

## 9.2 Search Engines

---

If you're building a website, one thing you probably want is traffic, i.e. people coming to your site. There are three ways people can find your site:

1. **Directly**, or by typing in your domain name into a search engine or the URL bar. Huge, popular websites — think Google, Facebook, Airbnb — can easily get most of their traffic directly, because their users already know what — or who — they're looking for. The others, however, must depend on targeted ads and search engines.
2. **Targeted Advertising**. As a website owner, you can attract people by creating ads on popular social networks. You would then usually target them to your specific demographic.
3. **Search Engines**. The most popular way to find a website is, of course, by looking it up on a search engine!

*\*Note: Search engine results can also be either paid-for or 'organic', i.e. attained through effective SEO.*

Given that the third way is so popular, it's important you learn how to leverage **SEO**, or **search engine optimization**, to increase your traffic. SEO is all about understanding how search engines work — but it's also about understanding what people look for, what words they use, etc.

## How do search engines work?



Search engines use **crawlers** — or so-called **spiders** — to go through billions upon billions of web pages, downloading them, and then archiving everything into a massive structure called a search engine index. The whole process is even called “**crawling and indexing**”!

When the search engine is used, the index is then filtered and hierarchically ranked by an algorithm with thousands of variables. The content considered most relevant to your search is then put at the top of the **search engine result page (SERP)**.

### Why is SEO so important?

If you're still asking the question of why you, a future web developer, should understand SEO, this section will provide all the answers.

**Search engines are the primary source of website traffic.** Marketers see SEO as 70% more effective than PPC, and SEO also drives more than 1000% more traffic than organic social media.

*\*Note: PPC means Pay-Per-Click. It is an internet marketing strategy, whereby advertisers pay for each click their ad gets.*

If you use SEO effectively and publish good content with the right keywords, your traffic will snowball and pay dividends over time. Ads, on the other hand, require constant payment. SEO is more work, but hard work pays off — literally.

### Search Engines

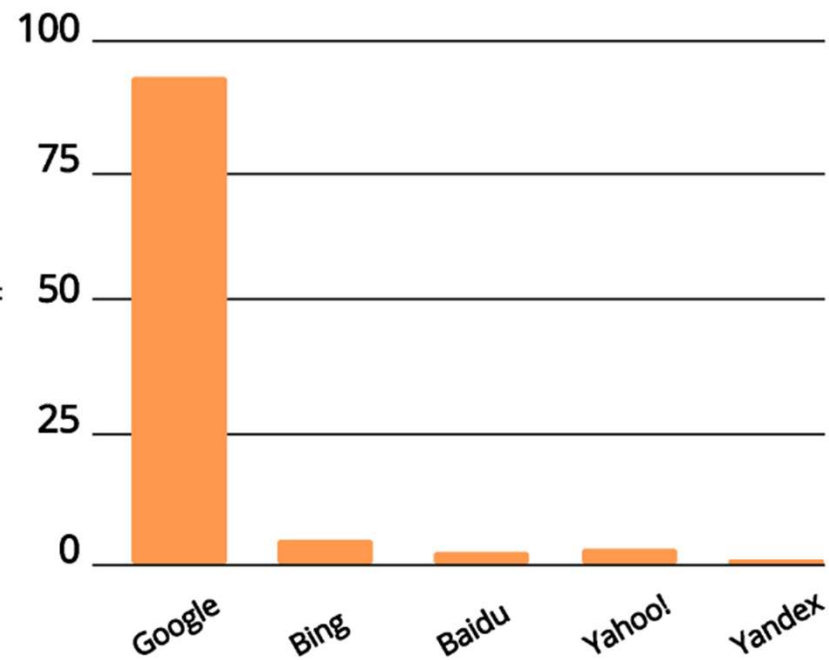
Shockingly, Google is not the only search engine out there, but it's by far the biggest.

## Top search engines

GOOGLE

92.23%

Google is the most popular search engine with a stunning 92.26% market share compared to 2.83% of second in place Bing.



In 2021, Google still takes the lion's share of the market. However, for fair game, let's look at some of its competitors:

- **Microsoft Bing.** Even though it's set as the default search engine for Windows PCs, Microsoft's version still takes only 2.83% of the market share at the best of times.
- It's a popular email site but, as a search engine, **Yahoo** has only 1% market share. Yahoo is also the default search engine for Firefox browsers in the US.
- **Baidu** is China's most popular search engine. While accessible globally, it is only available in Chinese.
- **Yandex.ru** is the Russian equivalent of Google or Baidu. While it covers 65% of searches in Russia, it falls behind drastically in the global rankings.
- **Duckduckgo** is a small but steadily growing search engine. It's great for anyone concerned with privacy, as, unlike Google, it doesn't track users or collect data for ads. On the other hand, Duckduckgo doesn't have its own search index and depends on other sources for their results. This means they can't develop more complex algorithms for filtering results.
- **Ask.com**, which is primarily based on polls and a question/answer format.
- Powered by Bing, **Ecosia** is a search engine that makes money on ads specifically for the purpose of planting trees. Let's beat climate change one stupid question at a time!
- **Internet Archive.** Want to see what a website looked like back in 1999, or maybe trace a domain's history back to its first days? This is the place to go.