

AVIATION ACCIDENT DATA ANALYSIS

Project Goals, Data, Methods, and Results
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Overview

- This presentation provides analysis of historical aviation accident data.
- Topics include:
 - - Business Understanding
 - - Data Understanding and Cleaning
 - - Data Analysis and Visualizations
 - - Business Recommendations

Business Understanding

- Objective: Enhance aviation safety by identifying trends and factors contributing to accidents.
- Key Questions:
 - - How have accident trends changed over time?
 - - Which aircraft are linked to higher fatality counts?
 - - What are the common flight purposes involved?

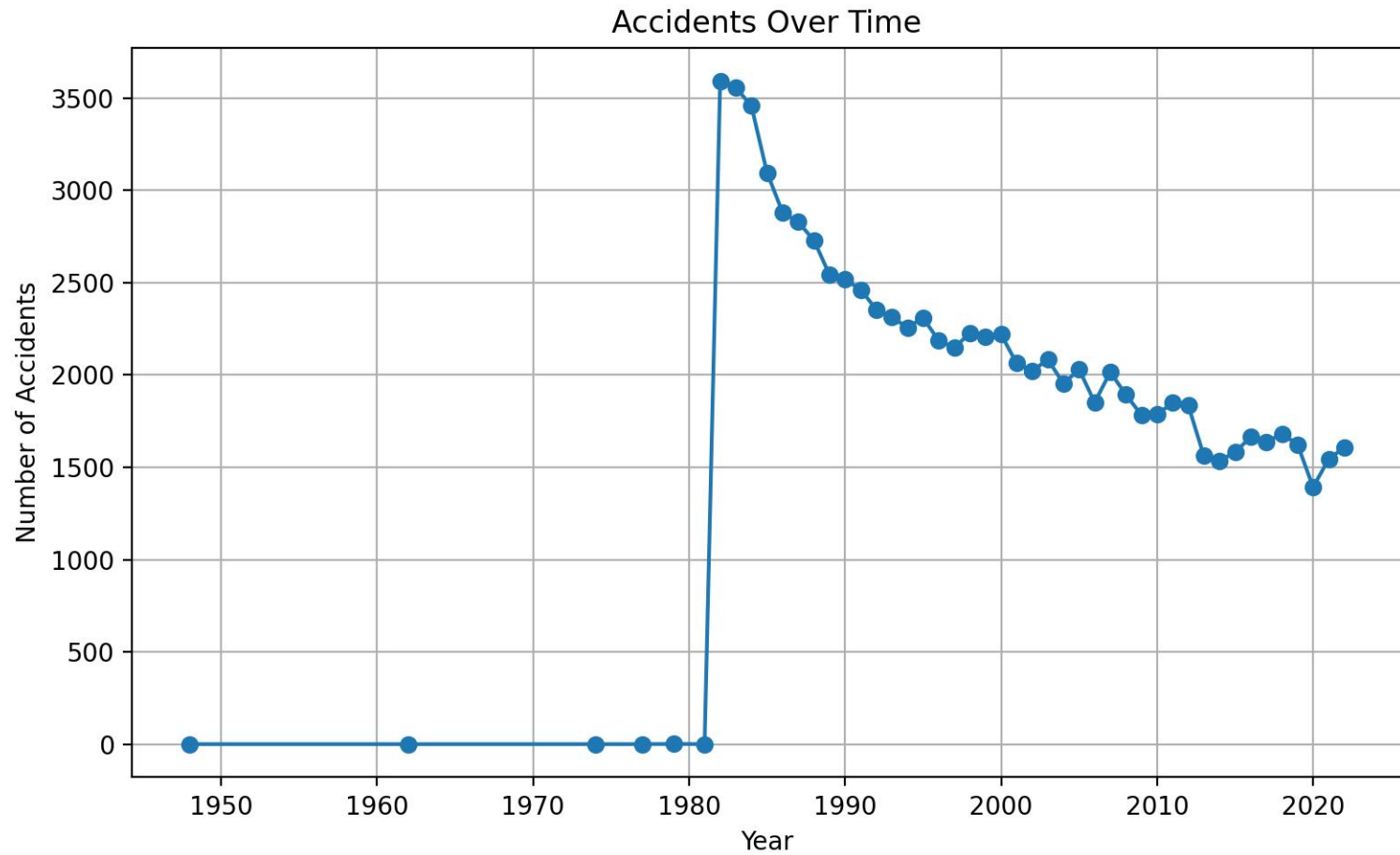
Data Understanding

- The dataset spans several decades and includes details such as event dates, aircraft types, injury counts, weather, and flight purposes.
- Data cleaning involved handling duplicates and missing values.

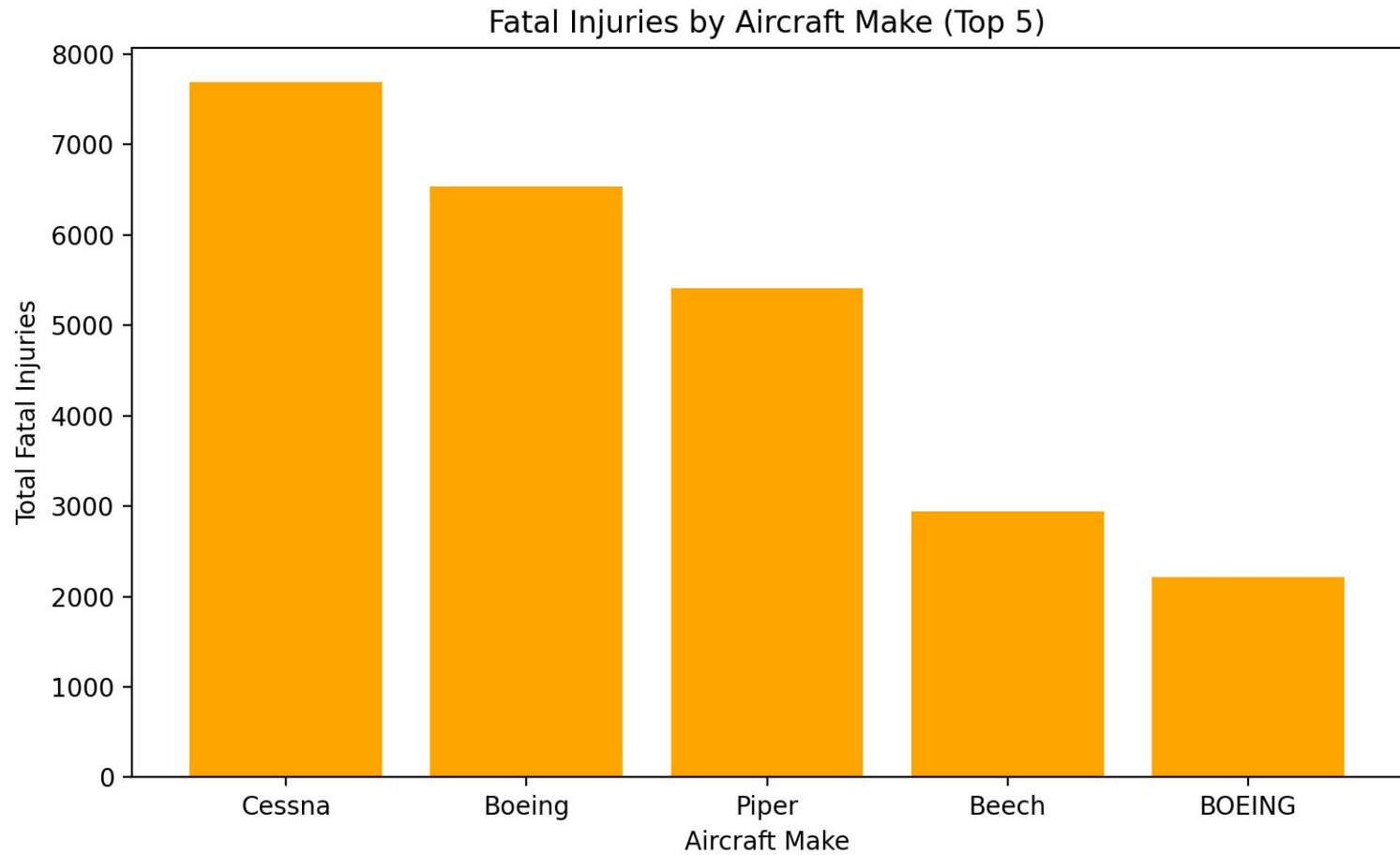
Data Analysis

- Analytical steps included time-series analysis, aggregation by aircraft makes, and categorical breakdowns of flight purposes.
- Visualizations highlight trends and insights.

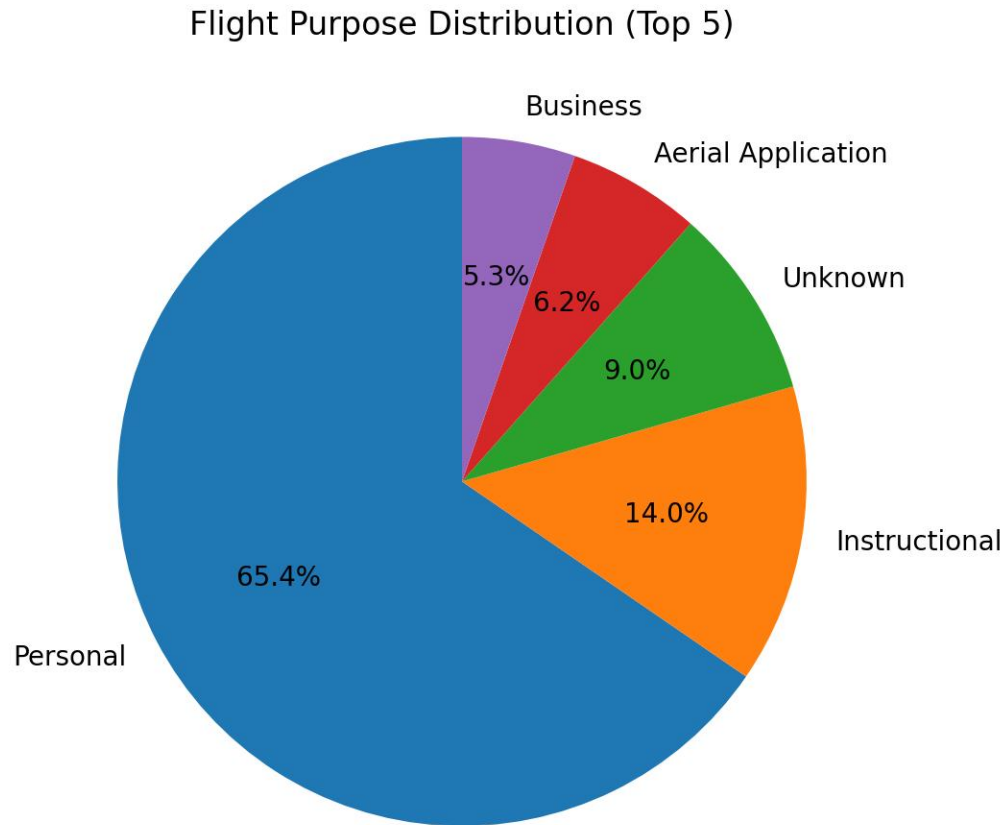
Accidents Over Time



Fatal Injuries by Aircraft Make (Top 5)



Flight Purpose Distribution (Top 5)



Business Recommendations

- - Further investigate geographical clusters of high-risk accidents
- - Incorporate real-time data for predictive analytics
- - Establish industry collaborations to bolster safety measures

Conclusion and Contact

- Thank you for your attention!
- Questions?
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