the same niche
- **Resource Pages:** "Best tools for marketers" etc.

Guest Blogging as a Strategy

How it's done:

- Identify niche blogs (use BuzzSumo or Google Search Operators)
- Pitch high-value, original content
- Link back contextually

Other ways…

- Influencer & Blogger Outreach

- Content Marketing (Off-Site Distribution): LinkedIn Articles, Medium Blogs, YouTube (SEO-optimized videos),Reddit & Quora

- Online Reviews as Ranking SignalsImpact:"Online reviews can influence up to 15.44% of local pack rankings"(Whitespark Local Ranking Factors, 2023)