

# Google It!

A K ZIAUDDIN AHMED

**Y**ou have bought a Durian. You found it in a supermarket, you never saw this fruit before. It's imported from Thailand. How to eat it? You have no idea and you don't know anyone who could tell you that. No problem, just Google it! Yes, search on google 'how to eat durian' and there you are - you have all the information on your desktop, laptop, or smartphone screen with images, videos, and all that.

That's a fictional example but today we actually look for answers to varieties of questions that arise in our everyday life on Google. A student searching for a book, a researcher exploring journal articles, a tourist trying to locate a hotel, a housewife seeking a recipe - all are on google. The proper noun Google has become a verb and 'Google it' is now a phrase in the English language.

But where does google find all this information? Of course, Google does not create them. Actually, the source of Google's findings is the world wide web - all the websites, web pages, and videos on the internet. Google is a search engine. It searches through the world wide web for the material available relating to our query and presents them to us. Well, it doesn't seem to be a very difficult thing to do. But wait, where does the world wide web exist? The answer is, on numerous computers, servers, data centers, etc. located all over the world and connected through the internet. There are billions of web pages on the world wide web and millions of new ones are getting added every minute. People throughout the world are constantly uploading photos, videos, reviews, advertisements, news, articles, research papers, books, etc. on the web. So, it's not a simple thing to search through these billions of sources for the particular informa-

tion that you have googled for and bring it to you in seconds. To do this, Google indexes all types of information, as Google explains, 'from text and images in web pages to real-world information, like whether a local store has a sweater you're looking for in stock.' That sounds even more difficult thing to do.

In an article titled 'Web Search for A Planet: The Google Cluster Architecture' published by the IEEE Computer Society, Google Fellow Luiz André Barroso described how Google executes web searches by the users. The author mentioned that to answer a single

nesses all over the world. Data centers are huge establishments containing millions of servers. And servers are units that have the processing power, memory, local storage, and network connectivity.

Google's history goes back to 1995 when two students of Stanford University USA, Larry Page and Sergey Brin built an internet search engine that they named Backrub and then renamed it Google. The name Google was inspired by the word googol which in mathematics stands for the number 'ten to the power 100', that is 1 followed

Cloud, etc. Google restructured its business in 2015 and now it's the flagship subsidiary of the multinational technology conglomerate holding company Alphabet Inc. Larry Page and Sergey Brin remain board members and controlling shareholders of Alphabet Inc.

According to Earthweb, there are over 9 billion searches on google every day which is way more than the total number of people on earth. Remember, the world population reached 8 billion recently. Google is providing a virtual platform for the exchange of human knowledge, ideas, and experience. Let's recall its mission: 'to organize the world's information and make it universally accessible and useful'. Indeed, it has made information accessible to everyone in the world free of cost.

Imagine a world without google! You don't have YouTube to watch videos for entertainment or information, you don't have Gmail to communicate with people around the world, you don't have google maps to show you locations of your places of interest and directions to reach them by various means of travel, you don't have Google Play for searching and downloading apps for your android phone, and above all, you don't have the Google search engine to look for answers to your endless questions. Of course, there are alternatives like Microsoft Bing or Yahoo! According to Statcounter Global Stats, as of January 2023, Microsoft Bing and Yahoo! handled 3.03% and 1.22% respectively of all search queries compared to 92.9% by Google. And there are also Yandex, Baidu, DuckDuckGo, etc. within the rest 2.85%. However, none of them aims to 'organize the world's information and make it universally accessible and useful'.

*The writer is a former Corporate Professional and Academic*



query Google has to read hundreds of megabytes of data and spend tens of billions of CPU cycles. To support a peak request of hundreds of thousands of queries per second Google requires a huge IT infrastructure with the power of the largest supercomputers.

Google owns some 30 data centers in operation or under development at 23 different locations in the USA, South America, Europe, and Asia. These data centers provide the computing and storage resources that google uses to provide its services to people and busi-

nesses all over the world. That's insanely ginormous! But probably matches with Google's mission which is 'to organize the world's information and make it universally accessible and useful'.

In 1998 the company Google Incorporated was established with an initial investment of \$100,000. Now it's a trillion-dollar company!

Google is not just a search engine anymore. It has now numerous products like YouTube, Google maps, Gmail, Google Drive, Chrome browser, Android OS, Google Meet, Google Play, Google