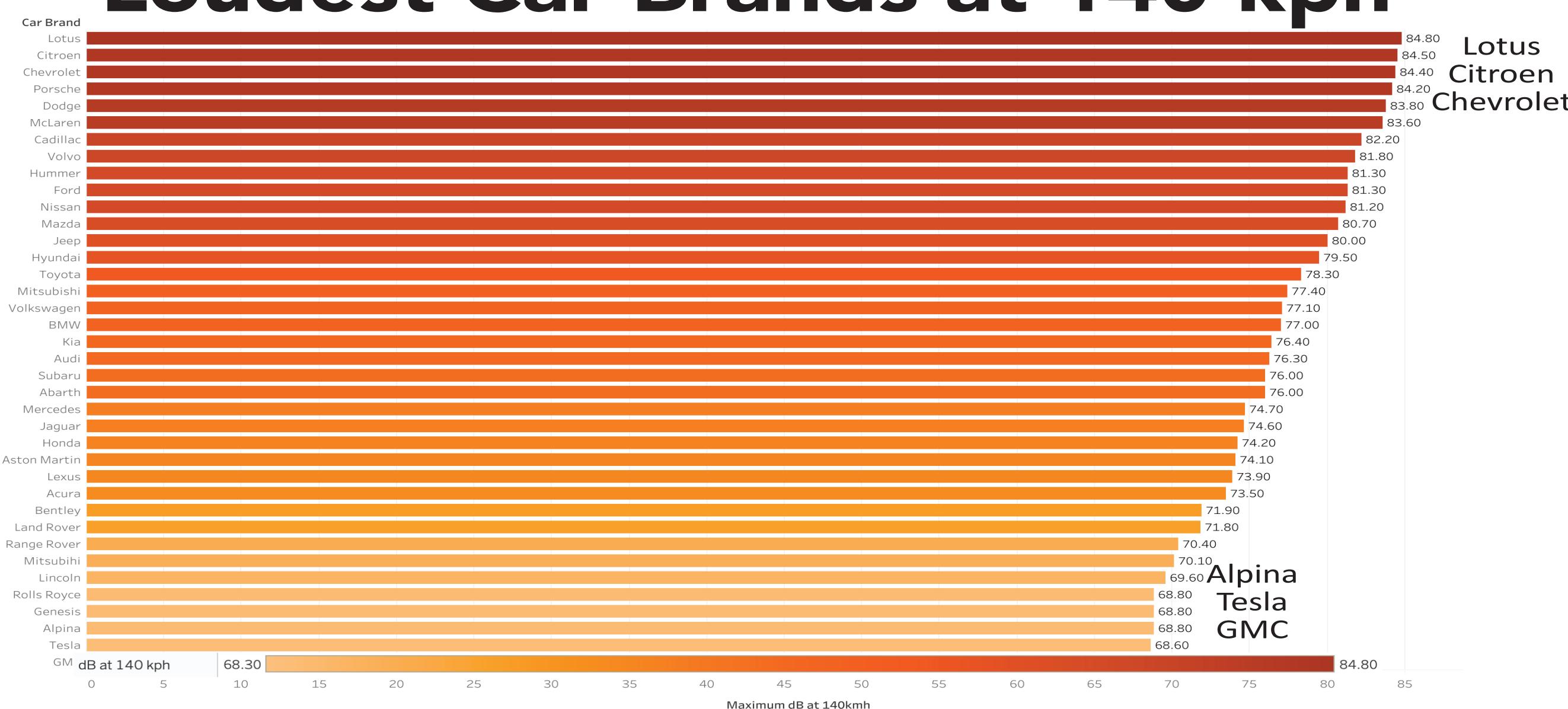


# **EXPLORING CAR DB DYNAMICS THROUGH VISUALIZATION**

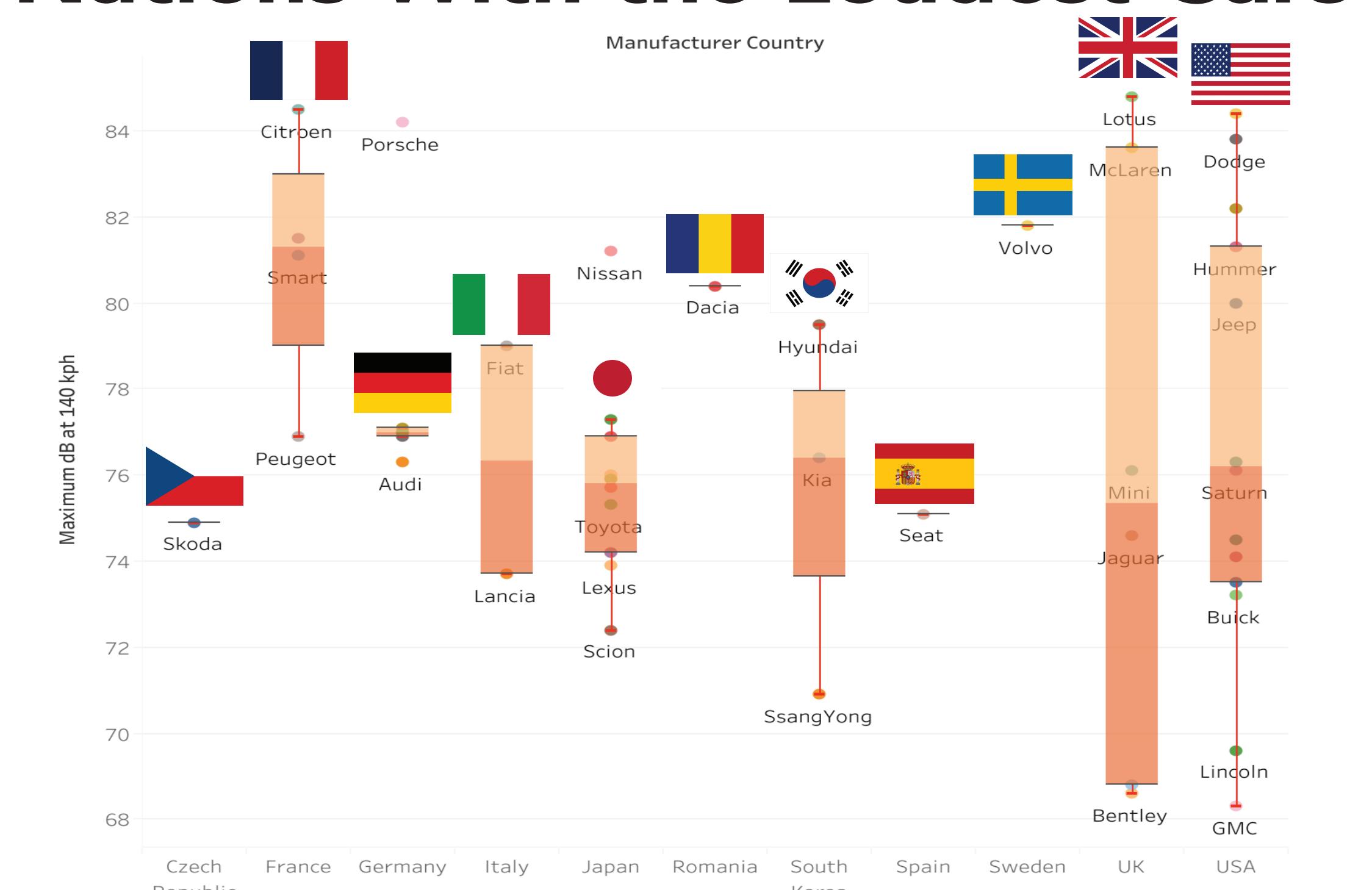
# EXAMINING CAR AND TEAM PERFORMANCE AT THE 24 HOUR LE MANS RACE 2023



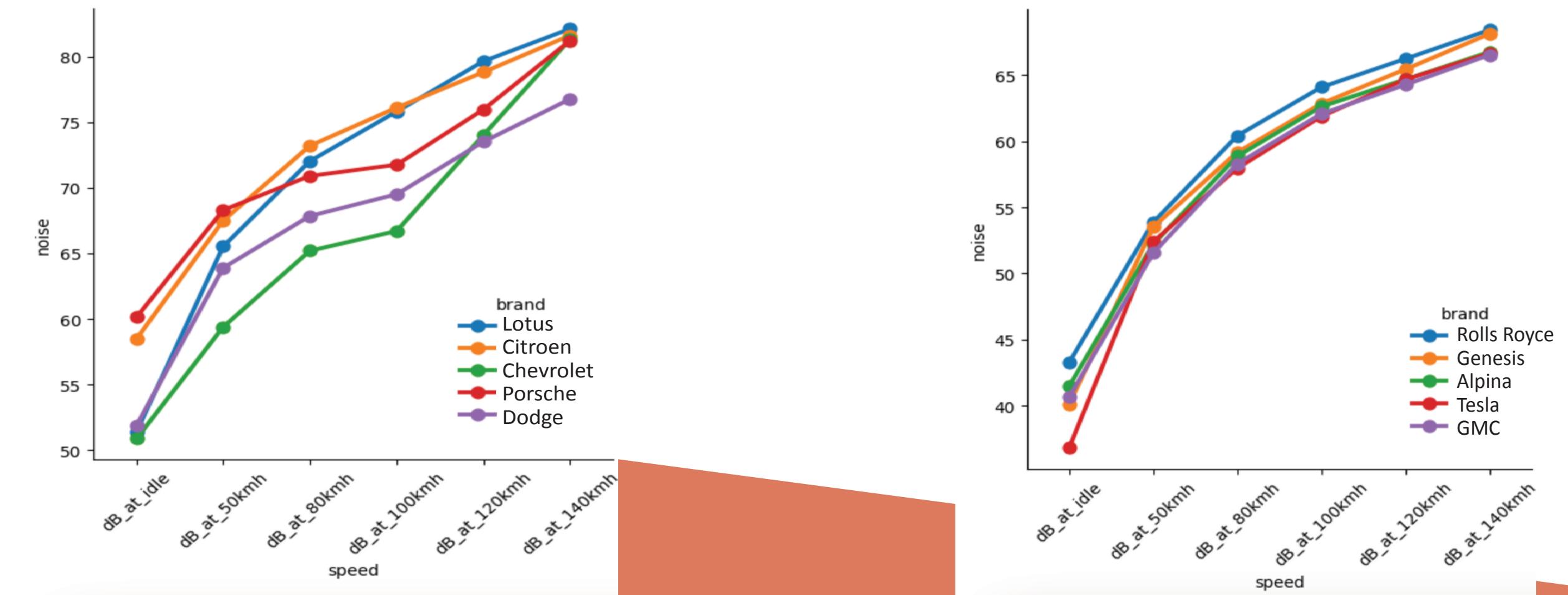
# Loudest Car Brands at 140 kph



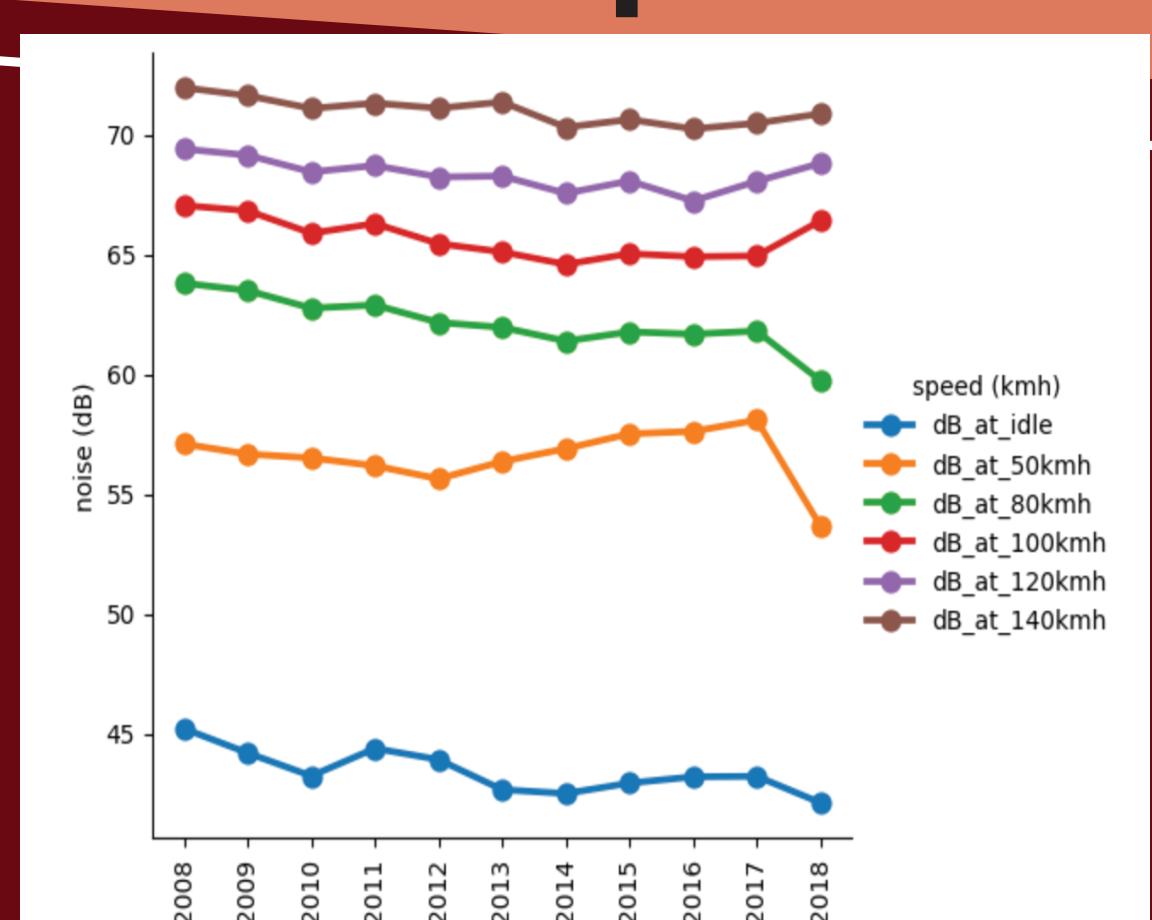
# Nations With the Loudest Cars



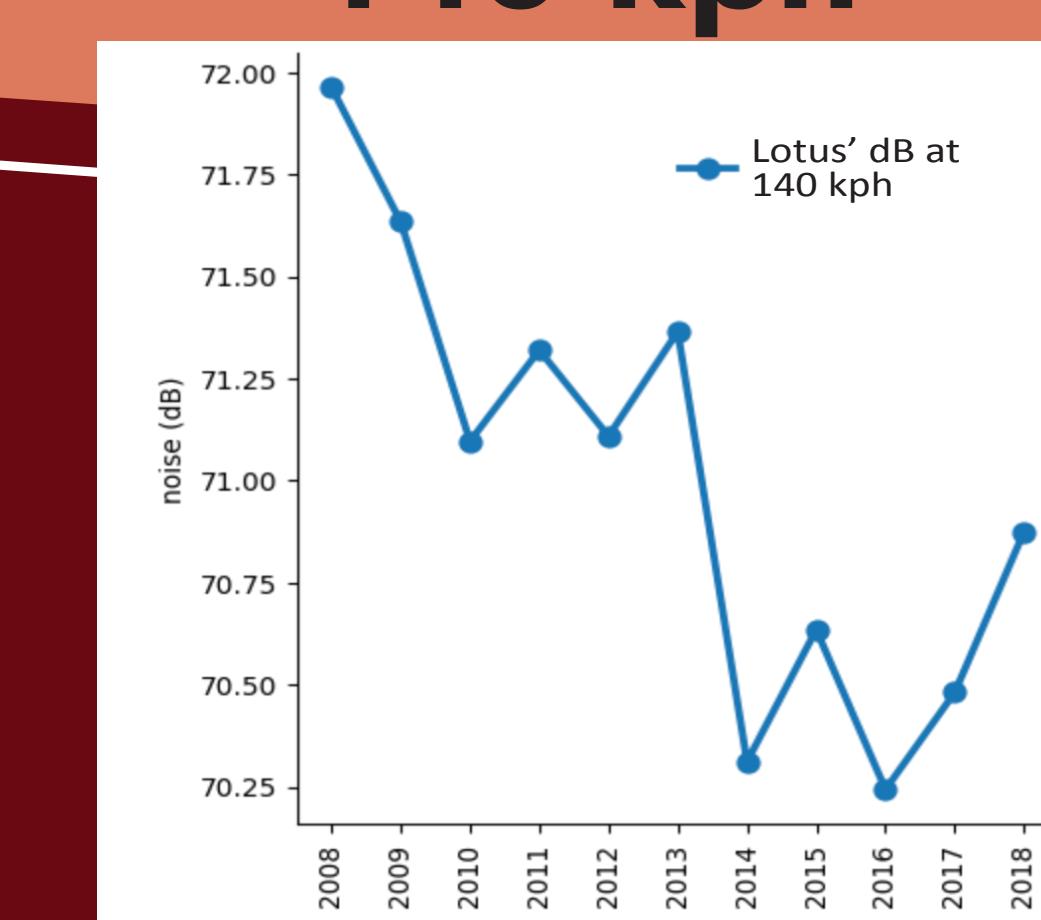
# Top 5 Loudest And Quietest Cars at Various Speeds



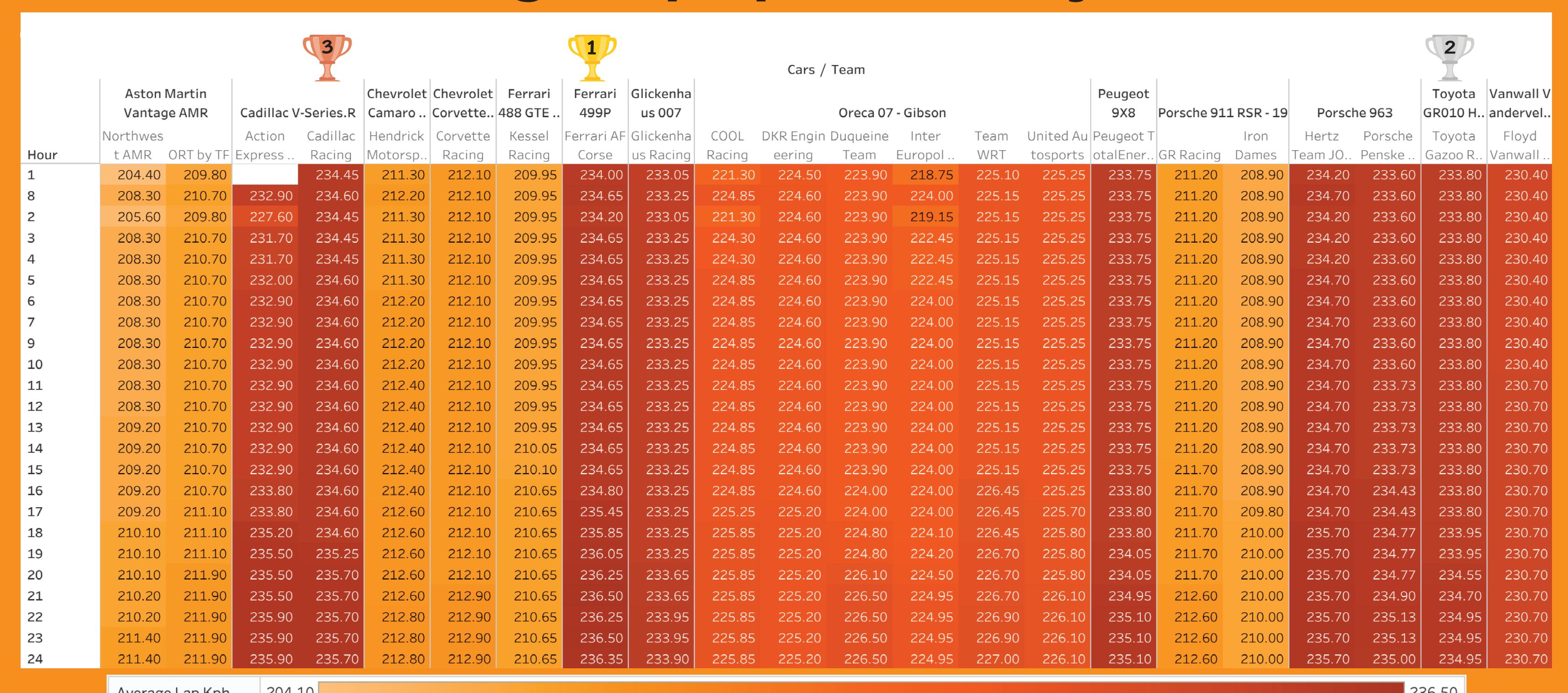
# dB Levels of Cars Over Time and Speeds



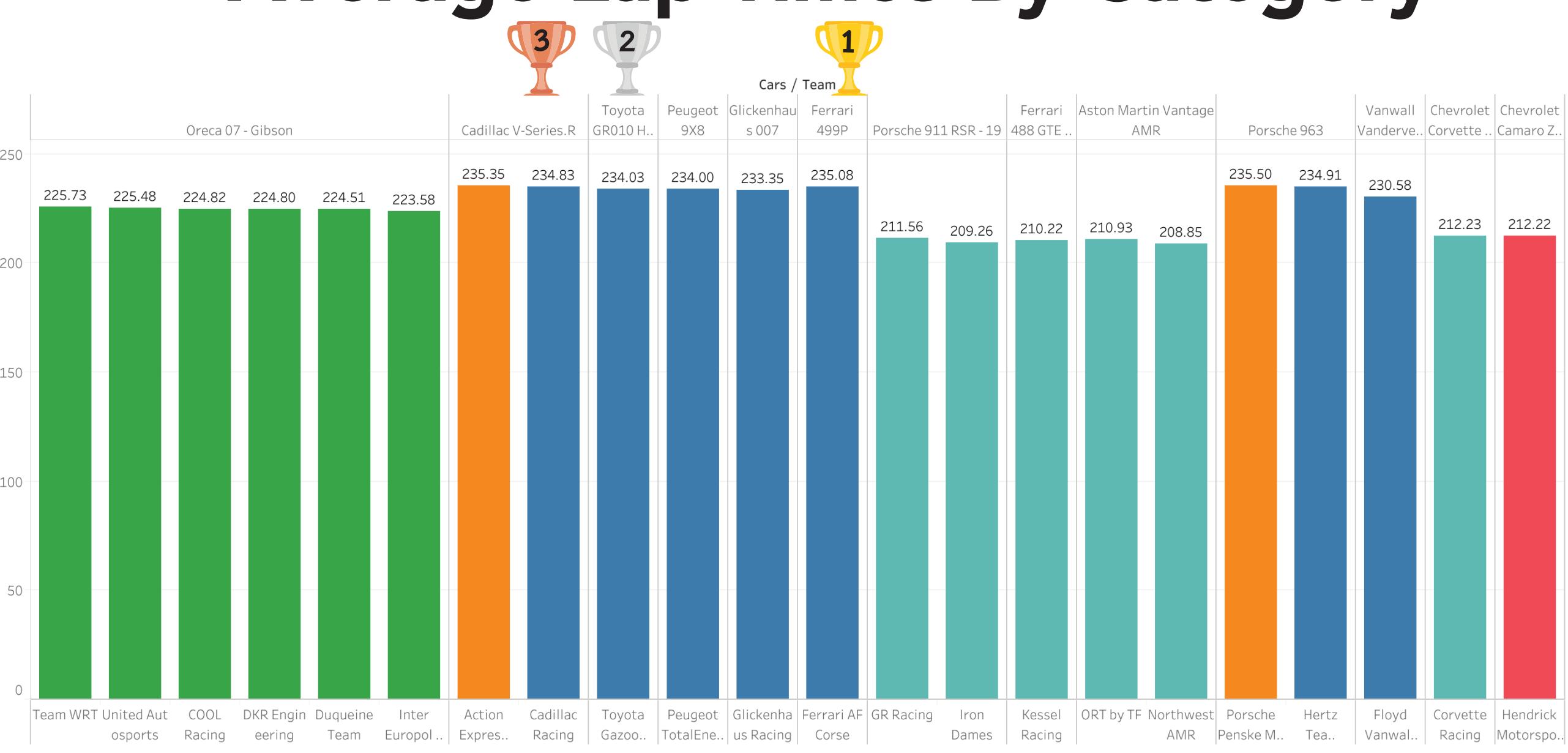
# Lotus' dB Levels Over Time at 140 kph



# Teams Under Every Car Brand's Average Lap Speeds Every Hour



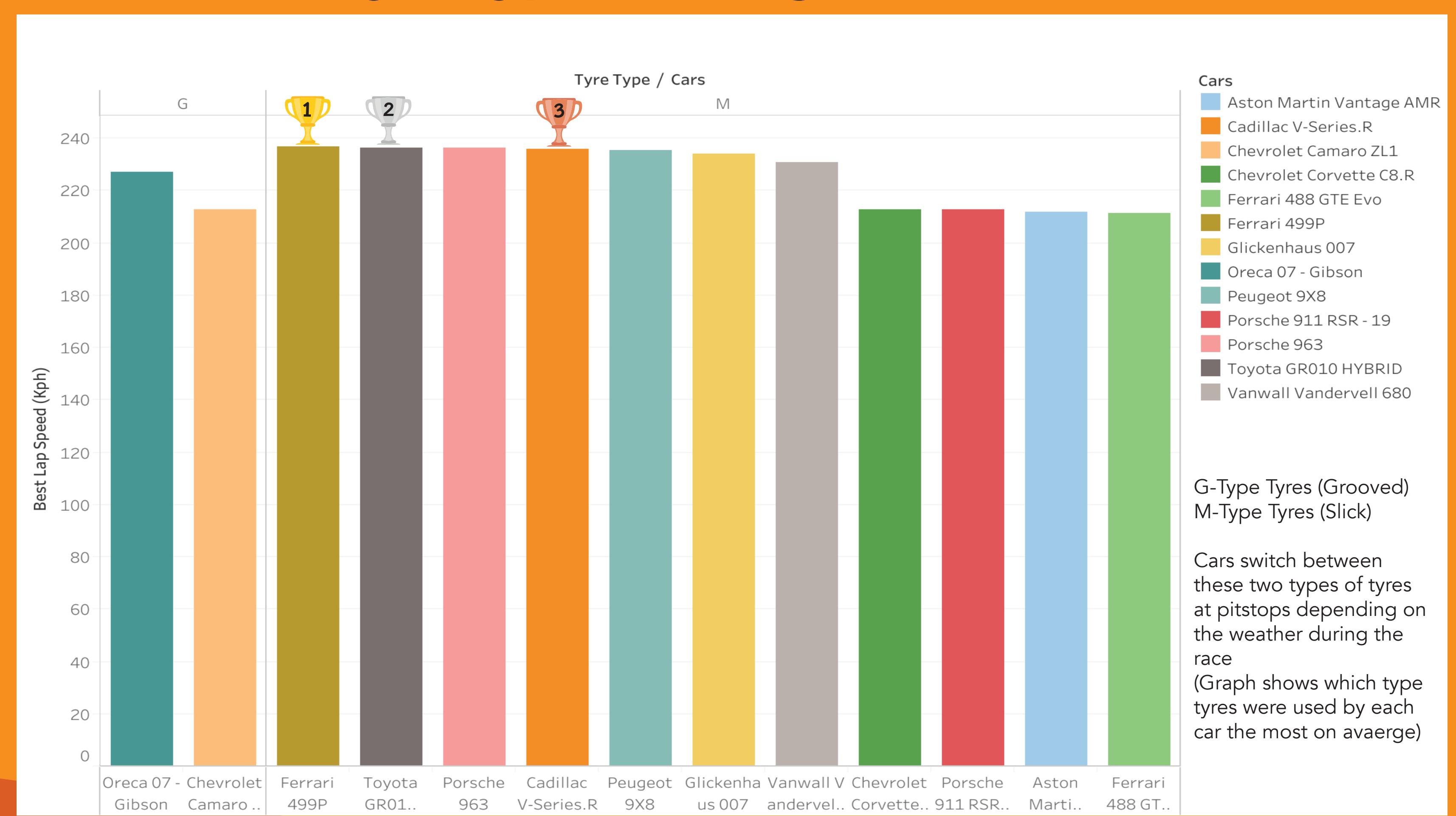
# Teams Under Every Car Brand's Average Lap Times By Category



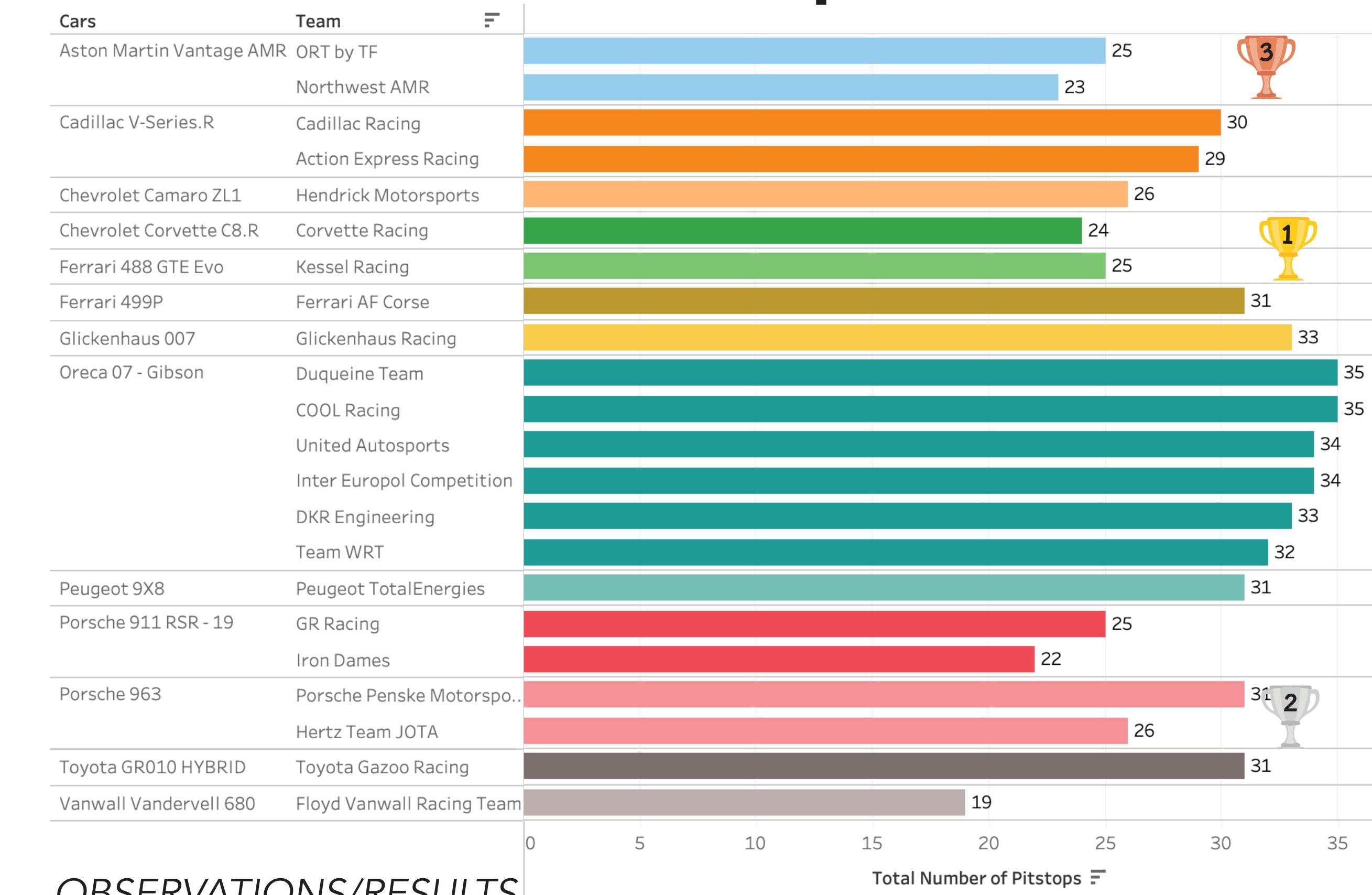
# BACKGROUND

In a rapidly evolving automotive industry, this research demonstrates how various factors from the manufacturer country to production year affect how loud cars can get, shown in the left column. The other dataset is about the 24 hour Le Mans Race showing correlation between speed and other factors in the race like number of pitstops, car category, and tyre types.

# Swiftest Tyre Types Amongst the Different Cars



# Car Comparison By Total Number of Pitstops Per Team



## OBSERVATIONS/RESULTS

- From the first dataset, it shows how Lotus, a car made in the UK is the loudest car. Newer cars seem to be getting not as loud at lower speeds but even louder at higher speeds by a small margin.
  - The second dataset highlights how the Ferrari 499P car won the 2023 Le Mans race being a Hypercar with M type tyres while relatively making a lot of pitstops.
  - These correlations help us visualize advancing automotive technology throughout the world and emphasizes what vehicle designs result in the fastest and loudest cars on the road.

