

BMW Group: Revolutionizing industrial processes with SORDI.ai and Vertex Al

BMW GROUP





Why Google Cloud

On average, manufacturing enterprises have thousands of different assets within a production plant. Many of them struggle with optimizing industrial planning processes.

SORDI.ai, a solution by BMW Group, worked with Google Cloud to convert real-world assets into precise digital counterparts, known as "digital twins" – to digitize planning and optimize supply chains with generative AI.

Solution

Point cloud objects are created by scanning assets, but they typically are imprecise and have gaps within their data structure. With <u>Vertex AI</u>, point cloud objects are transformed into 3D models that act as digital twins. Assets commissioning is accelerated by comparing a 3D model within a digital environment. Industrial environment planning is optimized in seconds using a SORDI Gen AI prompt. In addition, manufacturing process simulations can be easily streamlined using a growing number of 3D models.

About BMW Group

The BMW Group is one of the world's leading manufacturers of premium cars and motorcycles and a provider of premium financial and mobility services.

Industry: Automotive

Location: Munich, Germany

Partner: Monkeyway

Impact

- Eliminating the need for manual measurements and estimations, saving time and resources while enhancing planning efficiency
- Significantly reducing the development time of digital 3D twins for the simulation of industrial processes
- Increasing the scope and performance of the SORDI.ai open-source data set and APIs



We are proud to share our latest project results for SORDI.ai and the generative Al-supported development of digital twins in cooperation with Google Cloud. The results of our development collaboration in the context of SORDI.ai define new standards and significantly accelerate the process of creating synthetic industrial data."

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