AVIATION ACCIDENTS TRENDS

VICTORIA JEMUTAI

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Summary

Predictive analysis 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.

- It is cost-beneficial to venture into the aviation industry.

- Purchase commercial airlines for operations.

Outline

- Business problem

- Data and methods

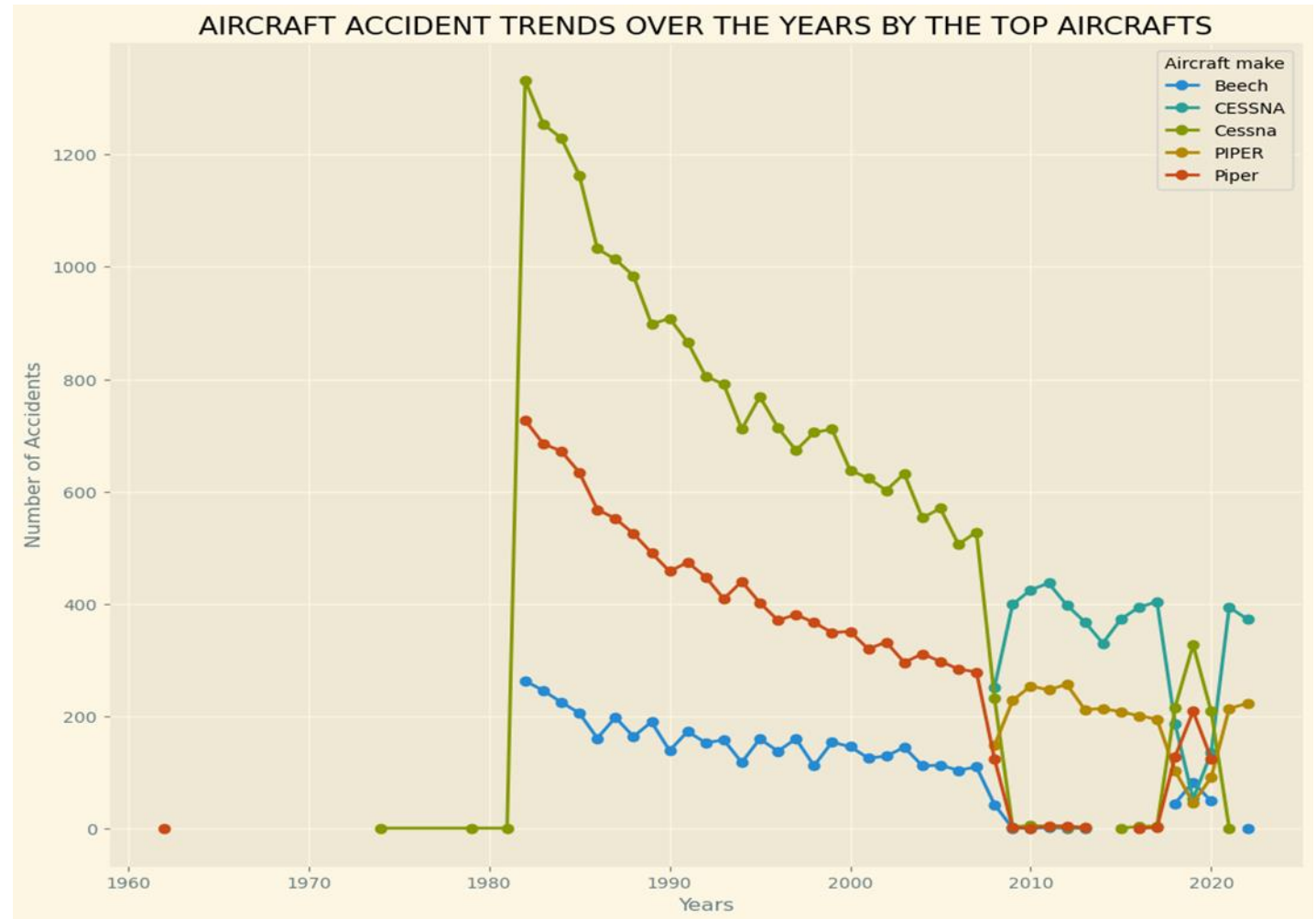- Results

- 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.
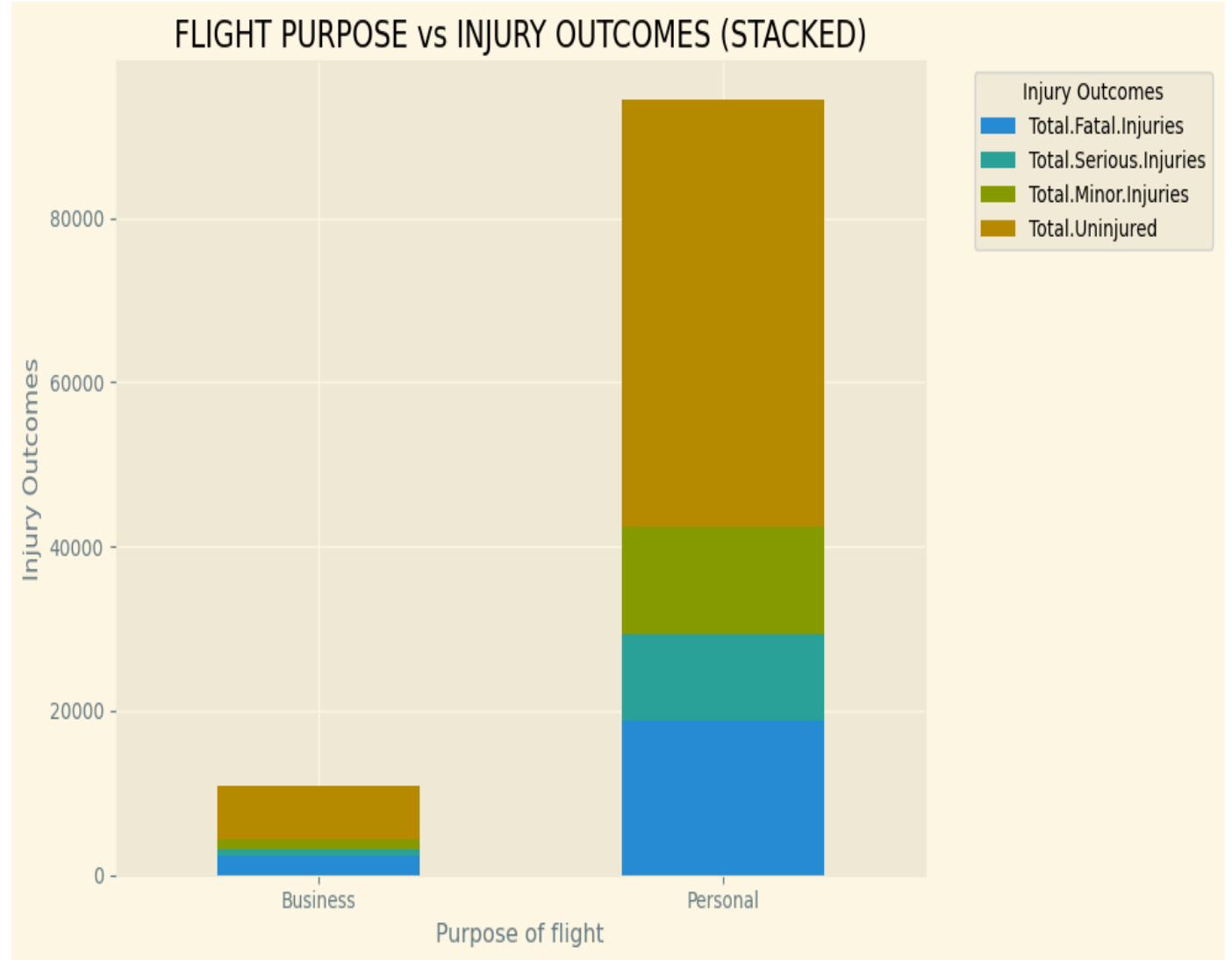
Data and Methods

- 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.
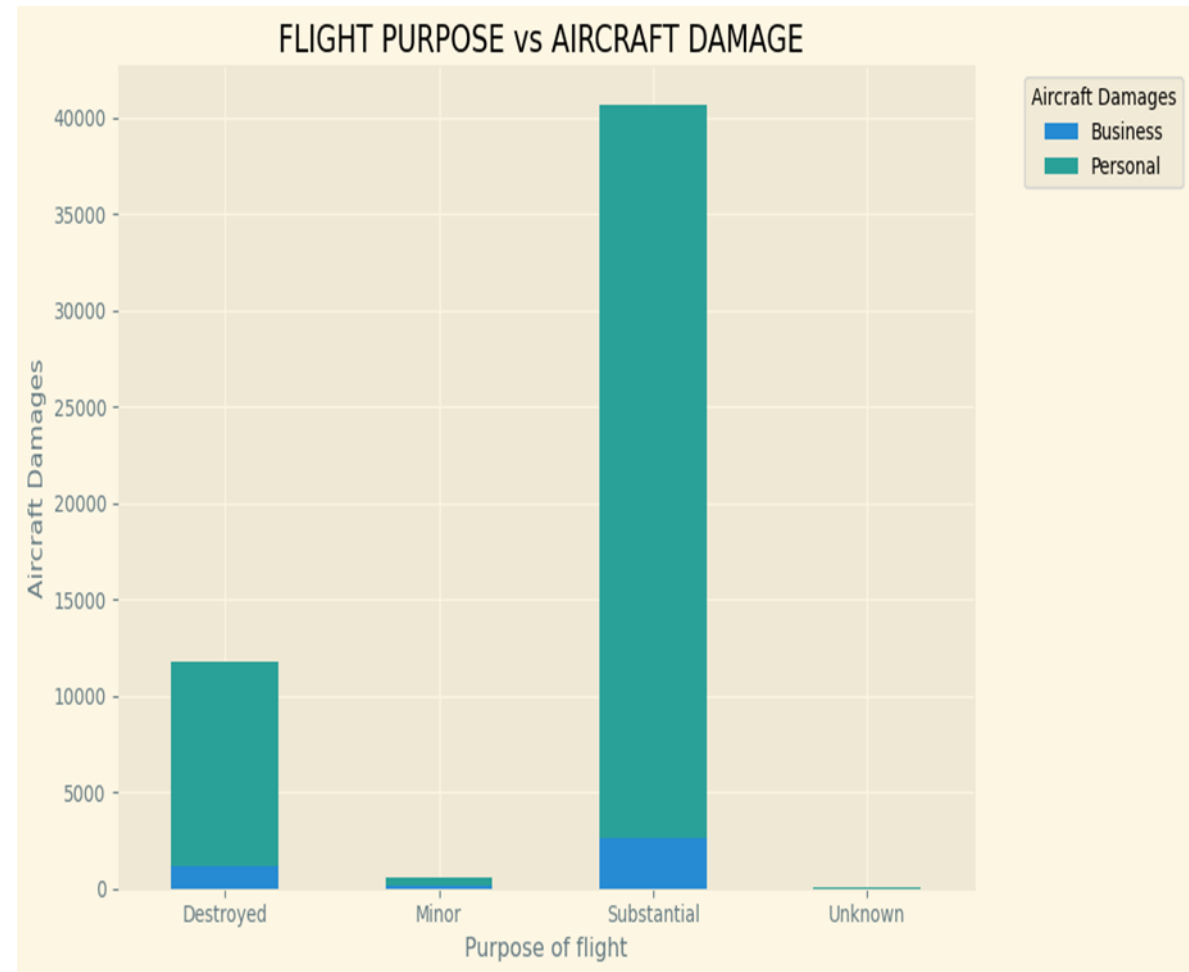
Results

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

AIRCRAFT ACCIDENT TRENDS OVER THE YEARS BY THE TOP AIRCRAFTS

Commercial airplanes posed a lower risk for accident trends, aircraft damages and injury outcomes.

FLIGHT PURPOSE vs INJURY OUTCOMES (STACKED)

Injury Outcomes
- Total.Fatal.Injuries
- Total.Serious.Injuries
- Total.Minor.Injuries
- Total.Uninjured

Injury Outcomes (y-axis): 0, 20000, 40000, 60000, 80000

Purpose of flight (x-axis): Business, Personal

- Commercial aircrafts show lower count of damages

FLIGHT PURPOSE vs AIRCRAFT DAMAGE

Conclusions

- Beech airlines is the best choice for purchase and operation.

- The aviation industry 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.

Thankyou!!!!

Email: victoria.jemutai@student.moringaschool.com