

Aircraft business risk analysis project



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Project overview

- ☐ To analyze the aviation accident data
- ☐ Recommend low risk aircraft model for the company's aviation operations team



Business Understanding

- ❑ The company aims to expand into aviation business.
- ❑ Stakeholder: Head of Aviation Division
- ❑ Key questions:
 - Which aircraft are safest?
 - When do most accidents occur?
 - What type of flights are high risk?

Data

Data from National Transportation Safety Board

❑ Covers Aviation accidents 1962 -2023

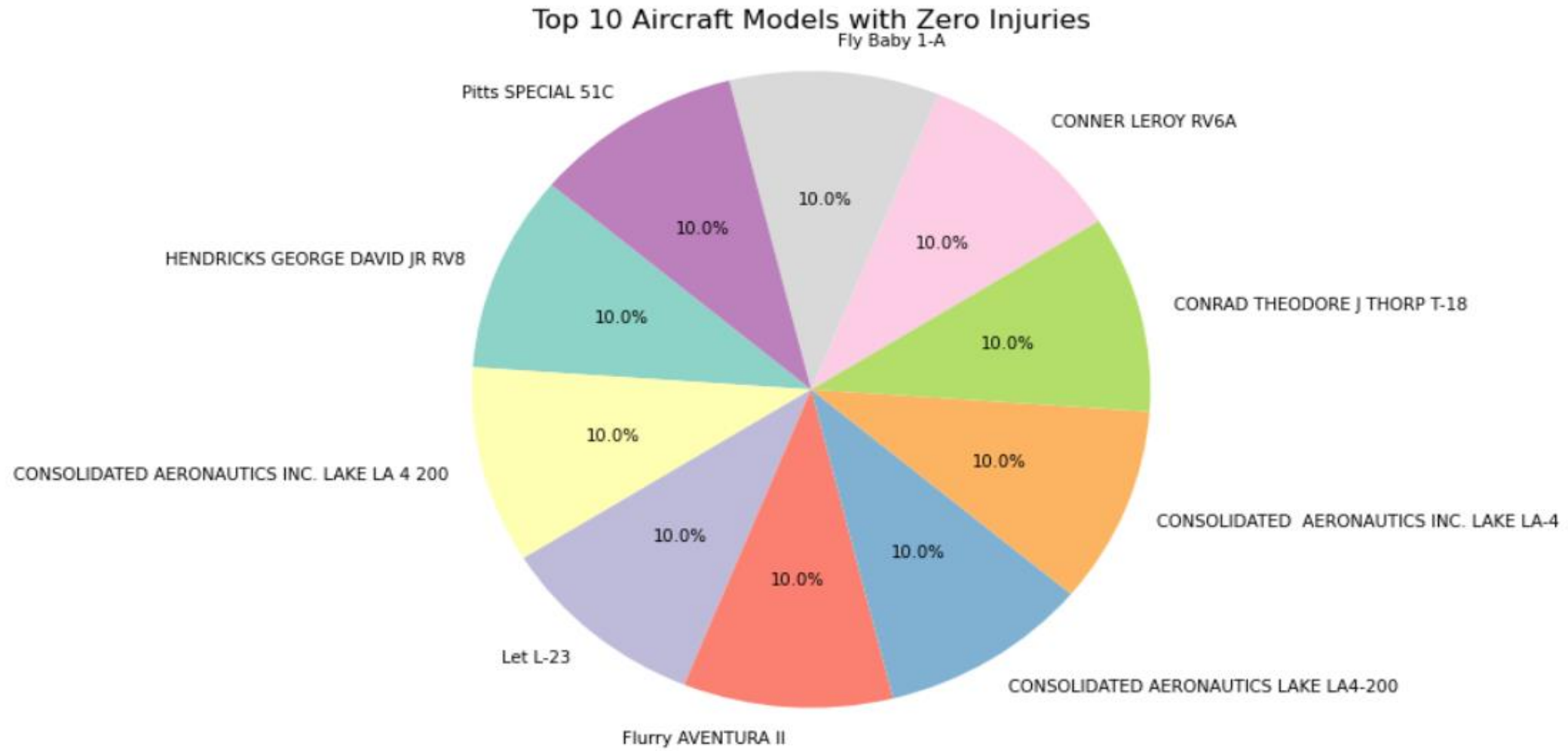
❑ Key features:

- Aircraft Make/Model
- Purpose of Flight
- Broad Phase of Flight
- Injury severity

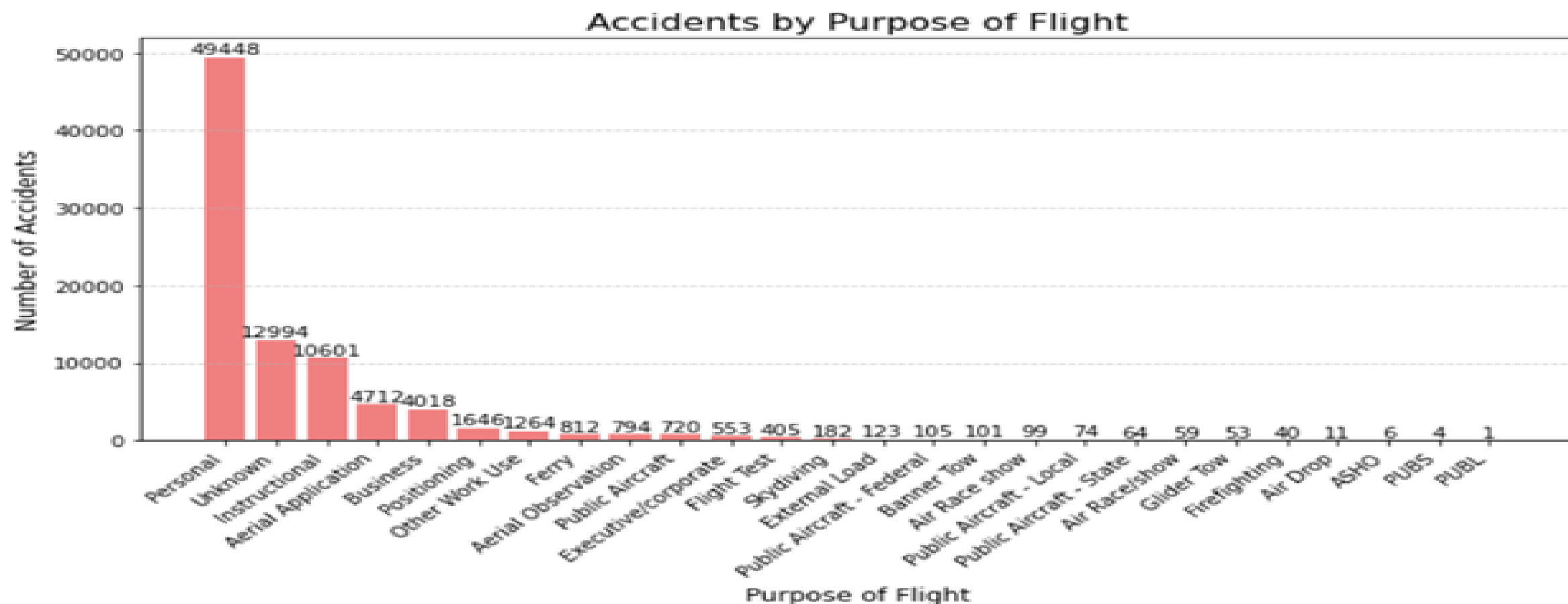
Data Analysis

- ☐ Data cleaning
 - Missing values handling
- ☐ Aggregation
- ☐ Visualization

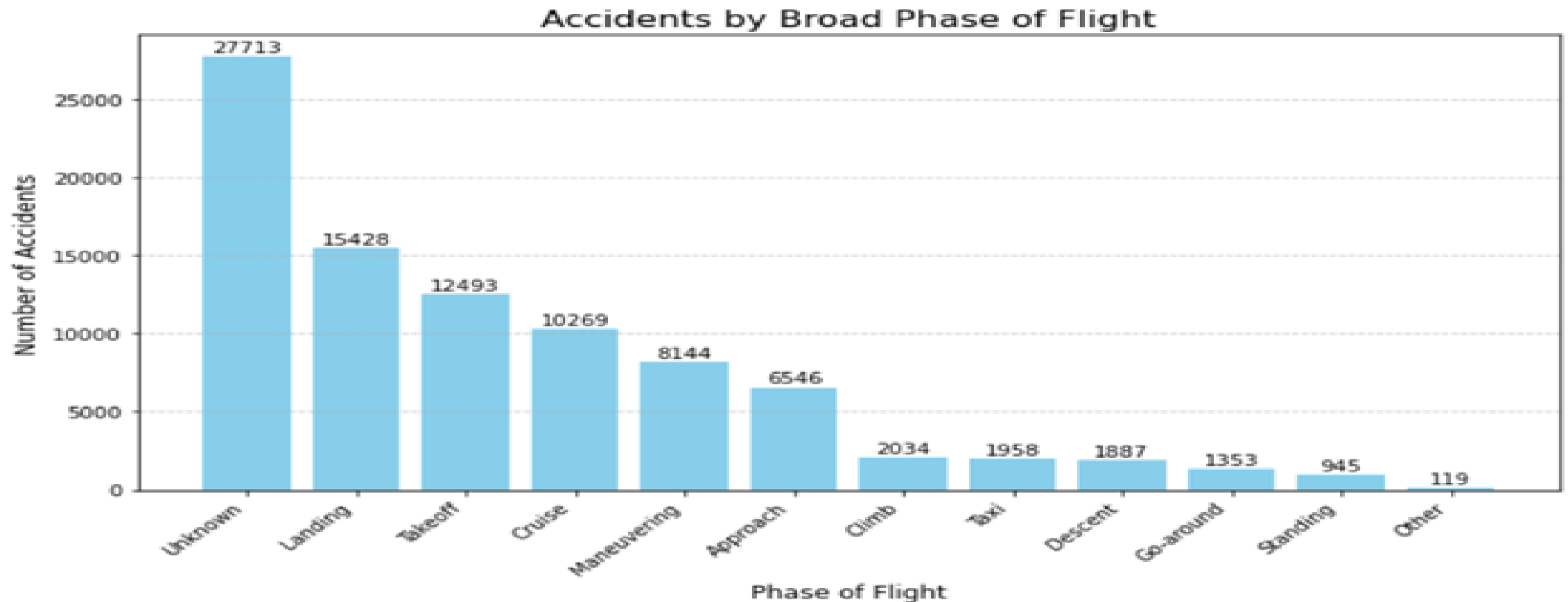
Key visualizations; Top 10 safest aircraft



Key visualizations; Riskiest purpose of flight



Key visualizations; When accidents occur



Recommendations

- ☐ Invest in aircrafts with zero injury records
- ☐ Improve Landing/Takeoff safety measures
- ☐ Take caution with flights for personal and training purposes
- ☐ Enhance & maintain emergency response systems

Questions?

Thank you



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Let's connect on [LinkedIn](#)