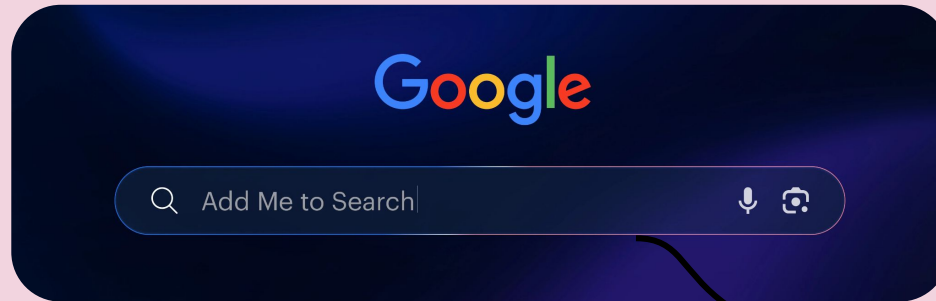


Guesstimate Question

Calculate the number of queries answered by Google per second?



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*How many times you
search?*

Calculate the number of queries answered by Google per second

1. Clarification and Scope:

We have clarified that we are estimating the total number of queries answered by Google for every location present on earth, without geographical constraints.

2. Brainstorming and Structure:

We've chosen a top-down approach, estimating the number of Google Users and then translating this into the number of queries asked per second.

We can segment them according to their frequency of usage.

We can assume 3 types of searchers: Aggressive, Active and Passive

3. Creating an Equation:

The total number of Google Searches on Earth is derived from the total of Google Searches by Aggressive, Active and Passive searchers. The equation can be outlined as follows:

Total Google Search Queries = Google Searches by Aggressive Users + Google Searches by Active Users + Google Searches by Passive Users

4. Map out Calculations and Keep Your Numbers Easy:

Earth's population is around 8 billion people.

Since Google isn't available in China, we subtract about 1.5 billion from that, leaving us with roughly 6.5 billion potential users.

About 75% of the world has internet access, meaning around 4.875 billion people can go online.

Google dominates the search engine market with about 80% share.

So, we estimate around 3.9 billion people worldwide use Google for their searches.

Further we can segment these users according to their frequency of usage

- Aggressive – Assuming 30% of the users are active users and they make 5 Searches daily on an average
- Active – Assuming 40% of the users are active users and they make 5 Searches daily on an average
- Passive – Assuming 30% of the users are active users and they make 1 Search daily on an average

5. Round Numbers and Calculate:

Number of Aggressive users – 1.17 billion

Number of Active users – 1.56 billion

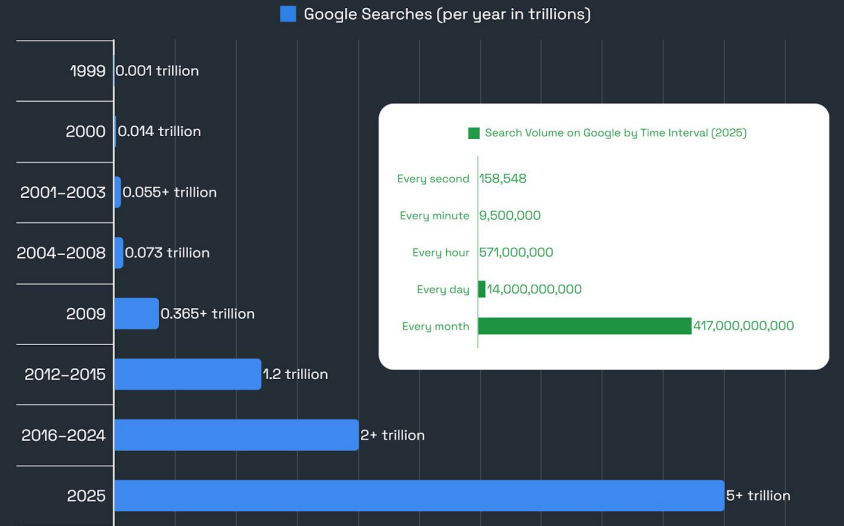
Number of Passive users – 1.17 billion

Searches made by Aggressive users daily – $1.17 \times 5 = 5.85$ billion

Searches made by Active users daily – $1.56 \times 3 = 4.68$ billion

Searches made by Passive users daily – $1.17 \times 1 = 1.17$ billion

Google's Search Volume Growth: From 1 Billion in 1999 to 5 Trillion in 2025



Source: Google - Searchengineland - John Battelle's book, "The Search" - Google Zeitgeist

Total Searches in a day = 5.85 billion + 4.68 billion + 1.17 billion = 11.7 billion

Number of Seconds in a day = $24 \times 60 \times 60 = 86400$

Total Searches per Second = $11.7 \text{ billion} / 86400 = 135417$

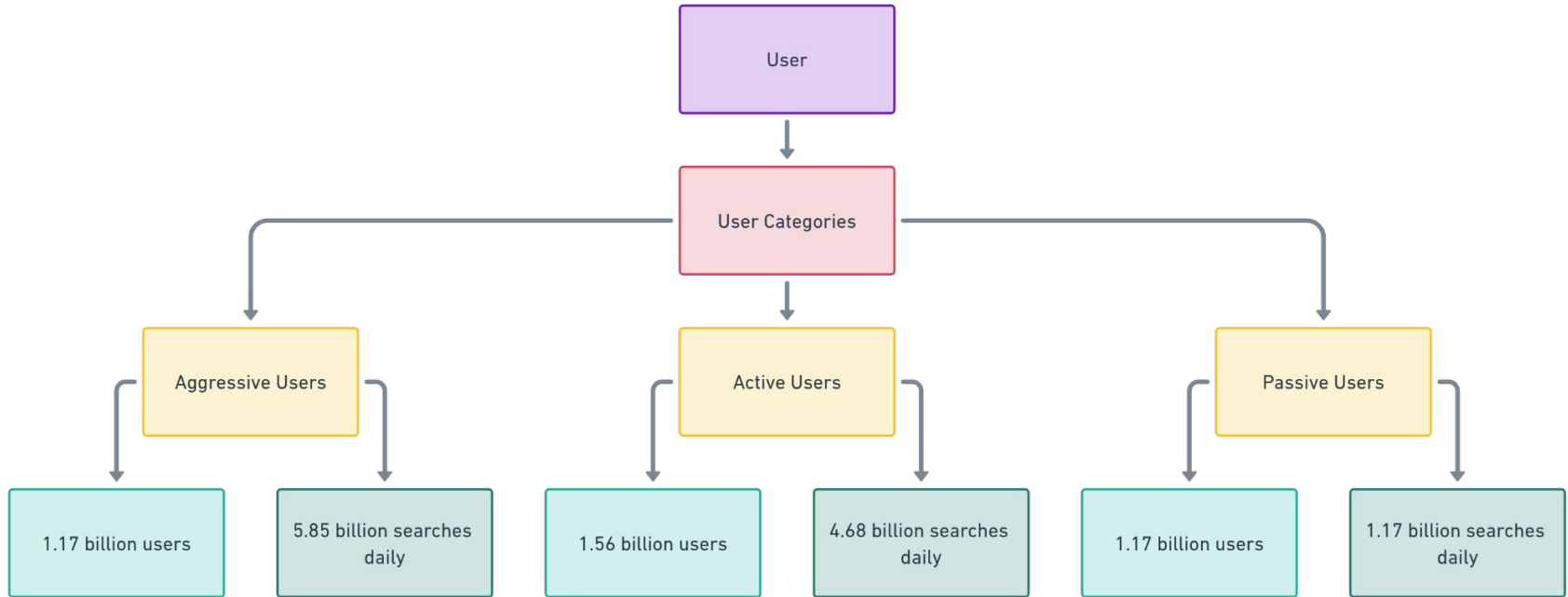
KEY SEARCH METRICS:

5.85 Billion

4.68 Billion

1.17 Billion.

Simple version



Thank you

Any Guesses?

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