# **DOMAIN: Manufacturing**

# **Mercedes-Benz Greener Manufacturing**

Since the first automobile, the Benz Patent Motor Car in 1886, Mercedes-Benz has stood for important automotive innovations. These include, for example, the passenger safety cell with crumple zone, the airbag and intelligent assistance systems. Mercedes-Benz applies for nearly 2000 patents per year, making the brand the European leader among premium car makers. [Daimler’s](https://www.kaggle.com/daimler) Mercedes-Benz cars are leaders in the premium car industry. With a huge selection of features and options, customers can choose the customized Mercedes-Benz of their dreams.

To ensure the safety and reliability of each and every unique car configuration before they hit the road, Daimler’s engineers have developed a robust testing system. But, optimizing the speed of their testing system for so many possible feature combinations are complex and time-consuming without a powerful algorithmic approach. As one of the world’s biggest manufacturers of premium cars, safety and efficiency are paramount on Daimler’s production lines.

**Attribute information**

This dataset contains an anonymized set of variables (X0 to X385), each representing a custom feature in a Mercedes car.

\*\* Note: This is confidential data and we will not be able to provide description for each of the anonymized set of variables.

For example, a variable could be 4WD, added air suspension, or a head-up display.

The ground truth is labeled ‘y’ and represents the time (in seconds) that the car took to pass testing for each variable.

## **File descriptions**

Variables with letters are categorical. Variables with 0/1 are binary values.

* train.csv - the training set

## **Objective**:

Tackle the curse of dimensionality (Use PCA for dimensionality reduction) and then Predict the time it takes to pass testing for cars.