

# TRAGEDY OF FLIGHT

## 1. INTRODUCTION:

**1. 1. OVERVIEW:** 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 system, the operators, and many other relevant factors. This data is typically collected from kaggle. Once the data has been collected, it is analysed through tableau, to identify and 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.

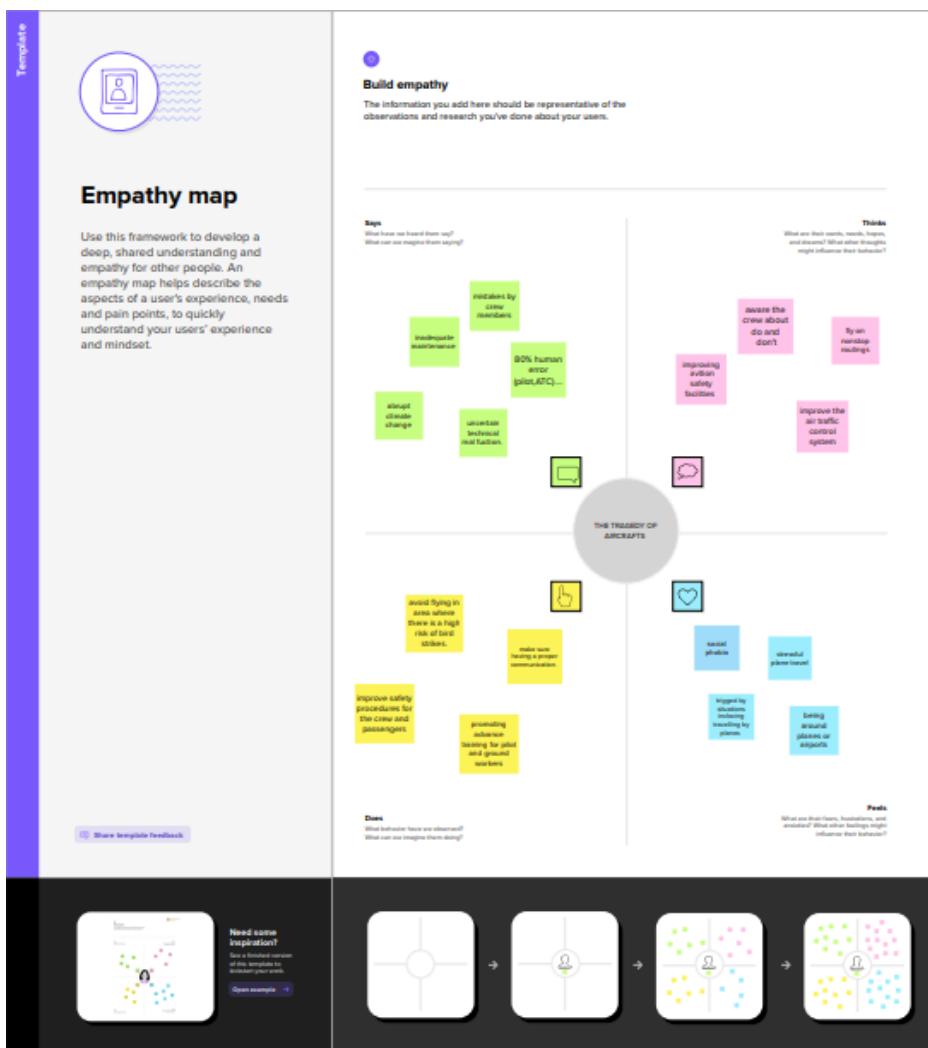
**1. 2. PURPOSE:** Tragedy is an imitation of action of incidents arousing pity and fear.

The purpose of tragedy is for the audience to have a cathartic experience.

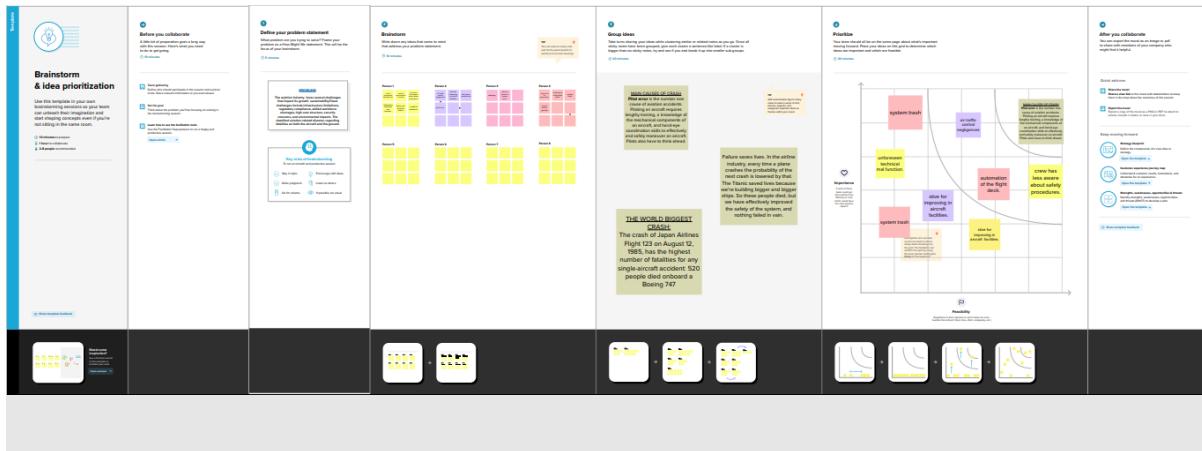
Tragedy is for the purpose of cleansing (catharsis) the emotions of pity and fear (pathos) in a safe setting.

## 2. PROBLEM DEFINITION AND DESIGN THINKING:

### 2. 1. EMPATHY MAP:

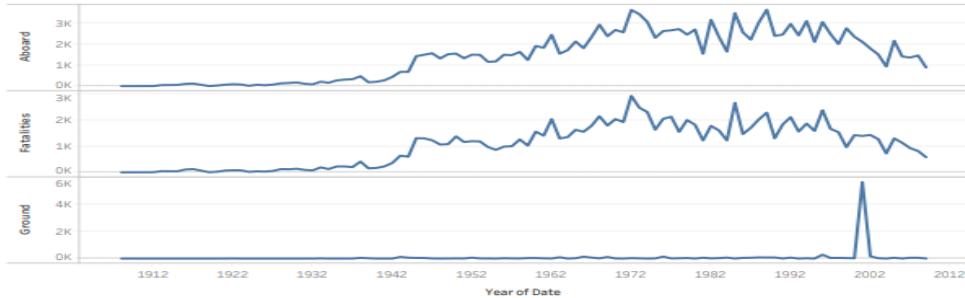


### 2. 2: IDENTATION AND BRAINSTROMING MAP:



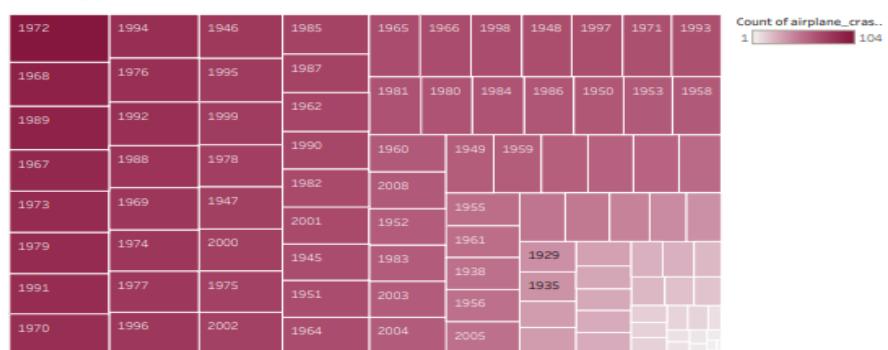
### 3. RESULT:

COM:AB\FAC\GRO



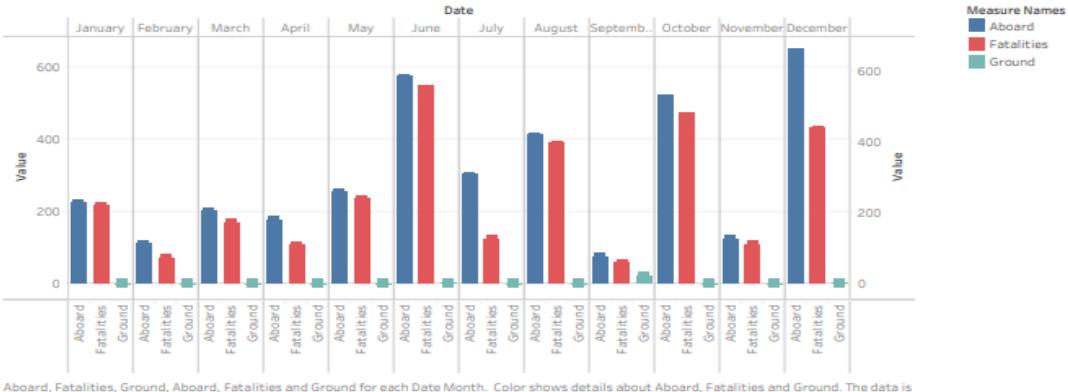
The trends of sum of Aboard, sum of Fatalities and sum of Ground for Date Year.

MAX ACCI

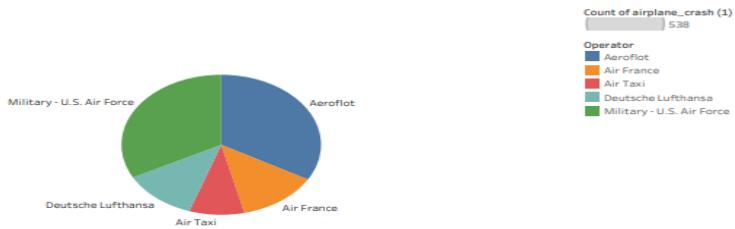


Date Year. Color shows count of airplane\_crash (1). Size shows count of airplane\_crash (1). The marks are labeled by Date Year.

## ACCI:1972



## HIGH NO.ACCI

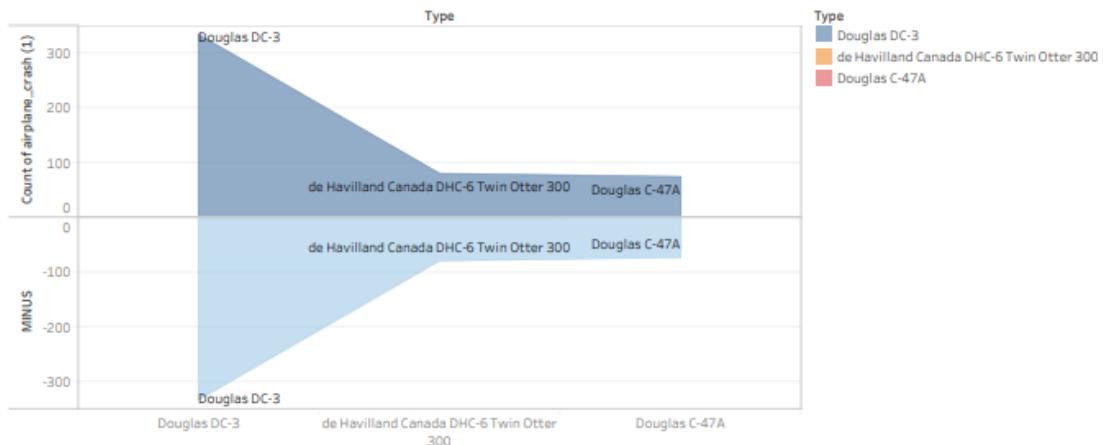


Operator. Color shows details about Operator. Size shows count of airplane\_crash (1). The marks are labeled by Operator. The view is filtered on Operator, which has multiple members selected.

## TOP 10 LIST



## TOP 3 ACCI



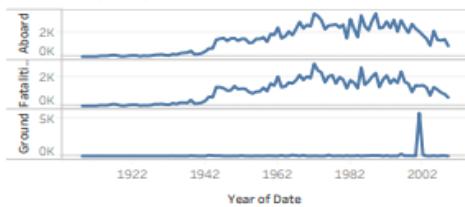
Count of airplane\_crash (1) and MINUS for each Type. The marks are labeled by Type. For pane Count of airplane\_crash (1): Color shows details about Type. The view is filtered on Type, which has multiple members selected.

## REGION BASES

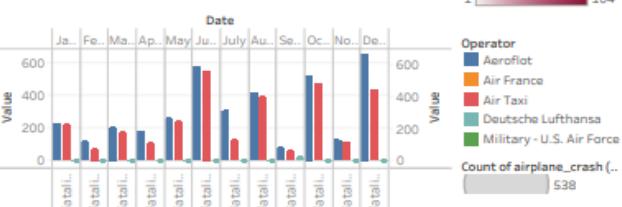


Map based on Longitude (generated) and Latitude (generated). Color shows count of airplane\_crash (1). The marks are labeled by count of airplane\_crash (1) and Location - Split 1. Details are shown for Location.

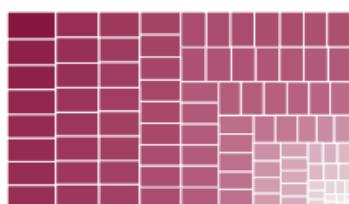
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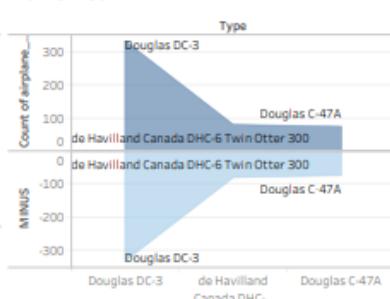
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TOP 10 LIST



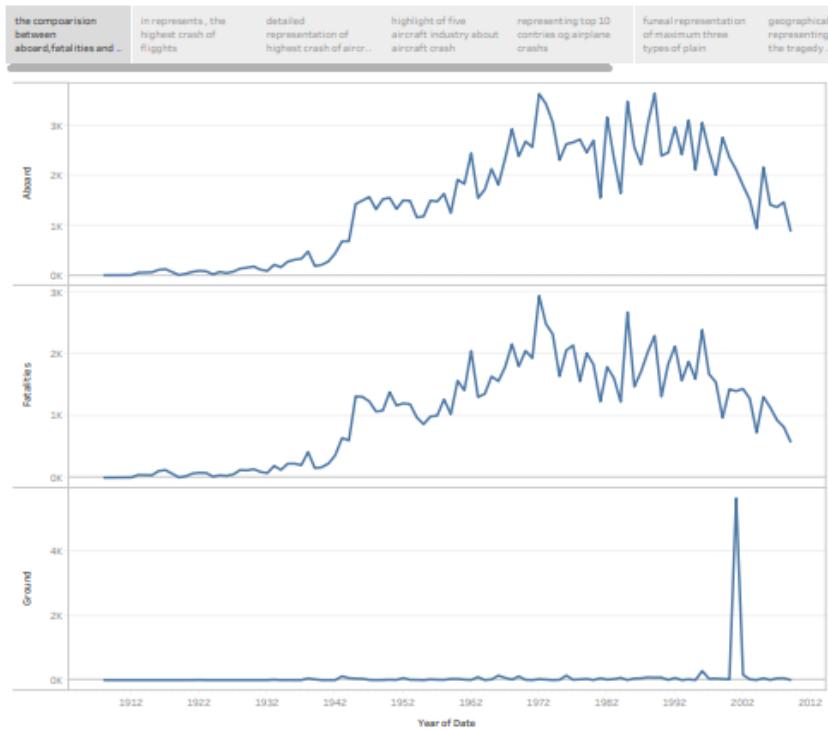
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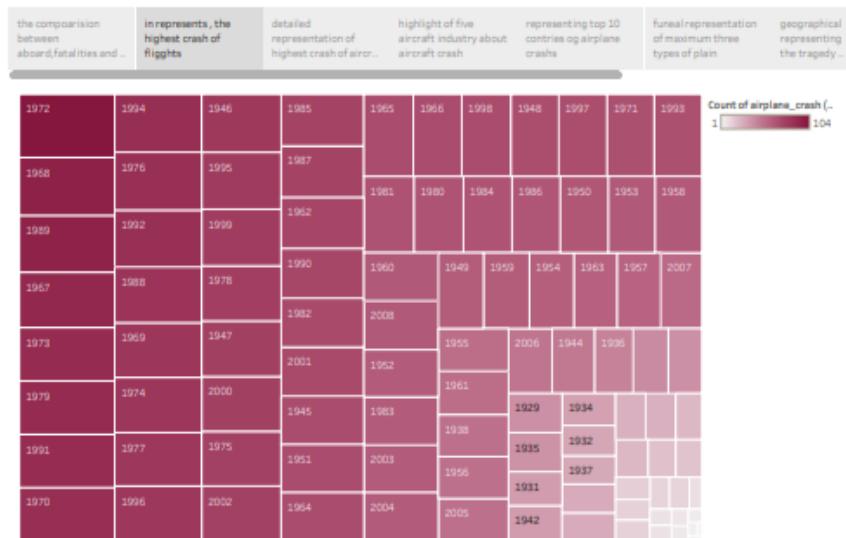
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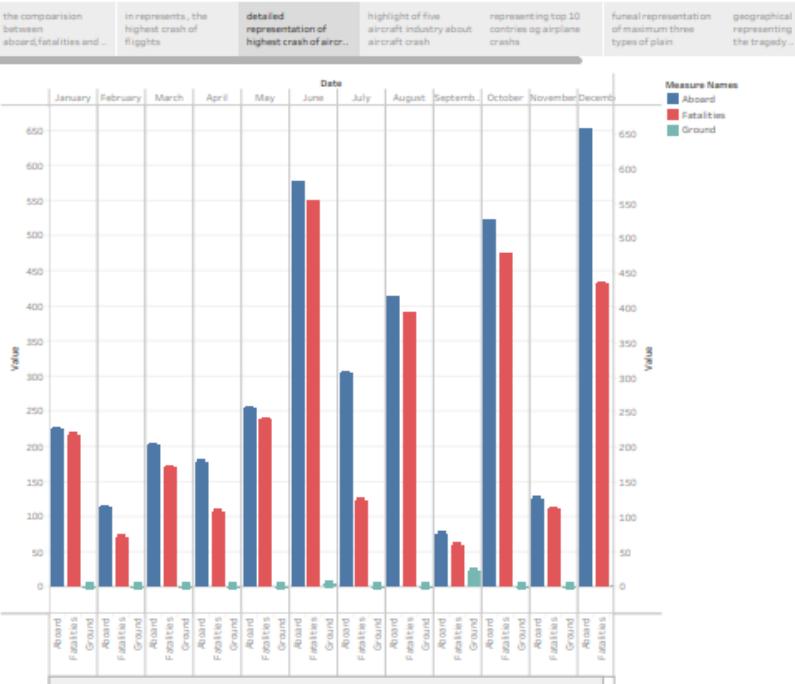
## Story 1



## Story 1



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## Story 1

the comparison between aboard, fatalities... in represents , the highest crash of flights.

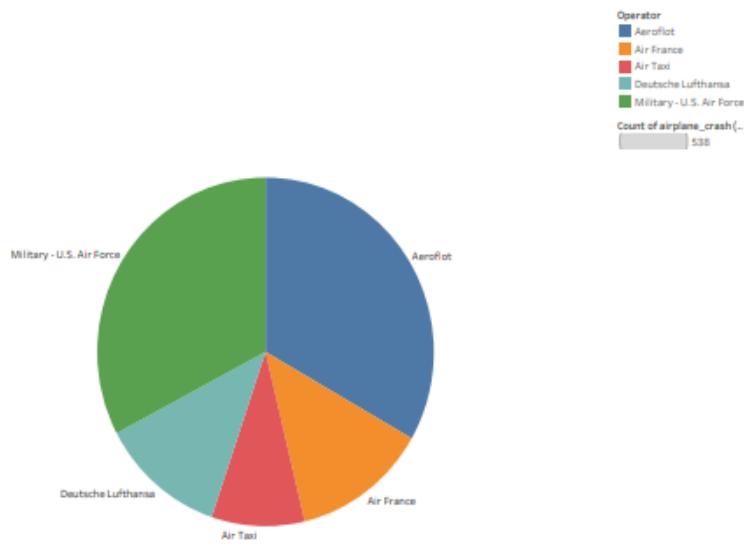
**detailed representation of highest crash of aircr...**

highlight of five aircraft industry about aircraft crash.

representing top 10 countries og airplane crashes.

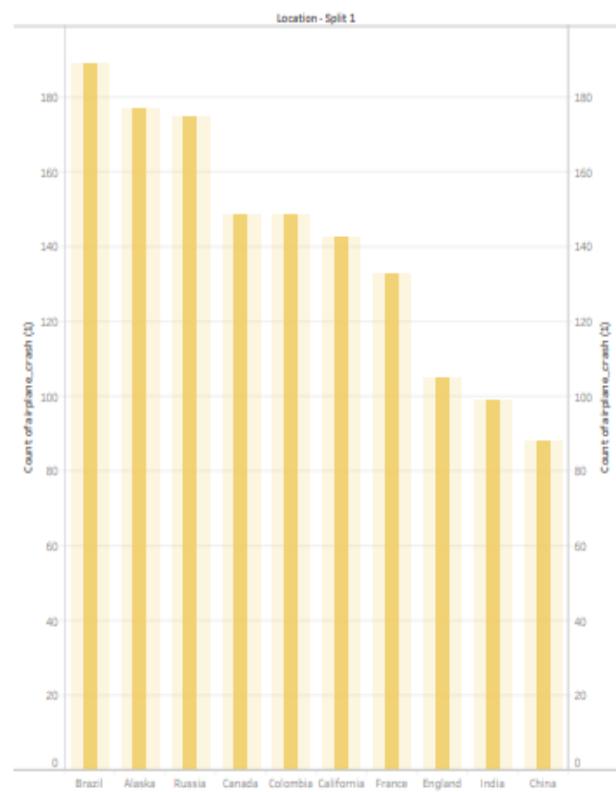
funal representation of maximum three types of plain

geographical representing the tragedy...



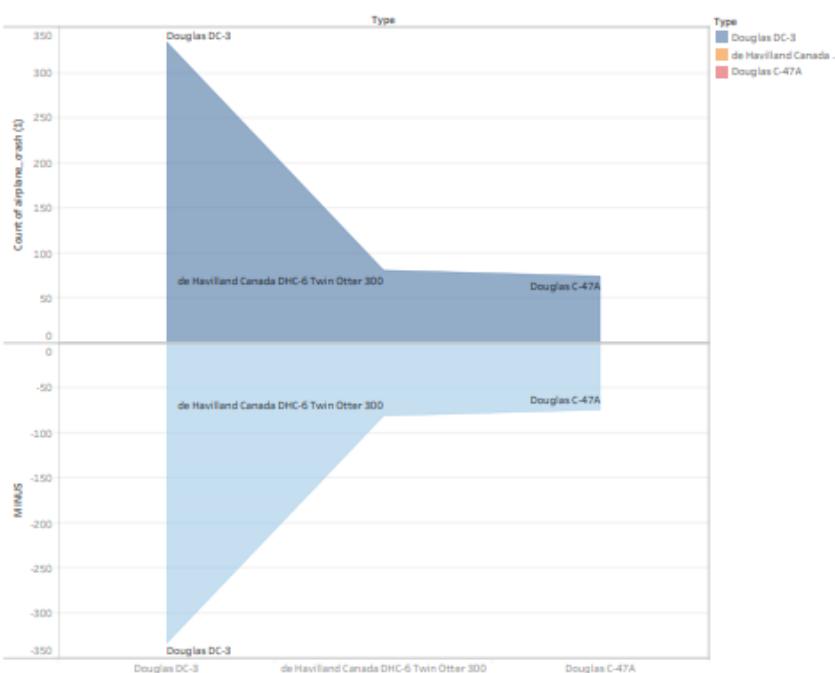
## Story 1

in represents, the highest crash of flights	detailed representation of highest crash of aircraft	highlight of five aircraft industry about aircraft crash	<b>representing top 10 countries of airplane crashes</b>	funeal representation of maximum three types of plain	geographical representing the tragedy of airlines	dashboard Of air_plane crash (1)
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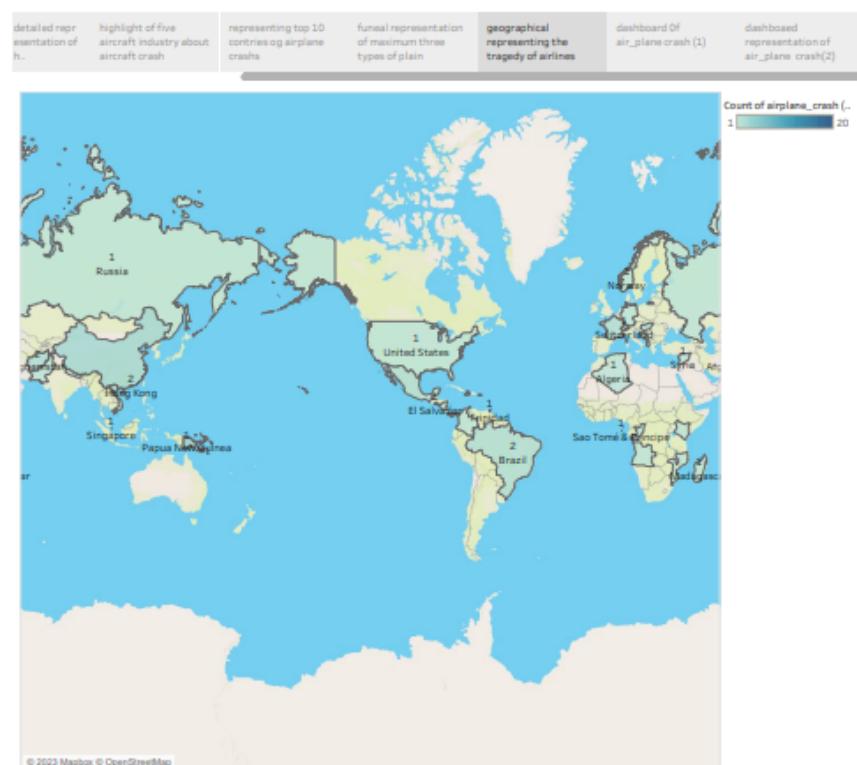


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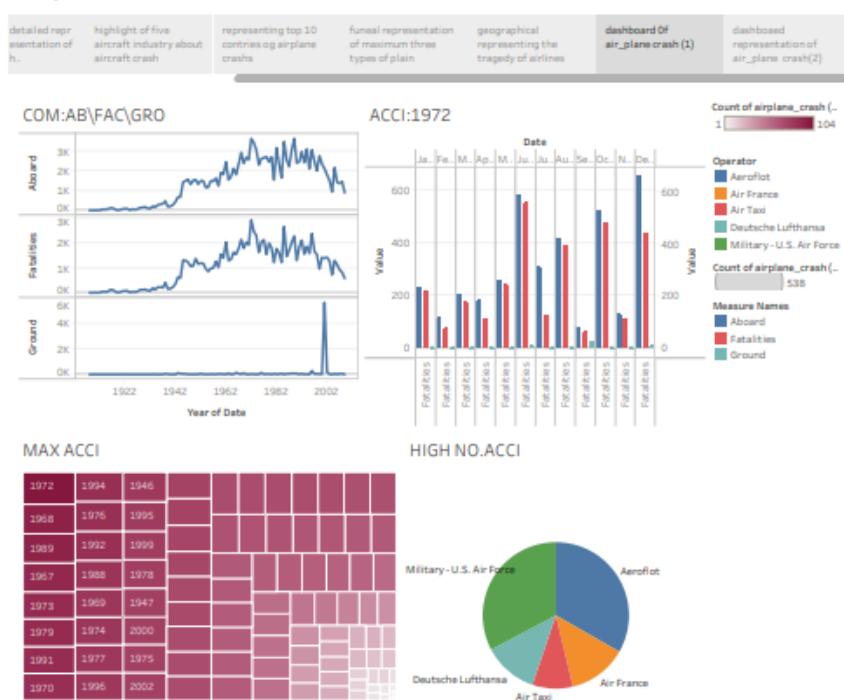
detailed representation of highest crash of ..	highlight of five aircraft industry about aircraft crash	representing top 10 countries of airplane crashes	<b>funeal representation of maximum three types of plain</b>	geographical representing the tragedy of airlines	dashboard Of air_plane crash (1)	dashboard representation of air_plane crash(2)
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## Story 1



## Story 1



## Story 1



## 4. ADVANTAGES:

**Let's kick off in a positive way, and look at airplane advantages and the benefits of making a journey by plane.**

**1. Speed:-** One of the best advantages of airplanes, is that when you need to get somewhere fast, flying is often the best option. It can get you across the country or around the world in a matter of hours. If you have a choice between flying and driving, flying will almost always get you there faster.

For example, as I write a lot about Greece, I'm often asked how to travel from one place to another. Many people who want to get from Athens to Santorini are surprised to find that to fly rather than take a ferry is quicker, and often cheaper!

**2. Comfort:-** With wider seats, more legroom, and in-flight entertainment, flying can be a very comfortable experience. On international flights anyway! When you compare it to other forms of transportation like buses or trains, it's often much more pleasant.

**3. Efficiency:-** One of the key advantages of air transport, is that planes are designed to get you from Point A to Point B as quickly and efficiently as possible. They can cover large distances in a relatively short amount of time. Even when you factor in the time it takes to get to and from the airport, flying is often just as quick but usually quicker as other forms of travel including high speed trains.

**4. Relaxation:-** For some people, flying is a chance to relax and escape the hustle and bustle of everyday life. When you're up in the air, it's easy to forget about your troubles down on the ground.

You can watch movies, listen to music, or sleep. Falling asleep on a flight is easy for many people, and there's never the concern you might miss your stop as with other modes of transport!

Long distance flights have inflight entertainment to help you relax during the journey.

**5. Safety:-** I think it was Superman who said, "Statistically, it's safer to fly than to drive." Flying is one of the safest forms of transportation, making it one of the best advantages of planes. In 2015, there were over 35,000 commercial flights per day in the US, and only 21 accidents.

That means that your odds of being in a plane crash are about 1 in 8 million. With modern technology and safety protocols, the chances of an accident or plane crashes are very low.

**6. Convenience:-** One of the pros of planes, is that flying is often the most convenient option, especially when traveling long distances. It can save you time and hassle, and get you where you need to go with minimal fuss. When compared to driving or taking a train or bus, flying is often much more convenient.

**7. Accessibility:-** With more people flying than ever before, there are now more options for flights to unique and hard-to-reach destinations. You can fly almost anywhere in the world, and there are usually multiple flight options to choose from.

**8. Networking:-** Flying can be a great opportunity to network with other professionals either on long haul flights or shorter flights of just a few hours. If you're traveling for business, you'll often find yourself sitting next to someone who could be a valuable connection.

**9. Adventure:-** For some, flying is an adventure in and of itself. Travelling by plane is a chance to explore new places, meet new people, and experience the world in a whole new way.

**10. Fun:-** Flying can be a lot of fun, especially if you're traveling to somewhere you've never been before. It's an opportunity to explore and have new experiences. Here's a look at the plane we took to Con Dao in Vietnam!

## DISADVANTAGES:

Travelers who are making arrangements to travel long distances by plane might also want to keep some of the disadvantages of flights in mind:

**1. Cost:-** One of the biggest disadvantages of flying is the cost. It can be very expensive to purchase a plane ticket, especially if you're flying internationally. Sure, budget airlines might offer some cheap flights, but they often come with their own set of problems (more on that below).

**2. Time Commitment:-** Flying can take a lot of time, especially if you're flying to a far-flung destination. You have to factor in travel time to and from the airport, as well as time spent waiting at the airport itself.

**3. Hassle:-** Even for hardened travelers, flying can be a hassle, especially if you're dealing with delays, cancellations, or lost baggage. It can be frustrating to deal with the logistics of air travel, and it's not always a smooth or easy process.

**4. Inconvenience:-** Flying can be inconvenient, especially if you have to travel on short notice. It can be difficult to find a flight that fits your schedule, and you may have to deal with unforeseen delays or cancellations. You also need to make sure your plane tickets, passport, and other documents are in order.

**5. Missed Connections:-** One of the biggest headaches of flying is dealing with missed connections. If your flight is delayed or canceled, it can throw off your whole travel schedule. When buying tickets, you

**should leave plenty of time between connecting flights!**

**6. Jet Lag:-** Jet lag is a real problem for many people who fly frequently. It's a disruption of your body's natural sleep cycle, and it can be difficult to adjust to a new time zone. If your air travels involve a long journey, you're likely to experience some jet lag.

**7. Baggage Fees:-** Many airlines now charge baggage fees, which can add up quickly if you're traveling with multiple bags. It's important to check the baggage policy before you travel to avoid any surprises, especially if using a budget airline.

**8. Security Lines:-** One of the biggest hassles of flying is dealing with security lines. They can be time-consuming and frustrating, especially if you're running late for your flight. One tip is to get to the airport early so you have plenty of time to clear security.

**9. Crowded Flights:-** One of the disadvantages of travelling by plane, is that flying can be cramped and uncomfortable, especially if you're on a crowded flight. It's important to book a seat in advance so you can avoid being stuck in the middle of the plane.

**10. Environmental Impact:-** Finally, it's important to consider the environmental impact of flying. Air travel is one of the biggest contributors to greenhouse gas emissions, so if you're looking to reduce your carbon footprint, flying is not the best option. If you want to be a responsible traveler, consider offsetting your emissions by planting trees or investing in renewable energy.

## **5. APPLICATIONS:**

An aviation accident is defined by the Convention on International Civil Aviation Annex 13 as an occurrence associated with the operation of an aircraft, which takes place from the time any person boards the aircraft with the intention of flight until all such persons have disembarked, and in which (a) a person is fatally or seriously injured, (b) the aircraft sustains significant damage or structural failure, or (c) the aircraft goes missing or becomes completely inaccessible. Annex 13 defines an aviation incident as an occurrence, other than an accident, associated with the operation of an aircraft that affects or could affect the safety of operation.

**PenAir Flight 3296 after its landing accident in 2019**

A hull loss occurs if an aircraft is damaged beyond repair, lost, or becomes completely inaccessible.

The first fatal aviation accident was the crash of a Rozière balloon near Wimereux, France, on June 15, 1785, killing the balloon's inventor, Jean-François Pilâtre de Rozier, and the other occupant, Pierre Romain. The first involving a powered aircraft was the crash of a Wright Model A aircraft at Fort Myer, Virginia, in the United States on September 17, 1908, injuring its co-inventor and pilot, Orville Wright, and killing the passenger, Signal Corps Lieutenant Thomas Selfridge.

## **6. CONCLUSION:**

This analysis revealed that among the pilots that caused the targeted accidents, 22 had flight experience for 301 to 1000 hours and 20 had 1001 or more hours of experience. By age, those in their 50s and 60s combined were 34, accounting for nearly 60% of the total.

Pilots with the total flight time of 301 to 1000 hours may have accumulated experience in familiarization flights and recreational flights after obtaining a license and may have become confident in their skills.

On the other hand, the analysis of causal factors shows the involvement of human factors, such as

wrong assumptions carelessness and negligence, as well as a gap between perceptions and reality concerning skills, in many of the accidents. There was also a case where a pilot's excessive self-confidence triggered the accident.

In the interviews, some pointed out the importance of cautioning oneself against all dangerous situations instead of taking them lightly. However experienced you may be, you should refrain from dangerous and reckless flights.

Be aware that you may do something careless or make errors at any moment, be sure to conduct periodic checks and prior confirmation, and try to take action as soon as possible instead of ignoring any abnormalities or anxiety you may notice during the flight. Such attitude of each pilot will lead to preventing aircraft accidents.

Lastly, we extend our appreciation to the people from the Japan Flying Association and the AOPA-JAPAN who kindly responded to our interviews and offer our best wishes for their further success.

## 7. FUTURE SCOPE:

Future predictions about anything is intriguing; and the same holds true for the aviation domain. Scientifically based predictions are constructed on predictive modeling and probability of identified outcome(s).

Notwithstanding this fact, foretelling has often proved to be inaccurate. In spite of a statistically significant track record of inaccuracies in looking into the future, all reputable organizations devoutly dwell on research and planning on their future predictions.

It is interesting to note that world's most famous pioneer in the chronicles of aviation was beset with a mounting disappointment on his plans in 1901 when Wilbur said to his brother Orville Wright that "Man would not fly for 50 years," but later, he went on to say that "ever since, I have distrusted myself and avoided all predictions."

That said, 'research, predictions and plans' are undoubtedly, quintessential ingredients of advancement, sustainability and a better future; and aviation space is no exception.

This paper is an extract of various interesting predictions of the future of aviation as seen by industry stalwarts, regulators and academicians to see and fathom what is in store in the aviation domain in the years to come.

Also pertinent is the observation that for sustained growth, education must stay abreast of the anticipated changes so as to ensure that the supply of skilled and educated Human Resource stays in sync with the industry demand.

## 8. APPENDIX:

