

AVIATION ACCIDENTS TRENDS

VICTORIA JEMUTAI

27TH MARCH 2024



Summary

Descriptive and trend analyses [Aviation accident Database](#) yielded results that will help Uzima company determine which aircraft are the lowest risk for the company to start the aviation business venture:

- Beech airlines pose the lowest risk for accidents occurrence.
- Aviation business is a worthy venture.
- Purchase commercial airlines for operations.

Outline

- Business problem
- Data and methods
- Results
- Conclusions

Business Problem

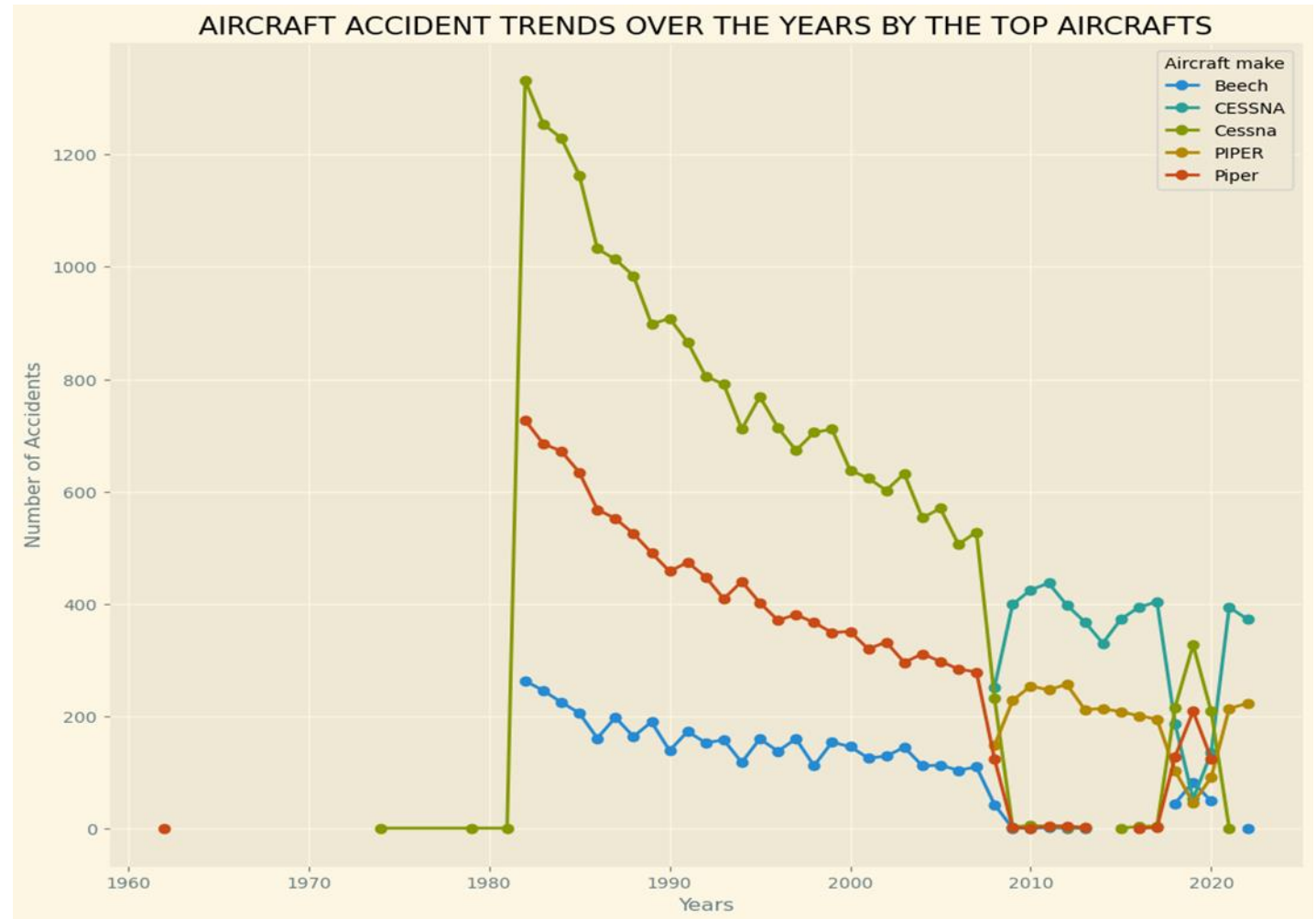
- Purchasing and operating airlines for commercial and private enterprises.
- Knowledge of potential risks of aircrafts.
- Determining which aircraft poses the lowest risk for the company to start the new business venture.

Data and Methods

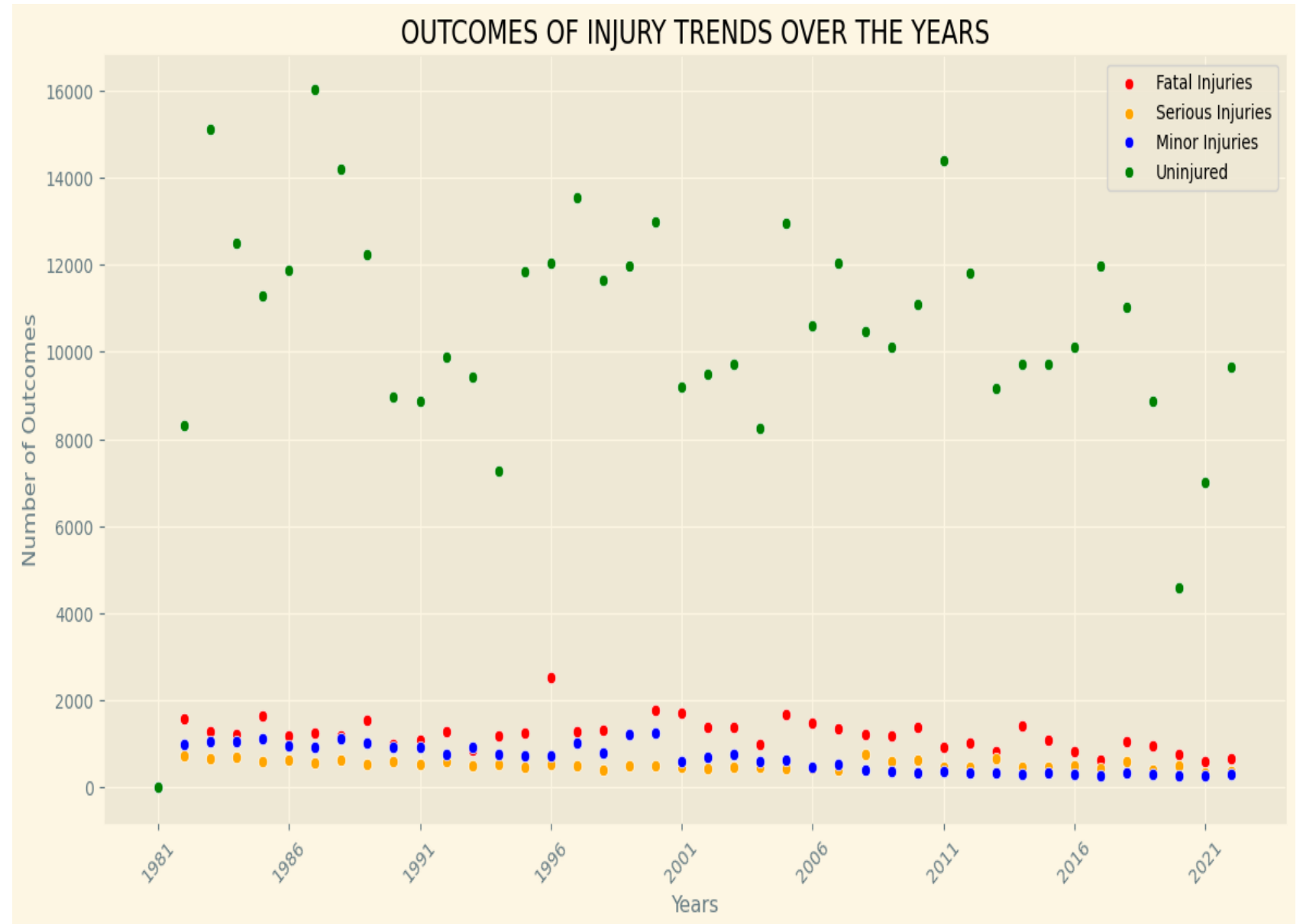
- The [dataset](#) provides data on accidents records, the event dates, aircraft makes, aircrafts damage etc. that have been used to determine the best aircraft to purchase.
- Data cleaning, imputation, analysis, and visualization have been used to generate insights from the data.
- Trend , descriptive and comparative analysis have been used to determine the aircraft with the lowest risk for the company.

Results

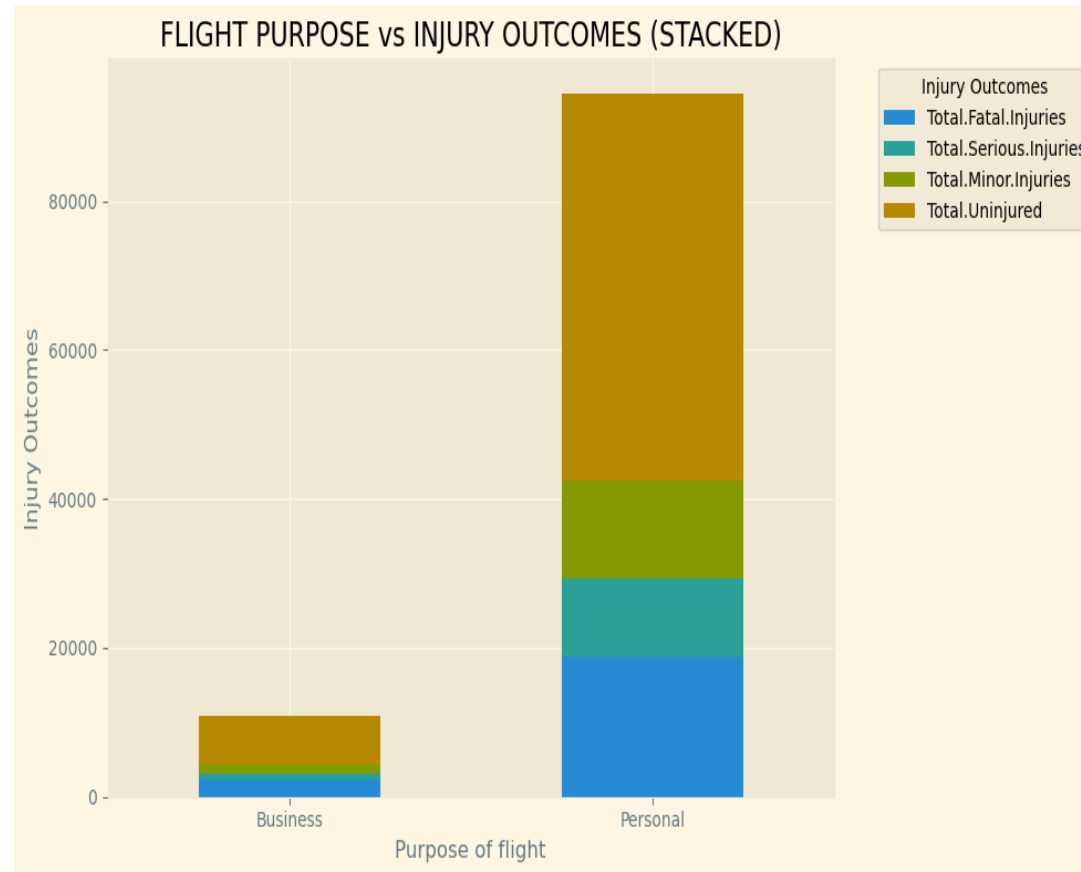
- Analyses revealed that Beech airlines are the best option to purchase because it has the lowest risk in terms of accident trends.



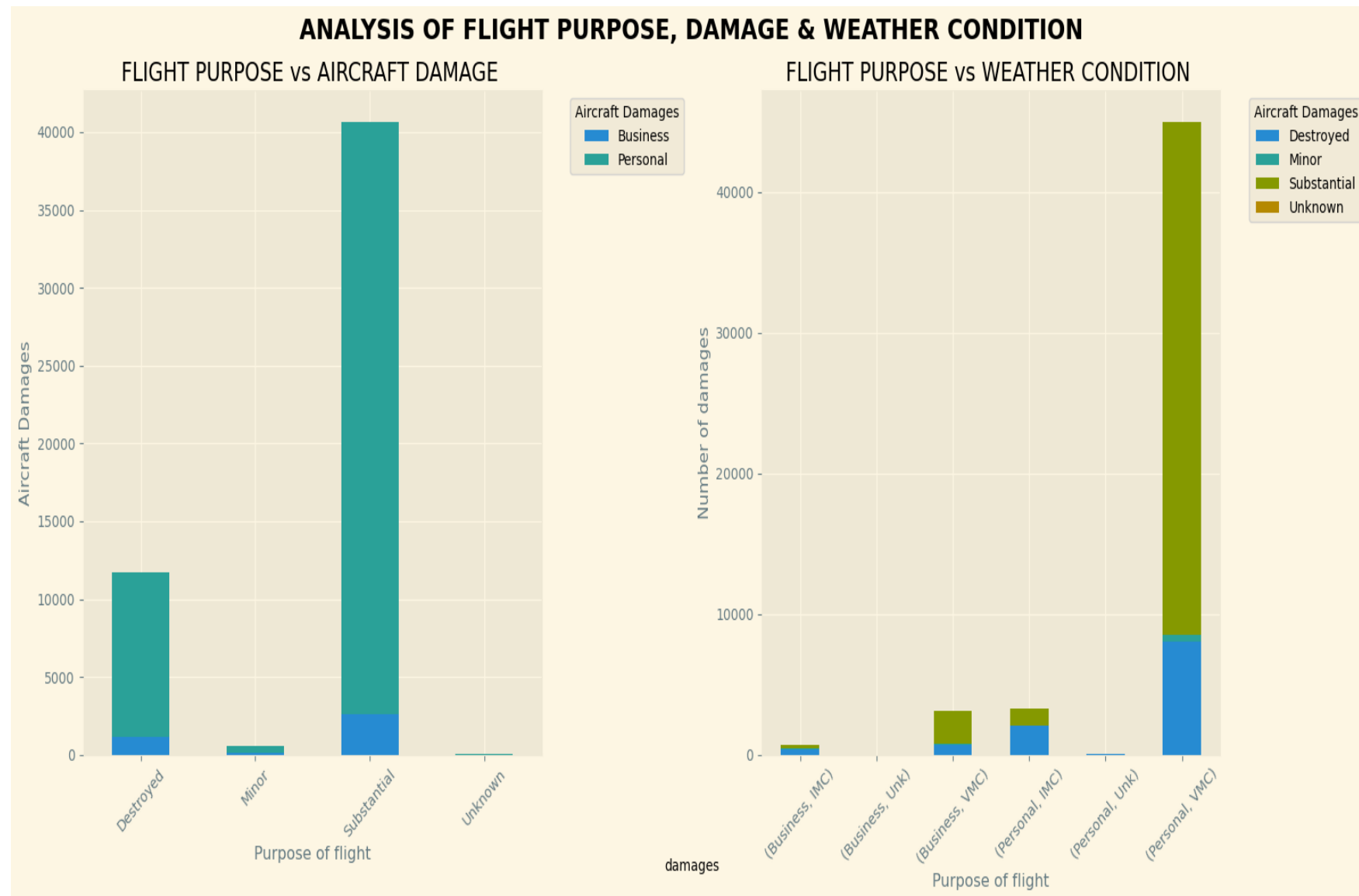
- Most airline accidents are survivable.
- There is a higher count of uninjured passengers compared to other injury outcomes.



- Commercial aircrafts show lower count of injury outcomes.



- Commercial aircrafts can withstand weather conditions better.
- They also sustain damages better during accidents.



Conclusions

- Beech airlines is the best choice for purchase and operation.
- The aviation business is a worthy venture to undertake.
- Commercial airlines are a better choice for purchase.

Next Steps

- Show accidents occurrence based on broad phase of flight.
- Use data on model of aircrafts to determine commonly used aircrafts for each category.
- Analyze accidents trends based on Code of Federal Regulations (CFR) of aircrafts.
- Analyze accidents severity; Investigation type and aircraft damage to measure how often aircrafts experience damage or severe incidents.

Thankyou!!!!

Email: victoria.jemutai@student.moringaschool.com