PHASE 1 PROJECT

ANALYSIS OF AVIATION ACCIDENT DATA

Persentation By
Martin Kabare

ABOUT

Overview

This project analyzes aviation accident data to identify patterns and insights that can provide recommendations to a business owner who is venturing into a new business venture.

Purpose

To determine factors contributing to accidents and recommend safer aircraft models.

Data Source

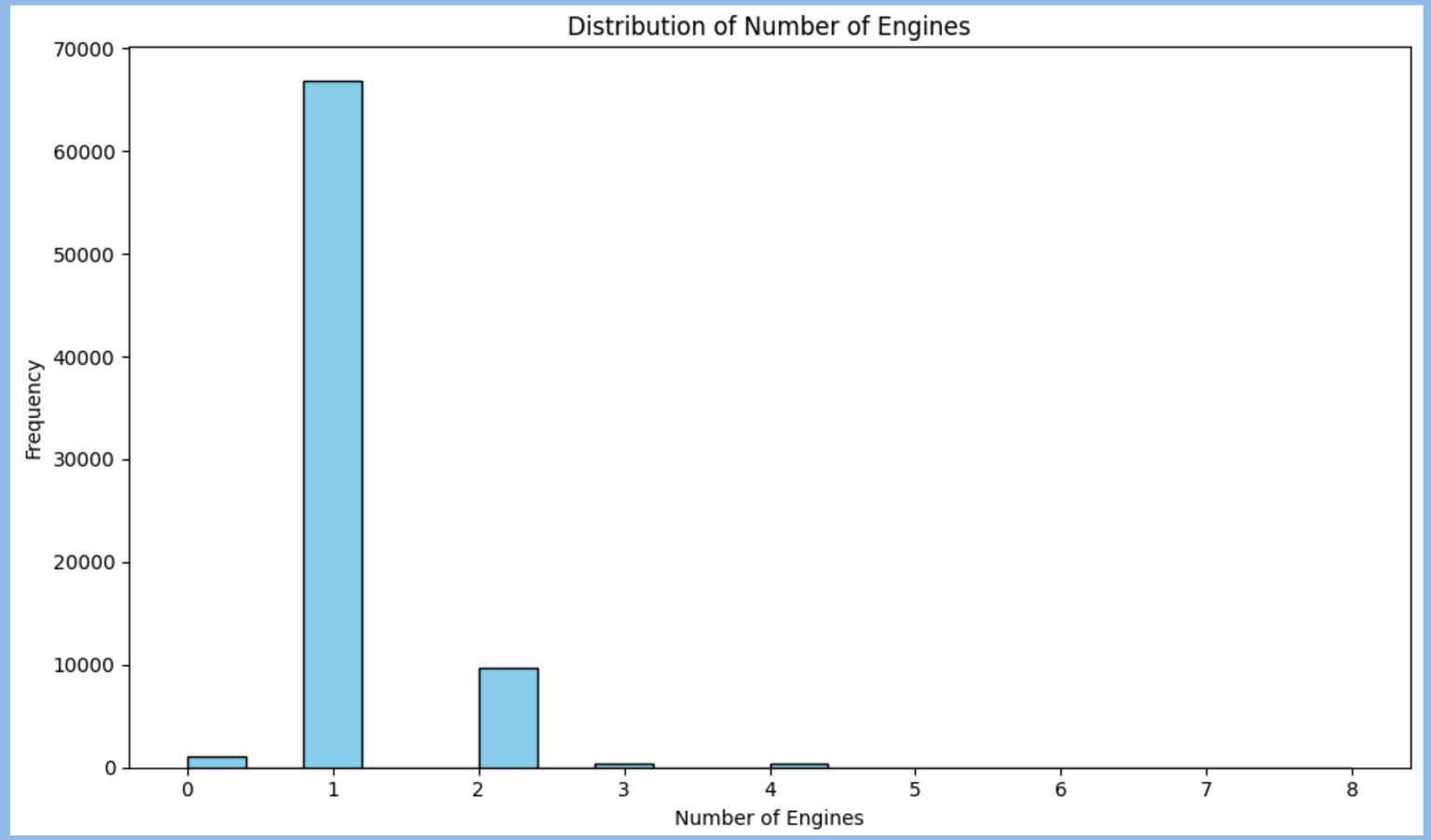
National Transportation Safety Board (NTSB) aviation accident database, covering accidents from 1985 to 2022.

Vision

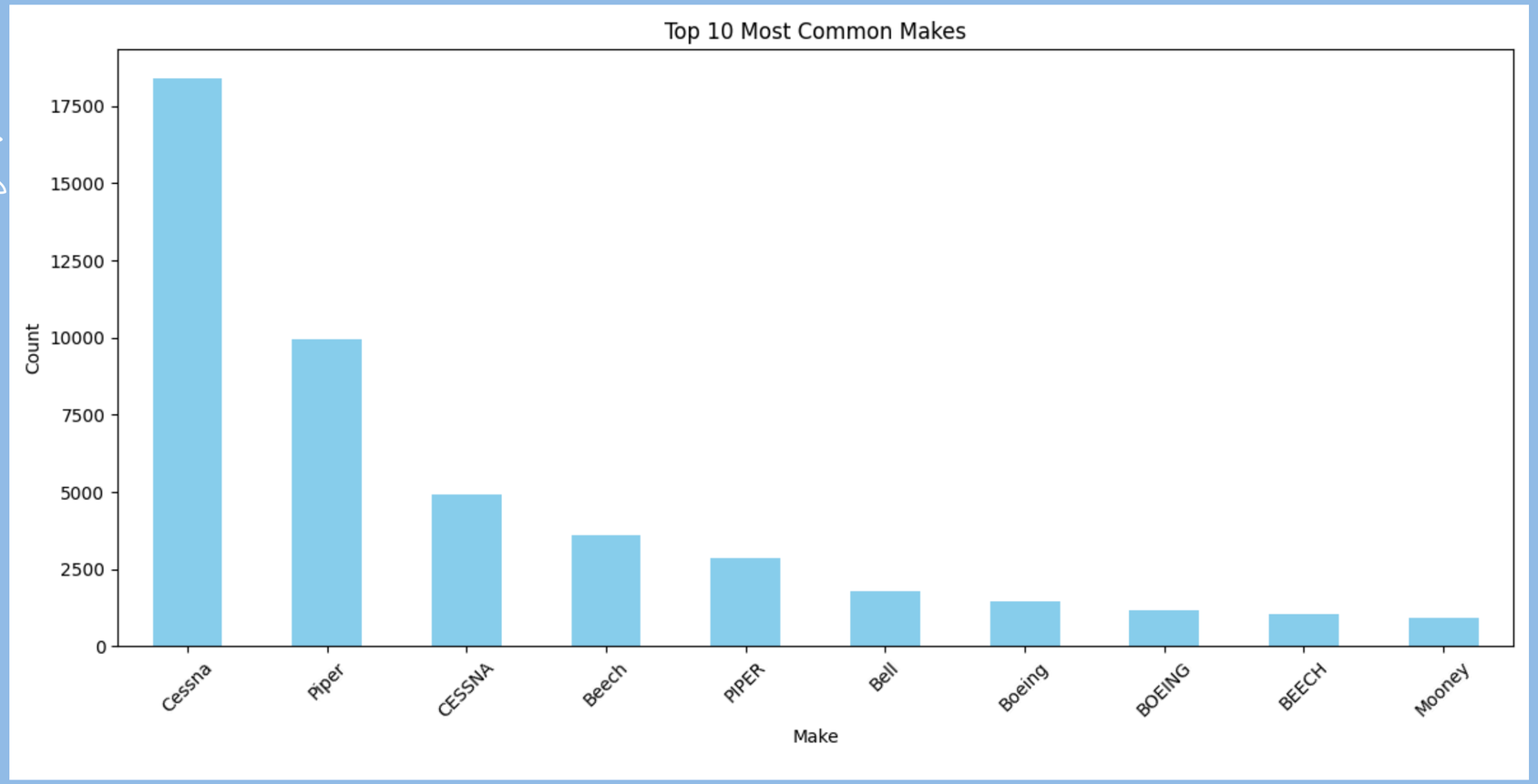
Determine the best aircrafts for the company’s new business venture with minimal risk and most R.O.I

Mision

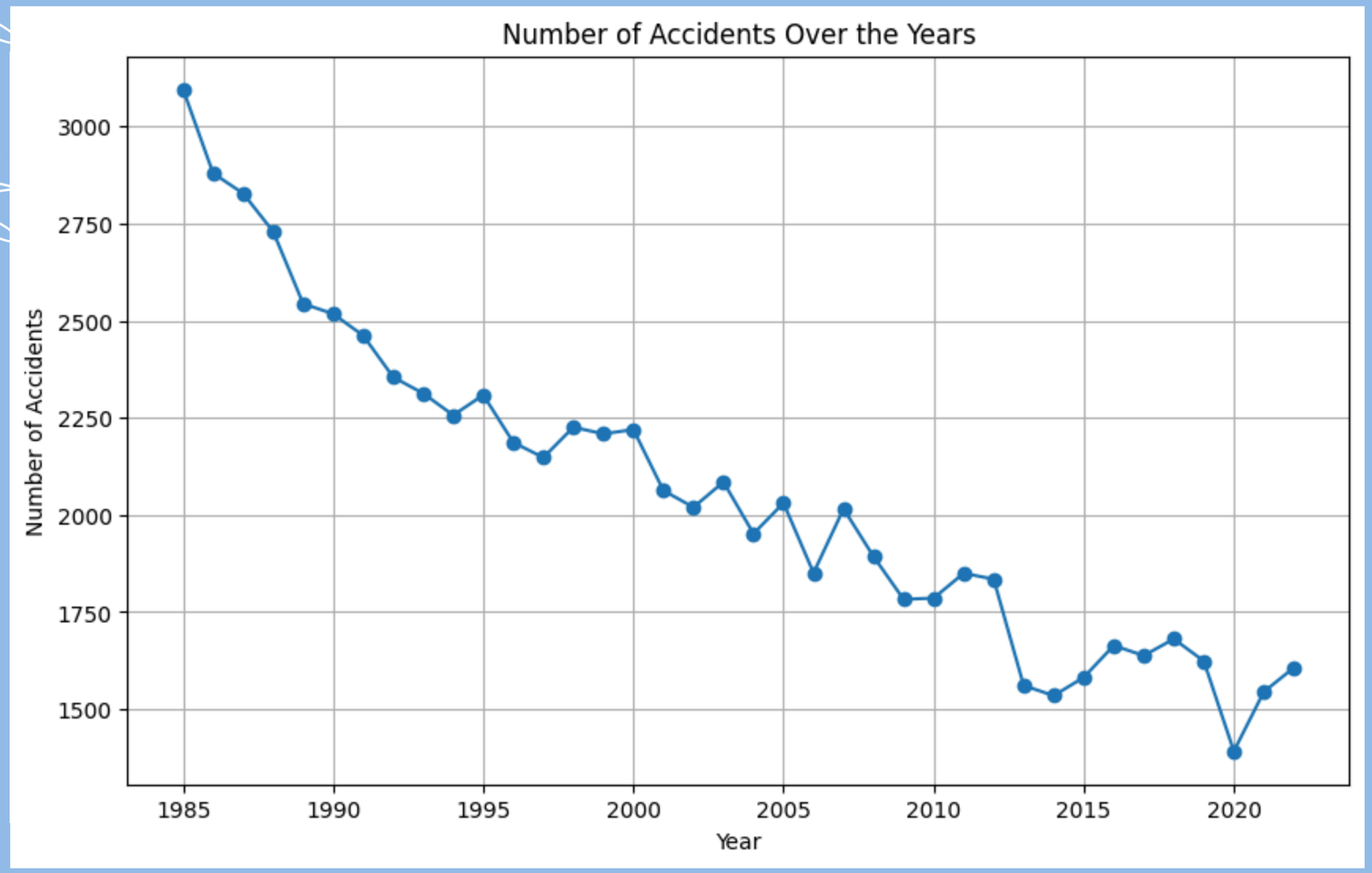
Provide actionable Insights for the company new business aspirations that will ensure success



Single-engine aircraft dominate the accident statistics due to their prevalence in general aviation. Targeted safety improvements in this category could significantly impact overall aviation safety.

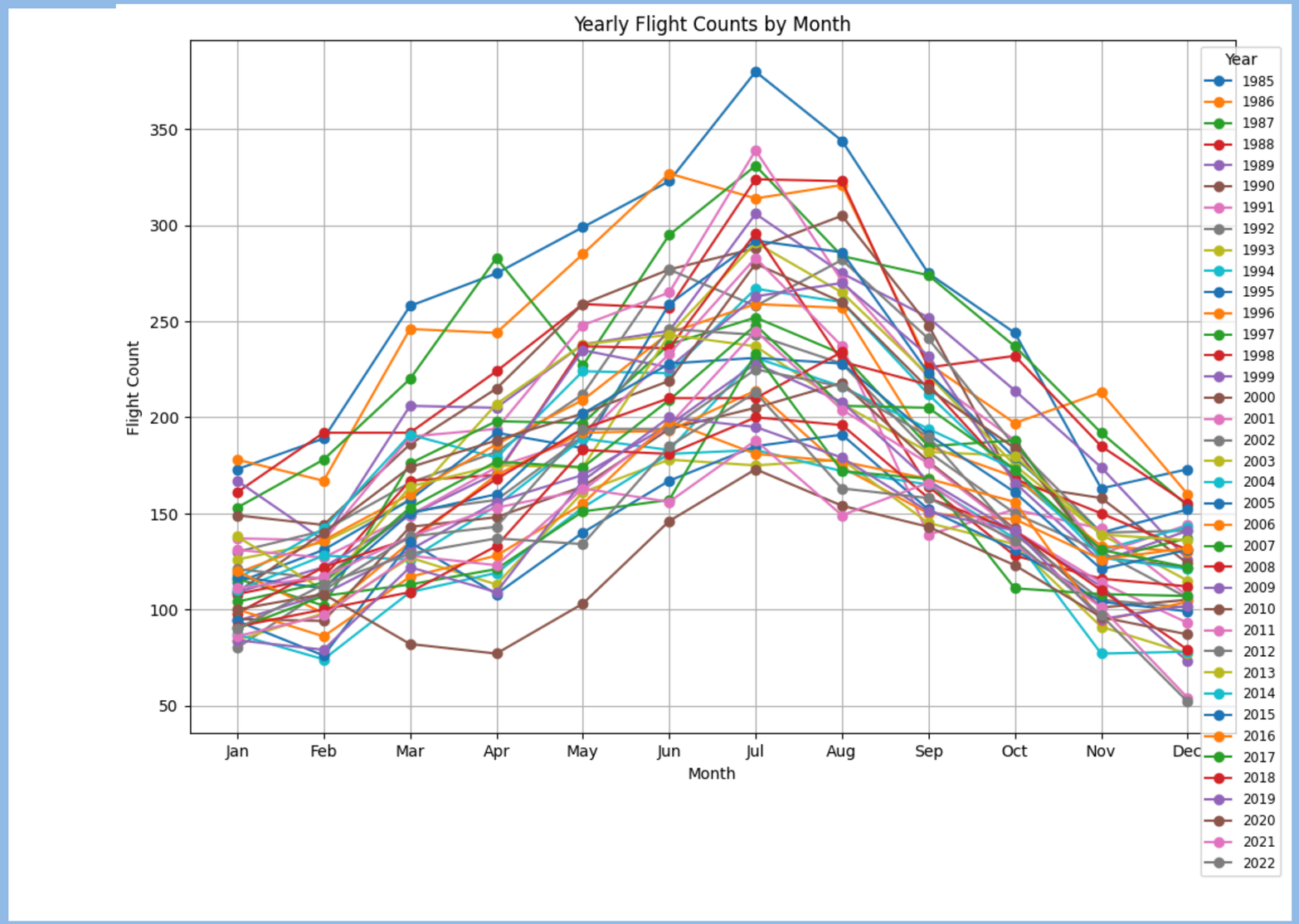


Cessna and Piper dominate the accident statistics due to their prevalence in general aviation.



Cessna and Piper dominate the accident statistics due to their prevalence in general aviation.

The data reveals a consistent seasonal pattern in flight activity, with peaks in the summer and lows in the winter.



RECOMMENDATIONS

Invest In Multiple-Engine Aircrafts: single engine aircrafts have the most accident rates where ass 4+ engine aircrafts have the least

Invest in Advanced Safety Technologies: Invest in advanced avionics and safety technologies to further reduce the accident rates.

Focus on Safety During Critical Phases: Enhance pilot training and safety measures specifically for the landing and takeoff phases.

Weather Monitoring and Decision Making: Improve weather monitoring systems and decision-making protocols to reduce accidents under VMC.

RECOMMENDATIONS

Regular Maintenance and Inspections

Ensure stringent maintenance and inspection routines, especially for single-engine aircraft.

Seasonal Safety Campaigns

Conduct safety awareness campaigns during the summer months to address the higher accident rates.

CONCLUSION

By focusing on these areas, the company can confidently enter the aircraft industry with a robust safety strategy, minimizing risks and ensuring safer operations. This approach not only aligns with our commitment to safety but also positions the company as a responsible and forward-thinking player in the aviation sector and will be the best considering the return on investment