PLATEER | groobee

# Plateer: Building an integrated AI environment and ecommerce marketing platform with Vertex AI

Get started for free

**GOOGLE CLOUD RESULTS**

✓ Outstanding performance and low operating costs compared to other LLMs

✓ AI-centered environment that connects data to services

✓ Integration of [BigQuery](#) and AI supports a smoother data learning process

Plateer built Groobee using Vertex AI and Gemini to predict consumer intentions, enhance product search, and offer personalized shopping experiences.

[Plateer](#) is a digital platform solutions company that helps ecommerce companies grow through its AI-based marketing solution, [Groobee](#). It analyzes customers' purchasing patterns to create a better commerce experience through various functions such as personalized product recommendations and targeted marketing. Groobee's differentiation begins with parsing data from events that occur during the ecommerce journey.

To further enhance the solution, Groobee has implemented more robust data analysis, and recently, it has been updated to an AI-based marketing analysis solution through the AI capabilities of [Google Cloud](#).
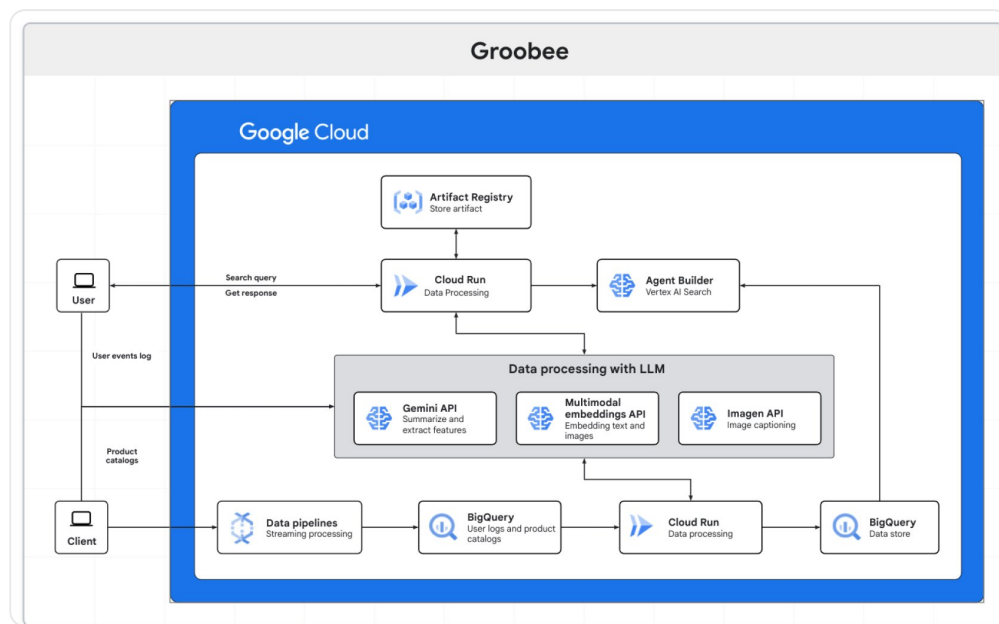


## Generative search in ecommerce - A new trend

"We aimed to inspire confidence by emphasizing 'personalization,' 'recommendation,' and 'search' as the key drivers

There are expectations that AI will lead to better marketing. However, there is still a lot of uncertainty. "We aimed to inspire confidence by emphasizing 'personalization,' 'recommendation,' and 'search' as the key drivers of an improved online commerce experience. Google Cloud became the foundation for making this idea a reality," says

of an improved online commerce experience. Google Cloud became the foundation for making this idea a reality."

**Dr. Seo Hyeong-Won**
Data Science Team Leader, Plateer

Dr. Seo Hyeong-won, Data Science Team Leader at Plateer.

He also said that the generative AI search solution applied to Groobee has been a trend in the evolution of ecommerce. For a long time, shoppers relied on entering keywords such as 'jeans,' 'mineral water,' or 'ramen,' or the product's name. However, as online shopping became a part of daily life, there were many cases where people looked at relevant products even if they did not find the items they needed, like how they would wander around shopping malls without deciding on a purchase, just for fun.

Large-scale language models are excellent at reading the context of text and understanding intent. Applying this to search technology can help users understand what products they want and provide appropriate results. If this is done well, consumers will experience the joy of discovery. Using Gemini, Plateer is able to create a new product search experience by integrating the data analysis environment of Vertex AI.

"In order to provide generative AI search to online shopping services in the form of a SaaS, all data analysis and AI services need to be in the cloud. Vertex AI has the strength of being able to apply and manage many models systematically. In generative AI search, the Imagen model, which connects images to text, plays a big role. This is because advanced search begins when the system accurately understands the product," added Dr. Seo.

The Imagen model on Vertex AI can read the images of products listed on shopping portals. It not only turns text into images but also provides detailed explanations of the contents of the image as text. Groobee uses this to interpret various information such as the shape, color, material, and more about the product, along with existing product information, to provide a clear understanding of the product.

Unfortunately, many images used are often staged for promotional purposes in addition to providing product information. Staged images can cause distortion when processed by artificial intelligence. To improve accuracy, Groobee generated three possible results for each image and compared them to determine the best possible selection. Dr. Seo explained that Imagen's diverse image analysis became the foundation for broader searches.

"Imagen, among many generative AIs, has a high level of understanding of images and provides rich interpretations. There are almost no errors in basic interpretation, but by comprehensively verifying the three results generated by Imagen, we were able to increase accuracy while looking at the images from a more diverse perspective, which made it possible for even better search results."

Both standardized search terms, such as 'black one-piece dress' and more general queries, like 'Find things I need for my five-year-old daughter's birthday party,' will see relevant results come up. Gemini is able to interpret the context of the phrases entered by the user in the search bar and search for product metadata as Imagen understands. Since it performs text and vector searches simultaneously, it is possible to achieve advanced searches while increasing accuracy.



# Excellent performance and efficiency with Gemini

The team leader also praised the performance and efficiency of the Gemini model. In addition, since all processes of all AI models for generative AI search are processed within Vertex AI, the effect was even more remarkable. He explained that development and data management were also smooth since learning and [BigQuery](#) data calls were all done in one place.

"We applied [Gemini 1.5 Flash](#) for generative AI search after reviewing various models, and Gemini showed faster response speed and better results compared to other large-scale LLMs. The lightweight model showed optimal performance with appropriate parameter size, and it cost less than half that of other generative AI models," Dr. Seo said.

Most ecommerce services have a recommendation section that shows products that users may want and are trendy. This is an essential element that allows users to discover more products while making their purchases. Groobee also evolved the operation method of this recommendation service as part of the improvement.

In general, the selection of products appearing in this area is manually selected or extracted based on data analysis and deep learning based on the direction pursued by each trading site. In most cases, product selections are obtained through data queries during low-traffic times daily.

> "We applied Gemini 1.5 Flash for generative AI search after reviewing various models, and Gemini showed faster response speed and better results compared to other large-scale LLMs. The lightweight model showed optimal performance with appropriate parameter size, and it cost less than half that of other generative AI models."
>
> **Dr. Seo Hyeong-Won**
> Data Science Team
> Leader, Plateer

"The new recommendations section is designed to collect all data through BigQuery and bring it to Vertex AI for analysis at any time. All data collected is in Google Cloud, and since separate data transfer is not required, it safely and quickly analyzes and infers to create appropriate results. Above all, the regular AI-based recommendation area configuration is generated immediately upon request, so it can respond appropriately in a shopping environment that requires a quick response."

The learning process was also much smoother than handling previous general deep learning models, as BigQuery data and AI embedding move quickly and intuitively within Vertex AI. Since there is no need to transfer or separately process data, performance has improved, and data processing costs have also been reduced.

## Transforming ecommerce through Google Cloud AI

"Google Cloud has made the idea of AI-based services a reality based on high performance, development convenience, and cost efficiency. Google Cloud's AI ecosystem has achieved smooth results in a short period of time, allowing us to effect

As Groobee has sufficient experience working within the cloud, Google Cloud recommended venturing onto a higher level of data processing. Through technical support from partners, it became possible to implement AI-based marketing services in just two months, from review to application.

"Google Cloud actively helped in the process of revamping all our services. Although the introduction period was not long, Google Cloud and its partner Bespin Global suggested appropriate services and assured us that the actual service could be completed stably through

## changes in marketing powered by AI."

**Dr. Seo Hyeong-Won**
Data Science Team
Leader, Plateer

continuous technical verification," said Dr. Seo.

"Google Cloud has made the idea of AI-based services a reality based on high performance, development convenience, and cost efficiency. The Google Cloud AI ecosystem gave us smooth results in a short period of time, allowing us to effect changes in marketing powered by AI."

The results were rapidly apparent. In particular, the fashion industry benefited significantly as it became easier to find appropriate products by quickly identifying consumers' intentions, needs, and wants. The growing expectation is that a chat-type search service will be possible in the future.

The importance of generative AI search is greatly magnified in the shopping industry. Global distribution companies have already improved their search experience by combining massive data and large-scale language models. The process of finding exactly what you want through intuitive conversation and helping you choose by categorizing a wide range of questions into detailed categories is becoming increasingly prevalent.

Dr. Seo says that AI can tremendously evolve the online commerce experience through Vertex AI and Gemini. This is as the long-standing idea of creating a single flow from the process of registering a product to marketing through appropriate category classification and data analysis is taking a more service-oriented approach.

"As we introduced the Google Cloud AI environment to the Groobee service, we began to see changes in marketing. This is because we confirmed that although the shopping market is still largely handled by people, existing values can be further enhanced with AI. Groobee plans to develop a service that helps not only consumers who access the service and purchase products, but also product planners through broader application of AI."

**Plateer** is a Korea-based company principally engaged in the construction of building ecommerce platforms. The company

operates its business through two segments. The Commerce-Marketing (CM) segment is engaged in the construction of a smart ecommerce platform and an artificial intelligence martech platform Groobee.

**Industry:** Technology

**Location:** South Korea

**Products:** [Vertex AI](), [Agent Builder](), [BigQuery](), [Cloud Run](), [Cloud Storage](), [Compute Engine](), [Gemini 1.5 Flash](), [Key Management](), [Secret Manager](), [Vertex AI Search]()

**About Google Cloud Partner- [Bespin Global]()**

[Bespin Global]() is a Cloud Delivery Platform (CDP) that enables enterprise-wide digital transformation. Bespin Global helps businesses accelerate cloud adoption with industry-leading solutions and consulting expertise, delivering service-level-driven outcomes. It is recognized as a "Visionary" for execution and vision in Gartner's 2023 Magic Quadrant for Public Cloud IT transformational Services, worldwide. Bespin's services include Cloud Strategy, Migration, Implementation, Big Data, DevOps, and FinOps.

GOOGLE CLOUD PARTNERS

## Why Google

Choosing Google Cloud

Trust and security

Modern Infrastructure Cloud

Multicloud

Global infrastructure

Customers and case studies

Analyst reports

Whitepapers

Blog

## Products and pricing

Google Cloud pricing

Google Workspace pricing

See all products

## Solutions

Infrastructure modernization

Databases

Application modernization

Smart analytics

Artificial Intelligence

Security

Productivity & work transformation

Industry solutions

DevOps solutions

Small business solutions

See all solutions

## Resources

Google Cloud Affiliate Program

Google Cloud documentation

Google Cloud quickstarts

Google Cloud Marketplace

Learn about cloud computing

Support

Code samples

Cloud Architecture Center

Training

Certifications

## Engage

Contact sales

Find a Partner

Become a Partner

Events

Podcasts

Developer Center

Press Corner

Google Cloud on YouTube

Google Cloud Tech on YouTube

Follow on X

Join User Research

We're hiring. Join Google Cloud!

Google for
Developers

Google Cloud
Community

Google Cloud for
Startups

System status

Release Notes

About Google  |  Privacy  |  Site terms  |  Google Cloud terms

Our third decade of climate action: join us

Sign up for the Google Cloud newsletter          Subscribe

English