

**Master of Science in Data Science Program
Bellevue University**

**DSC640-T302 Data Presentation & Visualization(2245-1)
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Assignment 6.3 : Video Presentation Summary(Week 11 & 12)

**Professor: Catherine Williams
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Datafile

- **Primary Data file :** [Accidents and Fatalities Pery Year](#)

https://docs.google.com/spreadsheets/d/1SDp7p1y6m7N5xD5_fpOkYOrJvd68V7iy6etXy2cetb8/edit#gid=1448957446

- **Supplemental Data:** [Crash Datasets](#), Data.World

<https://data.world/hhaveliw/airplane-crashes-1908-2009>

- Bureau of Aircraft Accident Archives <http://www.baaa-acro.com/index.php/crash-archives>.

Introduction

The primary objective of the airline safety video presentation was to communicate key trends and insights regarding airline safety from 1985 to 2014 in a clear, engaging, and easily understandable manner. The video included visual aids such as charts, graphs, and animations to illustrate trends in incidents, fatal accidents, and fatalities across various airlines. The focus was on making the data accessible and meaningful to a general audience.

What you did and why you chose to present what you did?

- Flight phases can provide insights into when accidents are most likely to occur, whether during takeoff, cruise, landing, or other phases.
- Understanding which types of aircraft are involved in accidents and their respective contribution to fatalities is crucial for aviation safety analysis. A pie chart is a straightforward way to display the proportion of fatalities attributed to each flight type.
- Fatalities over year visualization helps to understand the trend of fatalities in the aviation industry over time.
- By presenting the total number of accidents for each airline in a bar chart, it allows for easy comparison of safety records.
- Seat Kilometers per Week graph helps to understand the scale of each airline's operation is essential when analyzing safety records.
- Seat Kilometers vs. Fatal Accidents plot enables the exploration of any potential correlation between the size of an airline's operation (measured in seat kilometers) and their safety record (measured in fatal accidents).

All these graphs help to present the aviation safety improvement over years and which Airline is performing the best.

How was this audience different than the internal audience?

The external audience for the video presentation comprised the general public, including passengers, media, and stakeholders with an interest in airline safety. This is different from the internal audience, which consists of aviation safety experts, analysts, and airline industry decision-makers. The external audience required information that was easy to digest, visually engaging, and free from technical jargon, whereas the internal audience needed detailed data and technical analysis for strategic decision-making.

How did you go about deciding what to present?

- Overall trends in airline safety incidents and fatal accidents.
- Comparisons of safety records among major airlines.
- Notable improvements in safety over the years.

Did you use a script?

Yes, a script was used to ensure the presentation was clear, concise, and well-structured. The script helped in maintaining a coherent narrative and ensuring that all key points were covered systematically.

What ethical considerations should you have when presenting via audio?

- Ensuring that all information presented was accurate and based on verified data to avoid misinformation.
- Avoiding the mention of specific individuals or sensitive information related to accidents and fatalities.
- Clearly communication required as it have limitations or uncertainties associated with the data or analysis to provide context and transparency.
- Ensure that visual elements like colors, shapes, and scales are used consistently to avoid any ambiguity or misinterpretation.

Conclusion

The video presentation successfully achieved its goal of making airline safety trends comprehensible and engaging for the public. By focusing on clear communication and ethical integrity, we ensured that the audience was well-informed about the improvements and ongoing challenges in airline safety. This approach not only educated viewers but also helped maintain trust in the aviation industry's commitment to safety.

References

- Aviation Safety Network (ASN): <https://github.com/fivethirtyeight/data/tree/master/airline-safety>
- Aviation Safety Database: <https://aviation-safety.net/database/>
- https://docs.google.com/spreadsheets/d/1SDp7p1y6m7N5xD5_fpOkYOrJvd68V7iy6etXy2cetb8/edit#gid=1448957446
- Bureau of Aircraft Accident Archives <http://www.baaa-acro.com/index.php/crash-archives>.