

# **TRAGEDY OF FLIGHT: A COMPREHENSIVE CRASH ANALYSIS**

## **1.INTRODUCTION:**

### **1.1 Overview**

Paying high attention to civil aviation accidents the public easily lose confidence in civil aviation transportation, thus seriously restricting the development of civil aviation. Therefore it is necessary to make indepth research for improvement of the safety skill of airlines and reduction of the probability of aviation accidents.

When managing civil aviation safety, officers should obtain accurate prediction data and forecast the future safety state so as maintenance and mechanical fault, unexpected factors mainly involve severe weather and bird strike. Due to the involvement of the dynamic system of various information it is impossible to give expression with a simple data model.

### **1.2 Purpose**

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. Many models have been used not only for the accident investigation but also for educational purposes.

## **2 Problem defining and design thinking**

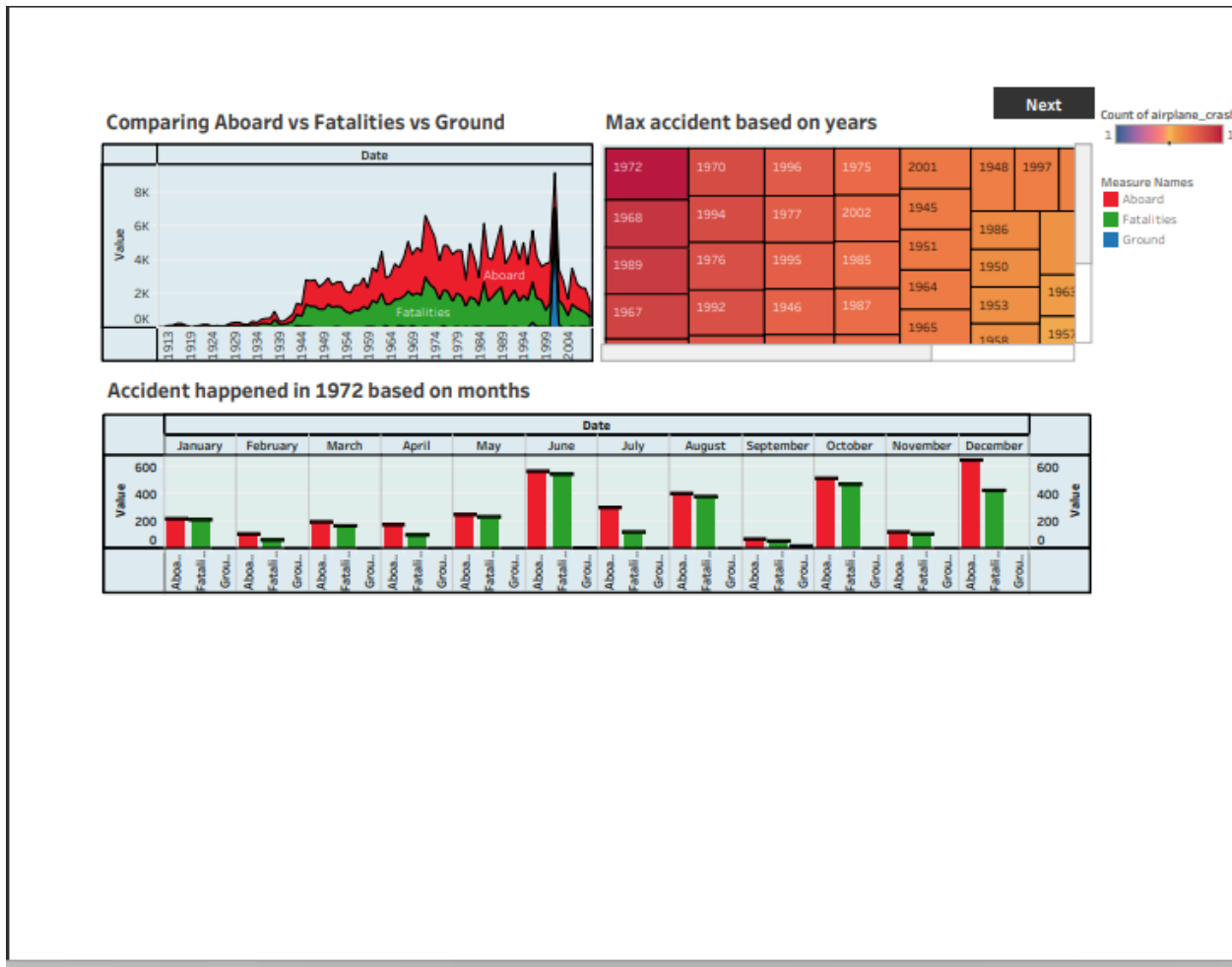
### **2.1 Empathy map**

The empathy map is given below:



3 Result

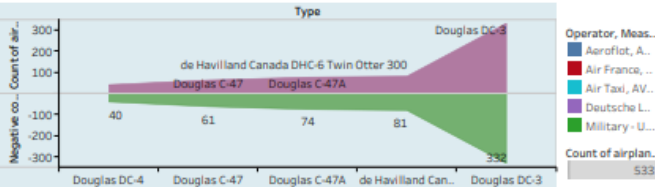
Dashboard and story:



Highest Number of accident happened by Operators

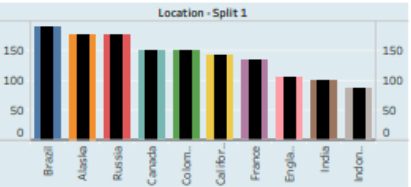


Top 3 flights which have max accident history



Previous

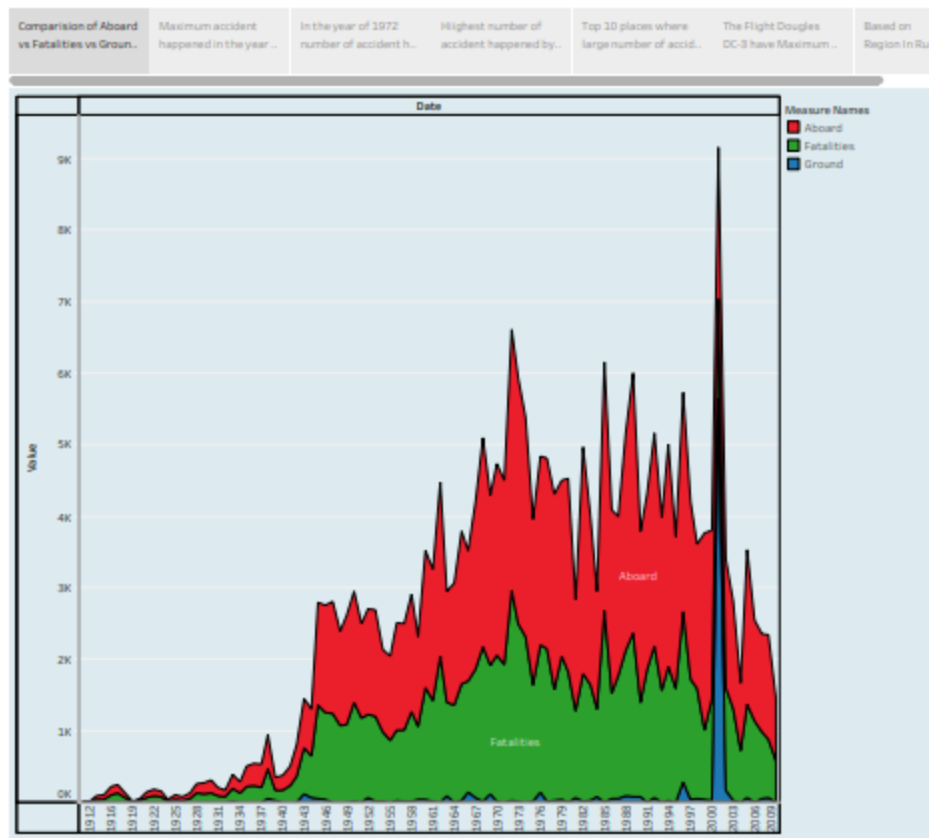
Top 10 Location which had more accidents



Accidents based on regions



## Story 1



## 4 Advantages

- To effectively discover the hazards that led to the accident.
- Once the cause of the accident is determined, corrective action can be taken to prevent the same.
- Prevent human injury or loss of life.
- Avoid damages to the environment and to property.
- Understanding the events that led up to an accident can help to determine the cause.

## Disadvantages

- Destroys the land during plane crashes.
- Destroy the name of the flight companies.
- It causes loss of lives.

## **5 Application**

To effectively discover the hazards that led to the accident and to prevent their recurrence in a future accident or incident.

Give more information about the flight companies to people.

This application applied to the flight which has more crash records.

Helps to improve safety measures of flight.

## **6 Conclusion**

The constant maintenance and repair of aircraft may seem like a trivial job but they can prove to be fatal if not done properly. The case of this accident is the combination of several factors, inadequate training. Situational awareness, environmental and crew coordination factors, skills and experience also cause accidents.

## **7 Future scope**

Enhancement that can be made in future.

A recent report suggested that hydrogen-powered planes could enter the market as soon as 2023 and those planes could carry hundreds more passengers per flight than traditional planes with clean energy source.

Demand for air transport will increase by an average of 4.3% per annum over the next few years.

Train employees to use hazard reporting systems.

## **8 Appendix**

### **A. Source code**

**`file:///C:/Users/alhaj/OneDrive/Desktop/startup_analysis/Airplane%20crash%20analysis/index.html`**