

Have you ever wondered how Search engines like Google, Bing work? How do they crawl through web and show results? How do they show you a result based on your query? Where does search engine find those pages? How does it rank on result pages? Keep reading to know the answers.

Firstly let's understand the purpose of search engine. It is to solve the user query. Query can be anything from searching about nearest hotels to online courses on AI, ML to searching about celebrity. To solve user query, search engines (or search engine crawler bots to be precise) use specific steps.

These steps are –

- CRAWLING
- INDEXING
- RANKING

1. CRAWLING

Search engines crawl through the entire World Wide Web to find various web pages. Crawler bots or crawlers or spiders are used for this practice. Crawlers are nothing but a software program of search engines

that go out on the World Wide Web and find new pages.

It does so by starting with a set of trustworthy sites and then moving forward via links given on those sites. This helps in maintain the genuineness of the discovered sites. Spider bots move from one link to another and from there to another link, in such a way scroll the entire World Wide Web in order to find new pages and sites. This process of search engine bots skimming through the entire web is called CRAWLING.

2. INDEXING

Once the crawler finds a certain web page or site, it goes on to perform the next activity. It stores that site into the search engine's database. This database already has a large amount of web data from previous crawling sessions.

So, if a new web page/site is discovered, the crawler will index that page or say the URL of that page into the search engine's database.

That will then be used for showing it to users.

Also, it should be noted that crawlers don't crawl or sometimes index each and every time they come across a new page.

Sometimes it is because the crawler doesn't find certain webpages/sites to be genuine or relevant enough or else the site owner has restricted crawler movement on that particular webpage.

INDEXING of pages of your website is very important as if your site or page is not indexed you will not be in the search engine's database so ultimately your website will not be shown to users. Remember a NON-INDEXED site is as good as an INVISIBLE site. And if a site is not visible to the crawler it will not be visible to users as well.

3. RANKING

Once the website is stored in the search engine's database, the next step is to show it to the users, in an organized format, whenever a query about that topic is entered into the search bar by the user. This showcase of result pages on SERPs is called RANKING.

But you might wonder that there would always be more than one website for a single niche, does search engine shows all of them? Or a few of them? If later one how does a search engine decide which web page/site to show and which not to show on search engine result pages(SERPs).

Well, the answer is ALGORITHM. Search engines use different algorithms to check the genuineness relevance, the importance of a website. And according to that, it ranks the page. If the algorithm finds a webpage in against these factors it de-ranks the site or sometimes doesn't show it at all.

Algorithms take into consideration the intent behind the user query very much. If your site cannot provide user satisfaction or say user doesn't find your content engaging or satisfactory it will give algorithms a signal to de-rank your site.

EVALUATION OF CONTENT

Whenever the user enters certain keywords it shows the results according to that. But before that search engines needs to evaluate the content on your web page/site. Why? Because that will allow them to understand the premise of your web page in a better

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way. Also, they need to check whether the content on your page is plagiarism free or not? Are there any false redirected links? Is there any copyright data on your page? To know more about it, search engine algorithms evaluate your content.

One another thing to note here is that the web crawler when crawling through your data will not see the same “thing” that you see on SERPs. As I have mentioned before these are nothing but software programs that cannot understand human language hence what they see is the language in which the website is developed. This is HTML, CSS, Javascript in most cases.

So it is very important to make HTML friendly website so bots can easily parse through your content.

Remember there are certain files that bots find difficult to interpret for example images. Search engines like Google have themselves stated that bots are not that good when it comes to interpreting images. Hence as an alternative *alt text* should be used on web site which directs the crawler about what the image says or depicts.

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If a crawler finds it difficult to understand your content your chances of getting a high rank will reduce.

UNDERSTANDING THE SEO GAME

One of the reasons we need to understand how a search engine works is because it helps us to frame our own SEO strategy. That should be your ultimate goal. Knowing how search works alone will not get you anywhere. You also need to take action or say make an effective SEO strategy after that.

In SEO strategy always try to be as HUMANE as possible. Make effective and useful content on your site that too in such a way that it helps or add value to users. ALGORITHMS change from time to time, CONTENT also changes or comes in a fresh manner from time to time. Also, thousands of changes are made every day in a search engine to make search results as personalized as possible.

The only thing constant is that you create such content that is crawler friendly as well as user friendly. And it always satisfies your user. CRAWLING, INDEXING, RANKING, ALGORITHMS, BOTS, everything will automatically fall in place if you follow this.

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Wohoo. you have successfully completed chapter 1 of the CRAWLING, INDEXING, RANKING:- complete **SEO Guide from beginner to expert.**

Now go and start *READING THE Chapter 3 to win the SEO game:* *What are the Types of SEO?*

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