

Crawling & Indexing: Core Concepts

Crawling

Software programs known as crawlers or spiders systematically explore and copy the content from web pages across the internet, following links from page to page to discover and retrieve content

Indexing

The process of organizing the vast amount of content collected during crawling, categorizing and cataloging web pages' textual, visual, and multimedia elements, so search engines (and other technologies) can quickly retrieve and utilize the information

Googlebot

Google's web crawler, a sophisticated computer program that follows links on the web, visits web pages, and copies their content for inclusion in Google's search index (and for use in other Google products)



Robots.txt: How Publishers Control Access

Robots.txt

A text file placed in a website's root directory that provides instructions to web crawlers, specifying which areas of the site they are allowed or disallowed to crawl and index. It helps website owners control how search engines access and interact with their site's content.

The example to the right gives access to Googlebot but blocks all other crawlers

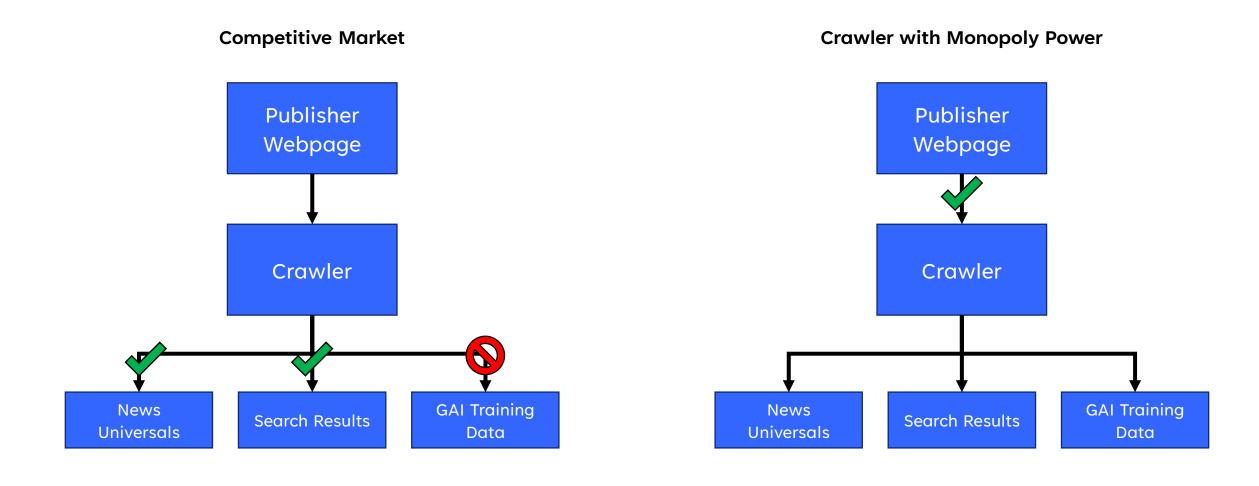
Important: Robots.txt lets publishers control *whether* their content is scraped, not *how* their content is *used*

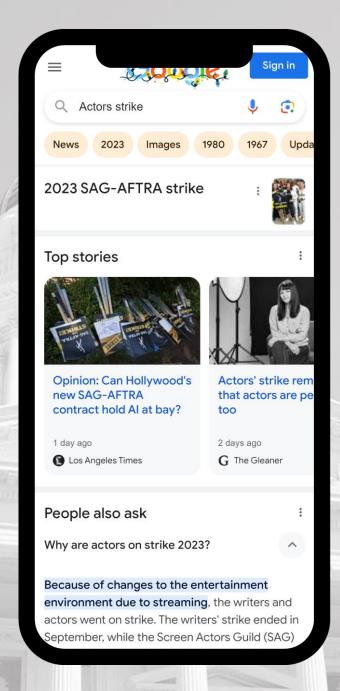
```
#robots.txt

User-agent: Googlebot
Allow: /

User-agent: *
Disallow: /
```

Publishers Lack Control Over Use of Crawled/Indexed Content





Google's **Top Stories** box provides a carousel of links to news articles, which often include high-res images and snippets scraped from the publisher

Clicking the links does take the user to publisher's website, but when that publisher monetizes through advertising using Google's dominant ad tech platform, Google extracts up to **30-70%** of the ad revenue for itself

