THE TRAGEDY OF FLIGHT: A COMPREHENSIVE CRASH ANALYSIS

PROJECT DESCRIPTION

An airplane crash analysis is a detailed investigation into the causes of an aviation accident. The goal of an airplane crash analysis is to identify any factors 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 collection and analysis of a wide range of data, including information about the aircraft and its systems, the operators, and any other relevant factors. 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 a report, which may include recommendations for improving safety and preventing similar accidents in the future. These recommendations may be implemented by the relevant authorities or industry organizations.

MAJOR DISASTERS

The first aircraft accident in which 200 or more people died occurred on March 3, 1974, when 346 died in the crash of <u>Turkish Airlines Flight 981</u>. As of April 2020, there have been 33 aviation incidents in which 200 or more people died. The aircraft, registered TC-JAV, was a <u>McDonnell Douglas DC-10</u> that crashed into <u>a forest</u> situated northeast of <u>Paris</u>. The London-bound plane crashed shortly after taking off from Orly airport; all 346 people on board died. It was later determined that the cargo door detached, which caused an explosive decompression; this caused the floor just above to collapse. The collapsed floor severed the control cables, which left the pilots without control of the

elevators, the rudder and No. 2 engine. The plane entered a steep dive and crashed. It was the deadliest plane crash of all time until the Tenerife disaster in 1977. [5] It is currently the deadliest single-aircraft crash with no survivors.

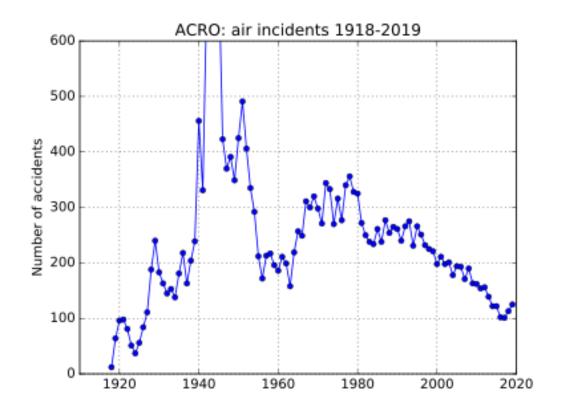
The top 10 countries with the highest number of fatal civil airliner accidents from 1945 to 2021 are the United States, Russia, Canada, Brazil, Colombia, United Kingdom, France, Indonesia, Mexico, and India. [6] The United Kingdom is noted to have the highest number of air crashes in Europe, with a total of 110 air crashes within the time period, and Indonesia is the highest in Asia at 104, followed by India at 95.

The largest loss of life on board a single-aircraft is the 520 fatalities in the 1985 <u>Japan</u>

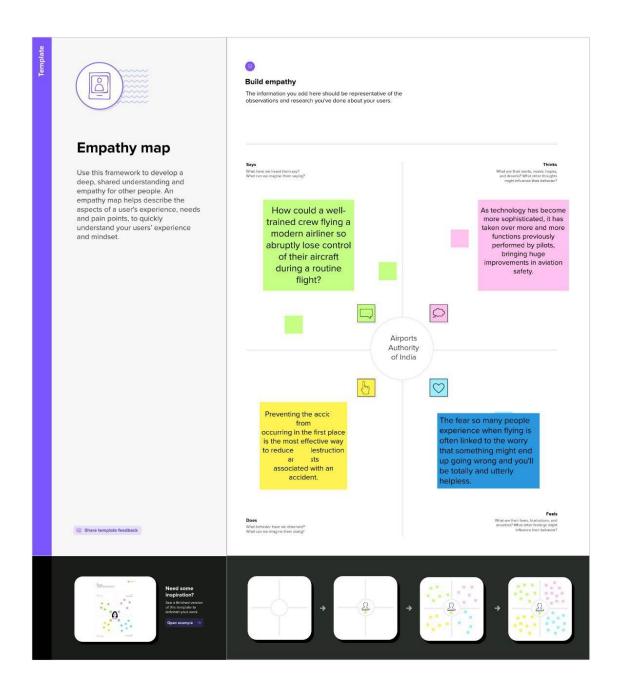
<u>Airlines Flight 123</u> accident, the largest loss of life in multiple aircraft in a single accident is the 583 fatalities in the two Boeing 747's that collided in the 1977 <u>Tenerife airport</u>

<u>disaster</u>, while the largest loss of life overall in a collective incident is the 2,996 fatalities in the coordinated terrorist destruction of airplanes and occupied buildings in the 2001 <u>September 11 attacks</u>.

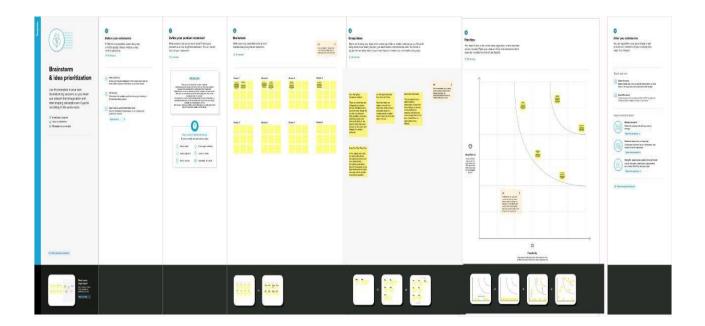
STATISTICS



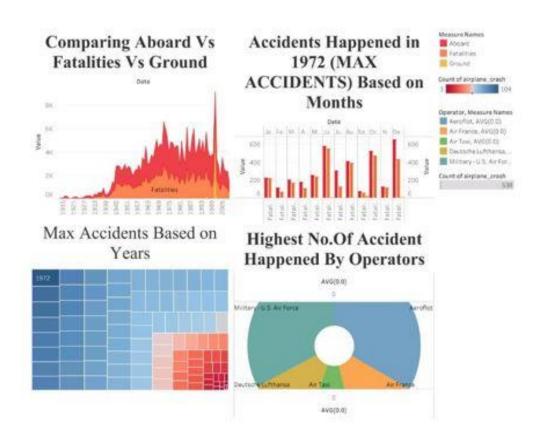
EMPATHY MAPPING



BRAINSTORMING

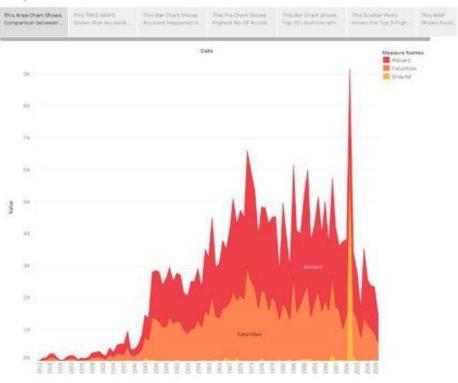


DASHBOARD



STORY

Story 1



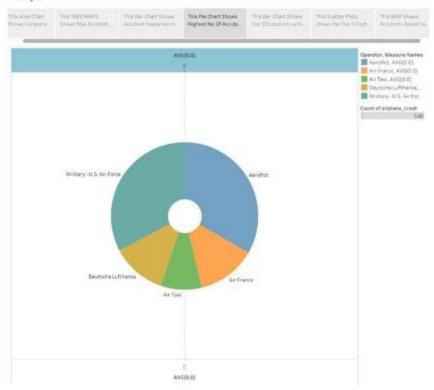
Story 1



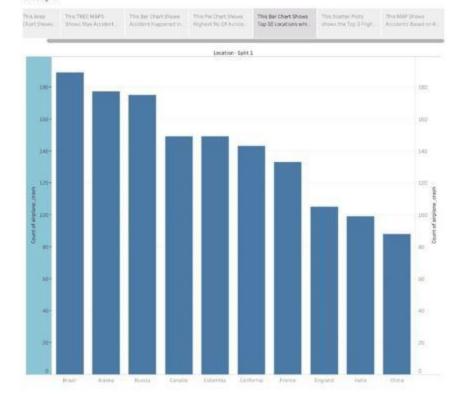
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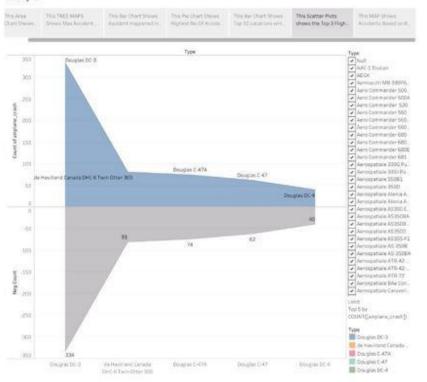
Story 1



Story 1



Story 1





IMPORTANCE OF AIRCRAFT ACCIDENT INVESTIGATION

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.

INVESTIGATE AN AIRCRAFT INVESTIGATION

The investigation should include the gathering, recording and analysis of all available information; the issuance of safety recommendations, if appropriate; the determination of the causes, if possible; and the completion of a final report.

REASONS FOR PLANE CRASH

Aviation accidents can be traced to a variety of causes, including pilot error, air traffic controller error, design and manufacturer defects, maintenance failures, sabotage, or inclement weather.

DUE TO BAD CONDITIONS

Bad conditions has always been a problem for pilots and sometimes results in accidents. Though flights are cancelled before it takes palce. But that hasn't help so much for thm to reduce the plane crash.

DUE TO PILOT ERROR

Due to pilot's error large no, of accidents are caused. More than 50% of accidents are caused only due to pilots failure. It can pilot failure for the mechanical failure or weather related. Pilot fatigue has also been blamed for the crash. Or another is the sleepiness of the pilot that he sleep while sitting in an airplane.

DUE TO MECHANICAL FAILURE

Mechanical failure has always been a reason for plane crash. Sometimes it has been listened that the engine stop working or there is some failure in the plane. If these problems are identified while in a flight then there is no prevention and automatically leads to plane crash.

ADVANTAGES

- Fast delivery times. Undoubtedly, one of the most advantageous features offered by air transport is its speedy delivery times. ...
- No Physical Limits. ...
- Very reliable transportation. ...
- Long Distances. ...
- Higher Cost. ...
- Less storage capacity. ...
- Restrictions on goods.

DISADVANTAGES

- High Costs: Air transport is a costly service. Its operational costs are too high. ...
- More Risks: Air transport is prone to accidents. A small mistake can be very dangerous for passengers. Hijacking of planes is easily possible.
- Huge Investments:

CONCLUSION

How can we prevent plane crashes?

- 1. Improve Training for Pilots and Ground Workers.
- 2. Improve Communication Between The Crew and Air Traffic Control.
- 3. It is Important To Have Proper Maintenance.
- 4. Avoid Flying in Areas Where There is a High Risk of Bird Strikes.
- 5. Improve The Air Traffic Control System.
- 6. Train Ground Workers Properly.