

**LARGE SCALE STUDY:
HOW DATA FROM
POPULAR KEYWORD
RESEARCH TOOLS
COMPARE:**

Methods

BACKLINKO

LARGE SCALE STUDY: HOW DATA FROM POPULAR KEYWORD RESEARCH TOOLS COMPARE: METHODS

There are dozens of standalone keyword research tools or SEO tools that provide keyword research as part of their feature set.

However, for the end user, it is often challenging to make informed comparisons between different data providers, which may be skewed or misleading when viewed individually. Also, many online reviews of each tool focus on subjective criteria (such as UX).

To our knowledge, there hasn't been a large-scale analysis of the **data** found in various keyword research tools.

The aim of this large-scale study of Keyword Analytics is to objectively compare data across various SEO tools. More specifically conducted a comparison for the following variables:

- Keyword Suggestions
- Average Monthly Search Volume
- Keyword Difficulty
- Cost-per-Click Ads data (USD)

We compared the data reported in 10 popular SEO tools.

- Google Keyword Planner
- Ahrefs
- SEMrush
- Moz
- KeywordTool.io (only Volume, Difficulty, and CPC)
- KWFinder (only Volume, Difficulty, and CPC)
- LongTailPro (only Volume, Difficulty, and CPC)
- SECKockpit (only Volume, Difficulty, and CPC)
- Sixtrix (only Volume, Difficulty, and CPC)
- Ubersuggest (only Keyword Suggestions)

We analyzed 9 SEO tools for keyword search volume, difficulty scores and cost per click (CPC) with a maximum of 9952 keywords per tool.

Google Keyword Planner does not provide any information on difficulty scores.

Moz does not provide any information on cost per click.

Sixtrix has a low number of successful requests (2,473 and 2,368 successful analysis attempts out of approximately 10,000 possible keywords).

WHAT WE DID— STUDY METHODOLOGY

STEP 1 - Collect Seed Keywords: Seed Keywords were sourced from <https://www.wordstream.com/popular-keywords>. From 15 keyword categories, we selected randomly 5 keywords, totaling 75 keywords.

STEP 2 - Collect Keyword Suggestion data for each SEO tool: We manually added each of the 75 keywords onto each SEO tool to receive the number of Keyword Suggestions.

STEP 3 - Input Seed Keywords onto Google Keyword Planner and download all Keyword Suggestions: To gather data on Search Volume, CPC and Keyword Difficulty, we entered 5 keywords from each of the 155 categories onto the GKP. Then, we downloaded all the suggested Keywords into CSV files. This resulted into 59516 keyword observations.

STEP 4 - Categorize data into different monthly Search Volume buckets and limit observations to 10.000 observations: From the GKP data, we removed search volumes smaller than 100 and dropped all NAs for the relevant variables. As a next step, we categorized the keywords into three search volume keyword size buckets (i.e. 100-1,000, 1,000-10,000, +10,000) and randomly selected 1/3 of observations from each.

STEP 5 - Upload 10,000 onto each SEO tool and download Average Monthly Search Volume, Keyword Difficulty and CPC Ads data: Lastly, we uploaded the clean GKP data onto each SEO tool and downloaded the results.

FACTOR-BY-FACTOR BREAKDOWN

The main factors that we analyzed are outlined below.



KEYWORD SUGGESTIONS

This is the raw number of keyword suggestions generated from a single seed keyword search. No analysis was done on quality of suggestions, search volume of each suggestion etc. Nor was any filtering done.

7 SEO tools were used in this analysis, each used to search 75 keywords. The keywords fall into 15 categories with each category containing 6. Minimum of suggestions was 22 and the highest values was 6.58880510^{6}.



KEYWORD SUGGESTIONS BY CATEGORY

This was an analysis of the number of suggestions that each tool provided by various categories (travel, web hosting, etc.).

Here is the full breakdown of that analysis.

2 Keyword Suggestions

Data Table

Category	Keyword	SEO Tool	Suggestions	Median per Tool	Median per Category
Financial Services	finance	Google Keyword Planner	691	691	153,308.0
		Ahrefs (all keyword ideas)	1,269,225	43,488	153,308.0
		Ahrefs (phrase match)	1,233,201	23,021	153,308.0
		SEMrush (broad match)	1,201,273	36,523	153,308.0
		SEMrush (phrase match)	973,555	25,475	153,308.0
		Moz (mix of sources)	1,000	1,000	153,308.0
	investing	Ubersuggest (related)	196,562	4,261	153,308.0
		Google Keyword Planner	2,528	691	153,308.0
		Ahrefs (all keyword ideas)	264,668	43,488	153,308.0
		Ahrefs (phrase match)	255,608	23,021	153,308.0
		SEMrush (broad match)	1,209,214	36,523	153,308.0
		SEMrush (phrase match)	135,075	25,475	153,308.0
	loans	Moz (mix of sources)	1,000	1,000	153,308.0
		Ubersuggest (related)	29,295	4,261	153,308.0
		Google Keyword Planner	936	691	153,308.0
		Ahrefs (all keyword ideas)	1,007,861	43,488	153,308.0
		Ahrefs (phrase match)	994,674	23,021	153,308.0
		SEMrush (broad match)	1,851,628	36,523	153,308.0
insurance	SEMrush (phrase match)	541,163	25,475	153,308.0	
	Moz (mix of sources)	1,000	1,000	153,308.0	
	Ubersuggest (related)	153,308	4,261	153,308.0	
	Google Keyword Planner	789	691	153,308.0	
	Ahrefs (all keyword ideas)	6,588,805	43,488	153,308.0	
	Ahrefs (phrase match)	6,522,620	23,021	153,308.0	
		SEMrush (broad match)	4,109,928	36,523	153,308.0



MONTHLY SEARCH VOLUME

This was reported monthly search volume in the United States.

SEO Tool	Minimum	Average	Median	Maximum	NAs
Google Keyword Planner	110	15,555.0	3,600	1,500,000	0
Ahrefs	0	9,078.1	1,900	1,780,000	0
Moz	5	11,374.4	2,300	904,000	0
SEMrush	20	15,549.2	3,600	1,830,000	0
KeywordTool.io	90	23,240.4	4,400	6,120,000	0
KWFinder	0	14,810.3	3,300	1,390,000	0
LongtailPro	90	15,745.9	3,600	1,500,000	0
SECOckpit	70	15,694.7	3,600	1,500,000	0
Sixtrix	25	26,848.0	10,000	250,000	0



KEYWORD DIFFICULTY

The reported Keyword Difficulty for each term, on a scale of 1-100.

4 Keyword Difficulty Scores

Summary Table	SEO Tool	Minimum	Average	Median	Maximum	NAs
	Ahrefs	0.00	22.34	16.00	99.00	0
	Moz	3.00	42.59	43.00	76.00	0
	SEMrush	0.00	81.17	84.12	99.81	0
	KeywordTool.io	0.00	61.78	75.00	100.00	0
	KWFinder	6.00	39.13	38.00	86.00	0
	LongtailPro	11.00	41.25	41.00	79.00	0
	SECOckpit	1.29	9.39	7.76	100.00	0
	Sixtrix	10.00	49.77	49.00	85.00	0



COST PER CLICK

This was the reported CPC in USD.

5 Cost per Click (CPC)

Summary Table

SEO Tool	Minimum	Average	Median	Maximum	NAs
Google Keyword Planner	0.02	5.03	2.12	749.06	0
Ahrefs	0.01	3.63	1.60	355.00	0
SEMrush	0.01	3.12	1.38	209.10	0
KeywordTool.io	0.02	4.00	1.60	361.05	0
KWFinder	0.02	4.46	1.66	361.05	0
LongtailPro	0.01	4.33	1.61	361.05	0
SECOckpit	0.01	5.25	2.20	502.10	0
Sixtrix	0.11	5.07	1.66	195.47	0

RESULTS

Besides the results that were published on the Backlinko blog, all results (including a full appendix) can be found at: https://frontpagedata.com/projects/backlinko/keyword-analytics/Final_Analysis.html