



# Aviation Category Safety Analysis

DIANA NYABOKE OGETO

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# Summary

- ▶ Enhance Safety Measures for High-Traffic Aircraft by focusing on improving safety protocols for airplanes.
- ▶ Develop Risk-Reduction Strategies for Favorable Weather Conditions.
- ▶ Invest in Advanced Navigation Systems to Improve navigation systems to mitigate risks associated with operational inefficiencies.

# Outline

- ▶ Business Problem
- ▶ Data & Methods
- ▶ Results
- ▶ Conclusions

# Business Problem

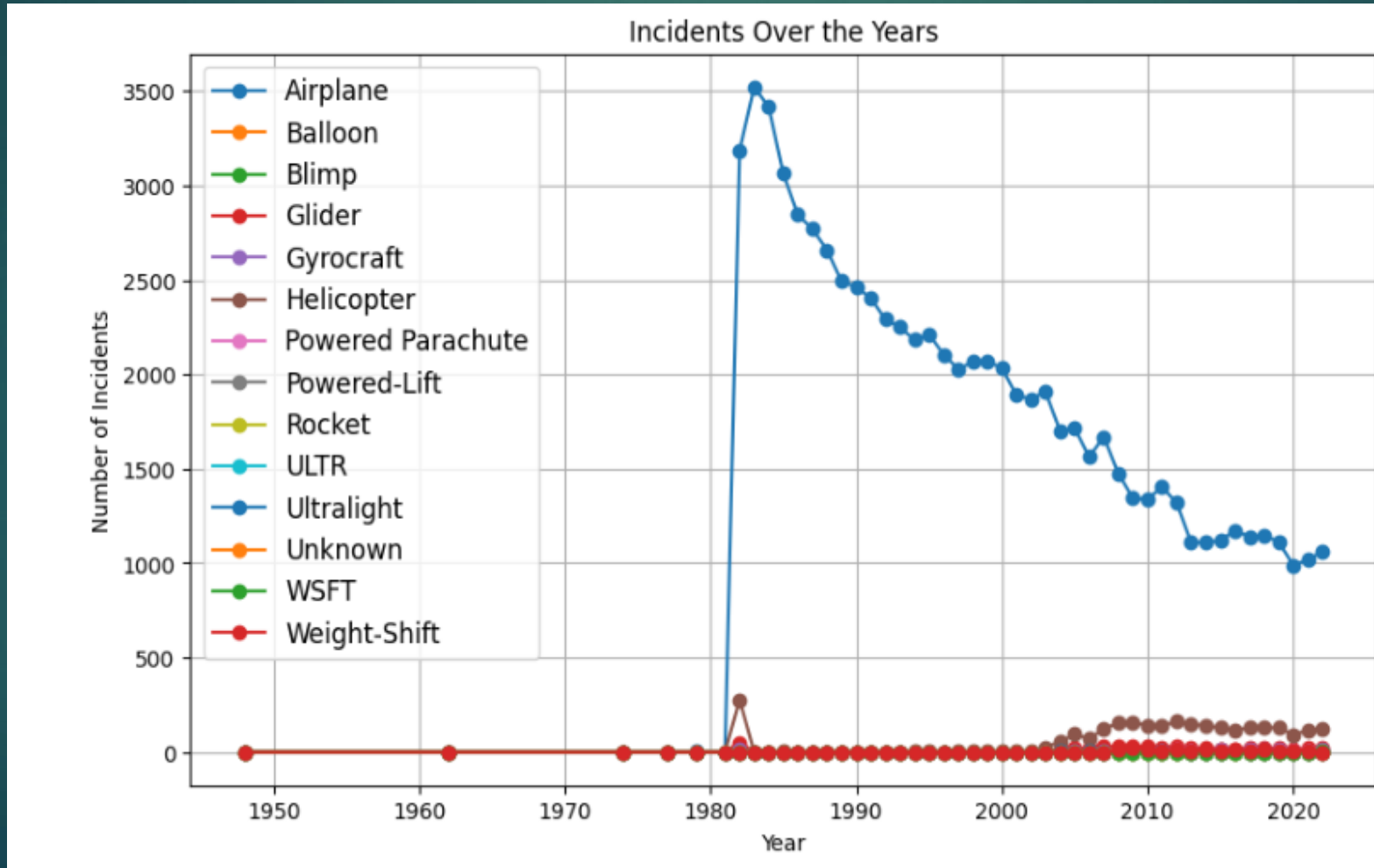
- ▶ Identify low-risk aircraft models
- ▶ Provide actionable insights
- ▶ Optimize resource allocation

# Data and methods

- ▶ This project uses EDA analysis to identify trends in aviation accidents, safety and injury rates across different aircraft categories.
- ▶ This is a dataset from the National Transportation Safety Board, which includes aviation accident data from 1962 to 2023.

# Results

- Trends Over Time -The analysis of incident trends over the years highlights significant patterns and changes.



# Conclusions

- ▶ Airplanes show a steady decline in incidents despite high traffic reflecting improved safety protocols.
- ▶ Incidents that occur in favorable weather highlight the need for strong safety measures and comprehensive pilot training.
- ▶ Different aircraft types, like helicopters and gliders, have varying risk levels so buyers should align choices with operational needs and safety needs.