

The background of the slide is a dark navy blue. On the left side, there is a large, semi-transparent circular graphic that resembles a magnifying glass. Inside the lens of the magnifying glass is a detailed image of an electronic circuit board, likely a flight data recorder or a similar aviation-related component. In the top-left corner, there are two overlapping geometric shapes: a blue parallelogram and a light green parallelogram. In the top-right corner, there is a faint, grey, 3D-rendered pattern of interlocking cubes or a circuit board layout. The title "Aviation Dataset Analysis" is written in a clean, white, sans-serif font, centered on the right side of the slide.

Aviation Dataset Analysis



Overview

The aim of this project is to identify low risk aircraft for the company's expansion into commercial and private aviation, helping the company make informed decisions.



Business Problem

- 01 The company is seeking to diversify its investment portfolio by expanding into the aviation industry.
- 02 The company lacks aviation specific expertise, increasing the risk of aircraft selection and operational decisions.
- 03 The company must determine which aircraft types and manufacturers present the lowest risk for initial market entry.



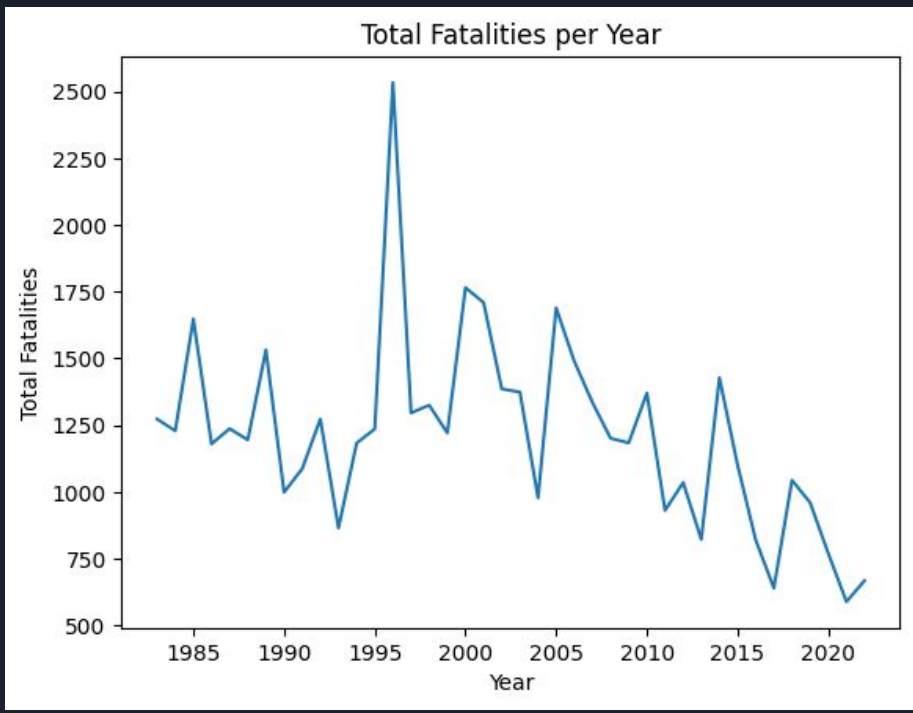
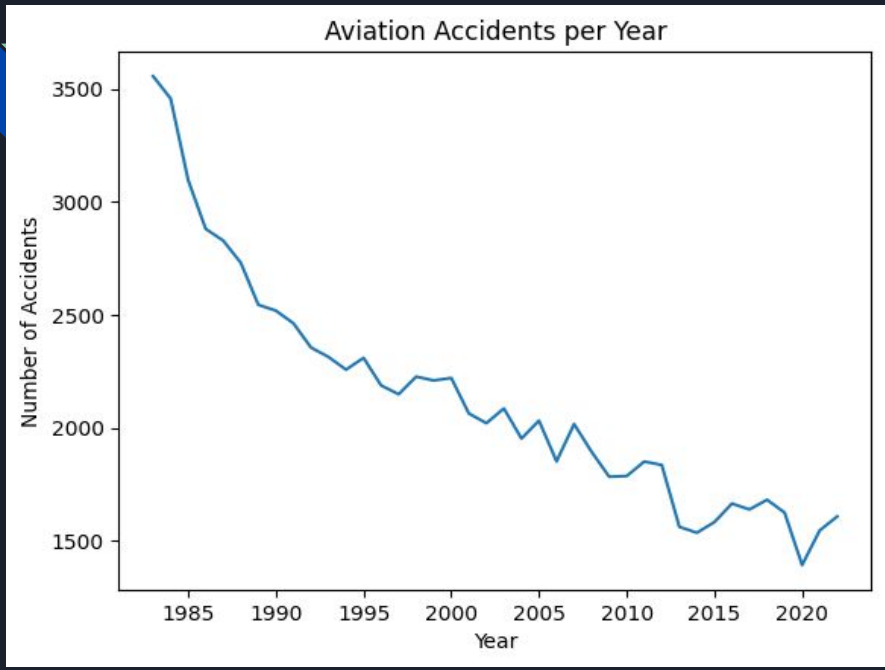
Data Understanding

This dataset is a record of global aviation safety, typically focusing on commercial and civil aircraft accidents. It generally captures critical attributes such as date, geographical location, make and model and many more factors.

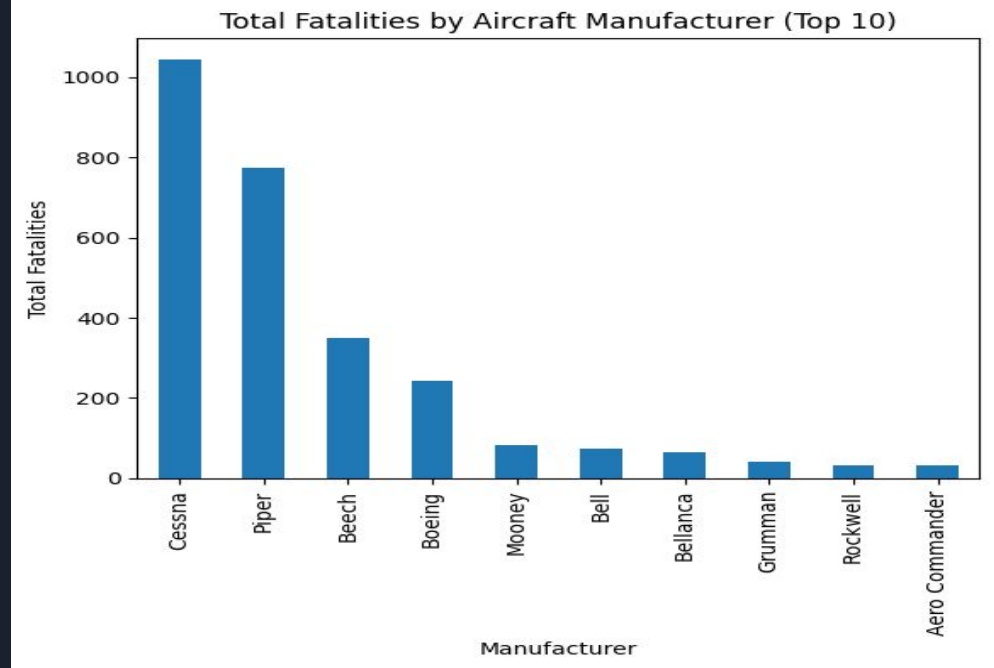
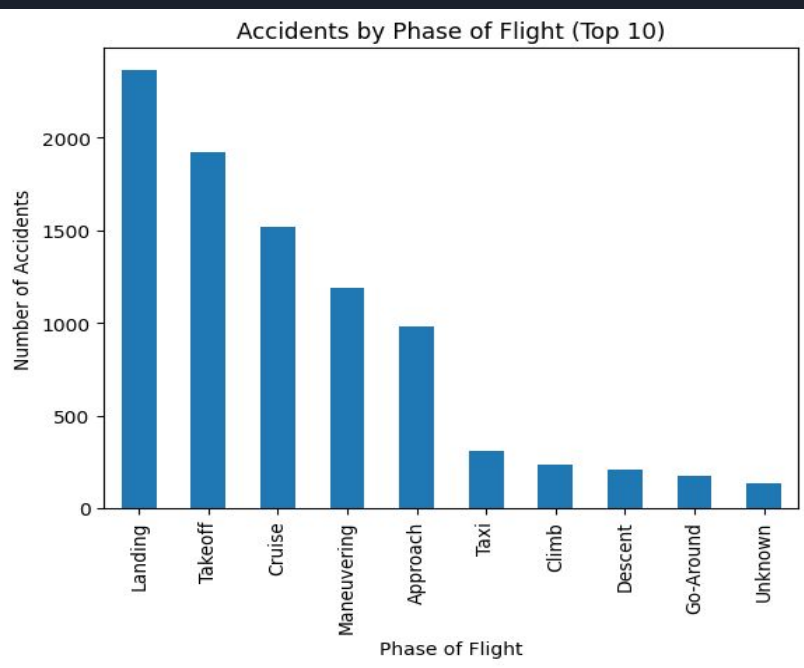


Data Analysis

The analysis of the aviation dataset provides critical insights into the risk profile of aircraft operations, enabling the company to make informed, data-driven decisions as it considers entry into the aviation industry.



1. Aviation Safety improves over time.
2. Total aviation fatalities peak in the mid to late 1990's, from 1995-2000's



1. Landing, takeoff and approach dominate.
2. Cessna single engine planes are responsible for 30% of all the accidents.



Recommendations

1. Accidents counts have generally declined over time, indicating improved industry safety and regulations.
2. Purchase aircraft known for stable low-speed handling and stable landing performance.
3. Avoid high-capacity and high-speed aircraft in early operations.
4. Invest heavily in pilot training, standard operating procedures and human factor controls.
5. Purchase aircraft from widely used makes with strong global support networks.



THANK YOU FOR YOUR ATTENTION

Aviation Dataset Analysis

BY David Ndung'u