

# Research on Google Search and Amazon Search Based on the Comparison of Algorithms

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## Abstract

Search engine optimization, which can optimize the search display position of content and expose the target content to readers faster, is a great tool for marketing. For foreign trade practitioners, the traffic entrances of the two major search engines, Amazon and Google, determine the exposure of products. Amazon drives consumers to click and search with shopping as the demand and has a clearer consumption intention, while Google is a bigger information plaza than Amazon, leading people to various websites.

**Keywords:** Decoding algorithm • Amazon search • Search engine • Google search

## Introduction

Google's engine algorithm, which is updated 500 to 600 times a year, also aims to find the most relevant results based on keywords, while Amazon's A9 algorithm is not. Amazon's algorithm mainly considers whether these products exposed to consumers can generate transactions. Therefore, Amazon not only cares about the relevance of keywords, but also pays more attention to the conversion rate of keywords, that is, to complete sales. Therefore, although these two search engines are both keyword-based searches, their operating ideas are not exactly the same.

## Research Methodology

### Google focuses on long-tail keywords, amazon focuses on short-tail keywords

Compared with short-tail keywords, long-tail keywords refer to non-target keywords on the website, but those related to target keywords can also bring search volume. Combination keywords generally consist of 3 or more words. Composition, more specific.

According to data, 92% of all keywords that people enter into the Google search engine are long-tail keywords and they usually use a complete question sentence to search. Therefore, in the design of web pages and blog posts, Google's SEO promoters will add multiple long-tail keywords to the text to improve the ranking of web pages in Google search. Amazon's A10 algorithm is more concerned about the product's single short-tail keyword. Weights; In consumer searches, give priority to exposure of products with high conversion rates and strong relevance. There are two main methods of Google keyword optimization. One is to optimize content around core keywords and write relevant content blogs and website texts. The other is to optimize pages around short-tail or "middle-tail" keywords. Add long-tail keywords derived from tail-breakers [1].

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Amazon can perform SEO optimization by embedding product-related keywords in title settings, Search Term keywords, five-element features and product descriptions, reviews, QA and PPC ads.

However, when Google optimizes keywords, it can repeatedly fill in keywords, while Amazon can affect the presentation of listing search results as long as one keyword appears.

In addition, due to the deep-rooted demand for shopping on Amazon, 30% of consumers who search for products on Google will search on Amazon first. Therefore, the search terms for some products on Google are the second choice after some keywords on Amazon are not satisfactory. If you capture these keywords and optimize them into listings, you can harvest a wave of traffic.

### Google search

Google is a fully automated search engine that uses software called "web crawlers" to periodically explore the web in order to find sites to add to Google's index. In fact, most sites included in Google search results are not submitted manually, but are automatically found and added by our web crawlers as they crawl the web.

Understanding the meaning of search terms is critical to returning good results. Therefore, in order to find pages with relevant information, our first step is to analyze the meaning of the words in your search query [2].

This involves steps that seem as simple as parsing misspellings and extends to trying to understand the type of query you enter by applying some of the latest research in natural language understanding.

When a webpage contains the same keywords as your search query, it's the most basic signal that the searched information might be relevant to what you're looking for. If these keywords appear in the title or body of a web page or text, there is a greater chance that the information is relevant to what you're looking for.

For a typical query, there may be thousands or even millions of web pages containing potentially relevant information. So, to help rank the most in-demand pages, Google also wrote algorithms to evaluate the usefulness of those pages [3].

### Amazon A10

A10, the important part is how it works. The algorithm is designed to provide the best customer experience for Amazon shoppers. The goal is to ensure that as many product searches as possible end in sales. It does this by ensuring that relevant, popular, high-quality products are recommended for each product search.

One of the fundamental tenets of Amazon as a business is their commitment to customer satisfaction and the search experience is at the heart of that.

The same is true if your search returns a lot of low-quality products. If a customer is shown an inferior product, they will not be satisfied with the purchase and are less likely to buy from Amazon again (Figure 1).

The Amazon search algorithm takes many factors into consideration to ensure that the products displayed are more likely to satisfy customers. These factors include:

- Sales history
- keyword usage
- Comment
- product rating
- exchange rate
- Bounce rate/Exit rate

These are all factors that indicate to Amazon that your product is relevant to the search terms it appears in and is worth recommending to shoppers. So, satisfying the intent of the A10 algorithm - Customer satisfaction (Figure 2).

Amazon search engine rankings are independent. It's only influenced by what customers think of the product and the sales it generates on Amazon. It does not depend on the performance of your website [4]. Most factors that affect Amazon SEO are customer-centric, such as:

- Related customer search terms
- Convert
- Comment
- Ratings

If you want to position yourself for Amazon SEO, you need to follow the guidelines set by Amazon.

## Result and Discussion

### Amazon vs. Google: Similarities

Amazon and Google search still have similarities. The formula for computer retrieval is as follows:

After a keyword is input, the computer algorithm will match according to the similarity of the keywords and within 10 seconds, many similar results will appear (Figure 3).

**Keywords:** They are the primary way search engines match user needs to web page content. You need to know how users perceive your product and how to convey those ideas naturally and naturally in key parts of your product page.

**CTR:** CTR is the performance result of relevance. If no one clicks on your link on Google or Amazon, your page is irrelevant - perhaps because the content visible on the target page is unobtrusive (e.g., low-quality images, typos) or because search engines misinterpret your web page. In either case, you're unlikely to be on the first page of this search result for too long.

**Page 1:** The vast majority of clicks and revenue go to top-ranking sites or pages. The more buyers trust the quality of search engines, the less likely they are to view products after the second, third and so on.

In the key to the ranking of the homepage, the ranking of the web page is affected by many factors successively. Google's ranking formula:  $Google\ Score = (Related\ Keyword\ Score * 0.3) + (Domain\ Name\ Weight * 0.25) + (External\ Link\ Score * 0.25) + (User\ Data * 0.1) + (Content\ Quality\ Score * 0.1) + (manually\ add\ points) - (automatically\ or\ manually\ drop\ points)$ .



Figure 1. Amazon SEO ranking.



Figure 2. Product listing for high ranking.



Figure 3. Similarities of Amazon and Google research.

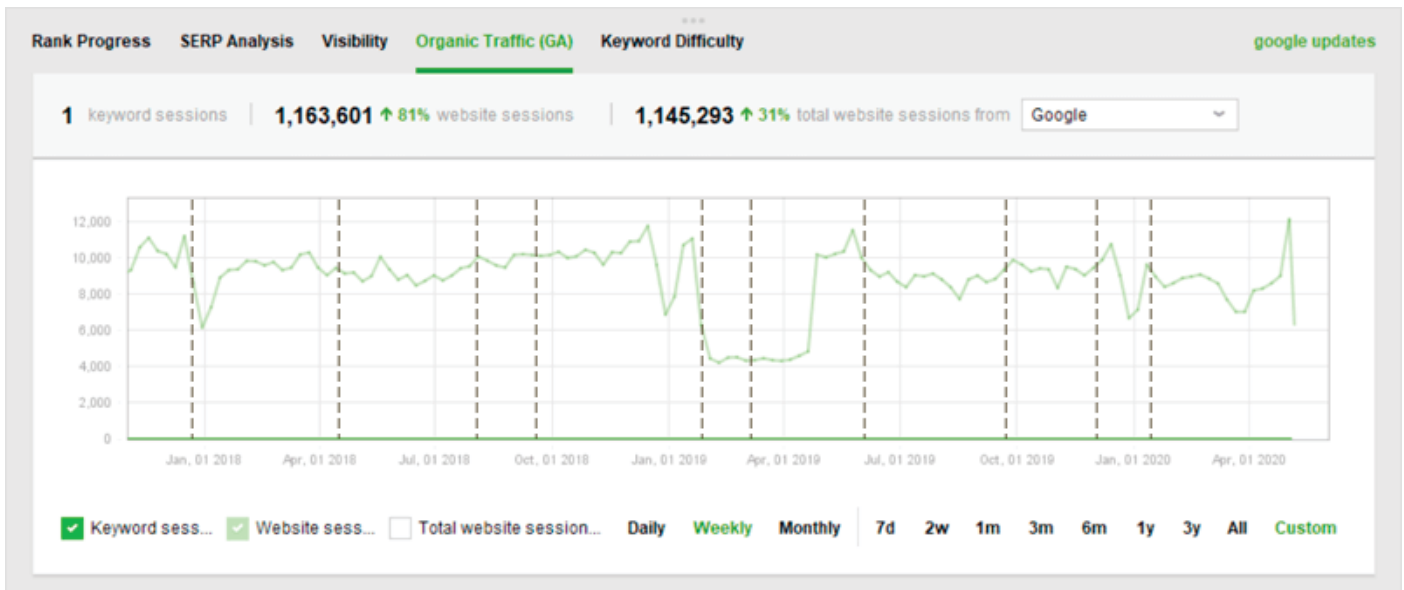


Figure 4. Rank tracker.

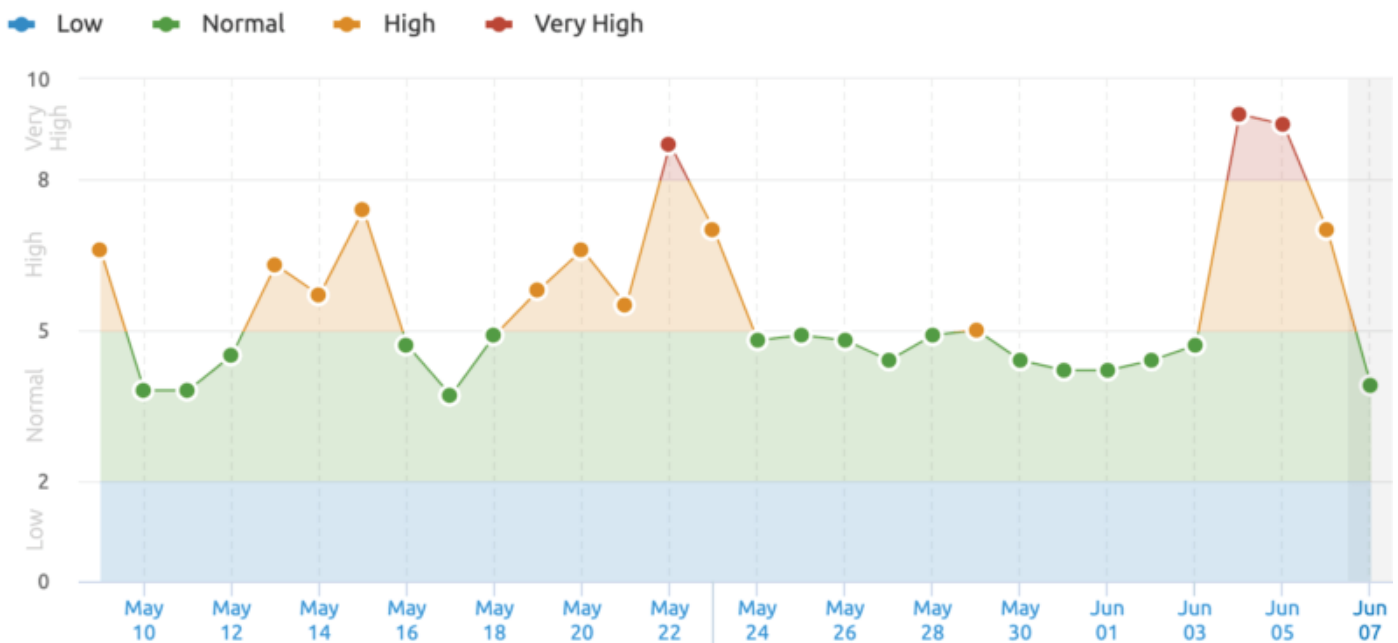


Figure 5. Google's June, July and November core updates rocked the SEO industry (Source: Semrush).

### Amazon vs. Google: Key differences

**Links have a bigger impact on Google rankings:** Google's algorithm is affected by the number of links. If a website has a large number of high-quality links, it can effectively increase traffic import and the ranking will be higher. The links here include external links and internal links. Internal links are internal links of a website and external links are links to other websites, social media and blogs [5].

However, a more reliable way to develop links is to do content marketing on an ongoing basis, for example companies can write and promote valuable original content for inclusion in Google (Figure 4).

Unlike Google, the number of external links does not affect your rankings.

Amazon focuses on user experience and the ranking of listings is also based on user search. The greater the user search volume, the higher your ranking will be. If you can increase your brand awareness outside of Amazon and attract consumers to search for your products on Amazon, it will also help improve your rankings.

### Google and Amazon optimize in different directions

While Google's algorithm is designed to boost ad sales, Amazon's algorithm focuses on boosting product sales (Figure 5).

Therefore, Google search engine pays attention to the number of clicks and bounce rates a page gets. The more users who click on your page and the longer they stay, the better it is for page ranking [6]. Amazon is focused on selling products and therefore pays more attention to the conversion rate of your page, which means that the more sales of your product, the greater the boost to rankings.

The main factors that affect the conversion are the optimization degree of listing, category selection, product price, product image, order sales, product review and other comprehensive factors [7]. A10 will grab the listing that has entered the Amazon product database and analyze your listing content to score, the higher the score, the higher the ranking.

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## Conclusion

With the latest updates to Amazon's SEO algorithm, you can use external traffic to influence your product rankings. One such method is to utilize Google SEO. To do this, companies need to create a blog and add direct links to your product listings in your posts, writing informative yet engaging articles in a way that excites your audience. This will increase sales and thus improve product rankings.

If views are low compared to total sales, this can affect your ranking on Amazon. This can be controlled by introducing a login page. If you're a Brand Registered seller, you can create custom landing pages for the products you want to highlight.

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