PROJECT REPORT TEMPLATE

THE TRAGEDY OF FLIGHT : A COMPREHENSIVE CRASH ANALYSIS

1. INTRODUCTION:

1.1 OVERVIEW:

An airplane crash analysis is detailed investigation into the causes of an aviation accident. The goal of an airplane analysis is to identify any factor that contributed to the accident, with the ultimate goal of improving safety and preventing future accidents. The process of conducting an airplane crash analysis typically involves the collections an analysis of a wide range of a data, including information about the aircraft and its systems, the operators, and anyother revalant factor. This data is typically collected from kaggle. Once the data has been collected, it is analysed through tableau, to identify any potential causes of the accident. The results of an airplane crash analysis are typically published in report, which may included recommendations for improving safety and preventing similar accidents in the future. These recommendations may be implemented by the relevant authorities or industry organizations.

1.2 PURPOSE:

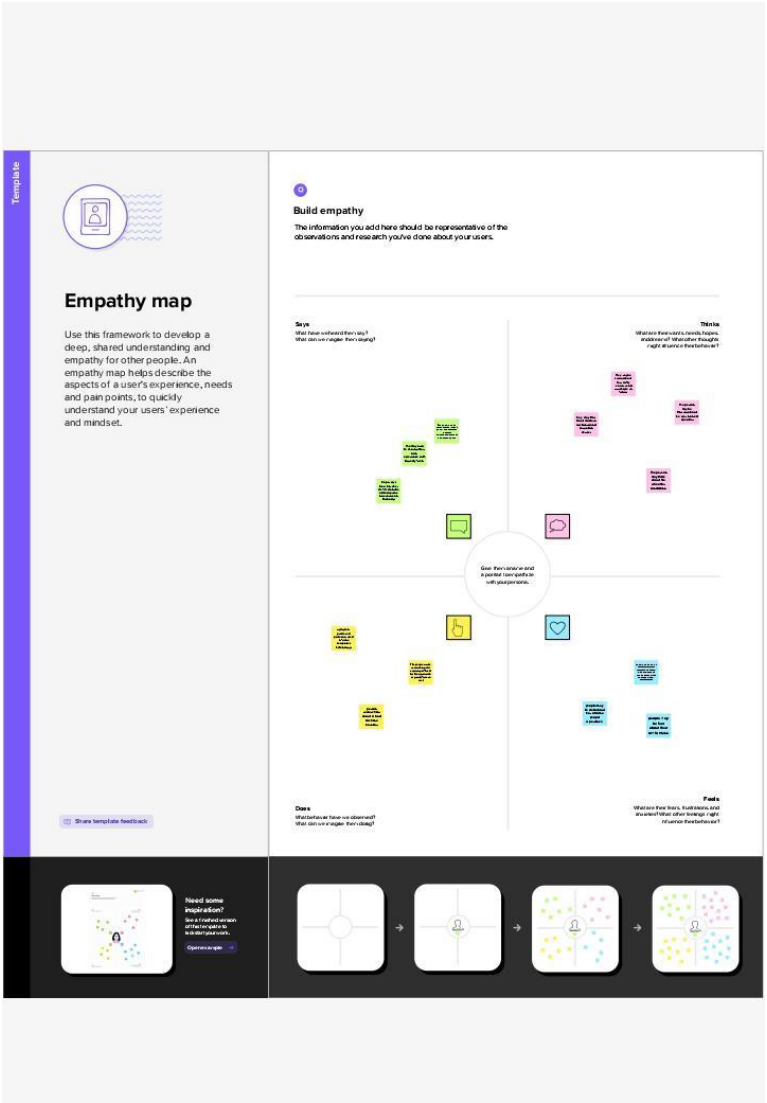
To effectively discovery the hazards that led to the accident and to prevent their recurrence in a future accident. The purpose is to analyse the recorded flight data to improve the safety of flight operations.

The analysis can provide closure to the families and loved ones of the victims of the crash, as well as to broader public. It can also help to improve public confidence in the aviation industry by identifying and addressing any safety issues that may have contributed to the incident.

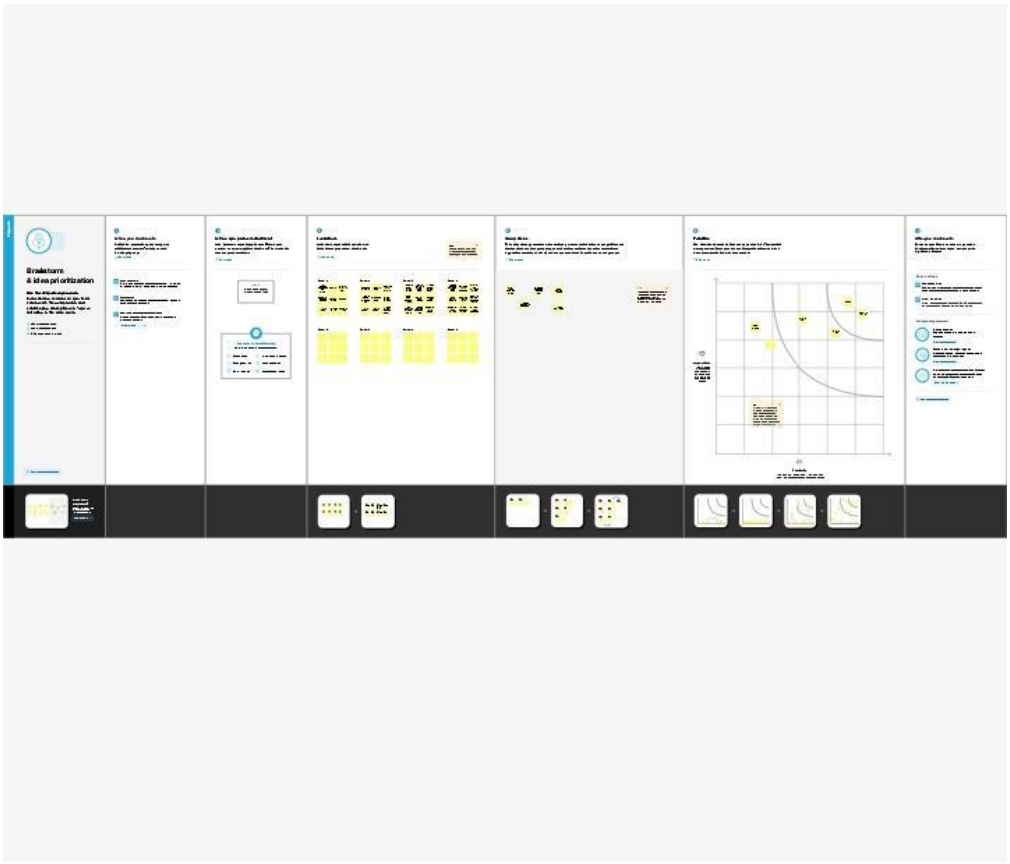
The analysis can have significant business implications for the airline and aircraft manufacturer involved in the accidents.

2. PROBLEM DEFINITION & DESIGN THINKING:

2.1 EMPATHY MAP:

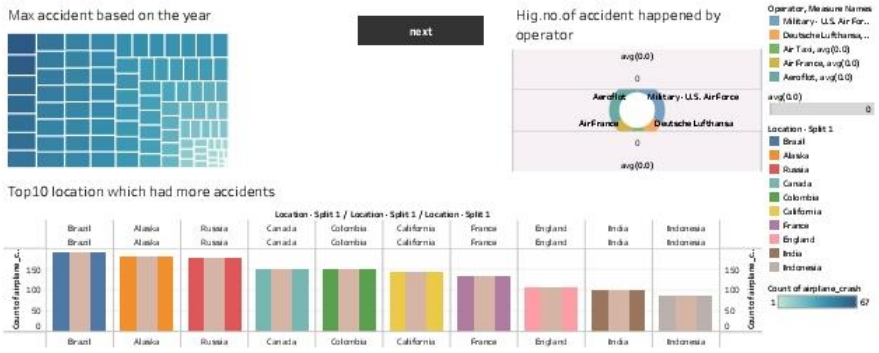


2.2 IDEATION &BRAINSTROMING MAP:

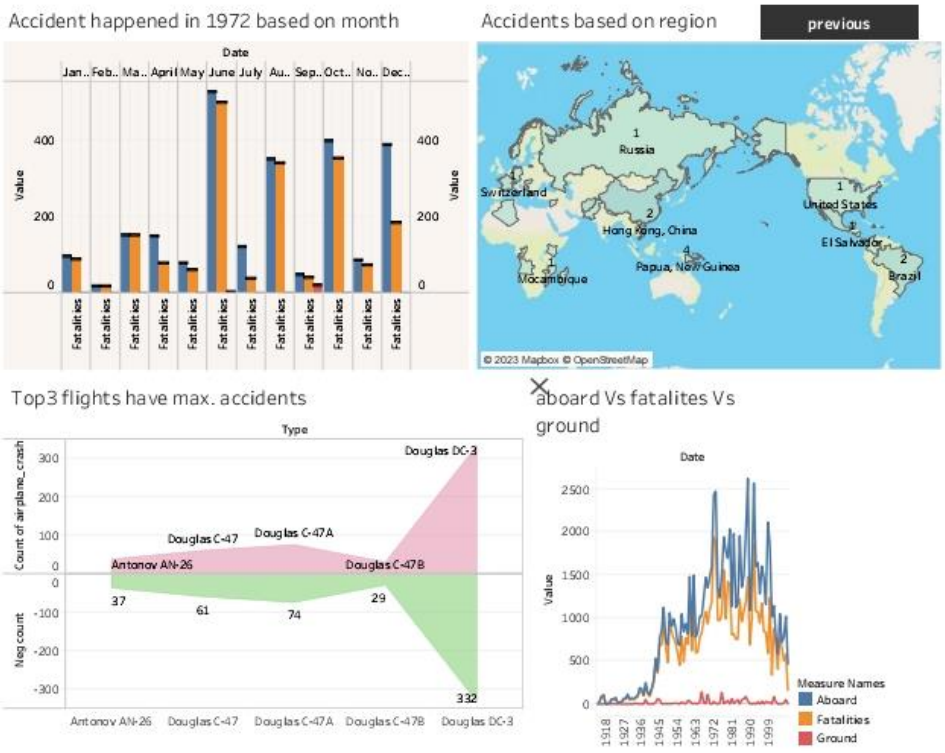


3. RESULT:

DASHBOARD 1



DASHBOARD 2


Accident happened in 1972 based on month
Date
Jan.. Feb.. Ma.. April May June July Au.. Sep.. Oct.. No.. Dec..
Value
400
200
0
Fatalities
Accidents based on region
previous
1 Russia
1 Switzerland
2 Hong Kong, China
4 Papua, New Guinea
1 Mocambique
1 United States
1 El Salvador
2 Brazil
© 2023 Mapbox © OpenStreetMap
Top3 flights have max. accidents
Type
Count of airplane_crash
Neg count
Douglas DC-3
Douglas C-47
Douglas C-47A
Antonov AN-26
Douglas C-47B
37
61
74
29
332
Aboard Vs fatalites Vs ground
Date
Value
2500
2000
1500
1000
500
0
1918 1927 1936 1945 1954 1963 1972 1981 1990 1999
Measure Names
Aboard
Fatalities
Ground

STORY


Story 1
Comparing Aboard vs Fatalities vs grounde..
No.of accident based on years
No.of accidents happened in the year ..
No.of accidents happened by the oper..
Top 10 location based on accident.
Top 3 flight which has more accident.
Accident based on re..
Count of airplane_crash
1
67
1972
1979
1995
1951
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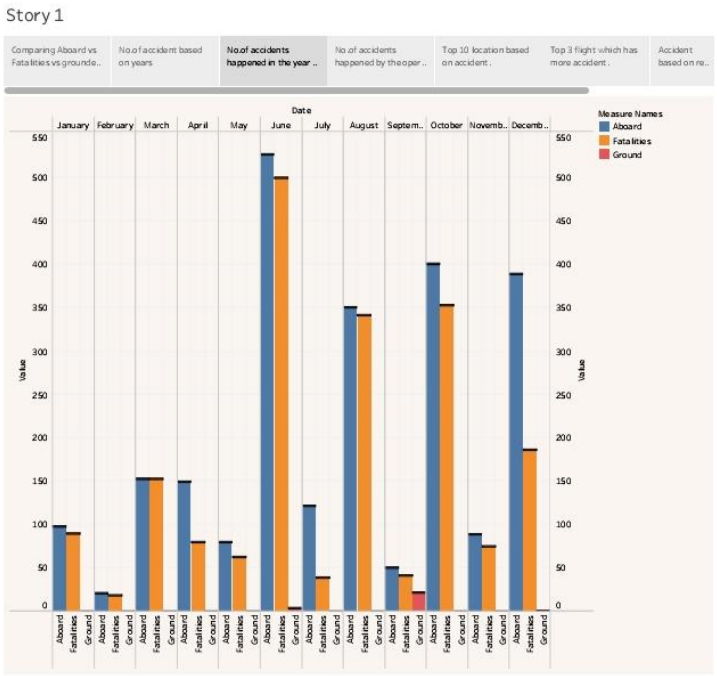
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February
March
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Septem..
October
Novemb..
Decemb..
Measure Names
Aboard
Fatalities
Ground
Value
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500
450
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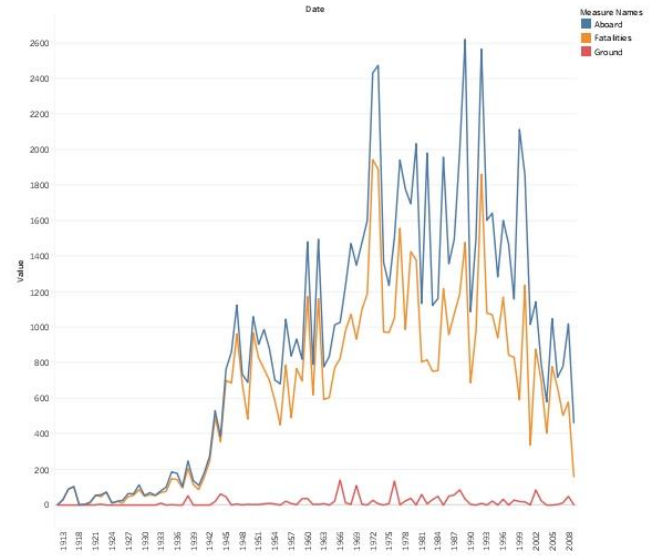
300
250
200
150
100
50
0

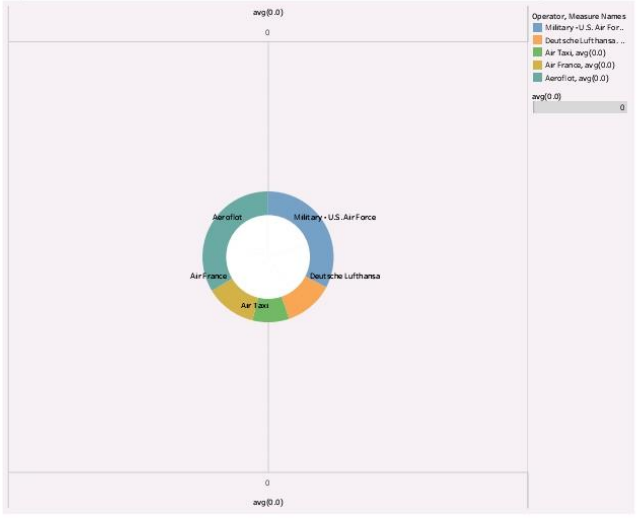
Story 1

Comparing Aboard vs Fatalities vs grounde.. | No.of accident based on years | No.of accidents happened in the year .. | No.of accidents happened by the oper.. | Top 10 location based on accident. | Top 3 flight which has more accident. | Accident based on re..

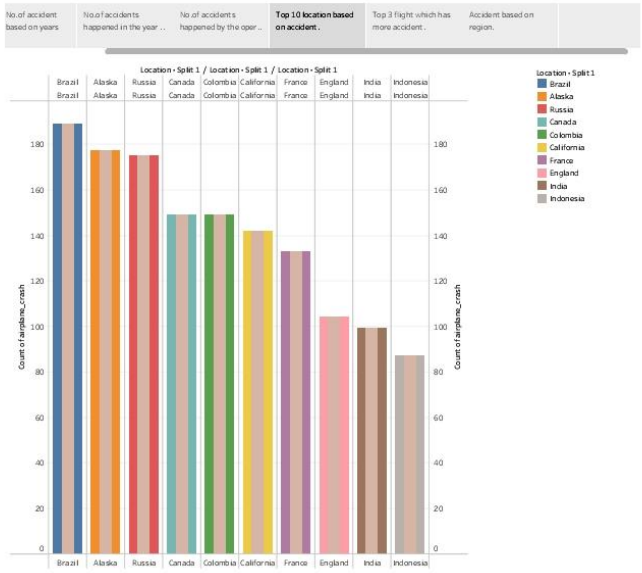


Story 1

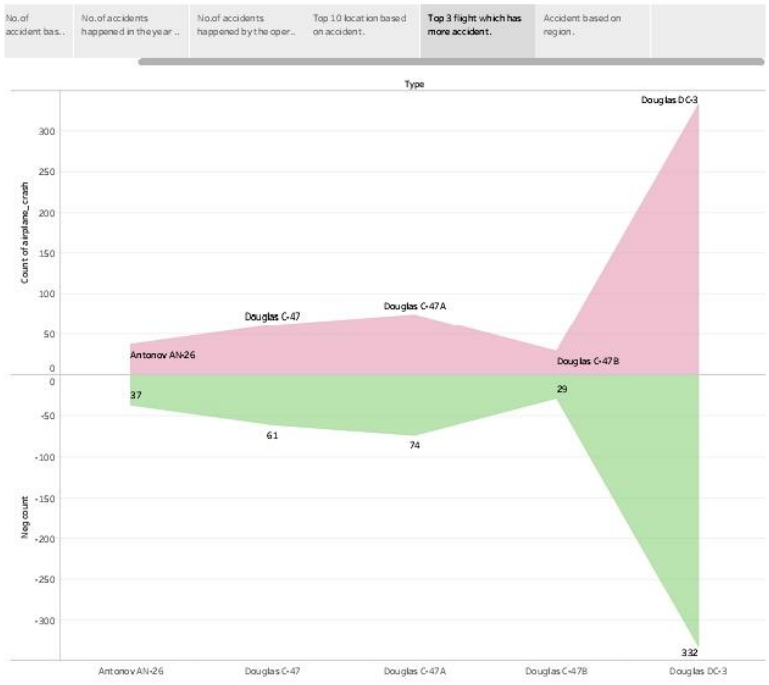
Comparing Aboard vs Fatali.. | No.of accident based on years | No.of accidents happened in the year .. | No.of accidents happened by the oper.. | Top 10 location based on accident. | Top 3 flight which has more accident. | Accident based on region.

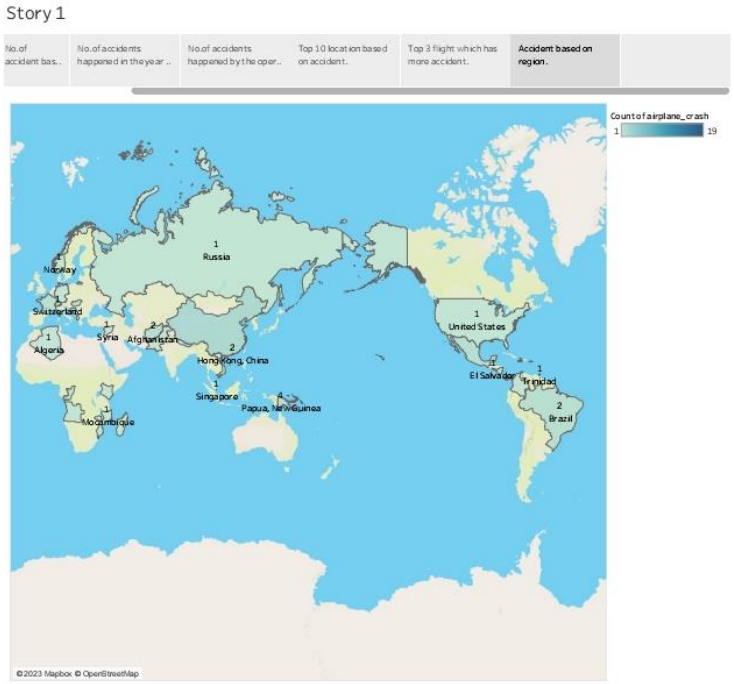


Story 1



Story 1





4. ADVANTAGES & DISADVANTAGES:

ADVANTAGES:

- Fast Speed
- Rapid Service
- Low Infrastructure
- No Physical Barrier
- Defence Service
- Security

DISADVANTAGES:

- Costly Service
- Limited Capacity
- Accident Prone
- Requires Skill
- Unfit for cheap & bulky goods
- Undependable & Risky

5. APPLICATIONS:

- Fly on nonstop routings
- Choose large aircraft
- Pay attention to the preflight briefing
- Avoid flying in the areas where there is a high risk of bird strikes
- Listen to the flight attendants
- Keep your seatbelt fastened while you are seated

6. CONCLUSION:

The report features the increase in accident involving private small aircraft and gliders. Accidents are often caused by pilots who have certain flight experience. Also, the accidents are caused due to weather conditions. The increase in flight length also contributes to explain the drop in number of plane crashes. Since accidents mainly occur during the takeoff and landing phases.

Finally, the introduction of regulation and checks by authorities and growing experience of aircraft manufacturers all contribute to the safety of the air transport.

However, what with a growing number of aircraft now operating, even though the rate of accident per flight may drop slightly, the actual number of accidents will increase. Since aircraft carry and ever increasing number of people, the number of onboard fatalities will per force rise too.

"AVIATION ACCIDENTS ARE CHAIN OF EVENTS THAT ALMOST ALWAYS INVOLVE AN ELEMENT OF HUMAN ERROR,"

- DOWNEY says

7. FUTURE SCOPE:

"In 20 years' time we may see more fundamental changes in aviation technologies driven by economic and environmental concerns of fossil fuels...,"

Many of the new technologies have helped improve safety such as instrumentation display and fly-by-wire systems.

In the meantime, the aviation industry continues to innovate, most recently with the introduction of composite materials and the increasing use of digital technology and electronics.

The improvement in airline safety is down to combination of a several factors, although the introduction of the jet engine in 1950's stands out as a major development.