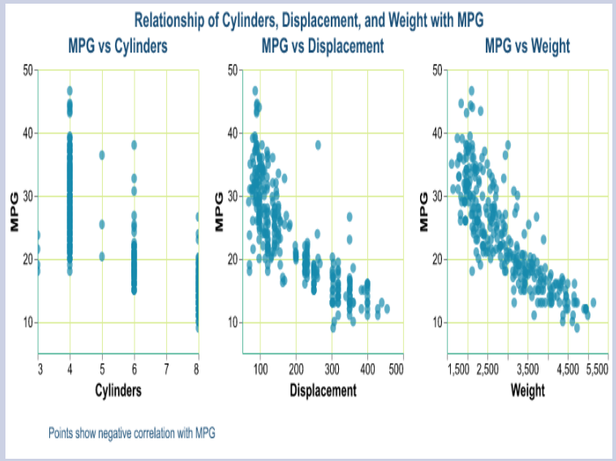
DATA2POSTER

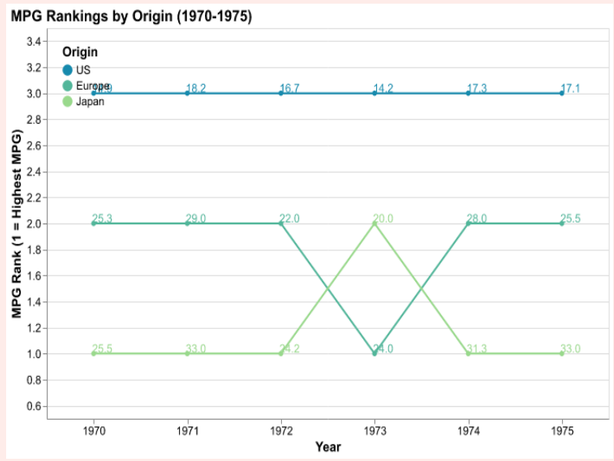
Introduction

This study explores how engine size, weight, acceleration, and design affect fuel efficiency. Visualizations reveal negative correlations between cylinders, displacement, weight, and MPG. We compare MPG trends by origin and year to understand regional influences on car markets.

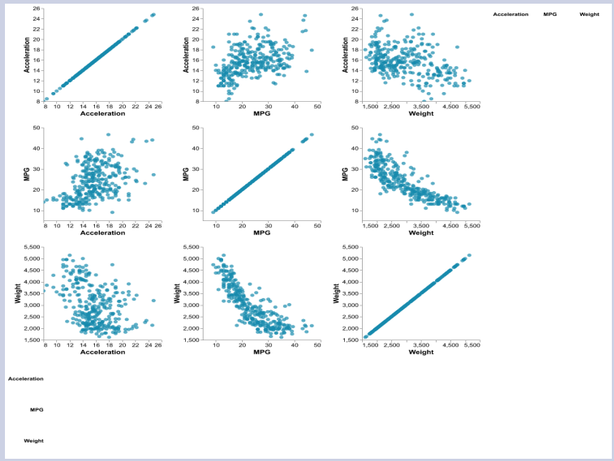
How Do Engine Size, Weight, and Region Influence Car Fuel Efficiency?



MPG decreases as Cylinders, Displacement, and Weight increase; heavier, larger engines have lower fuel efficiency consistently.



Japan leads in MPG from 1970-1975, Europe ranks second with slight decline, US ranks third with lowest MPG.



Acceleration and Weight negatively correlate; Weight and MPG negatively correlate; Acceleration and MPG positively correlate in vehicles.

Conclusion

Fuel efficiency decreases with larger engine size and heavier vehicle weight. Cars with more cylinders and bigger displacement have lower MPG. Heavier cars accelerate slower and are less fuel efficient. Japanese cars consistently show higher MPG compared to European and US cars. MPG trends reveal regional design influences on fuel efficiency. Acceleration positively correlates with MPG, while weight negatively impacts both acceleration and MPG. These findings highlight the combined effects of engine characteristics, vehicle weight, and regional design on fuel efficiency across car markets.