Phase 1 Project: Aviation Accident Analysis

By [Your Name]

Overview

- Goal: Identify safer aircraft options for company’s new aviation venture.
- Dataset: NTSB aviation accident data (1962–2023).

Business Problem

- The company lacks insights into aircraft safety risks.
- We need data-driven recommendations on which aircraft types are safest.

Data Overview

- - Aircraft make & model
- - Accident dates
- - Fatal, serious, and minor injuries
- - Accident locations

Key Finding 1: Accident Counts

- Visualization: Top 10 Aircraft Makes by Accident Frequency

- Insight: A few makes dominate accident history.

Key Finding 2: Fatalities Over Time

- Visualization: Line Chart of Fatalities by Year

- Insight: Fatalities peaked in earlier decades but declined in recent years.

Key Finding 3: Injury Distribution

- Visualization: Pie/Bar Chart of Injury Types

- Insight: Non-fatal injuries are far more common than fatalities.

Recommendations

- 1. Prioritize modern aircraft with stronger safety records.
- 2. Avoid makes/models with consistently high fatal accident ratios.
- 3. Invest in pilot training and preventive maintenance.

Next Steps

- - Explore accident patterns by region and weather.
- - Adjust comparisons using aircraft flight usage data.
- - Build a real-time safety monitoring dashboard.

Thank You / Q&A

- Contact: [Your Name] • [Your Email or LinkedIn]