

INK Data Study: How INK Really Helps you Rank

Understanding how well SEO tools work is a difficult task. Writers and content creators have a lot of options to help make sure their content is as visible as possible to target audiences. So, how can you tell which tools actually help you rank?

And, how do you know INK helps you rank?

We conducted an extensive data study to test how effectively INK helps content rank. Specifically, we tested how an article's INK Score relates to its ranking position.

In short, we set out to answer this question: **Does a higher INK Score indicate a higher Google ranking position?**

The answer is: **yes.**

Of course, there are dozens of factors that determine how high content ranks in search engine results. These include how high a site's domain authority is, how competitive the target keyword is, how fast the site is, and many more.

However, one of the main factors is how relevant your content is to what people are searching.

Our study proved that INK knows the difference between content that is relevant and content that is not relevant. This is important because the highest ranking articles are the most relevant to the search intent.

For these reasons, your INK Score is calculated based on:

- How relevant your content is to the keyword you are targeting.
- Other content already ranking in Google that is targeting the same keyword you are targeting.

This is why INK is designed around achieving the highest INK Score possible for your target keyword(s). Your INK Score indicates how relevant your content is to what your audience is searching *and* how well you can expect your content to perform against your stiffest competitors.

We know that the Top 10 Google search results reflect the most relevant content for a given search intent. INK Scores are, in part, a clear measure of how relevant your content is.

As a measure of predicting how likely an article is to rank, our study examined what is already ranking, used INK to assign this existing content an INK Score, and proved that content with higher INK scores is more likely to rank in Google's top 10.

Main Takeaways: What These Results Mean For You

1) Why should I trust the INK Score when it comes to SEO?

How high your INK Score is can be the difference between good and excellent content. Your INK Score is weighted against the content that is already ranking competitively in Google results. Our data study proved that the higher the INK Score, the higher the chance of ranking in the top 10 Google results.

2) What INK Score should I aim for?

Minimum INK Score: 80%

- This score means your content is relevant to the keyword(s) and topics you are targeting.
- We would consider this a B grade. It's above average, but there's room for improvement.

Great INK Score: 91 - 96%

- This range means your content is about **2-3x more likely to rank** in the top 10 Google results compared to the average relevant, top 100 article.
- This would be like getting an A- grade. You're better than most, but you still have some work to do in order to be at the top of the class.

Excellent INK Score: 97-99%

- Once you achieve an INK Score of 97%, your content is at least **4x more likely to rank** in the top 10 Google results compared to the average relevant, top 100 article.
- This shows that the closer you are to 100%, the stronger your chances of ranking competitively are.
- This would be like getting an A grade. But, the closer you are to 100%, the more likely you are to be at the top of the class.

Ideal INK Score: 100%

- This is the maximum INK Score.
- Once you achieve a 100% INK Score, your content is almost **4.5x more likely to rank** in the top 10 Google results compared to the average relevant, top 100 article.
- This score gives you the strongest chance of ranking competitively in Google results.
- This would be like getting a perfect A+ grade. Being at the top of the class is very likely.

3) When can I stop optimizing my content in INK?

Achieving an INK Score of 97% and higher means your content is highly relevant to your target keyword(s) and is up to **4x** more likely to rank in the top 10 of Google results. Therefore, 97% is an outstanding target.

To go back to our school example (and what some of our teachers would say when we got a 97% but wanted a higher grade), “an A is an A is an A.”

We always recommend working to achieve a score as close to 100% as possible. INK Scores closer to 100% are more than four times more likely to rank in the top 10 Google ranking positions. In the end, you’ll have to strike the ideal balance between your time, effort, and your ranking potential.

That said, pushing yourself to achieve a score of 100% only helps put your content in the very best position to dominate search results. And, gives you the peace of mind of knowing your content is as optimized as possible.



Data Study: The Details

In this initial data study, we tested how well INK works for SEO by comparing INK Scores with Google rank positions¹.

First, we collected articles that are already live on the Internet and ranking in the top 100 of Google results.

The next sections will explain our method.

Dataset: What Data Did We Use and How?

Selecting the Keywords

Google uses a search term, or keyword, to understand how relevant content is to what someone is searching. That's why you start off with keyword research and build a relevant article around your target keyword.

Just like you enter keywords into INK, and start writing, we started this study by selecting our keywords. We compiled a large set of keywords with the highest Cost Per Click, or CPC. That is because high CPCs usually mean a keyword is valuable and, therefore, more competitive.

¹ Ideally, we would publish new articles. Then, we would track their performance to understand if their Google ranking positions improve as their INK Scores increase. We would also consider other ranking factors like Domain Authority, Site Speed, and more. We aim to conduct a follow-up study that does just that.

Then, we randomly selected thousands of keywords from the CPC set. After that, we searched them on Google.

Selecting the Pages to Test

Each search returned a different number of relevant pages. While some keyword searches returned a large number of relevant pages, others returned fewer. We collected the top 100 pages for each keyword.

We extracted the text from these pages using HTML and the **newspaper3k** Python library.

Grouping the Data for Accuracy

The main goal of this study was to determine if INK Scores accurately indicate a given ranking position. In other words, we needed to understand how well INK models relevancy.

To accomplish this, we needed to use INK to score existing, real-world articles that are already ranking in Google.

What's more, we needed to use articles that INK hadn't seen before to make sure that this information was not already included in INK's relevancy model. This is because INK considers the top-ranking content in calculating the INK Score and our study used top-ranking content to assess the INK Score.

Otherwise, we risked overfitting. In statistics, overfitting occurs when the model fits the data too closely.

Specifically, the risk was that INK might be good at predicting a ranking position for only a certain data group and not a random, unknown article. After all, the point of the study was to see how well INK Scores accurately correlate with a given ranking position for any article, not just the articles it's already been exposed to.

Therefore, to eliminate the risk of overfitting and ensure fairness, we split the pages into a Train Group and a Control Group. Each group covered pages in different ranking positions.

Then, we further refined the data by filtering the pages for any errors. For instance, some pages did not have any content. This was due to an extraction error. So, we filtered these pages out of the dataset.

Next, we calculated the INK Score for all pages in the Control Group.

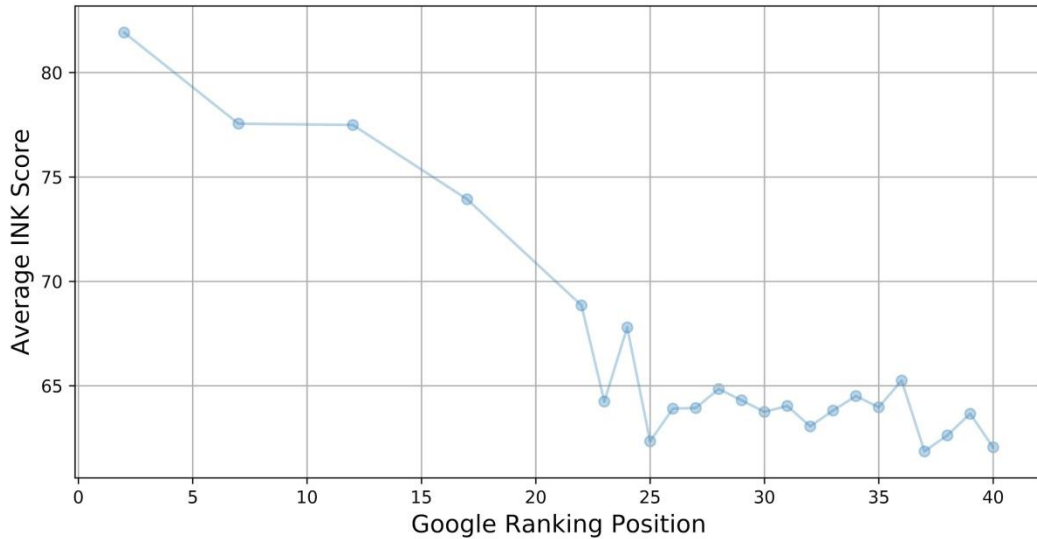
Click [here](#) to check out our dataset.

Analysis: How Did We Analyze The Data?

We started by comparing an article's INK Score with the article's Google ranking position.

We created the following graph of the pages in the control group (Img. 1) to help illustrate this relationship. The vertical Y-axis represents an article's average INK Score. The horizontal X-axis represents an article's position in Google at the time of the study. Then, we plotted points:

Figure 1



The graph shows that articles ranking in the top 10 Google positions had an average INK Score of around 80%. The graph also shows a decreasing trend for the top 20 pages.

This shows a clear relationship between an article's INK Score and Google ranking position.

As a result, this shows that the higher the INK Score, the higher the article's chances of ranking competitively in Google results.

Using Spearman's Rank Correlation

To get a bit more technical, this relationship is an example of Spearman's Rank Correlation. Spearman's Rank Correlation is a measure of the statistical dependence present between the rankings of two variables.

The absolute value of the mean Spearman Rank Correlation² between an article's INK Score rank and its Google rank turned out to be: 0.173.

By itself, this value does not mean much. However, this number is much more meaningful when compared to other factors known to influence ranking position. For example, [this research](#) outlines several other content-based factors that have a maximal correlation of 0.125. Domain Authority has a correlation of 0.25.

It's worth noting that the above study is from 2015; therefore, it considers a different time frame than ours. Furthermore, the results of that study were obtained with data that differs from ours. However, it is still worthwhile to compare INK with other influential ranking factors.

Establishing a Distribution Pattern for Relevant vs. Irrelevant Content

How can INK tell the difference between the *most* relevant content, relevant content, and content that is *not* relevant for a given keyword?

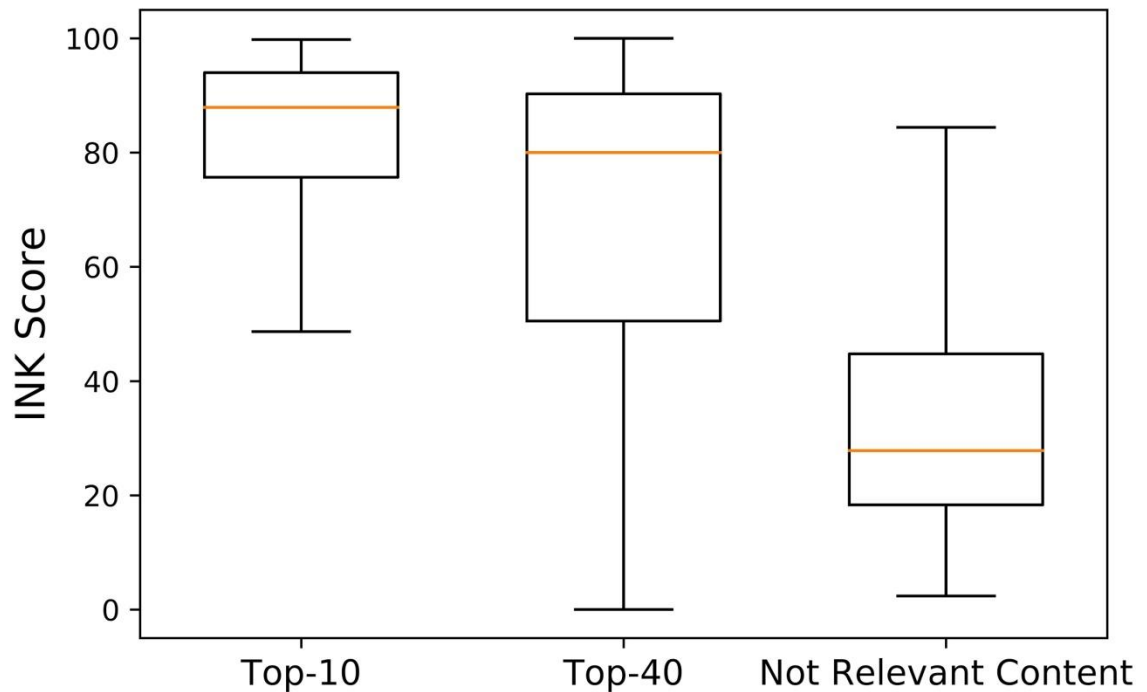
What is the range of INK Scores for the *most* relevant content for a given search intent? And for relevant content? Or, what about content that is *not* relevant?

To answer these questions, we examined the distribution of INK Scores within each of these three groups:

1. **Most Relevant Content:** the top 10 pages
2. **Relevant Content:** the top 40 pages
3. **Irrelevant Content:** pages resulting from searching keywords that differed from the keywords used in Groups 1 and 2

Figure 2

² First, we calculated the Spearman Rank Correlation of INK Scores with Google ranking positions for the top 40 pages. Then, we took the average of this value for all keywords.



The above box plots (Img. 2) show the range of INK Scores for each of the three categories of content:

1. **Top 10 Pages:** The first box shows that the most relevant content had a range of INK Scores from about 80% to 100%. The orange line represents a median score of around 90%.
2. **Top 40 Pages:** The second box shows that relevant content had a range of INK Scores from about 50% to 90%. The orange line represents a median score of around 80%.
3. **Not Relevant:** The third box shows that content that is not relevant to the search intent had a range of INK Scores from about 0% to 40%. The orange level represents a median score of around 30%.

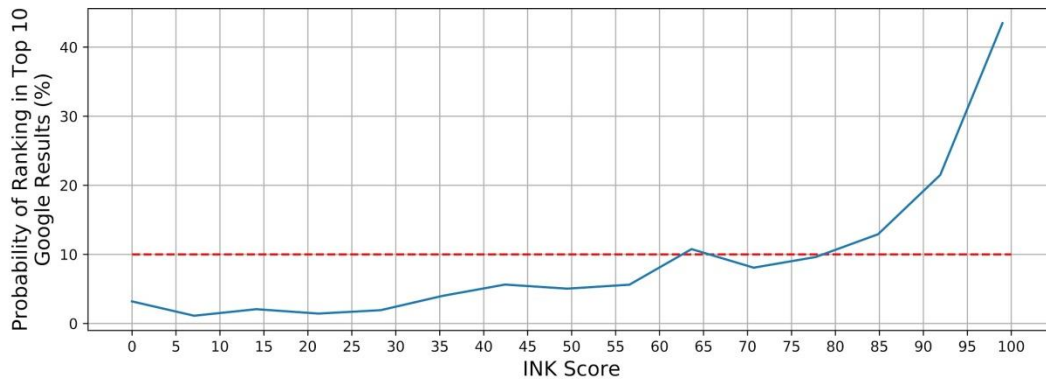
The box plots show that the INK Scores differ significantly for each of the three groups of content. Furthermore, it's clear that INK Scores concentrate at the bottom of the not relevant content box plot.

This means that INK is able to tell the difference between content that is relevant and content that is not relevant, and score it accordingly. This also shows that there is a clear relationship of how relevant content is to a search term and how well it ranks in Google.

Understanding Content's Probability of Ranking in the Top 10

The below graph shows the probability of ranking among the top 100 Google ranking positions for a range of INK Scores³:

Figure 3



The vertical Y-axis represents a page's probability of ranking in the top 10 Google search results.

The horizontal X-axis represents the range of possible INK Scores that a page can achieve.

The red line represents the base probability. This means that all content has a 10% probability of ranking in the top 10.

On the other hand, the blue line shows the content's probability of ranking in the Top 10 based on what INK Score the content has.

These data show that random content in the top 100 Google ranking positions has a 10% chance of ranking in the top 10 search results. Top 10 positions are out of 100, so 100 divided by 10 equals 10.

However, the data also show that using INK and:

- Achieving an INK Score from 60% to 80% gives the content a 10% chance of ranking in the top 10 Google results.

³ To collect these data, we used real web pages. We recorded their positions in SERP and their INK Scores. Then, we used Bayes Theorem to calculate the likelihood that arbitrary pages from the top 100 rank in the top 10 given their INK Score.

- Achieving an INK Score of 90% makes the content 20% more likely to rank in the top 10 Google results.
- Achieving an INK Score above 97% and closer to 100% makes the content at least 40% more likely to rank in the top 10 Google results.

Conclusions: What Did The Data Study Show?

1. There is a clear relationship between a high INK Score and a high Google ranking position.
2. Google ranks content based on relevancy. INK knows what relevant content looks like and how to get there. Therefore, using INK helps create relevant content that is more likely to rank.
3. Content that achieves an INK Score of 80% is relevant.
4. Content that achieves an INK Score of 91% is **2x more likely to rank** in the top 10 of Google compared to the average relevant, top 100 article.
5. Content that achieves an INK Score of 94% is **3x more likely to rank** in the top 10 of Google compared to the average relevant, top 100 article.
6. Content that achieves an INK Score above 97% is at least **4x more likely to rank** in the top 10 of Google compared to the average relevant, top 100 article.