GOOGLE ORGANIC CLICK-THROUGH RATE ANALYSIS:
Methods & Results
The goal of this research was twofold. First, we aimed to benchmark Google organic CTR for the top 10 search results. Second, we wanted to see whether or not certain factors (like sentiment and meta descriptions) correlated with CTR.

This CTR research is far from the first of its kind. For example, Advanced Web Ranking has had a public-facing CTR chart for many years now. And Rand Fishkin’s SparkToro has recently posted several interesting CTR studies.

The main limitation of most CTR studies is that the data comes from third parties. And when data does come from Google (via the Search Console), the data inevitably applies to that single site and the industry that site happens to be in. Which means the data is often hard to extrapolate to other websites and industries.

By combining data from several different Search Console accounts, we hope this study helps bridge the gap between these two different approaches to organic CTR analysis.
WHAT WE DID—
STUDY METHODOLOGY

Partnering with ClickFlow, we collected query, position and click-through rate data from 98 Google Search Console accounts. All data was anonymized. For confidentiality reasons, all data was analyzed in aggregate.

The benefit of using GSC data is that we were able to get CTR data from Google. Although it’s not 100% clear how Google reports the data inside of the GSC, we are confident that the data in Search Console is reliable compared to most 3rd party tools.

Our initial analysis looked at 98 websites and 874,929 unique URLs. These pages rank for 5,079,491 search queries.

This is the data we used to find out how many users went to the 2nd page of the search results and to calculate “clicks per query”.

However, we quickly realized that this data was quite noisy. Especially considering our main goal was to learn more about organic CTR on Google’s first page.

Which is why we ultimately ran an analysis for many of the variables (such as title tag length) on smaller data subsets.

Specifically, we excluded queries where homepages rank (as they tend to rank for branded searches which have an abnormally-high CTR), pages that ranked on the 2nd page or beyond, pages without any CTR value or pages that had very few impressions (<100).

In total, this subset contained 39 websites and 2,420 unique URLs with title tags. These pages rank for 14,195 search queries. When we reran the analysis on this subset, CTR distribution was similar (although the specific numbers were, of course, different). And we were able to zero in on factors that actually “moved the needle” when it came to organic CTR.

The main limitation of this study was that, even though we collected GSC data from several websites, it’s still a very small sample compared to the number of sites that rank in Google. While data from multiple GSC accounts are likely to be more representative of the larger web than a single GSC account, the fact that our analysis included <100 websites means that our data may still be skewed in some way. Future research should look to collect GSC data from hundreds (or even thousands) of different websites in order to obtain a more representative sample.
FACTOR-BY-FACTOR BREAKDOWN

To represent much of the data, we used a LOESS curve (locally weighted smoothing), which is a tool used in regression analysis to create a smooth trend line. This gives a visual representation of the relationship between variables and makes it easy to see possible trends.

The Loess trendline works in a similar way as Linear Regression. But unlike the straight line in a linear regression model, we are able to see a more adaptive curve, revealing gradual rise and drop in values across specific intervals.

ORGANIC CLICK-THROUGH RATE
“Average CTR” from the Google Search Console Performance report.

RANKING POSITION
“Average Position” in the Google Search Console Performance report.

QUESTION TITLES
Title tags that used the terms “How, Why, What, Who” or a title with a question mark.

TITLE TAG CHARACTER COUNT
Number of characters that appear in the title tag at time of indexing.

POWER WORDS
The presence or absence of a set of “Power Words” as collected from various lists (like this and this). Full list used in this analysis here.
**URLS**
Keywords present in the subfolder of a domain name (for example: website.com/subfolder).

**TITLE SENTIMENT**
We used a text polarity sentiment on each title. For this process, we assigned scores to each word used, and the overall “sentiment” was the total of all the qualities for each word.

**META DESCRIPTION**
This was a binary look at whether or not a page had a meta description with text or not.