Aviation Debut Feasibility Analysis

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Overview

Objective: Provide an analysis to identify the lowest risk aircraft for new business expansion in aviation.

Scope: Evaluate safety records, and accidents records.

Methodology: Data collection, analysis, and synthesis of key factors influencing aircraft risk.

The business

Industry Context: Growing demand in the aviation sector for both commercial and private aircraft.

Business Goal: Diversify the company's portfolio by entering the aviation market with minimal risk.

Decision Criteria: Safety, regulatory compliance, reliability, destinations.

The Data

The data was collected from NTSB. This is a body that works to regulate and oversee aviation safety.

Data Understanding

Data Sources: National Transport Safety Board(NTSB)

Data Types: Historical safety records, investigation records, weather conditions, injury severity, etc.

Data Analysis

This process included cleaning, reshaping and structuring the data.

Recommendations

Cessna:

- Strengths: Reliable safety record, strong regulatory compliance, high market demand.
- Use Case: Suitable for both commercial and private operations.

Piper:

- Strengths: Solid safety performance, low operating costs, good regulatory compliance, strong regional market demand.
- Use Case: Ideal for regional operations.

Next Steps

Detailed Cost-Benefit Analysis: Conduct a thorough financial analysis of the recommended aircraft models.

Stakeholder Engagement: Present findings and recommendations to key stakeholders for feedback and approval.

Vendor Negotiations: Initiate discussions with manufacturers for potential procurement.

Regulatory Review: Ensure all regulatory requirements are met for the selected aircraft.

Implementation Plan: Develop a comprehensive plan for acquisition, training, and integration into operations.