

CASE STUDY

Transforming Market Intelligence Research Leveraging GenAI to Empower a Leading Automotive Manufacturer

A photograph of a car body on an assembly line, with robotic arms visible on either side. The scene is dimly lit, with a blue and orange color scheme. The car is the central focus, and the robotic arms are positioned around it, suggesting a high-tech manufacturing environment.

Client Overview

Our client is a multinational automobile manufacturer with a significant presence in the North American market. They offer a diverse selection of electric vehicles (EVs) alongside their iconic gas-powered models, catering to a wide range of consumer preferences. As a major player in the industry, they have established a formidable reputation by selling cars, trucks, and EVs not only in North America but also across Europe.

In their pursuit of innovation, the client is pushing the boundaries of self-driving technology and making notable strides in racing, blending practicality with high performance. Their commitment to combining traditional automotive excellence with cutting-edge technological advancements solidifies their position as a leader in the automotive sector.

Client Background and Challenges

- The client's primary business goal is to develop a chatbot for their Market Intelligence team, aimed at addressing queries through prompts for both moderator and executive roles. Their objective is to create a chatbot that provides quick assistance and shares comprehensive analysis with the Market Intelligence team.
- They seek to leverage Gen AI capabilities to query their extensive datasets, which include PowerPoint presentations with text, images and charts, spreadsheets, audio transcripts, and videos.
- The client faces several challenges, including the need to find and generate searchable insights efficiently for their marketing users, thereby enhancing their productivity and effectiveness.
- By exploring Gen AI's potential, the client aims to streamline the process of obtaining valuable information from diverse data sources, ultimately reducing the time spent on manual searches and making their marketing workforce more agile in their day-to-day deliverables.

Our Approach and Solution

- We propose to build an MVP solution for Market Intelligence Research use case. Gen AI through Vertex AI leveraging Gemini 1.5 pro foundation model & many other APIs as per the data flow integration
- The MVP shall be delivered over ~12 weeks with underlying datasets as PPT's (in pdf format), Videos / Transcripts & Spreadsheets and will provide a minimalistic StreamLit Frontend Interface that the users can use to trigger queries.
- We expect around 15-20 users will be using the MVP solution. MVP will be powered by Gen AI tech on GCP stack to perform quick search around its updated car model using datasets like PPT's, Spreadsheets & Videos. These datasets cover Market Intelligence data applicable during: Prelaunch of the Car, During Car Launch & Communication, Post-launch of the Car.

Tech Stack: GCP stack, Vertex AI vector search service, Gemini 1.5 Pro, Streamlit, Cloud Firestore, Python libraries, etc.



Business and Community Impact

- Enhance the marketing workforce's effectiveness and agility in their day-to-day deliverables.
- Reduced the manual effort required to understand customer feedback, thereby enhancing the efficiency of their marketing workforce.
- Text search through ingesting the data in all forms of data such as Videos, PPTs, Excel, Transcript's along with rendering the video snippet along with citations.

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