SUCCESS STORY

# GFT helps to drive major automaker boost production floor migration to the cloud

**Using the Google Cloud Manufacturing** Data Engine solution, GFT, brought a digital transformation to the automaker's shop floor in less than six months.



**CLOUD ENGINEERING** 



**DATA ANALYTICS** 



**MACHINE LEARNING** 



THE CHALLENGE

### Wrangling with disparate data

USA

- Shifting from internal combustion engines to electric motors isn't simple. The move changes the entire architecture of the shop floor.
- The increased connectivity of the Internet of Things (IoT) produces vast amounts of data, but that data must be located, organized, and analyzed. In the auto-making process, data sets are typically spread among vendors, parts-manufacturing facilities, and assembly plants.
- As a result, much of the data resides on vendors' hardware, with on-premises data centers at various manufacturing plants, and on many different clouds. In addition, data are collected from sensors and other IoT devices on the production floor, but there is little consistency from one plant to the next.

THE ENGAGEMENT

# Digitizing the factory floor

- GFT developed a cloud platform that could collect, aggregate, and synthesize manufacturing data from disparate sources onto a single application based on Google Cloud's Manufacturing Data Engine platform.
- GFT created data parameters, processed the collected information, and then used machine learning to develop dashboards and other data visualization interfaces for the automaker and its suppliers.

THE BENEFIT

## Using relevant data to reduce costs and downtime, improve quality

- In a matter of months, the automaker had amassed 500 million data points that needed flexible and reliable storage.
- The automaker was able to spot variations in materials, control the stamping process parameters more effectively, and determine the output for better-quality parts.
- With the information collected from factory sensors, the automaker can better understand operating patterns and detect irregularities.