# The AI Race is On! Google's Bard and OpenAI's ChatGPT Head to Head: An Opinion Article

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## **Abstract**

Two prominent Artificial Intelligence (AI) competitors, Google's Bard, run by Language Model for Dialogue Applications (LaMDA) and Open AI's Chat Generative Pre-trained Transformer (ChatGPT), compete for supremacy in the market. LaMDA is a transformer-based neural language model pre-trained on online chat data. ChatGPT, on the other hand, is built on the GPT-3.5 architecture and incorporates a reinforcement learning model with human feedback. While Google's Bard is not yet available to the public, its search engine income has increased. ChatGPT, because of its exceptional conversational technology, has attracted considerable attention and established the standard for AI chatbots. Who will win yet? Time will answer, but both companies are working hard to keep up with the AI revolution.

Keywords: Artificial Intelligence, ChatGPT, Google's Bard, LaMDA

#### Introduction

This world is continually evolving, and there is no point in arguing that these changes significantly transform the contemporary world. Every day, people around the globe discover and experience a new technological marvel. Once upon a time, no one could have anticipated holding a device that could connect individuals from any corner of the world. Besides, this device could allow them to complete all of their tasks in the blink of an eye, take images, and write notes on the same machine without needing a separate camera or notepad. This is how contemporary technology evolves and enhances the lives of humans. The wonders of modern technology, from the World Wide Web (WWW) to Artificial Intelligence (AI), have never stopped astonishing people with incredible capacities. These days, ChatGPT, an AI-based chatbot, has captured the tech community's interest, causing the internet to break down. Google, on the other hand, is the throneless monarch of the modern tech industry. They consistently take the lead in technology like great leaders and develop many novel scientific and technological innovations. So they must do more than just stay quiet and watch. So, they are also getting ready for their AI-based chatbot, Bard, which LaMDA will run. People have already started to look into what's warmer in the tech world and imagine the race between Google's Bard, OpenAI's ChatGPT, and even other tech industries.

In a similar vein, chatbots such as Bard and ChatGPT will perform the same functions. Even though both companies are operating successfully, competition is a natural and unavoidable occurrence in the market. Speaking of rivalries, throughout the decades, mass people have experienced some classic battles of tech giants like *Samsung* Vs *Apple* in the Cellular Phone industries (Park & Kim, 2021), *iOS* Vs *Android* in the operating system of phones (Sahani, 2017), *Ferrari* facing off against *Ford* in the automobile industries (Baime, 2009), *Airbus* going head to head against *Boeing* (Jones, 2005); there is no scarcity of examples. Nevertheless, the thing is, all that can be observed from these rivalries is; that the most successful survivors could adapt to new changes promptly and get accustomed to them. Like all these technological marvels from the past decades, the present world is preparing to face another epic battle. This time, it is between the two AI-based conversation tools/models: Bard by Google and ChatGPT by Open AI.

## Google's Bard AI and OpenAI's ChatGPT: The future of conversational AI

In November 2022, OpenAI released ChatGPT, the most sophisticated language model. It is a neural network-based method for processing natural language that OpenAI has shown to be a very successful AI-based conversational tool, providing services with extremely high accuracy and efficiency in a concise amount of time. On the other hand, Bard was purpose-built for conversational agents like chatbots. Although both models have been pre-trained using vast volumes of text data, ChatGPT has a more extensive training corpus and can produce text in more contexts. ChatGPT could generate text based on the first responses to increase the authenticity of discussions. However, Bard was created from the bottom up to provide contextually appropriate responses to a wide range of questions. Bard's capacity to produce text in various voices and registers gives it versatility as a content-generation tool. While ChatGPT lacks this feature, its text generation is more flexible and unpredictable. The ability of Google Bard AI to react to its surroundings quickly sets it apart from ChatGPT. The Bard AI can now answer client inquiries rapidly while ensuring the data's highest level of correctness and veracity. Another unique quality of Bard is that it refrains from drawing erroneous inferences or making poor judgments or comments based on presumptions. Users must choose their Google Search options to continue obtaining Google's standard search results while using Google Bard AI. LaMDA serves as the initiative's LaMDA's engine. However, ChatGPT is built on GPT. Duplicate content may be found using the AI Text Classifier tool, which has been used as an integrated anti-plagiarism tool. The use of Bard, Google's AI assistant, is currently free. Additionally, OpenAI's accessible version has been in use since it was made available in November of last year. However, it has now released a new version of ChatGPT, the tool's premium edition, allowing users to use premium features and benefits. Compared to Google's Bard (LaMDA), which has 1.37 billion parameters and a massive vocabulary base of more than one and a half trillion words (Dhanshree, 2023). ChatGPT has 175 billion parameters, which indicates that ChatGPT has an advantage.

## Bard takes on ChatGPT: A battle for dominance in the NLP market

The Natural Language Processing (NLP) market is still new for marketers; thus, everything will be unique to them. Those who take advantage of the opportunities will be more successful. ChatGPT has the upper hand right now because they have been in the market longer and have made a name for themselves. However, Google is different from the kind of company that sits back and lets others do well while they take over the market and leave them with nothing to do but watch. They are also developing a plan to use their different styles to make an AI-based chatbot to talk to people and give them quick answers. The most important thing about Bard is that it can make answers using different metrics, which is a great way to ensure the answers are correct (Byryne Hager, 2022). Alphabet Inc., which also owns popular social media sites like YouTube and subsidiary companies like Fitbit and Waze, is the company that owns Google. This is a significant advantage for Google. This means that Google can quickly make a strong name for Bard, the latest trend. Employees can now use a converter box to ask the Bard questions, get text answers from it, and rate and score the quality of the answers given by the Bard Chatbot. CNBC says several comments show that Bard's answers can keep up with current events, but ChatGPT cannot (CNBC, 2023). Google's familiarity with end users will help them get this product to those users. It has also been said that Microsoft will add ChatGPT to its "Bing" search engine (SEJ SEO, 2023). Google Search Engine vs Bing by Microsoft is about to become the biggest rivalry, which will be very exciting for people (Reuters, 2023).

## Technology-driven competition: Market share

The present era is the era of modern technology, and there is very intense competition among the rivals of this industry. No one is willing to give a single inch of space to another. Everyone is fighting for their piece of bread. So there is no room for staying in a standstill position and allowing the other rivals to thrive in the spotlight. Every company is trying their best to improve the quality of its offerings to have a firm grab at the market share. Whenever a new technology comes into the knowledge of everyone, the developer of it tries to make sure that it remains unique and they continue to improve and develop it.

On the other hand, rivals try to bring out something more valuable than the existing one. Since the marketplace is always competitive, it is the fact that the more up-to-date and advanced the companies can become and offer their products and services to the clients accordingly, the easier it gets for them to ensure a bigger slice of the pizza in the market share. This allows Google to rule the market with this AI-generated conversation tool. Nevertheless, as it is an entirely new feature and a wide range of opportunities available for the firms, all the companies have similar scope to thrive into success. There is no limit to the opportunities available, but the correct decision-making would be the game changer in this rivalry.

## Conclusion

Last but not least, a significant worry for OpenAI and Google Inc. should be that other tech giants like Meta are also keeping up; they are closely monitoring the events and may also gather the necessary data to start the study for developing their version of the AI-based chat tool. Therefore, Google will endure challenging testing in the following weeks or months. Although Google has been devoting many resources to this project for a while, they have opted to publish it as soon as possible because further launch delays will make it harder for them to compete. The earlier they arrive, the more chance they have of grabbing the market.

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