





A premium historical brand transforms into a data-driven company

Discover how Villeroy & Boch is using data analytics and AI to optimize its production processes and value chain for greater sustainability

The challenge: As both manufacturer and seller, Villeroy & Boch needs data for a host of reasons. Achieving its business goals is dependent on greater transparency for better decision making. Optimizing processes reduces energy costs, and improves the quality and speed of production. Meanwhile, gaining client insights creates opportunities for more revenue and improved customer-centricity. Whatever the challenge, data is one of Villeroy and Boch's most strategic assets.

Why Google Cloud? Villeroy & Boch's employees, from infrastructure teams to analysts, can find the tools they need to support their goals with Google Cloud. Whether they need a GPU to train a machine learning model or a fully managed data lake solution, they can rely on Google Cloud solutions. In addition, the Google Cloud team helps Villeroy & Boch to innovate through skills development.

Solution 1 - Visual Inspection AI: Intermediate sorting is labor intensive and not economical enough to be done after every production step. Image recognition means that sorting is now digitalized. Defective plates are automatically removed before glazing and second firing, saving energy and materials. Further checkpoints are also being planned.

Solution 2 - Recommendation app (B2B): Generates sales recommendations for sales agents based on historical sales data, in-stock data, master data etc. The sales recommendations are generated using a special machine learning algorithm equipped with a feedback function to optimize the suggested results. This is combined with more descriptive statistics on sales data joined with meta-information that is uploaded by sales agents.

Solution 3 - Optimization of production process sequencing to avoid production downtime: Analyzes the workload of production orders in specific production areas of the factory, and then generates an optimal sequence for processing. This optimization helps avoid downtimes in production that can result from the overflow of bottleneck buffer areas. A large number of constraints and data sources from different systems are taken into account.



Image credit: Villeroy & Boch



A fantastic platform for creating sustainable business value."

Dr. Christina Bender, Head of Data Lab

About Villeroy & Boch: From its foundation in 1748 to the present day, the company's strong roots in European culture have shaped the development of a premium brand that is now a household name all over the world. Villeroy & Boch is now represented in over 125 countries with its "Bathroom and Wellness" and "Dining and Lifestyle" products. The company's headquarters is the Old Abbey in Mettlach in the Saarland region of Germany.