



# **Aircraft Safety Analysis for Business Expansion**

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HELLEN DIANA NJERI MACHARIA

# OVERVIEW

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**As a strategic plan to diversify its portfolio, our company plans to enter the aviation industry by purchasing and operating airplanes for commercial and private enterprises.**

**However, the company currently lacks knowledge regarding the potential risks associated with different types of aircraft.**

**This project aims to provide a data-driven evaluation of various aircrafts to guide the company in making informed purchasing decisions.**

# BUSINESS UNDERSTANDING

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## GOALS

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# GOALS

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Identify aircraft with the best safety, cost-efficiency, and performance.

Evaluate risks based on accident history, maintenance, and manufacturer reliability.

Recommend aircraft suited to the company's operational strategy.

# DATA UNDERSTANDING

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MENTION THE DATASET USED

KEY COLUMNS

EXPLAIN

# KEY COLUMNS

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The following columns are key to assessing the aircraft's safety and risk:

- Total.Fatal.Injuries: The number of fatalities in the accident.
- Total.Serious.Injuries: The number of serious injuries in the accident.
- Total.Minor.Injuries: The number of minor injuries in the accident.
- Aircraft.damage: The extent of damage to the aircraft (e.g., Substantial, Destroyed).

# KEY COLUMNS CONT

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- Make: The manufacturer of the aircraft.
- Model: The specific model of the aircraft.
- Engine.Type: The type of engine (e.g., Turbofan, Piston).
- Broad.Phase.of.flight: The different stages during which the aviation accident occurred(e.g cruise,landing)

# DATA ANALYSIS

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GRAPH 1



# GRAPH 3

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# GRAPH 2

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# RECOMMENDATIONS

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# THANKYOU

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QUESTIONS?