How safe is Air Travel?
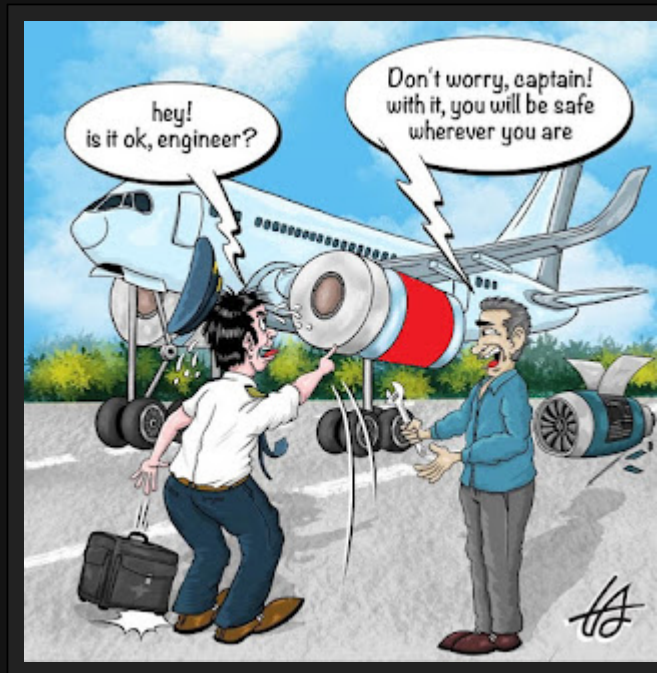
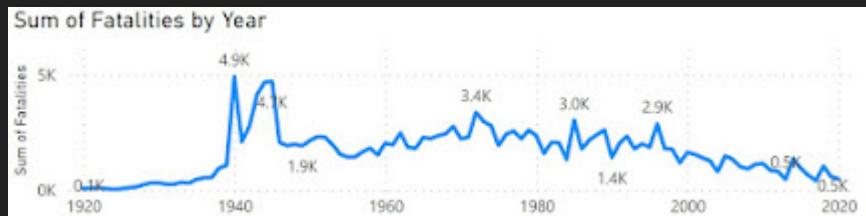Air Travel Safety Data Vs Media Reports
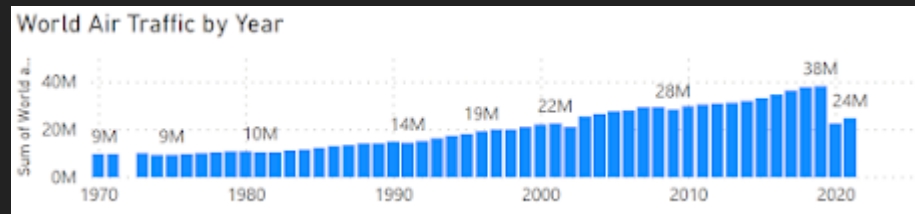
Air Travel Safety - What's the hype?

Since the disappearance of MH370 in 2014 and two Boeing 737 crashes, first in 2018 and second just 5 months later, there has been fear in public and concerns about the air travel safety. However, despite this increased attention we've seen in media reports, these numbers do not really represent any increasing trends. On the contrary, we've seen the opposite trend as airline accidents have continued to decrease over time.
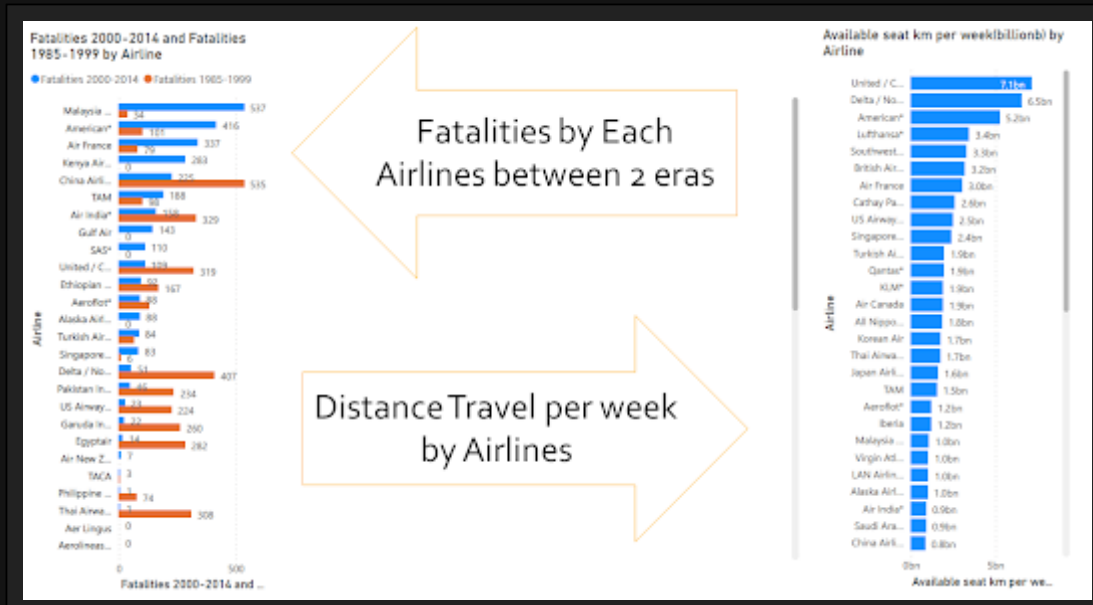
What does the data say?

Analyzing the statistics, one can say how safe air travel is. Let's dig into some data visualizations to see the actual trends.

Sum of Fatalities by Year

The line chart above shows that although there were few spikes but overall fatalities have kept on decreasing since 1970. While over all fatalities were declining, air traffic increased more than four folds since 1970, World Air Traffic bar chart below shows the same.

World Air Traffic by Year

Horizontal bar chart below shows fatalities by each airline as it shows best comparison between two era (1985-1999 and 2000-2014) for each airline. Another horizontal bar chart shows the sheer volume airlines experienced on a weekly basis. Comparing data from both the Horizontal bar charts, let's say for United Airlines, shows that it has flow over 7 billion Kms in a week and had only 109 fatalities in 15 years (2000-2014).

Conclusion

Considering the fact that air traffic has been drastically increasing and fatalities are decreasing, air travel is arguably the safest means of travelling in the present era.

Ethical Concerns

1. There are some exception scenarios like COVID that impact air travel. These scenarios can lead to false conclusions.
2. Some airlines focus more on plane maintenance than others and consequently have less accidents than others, however, the fear is created for over all air travel.

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By Anuj Tanwar at February 02, 2023

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