

Aviation Data Analysis

By Shelley Wang Patrick Yamin



Overview

→ Venturing into the airline industry

Outline



Business Understanding



Data



Visualizations & Recommendations



Business Understanding:

- → Stakeholders: Shareholders, Passengers
- → Question: Which aircraft should we buy?

The Data: 1948 - 2022



- → 90k incidents
- → Geography, injuries, damage, airplane type, etc.

Data Prep

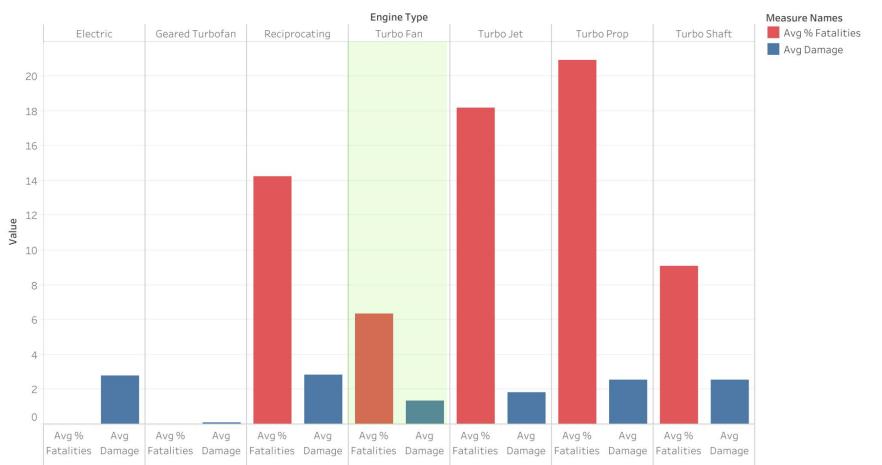
- → 24k rows of data
- → Found insights with airplane engines and manufacturer info
- → Main focus on fatalities and aircraft damage

Recommendations & Visuals



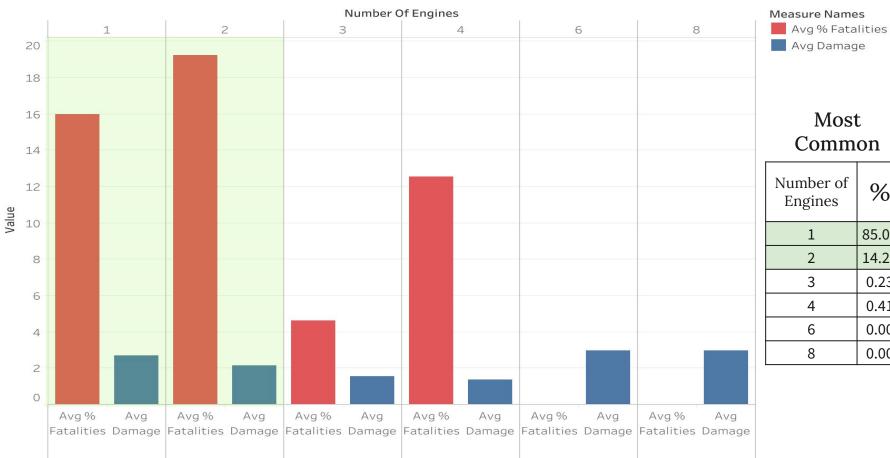
#1: Engine Type





#2: Number of Engines

Fatalities and Damage by Number of Engines



Most Common

00111111011	
Number of Engines	%
1	85.09
2	14.22
3	0.23
4	0.41
6	0.00
8	0.00

#2: Number of Engines (cont.)



VS.



→ Smaller, for private use

→ Larger, for commercial use

#3: Brand

Fatalities and Damage by Make



Conclusion



- → Airbus or Boeing Turbo Fan Planes
- → Chartered flights: single engine planes
- → Commercial flights: dual engine planes

THANK YOU

shelleylwang@gmail.com https://github.com/seashellsw

patrickyamin@gmail.com https://github.com/pyamin1878

Questions?

