Aviation Risk *Analysis*

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Outline

- Introduction
- Objectives
- Data Understanding
- Data Cleaning
- Data Analysis
- Recommendations

01.

Introduction

- SafeWings is expanding to aviation.
- The analysis is aimed at evaluating risk for a smooth transition to the business

02.

Objectives

- Analyze past aviation incidents to identify key risk factors.

- Use data-driven insights to shape SafeWings' entry strategy

03.

Data Understanding

- Data sourced from NTSB, obtained via Kaggle.
- Contains 88,889 incidents, each with 31 details recorded.
- Details cover aircraft incidents and related factors.

04.

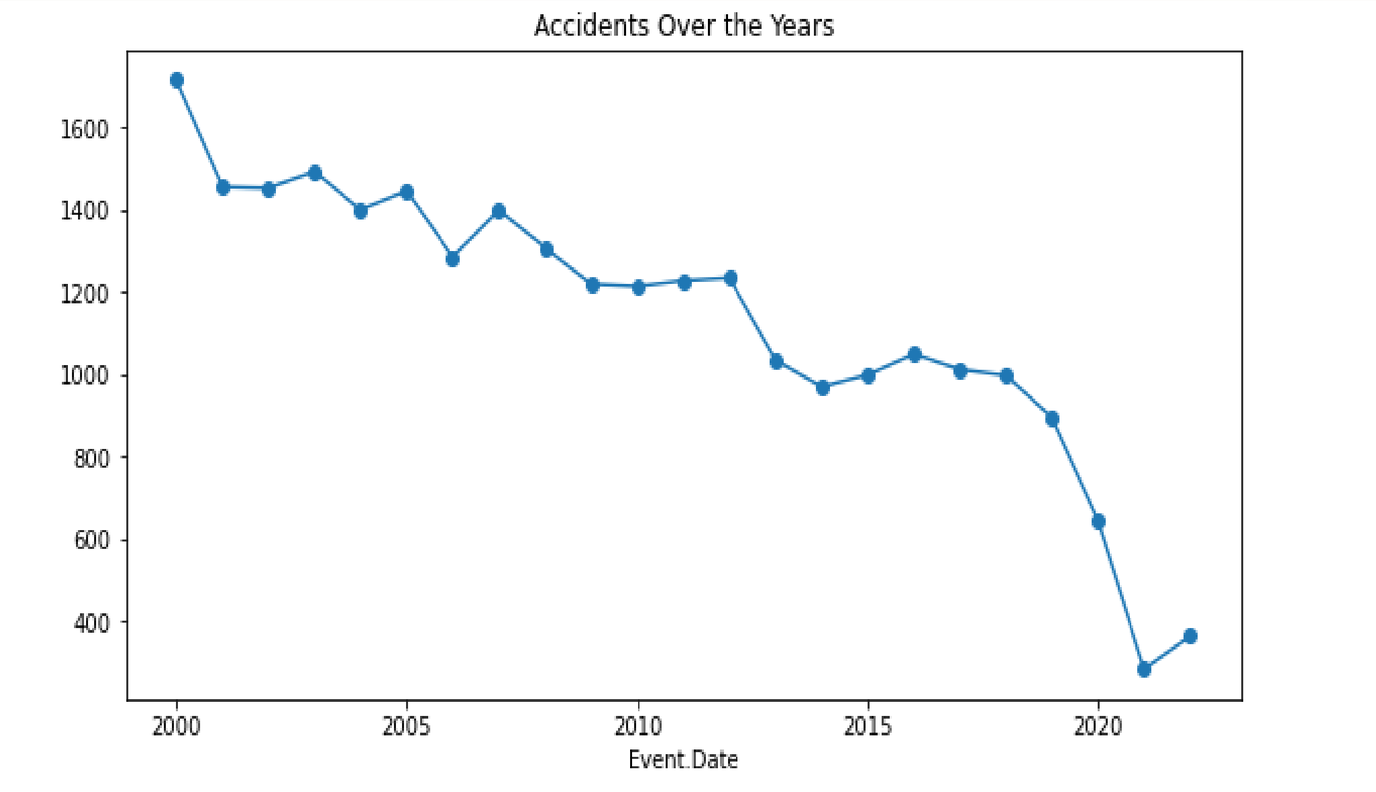
Data Cleaning

- Dropped missing and irrelevant data.
- Standardized formats and corrected inconsistencies for consistency.
- Filtered variables to focus on factors relevant to aviation risk assessment.

05.

Data Analysis

1. Is it the right time to invest in aviation?

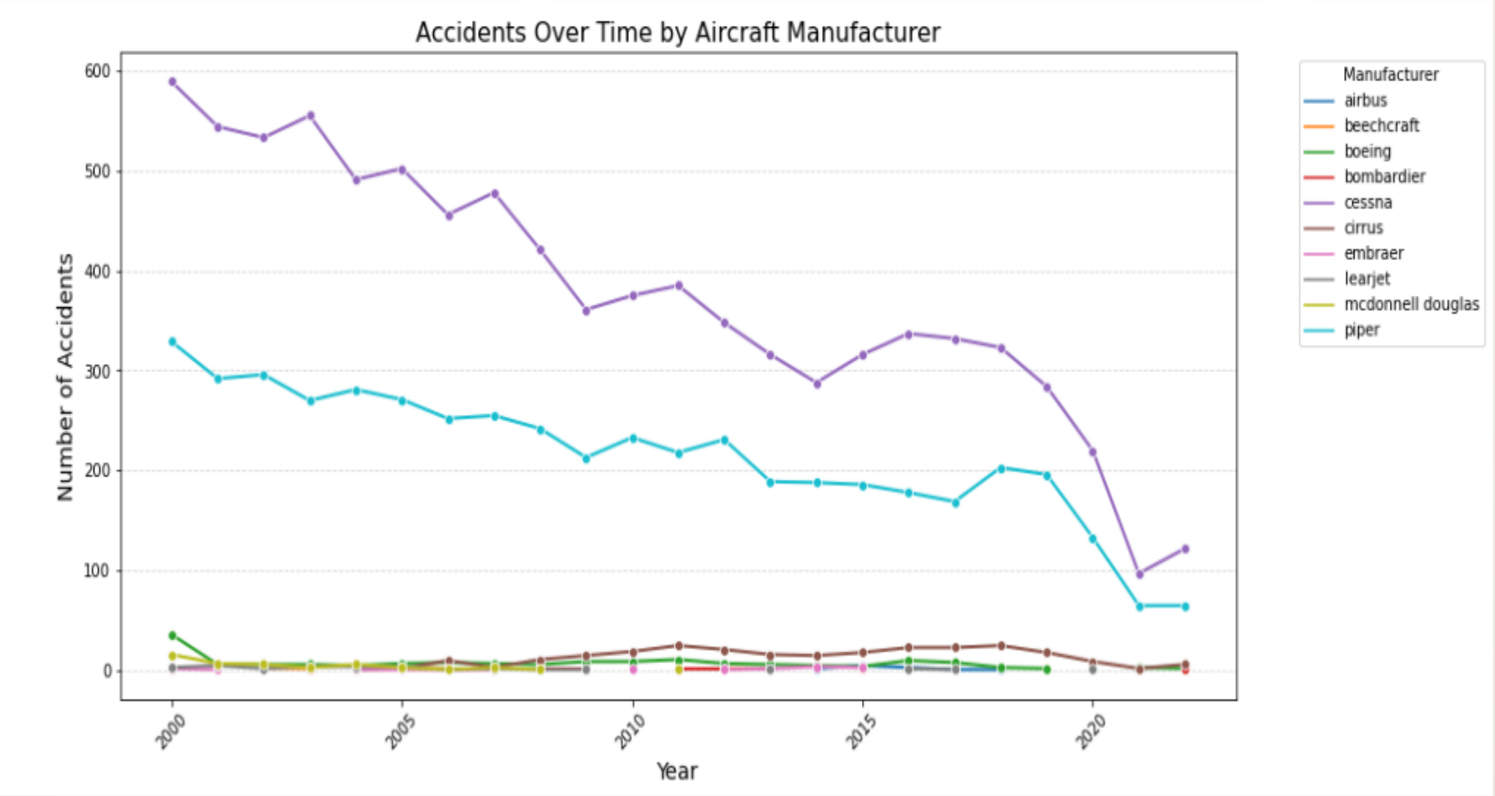


- Data from 2000+ shows declining aviation accidents
- Good for investment.

05.

Data Analysis

2. Who is the ideal manufacturer?

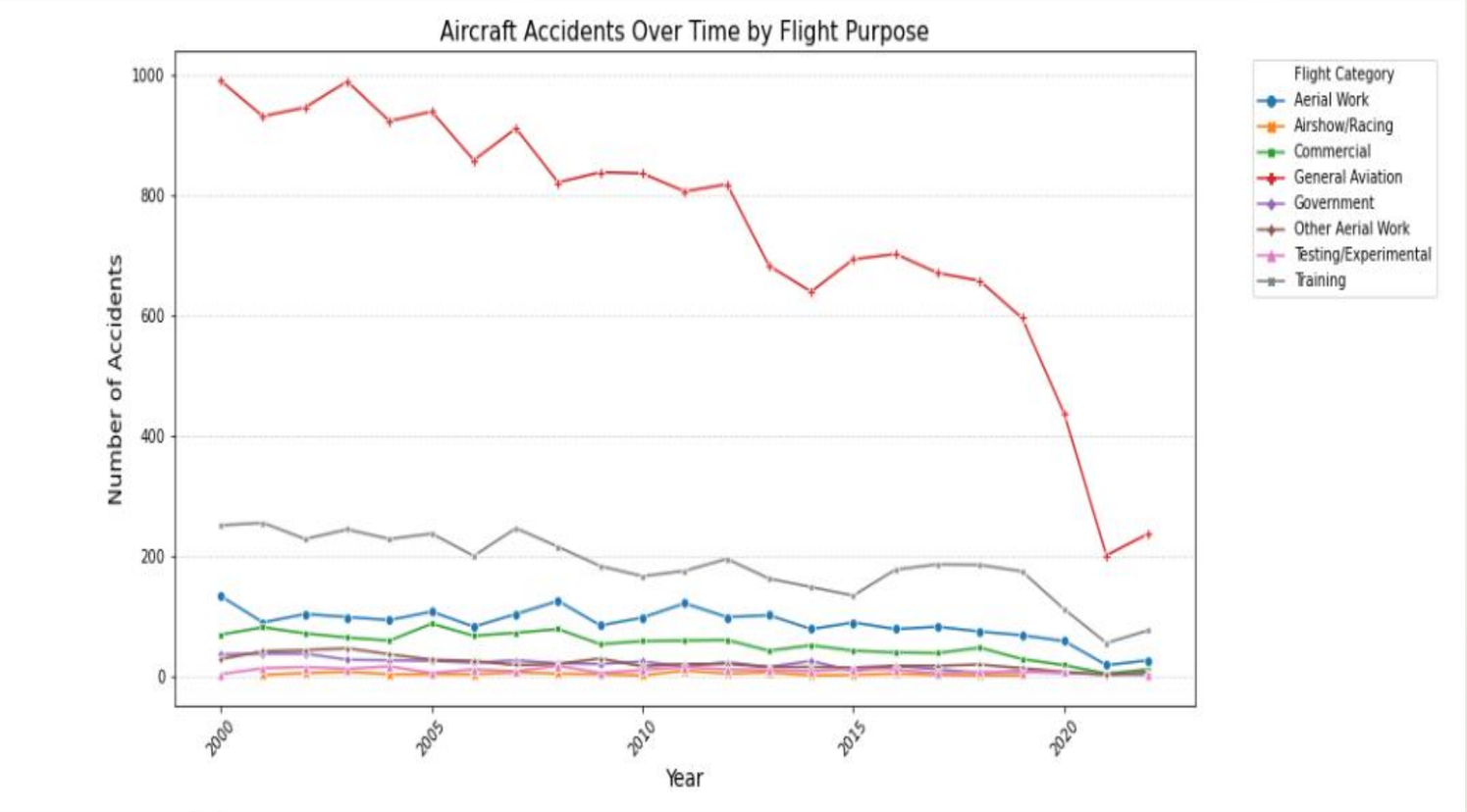


- Accident counts reflect usage volume, not necessarily higher risk

05.

Data Analysis

3. What about flight purpose?



General Aviation - High

- Lower pilot experience
- Older or smaller aircraft

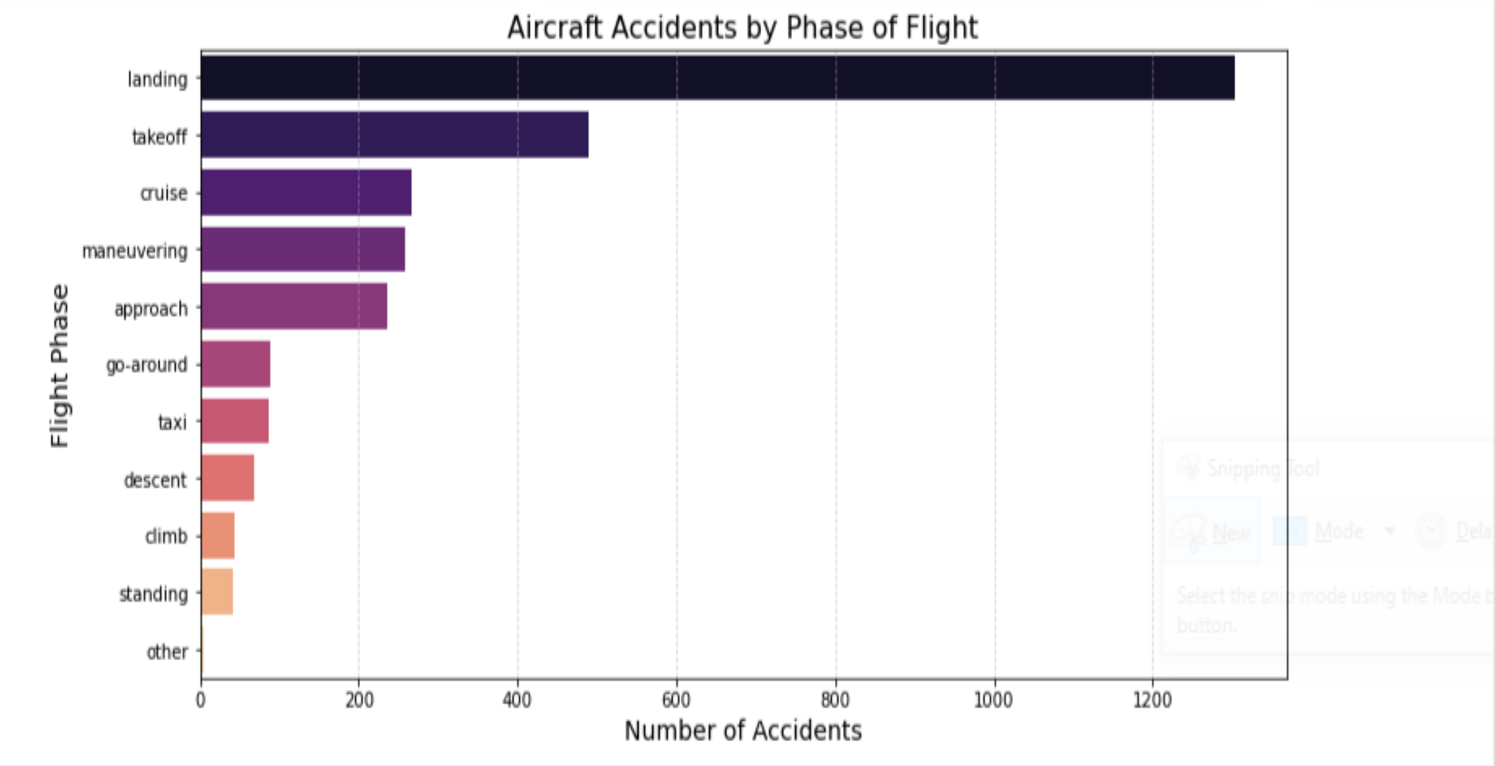
Commercial – Low

- Pilot training & safety programs
- Strict regulations & modern fleets

05.

Data Analysis

4. Phase of flight?



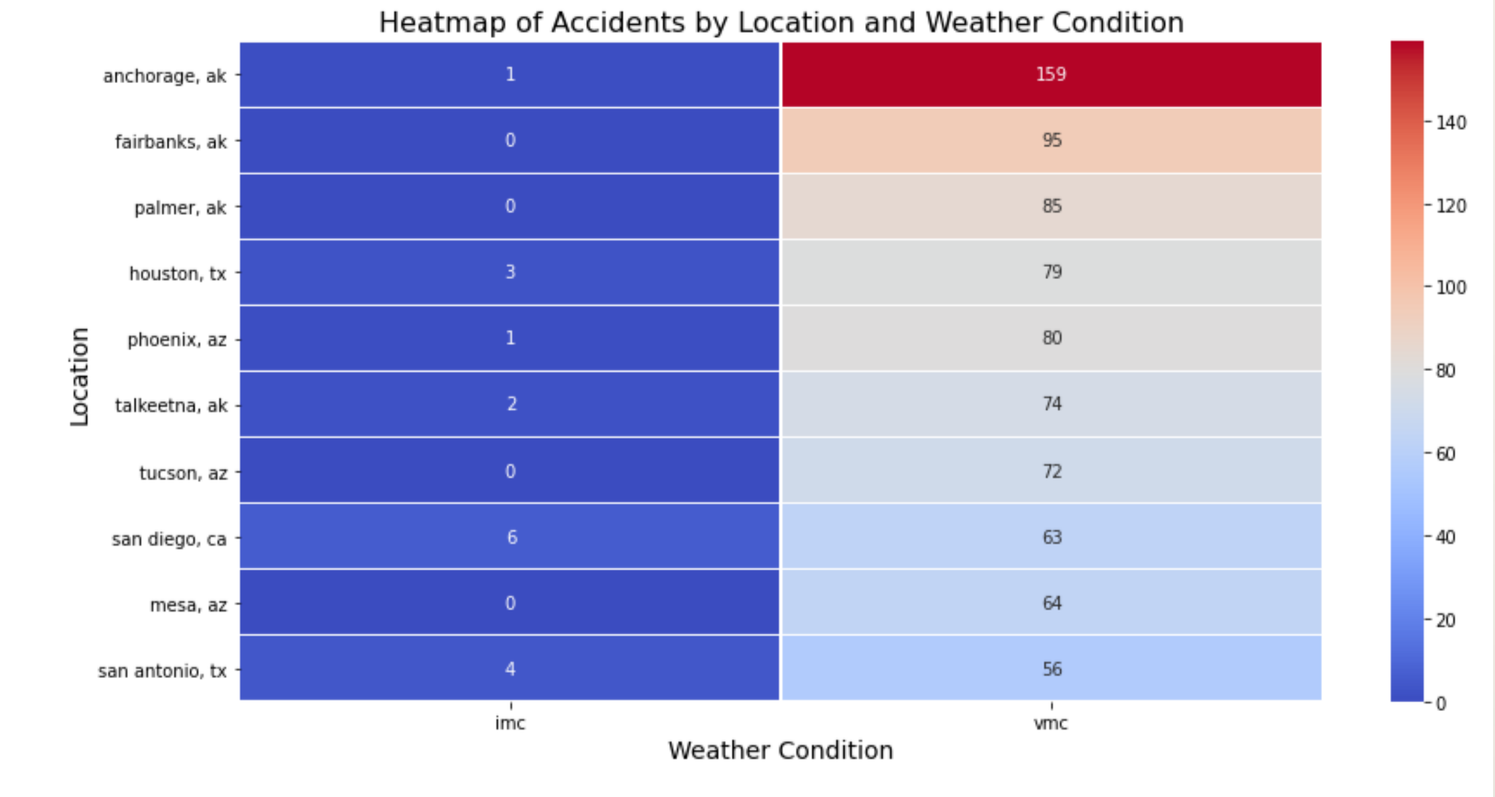
Take-off & Landing

- Invest in pilot training
- Aircraft reliability

05.

Data Analysis

4. Weather and Location?



VMC – good weather

- Invest in pilot training
- Aircraft reliability

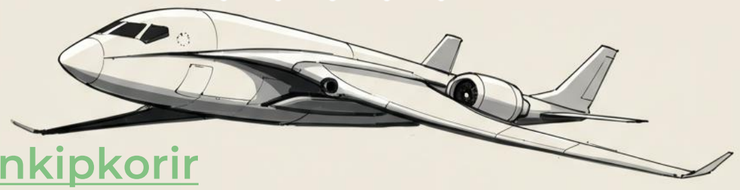
- Other factors like terrain may also contribute to accident trends.

06.

Recommendations

- Choose safer aircraft.
- Leverage modern technology
- Enhance training & maintenance
- Assess operational conditions e.g. terrain

Find me



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THANK YOU 😄