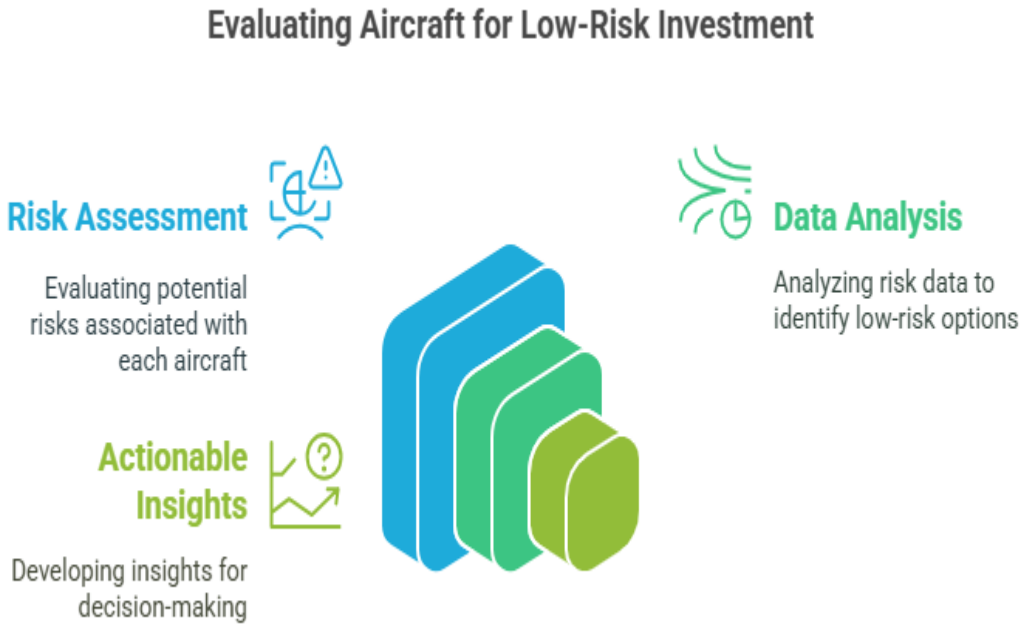
Aviation Accident Risk Analysis

Key Findings

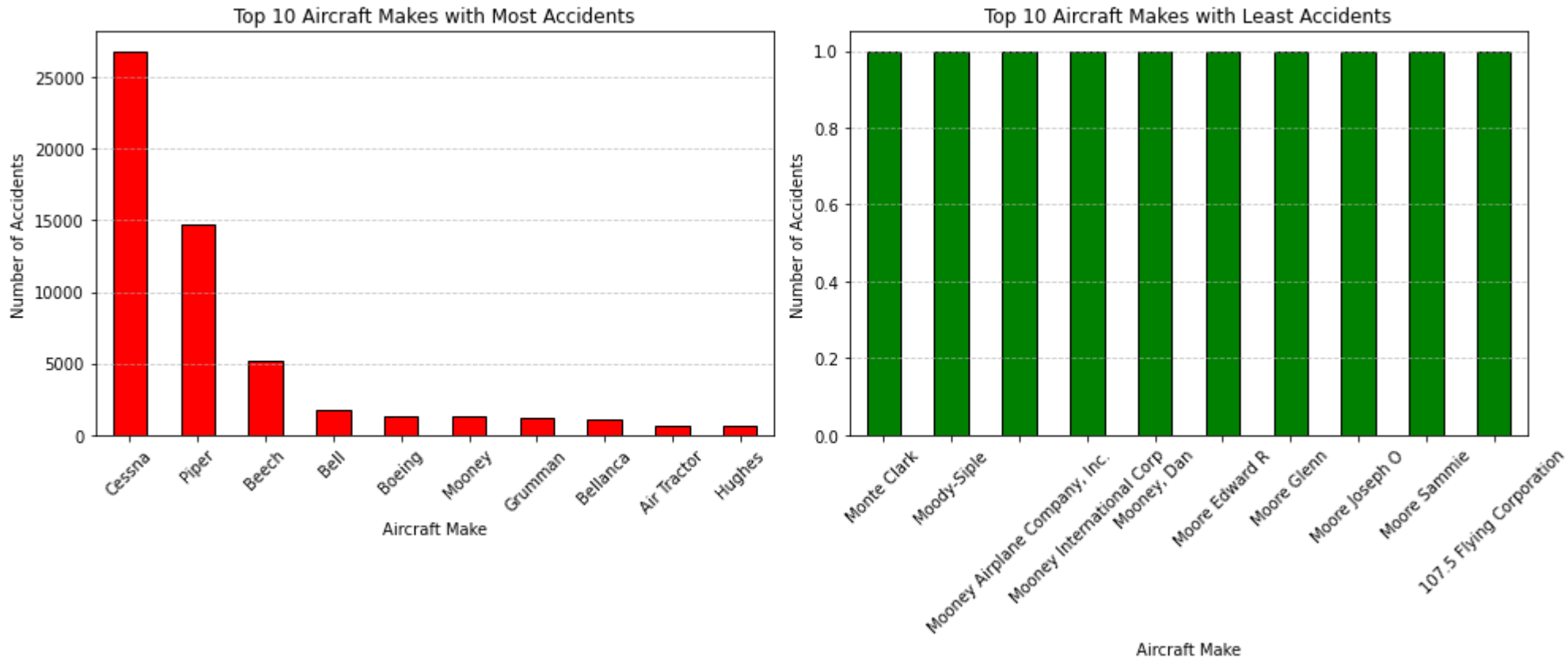
Aviation Accident Risk Analysis Presentation

Objective: Analyze aviation accident data to identify the safest aircraft for investment.

Purpose: Assist a company entering the aviation industry in selecting the aircraft manufacturer with the lowest historical risk based on accident trends and severity.



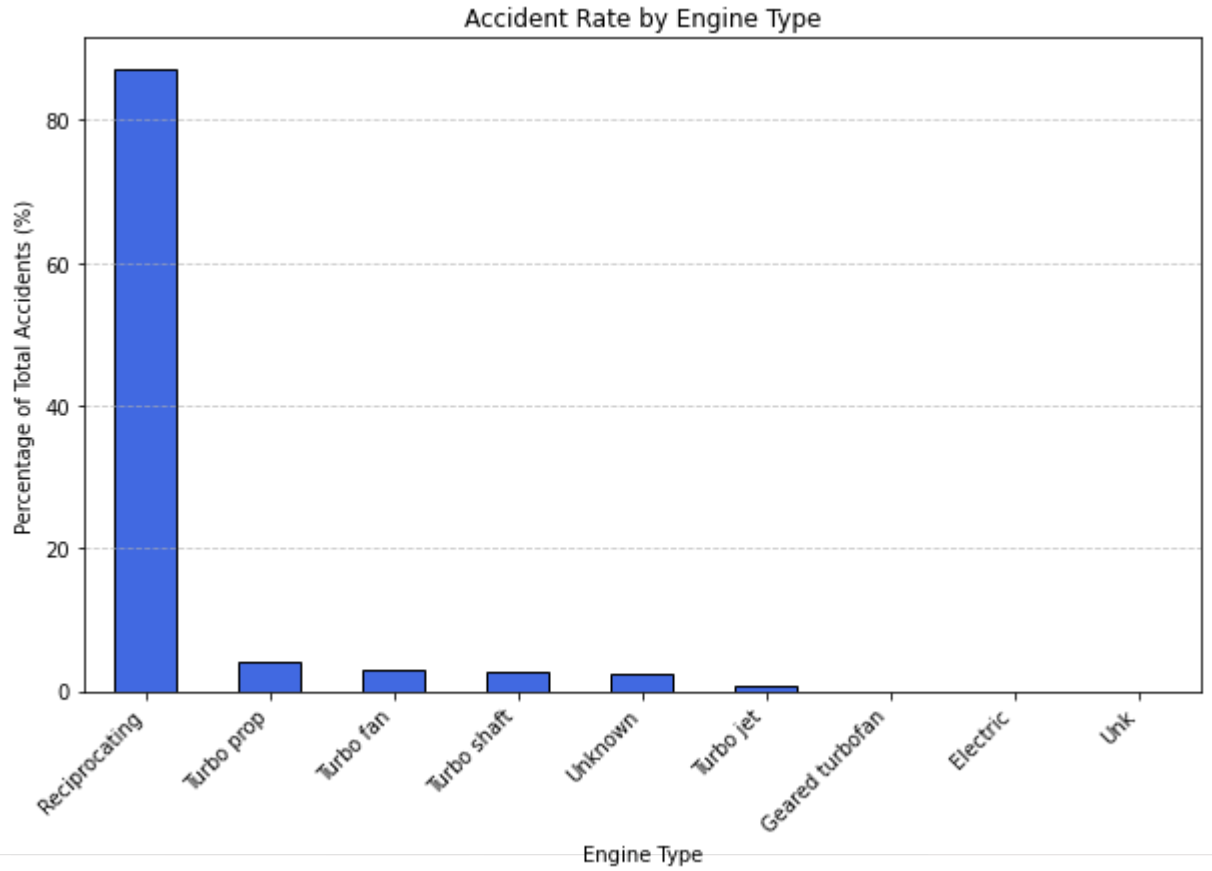
Results: Aircraft Make vs Number of Accidents



Key findings:

- Cessna registers the highest number of accidents followed by Piper then Beech.
- Mooney Aircraft Corp alongside other airplanes such as Moore Glenn recorded the least accidents.

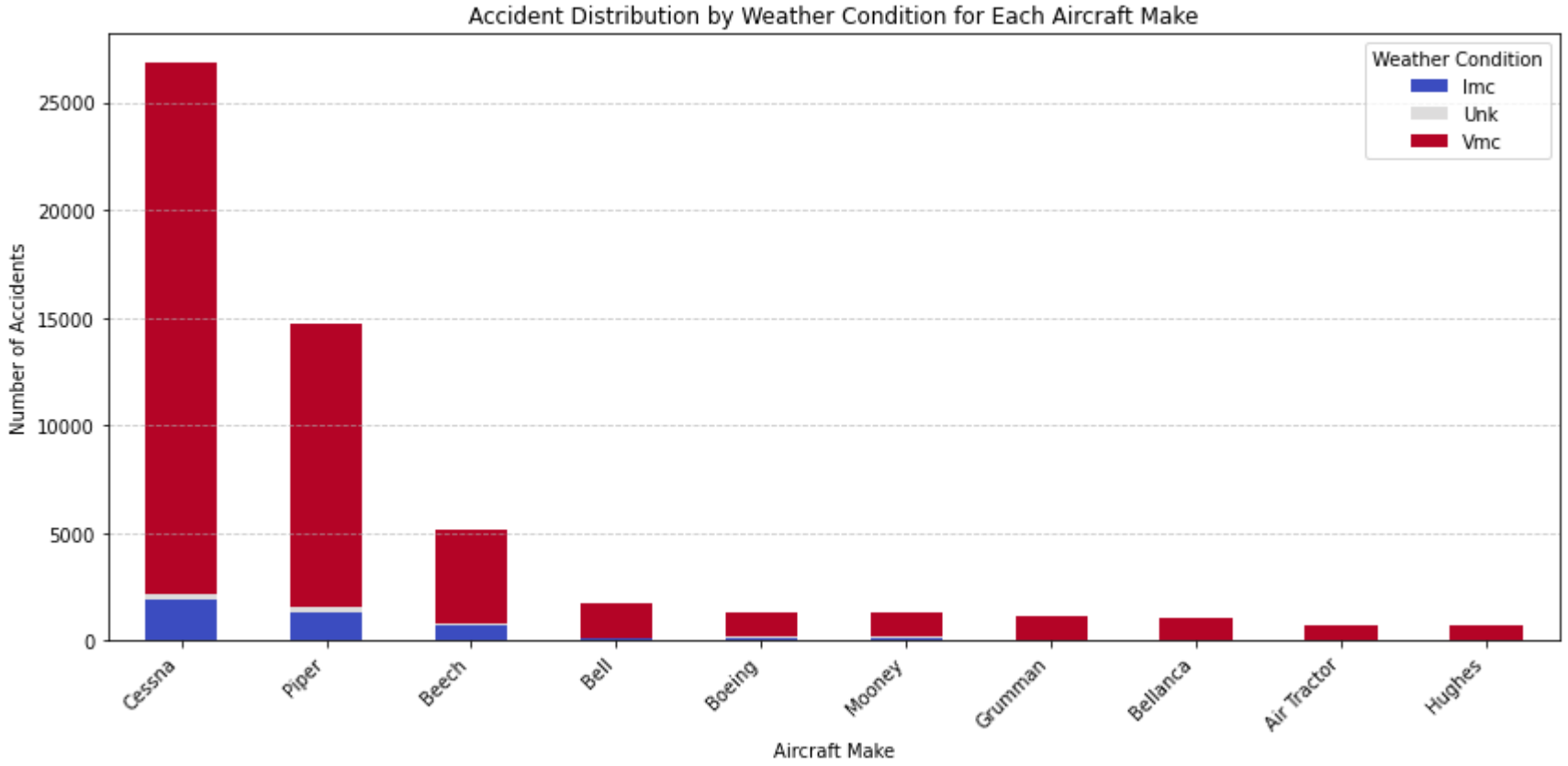
Results: Number of Accidents by Engine Type



Key findings:

- Reciprocating engine is associated with the highest number of accidents.
- Electric, Geared turbofan and turbo jet engines recorded the least accidents.

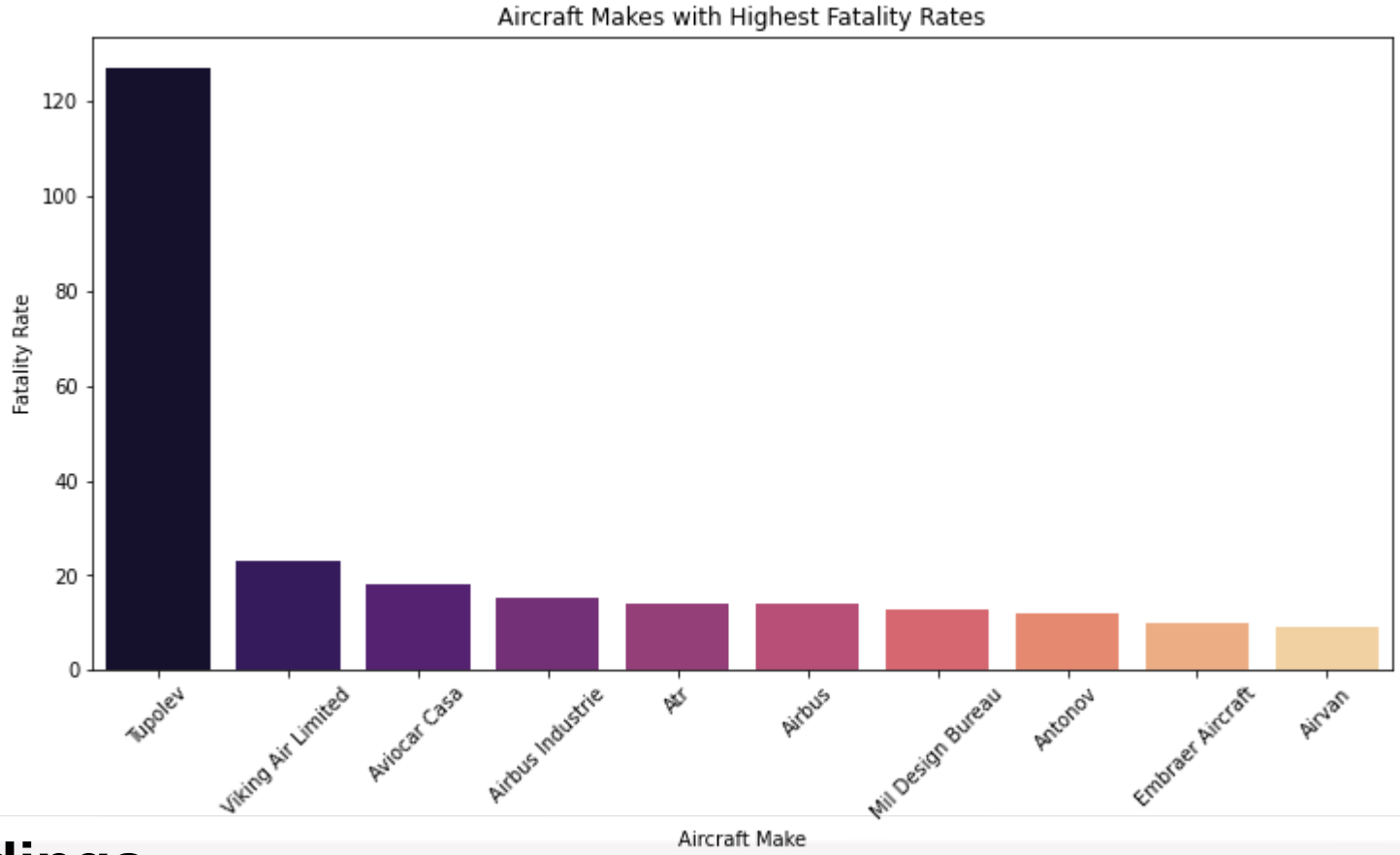
Results: Accident Distribution by Weather Condition



Key findings:

- Based on the above graph, most accidents were as a result of negligence, mechanical failure, or mid-air collisions as indicated by the high Visual Meteorological Conditions (VMC) scores. Instrument Meteorological Conditions (IMC) had little impact on the registered accidents.

Results: Aircraft Make vs Fatality Rates



Key findings:

- Tupolev registered the highest number of fatalities.
- The 9 planes that followed it almost had the same fatality.
- Kepple, Mclaughlin, Mclane, Mclachlan, Mckibben and Mckenzie John P registered the least fatality rate.

Recommendations

- Mooney Aircraft Corporation has few accident issues.
- The firm should consider buying the airplane but be keen with selecting the engines that are not accident prone such as Electric, Geared turbofan and turbo jet engines.