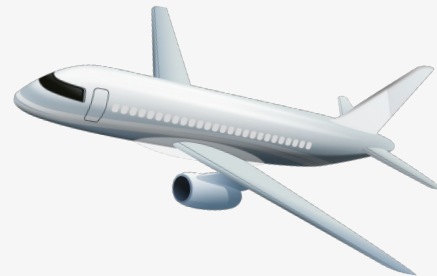




# Harry Jannerone Needs Analysis

Joshua G Grimes  
July 16, 2024

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# Overview

Descriptive analysis of the National Transportation Safety Board (NTSB) aviation accidents reveals insights into low-risk aircrafts models:

- Single and double engine aircraft have higher risk than 3 and 4 engine aircraft
- Turbo engines have less risk than reciprocating engines
- Airbus has a great track record for passengers being uninjured in accidents

# 02

## Business Understanding

“I’d like to sell one big thing, you know? Like... a plane. One sale, I’m out.”

- Reduce risk of injury
- High-number of airplane models



# Data Understanding

NTSB aviation accident database:

- 1962 - 2023
- Civil aviation accidents
- United States and international waters
- Each accident has a unique ID
  - Make
  - Model
  - Number of Engines
  - Engine Type
  - Injuries
    - Fatal
    - Serious
    - Minor
    - Uninjured





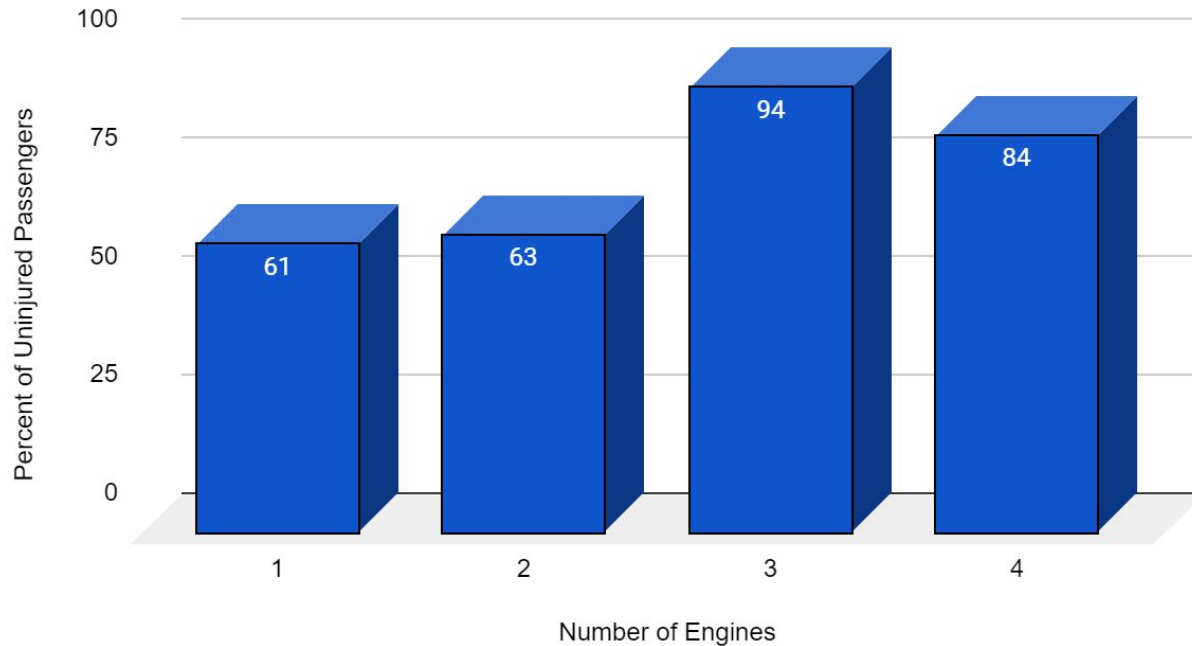
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# Data Analysis

# Number of Engines



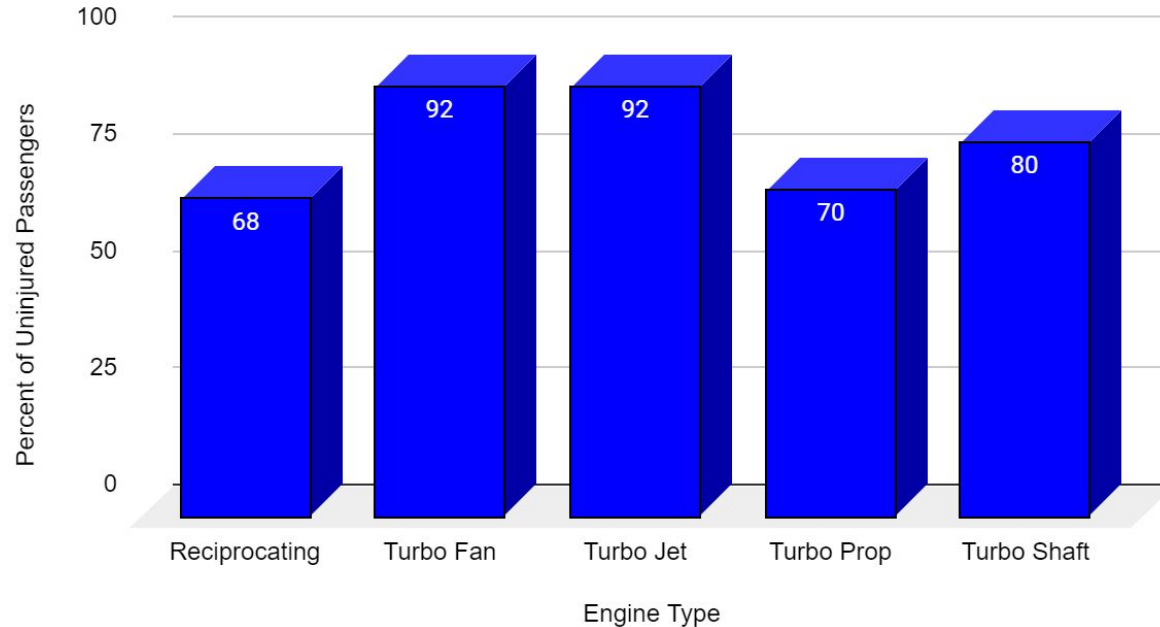
**Percent of Uninjured Passengers vs. Number of Engines**



# Engine Type



**Percent of Uninjured Passengers vs. Engine Type**

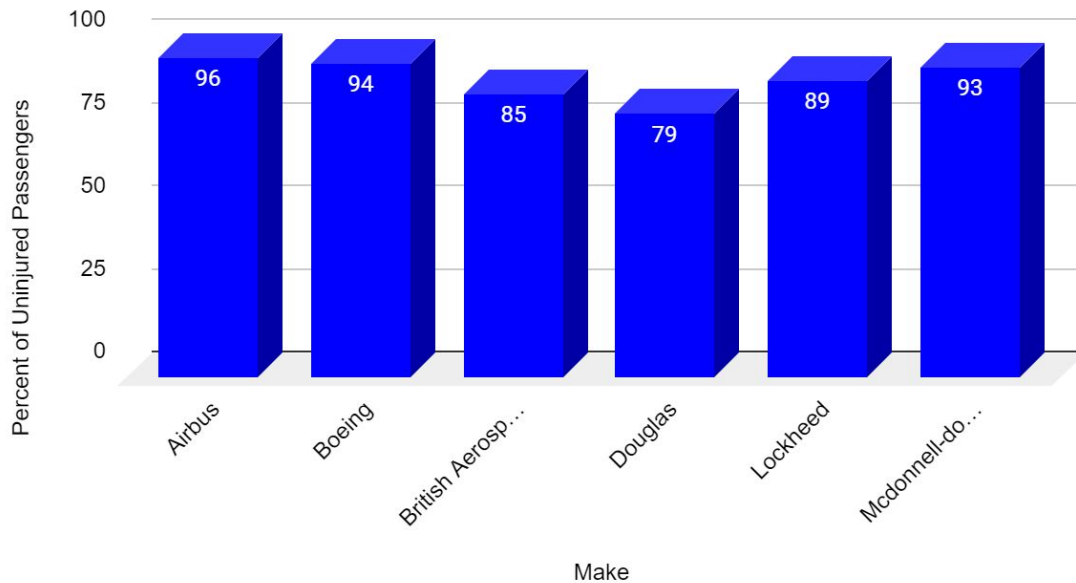




# Injuries by Make



**Percent of Uninjured Passengers vs. Make**





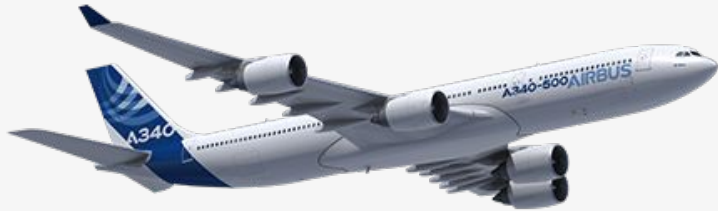
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# Recommendations

Which model should you sell?

# Airbus

- A-340
  - 1,366 passengers involved in accidents
    - 96% Uninjured



- A 380
  - 576 passengers involved in accidents
    - 0 injuries





# 05

## Next Steps

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# Next Steps

- Model data from airplanes that aren't in accidents
- Model Pilot Data
- Model Accident Data to determine ways to reduce risk for all airplane models



# Thank You



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