Aircraft Accident Risk Analysis

Interest in purchasing and operating airplane for commercial and private use

Summary

We have analyzed different flight makes and models to see Aircraft risk to accidents based on various parameters including but not limited to,

1. Aircraft make
2. Aircraft Model
3. Weather conditions
4. Accident frequency over the years

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

The company stakeholders are interested in purchasing and operating airplanes for commercial and private enterprises, but do not know anything about the potential risks of aircraft.

Data

A dataset from the National Transportation Safety Board that includes aviation accident data from 1962 to 2023 about civil aviation accidents and selected incidents in the US

Methods

1. Clean the data(Check missing values, duplicate columns and necessary/unnecessary data.
2. Visualize the data to show trends and make decisions
3. Give recommendation as to which Make/Model is best fit to suit the business needs.

Results

Based on our data analysis, we are able to recommend the best suited aircraft make and model for the company.

Conclusions

We recommend the following aircraft based on our accident risk analysis.

CESSNA models,

150M , 180 ,182, 172

BOEING models,

717-200, 757-200,757-222, 757-232, 787

Thank You!

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