



Project Design

Aviation Data Project

Methodology



DATA EXPLORATION



DATA CLEANING



DATA ANALYSIS AND
VISUALISATI

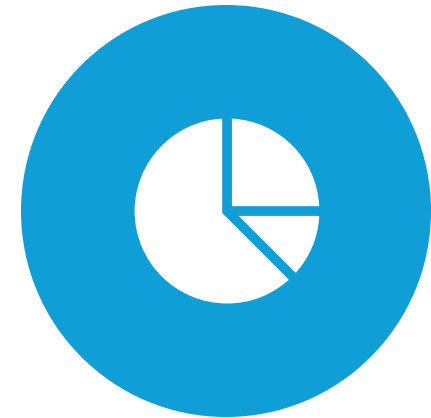
Approach



DATA CLEANING: HANDLED MISSING VALUES, STANDARDIZED TEXT, FILTERED IRRELEVANT COLUMNS.



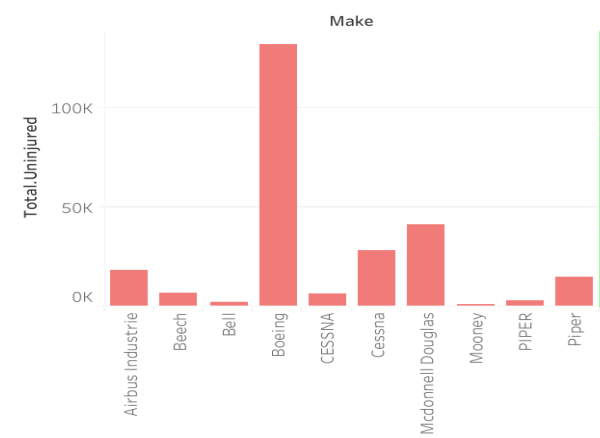
EXPLORATORY ANALYSIS: IDENTIFIED PATTERNS IN ACCIDENTS BY AIRCRAFT MAKE, CATEGORY, AND ENGINE TYPE.



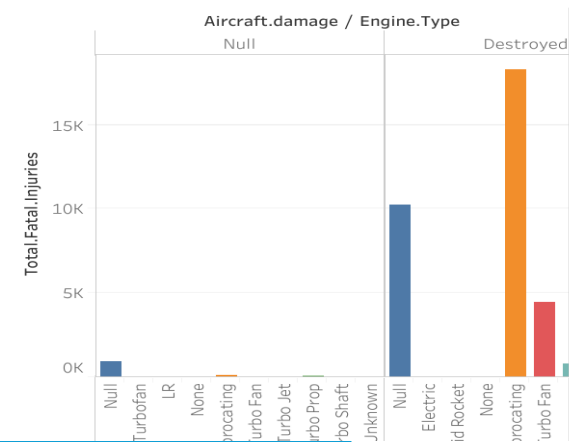
VISUALIZATION: CREATED CLEAR CHARTS TO HIGHLIGHT SAFETY TRENDS.

AVIATION DATA ACCIDENT

Top 10 Aircrafts by Uninjured Cases

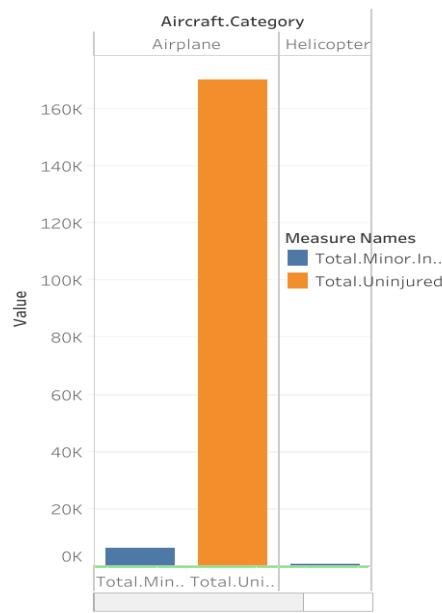


Aircraft Damage by Engine Type

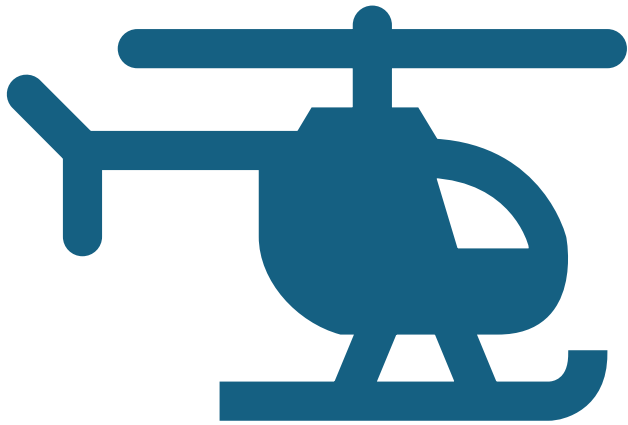


ATA ANALYSIS

Total Uninjured Cases in Aeroplanes vs Helicopters Category



Total.Minor.Injuries and Total.Uninjured for each Aircraft.Category. Colour shows details about Total.Minor.Injuries and Total.Uninjured. The view is filtered on Aircraft.Category, which keeps Airplane and Helicopter.



KEY FEATURES AND RECOMMENDATIONS

- **Prioritize Aircraft with:**

- 1 Airplanes and helicopters had the highest survival rates

- 2 Turboprop/turboprop engines (lower severe damage rates).

- 3 Proven safety records (Boeing, Airbus, Cessna).

- 4 . Reciprocating engines had the most accidents; turboprops had the lowest severe damage rates