The tragedy of flight: A comprehensive crash analysis

1. Introduction

1.1 Overview

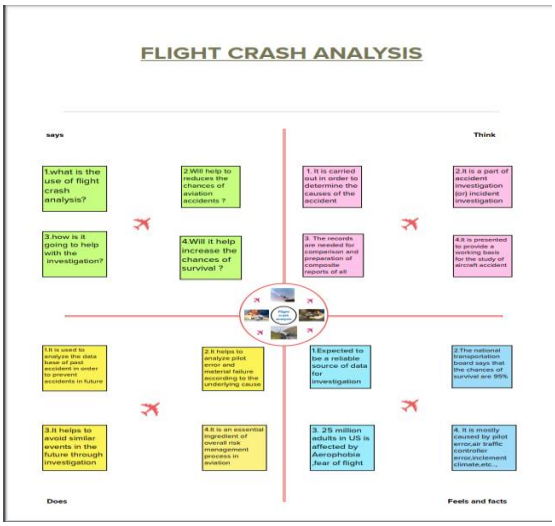
A flight crash analysis is a process of investigating and determining the cause of an aviation accident or incident involving an aircraft. It involves a thorough examination of the circumstances surrounding the event, including the flight crew's actions, the aircraft mechanics and systems, weather conditions, and other factors that may contributed to the crash.

1.2 Purpose

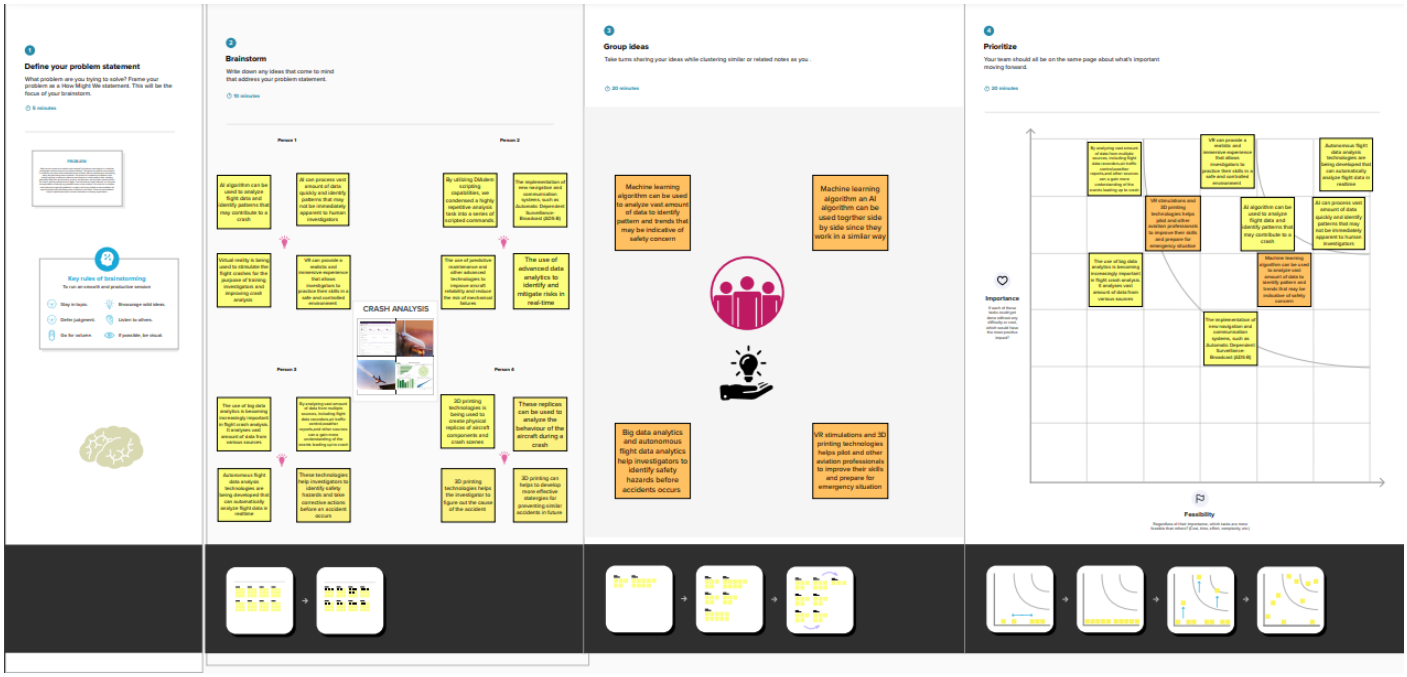
The purpose of flight crash analysis is to determine the cause of an aviation accident and to identify measures to prevent similar accidents from happening in the future.

2. Problem Definition & Design Thinking

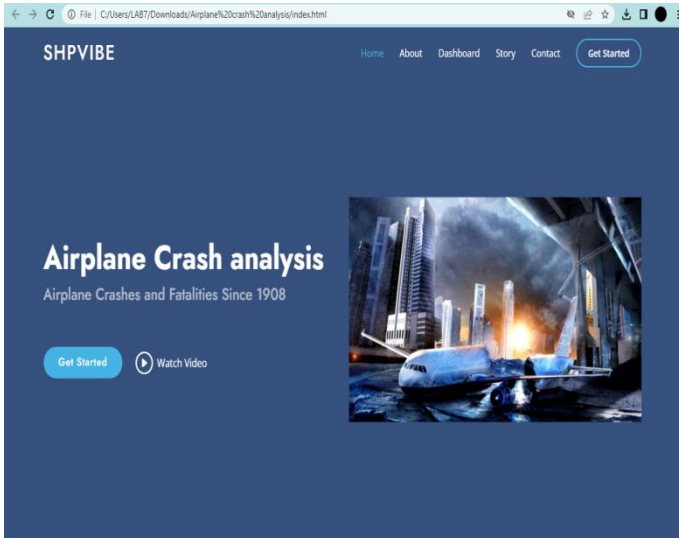
2.1 Empathy Map

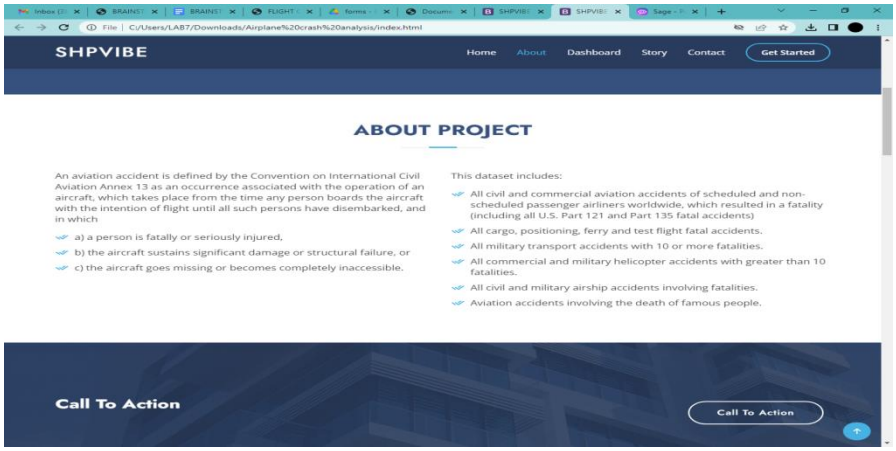


2.2 Ideation & Brainstrom Map



3. Result

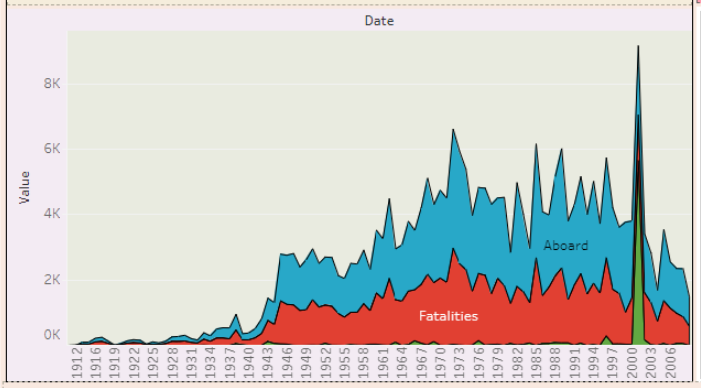




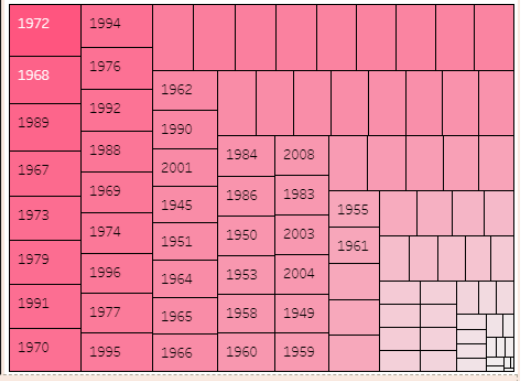
AIRPLANE CRASH ANALYSIS

Next

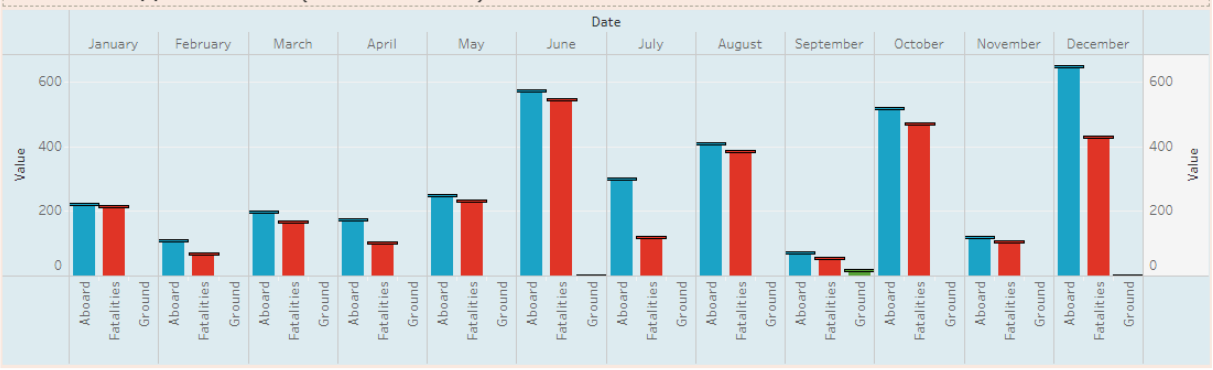
Comparison of Aboard Vs Fatalities Vs Ground



Maximum accidents based on the years



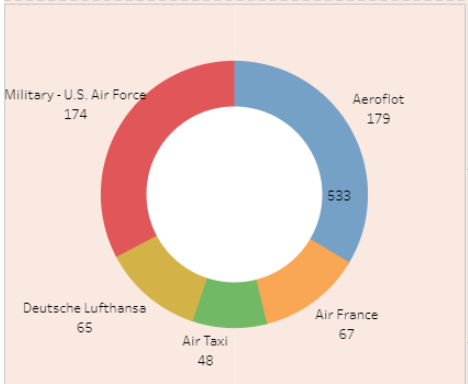
Accidents happened in 1972(MAX ACCIDENTS)based on the months



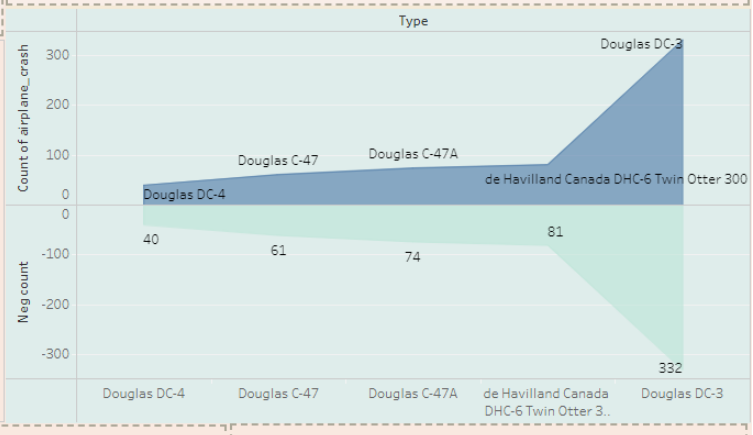
AIRPLANE CRASH ANALYSIS

Previous

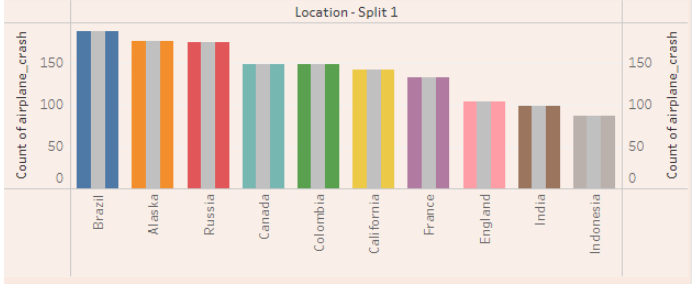
Highest No . of accident happened by operators



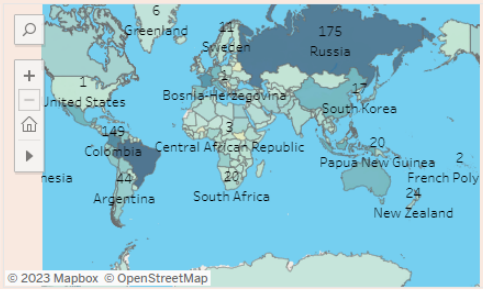
Top 3 flights which have max accident history



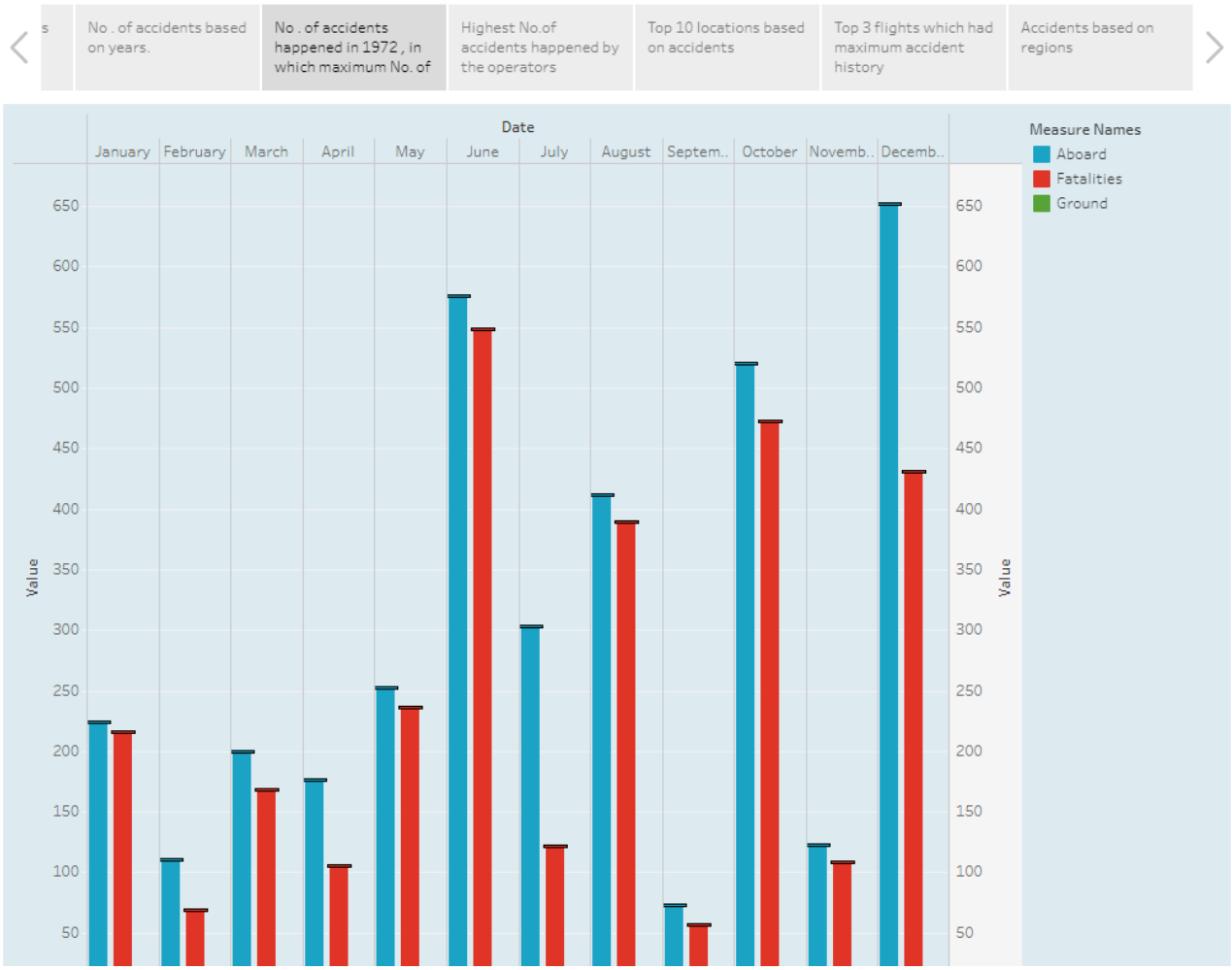
Top 10 locations which had more accidents



Accidents based on regions



Story about the flight crash analysis



4. Advantages & Disadvantages

Advantages:

1. Identifying the cause of the accident.
2. Improving the safety measures.
3. Enhancing technology in maintenance procedure.
4. Provides Information and evidence for legal purpose.
5. Used to improve training programs for aviation professionals

Disadvantages:

1. Time consuming and expensive.
2. Limited data and resources.
3. Human errors.
4. Political pressure leading to biased (or) incomplete findings.
5. Legal implications.

5. Applications

1. Aviation accident analysis is performed to determine the cause of errors once an accident has happened. In the modern aviation industry, it is also used to analyze a database of past accidents in order to prevent an accident from happening.
2. Aircraft accident investigation involves the collection and analysis of various data in order to draw conclusions and make safety recommendations that will prevent aircraft accidents caused by similar causes in the future. Therefore, a properly conducted investigation is a key to prevent future accidents.

6. Conclusion

In the end the cause of the accidents might be of various reasons such as human error, mechanical failure , fuel problem, pilot incapacitation, air traffic control error etc..,

7. Future scope

The future scope of flight crash analysis is likely to involve advancements in technology and data analytics techniques such as AI, machine learning, Augmented reality etc..,

8. Appendix

1. https://public.tableau.com/views/dashboard_1_16830059915750/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

2. https://public.tableau.com/shared/9R59QHCZP?:display_count=n&:origin=viz_share_link
3. file:///C:/Users/friends/Downloads/Airplane%20crash%20analysis/index.html
4. https://public.tableau.com