'COME FLY WITH ME!'; Analyzing Airline Safety Statistics against Automobile Safety

Going off of the introduction to my last write up explaining the need for travel, to getaway, rest, reboot, and recharge, the question of Airline safety vs Automobile safety has been raised a lot, especially since the media has attempted to push the narrative that airline travel is somehow more dangerous than automobile travel. Through the use of data science and statistics, we have debunked this false claim by the media, and have done so by simply supporting our stance with facts, figures, and the most important part, data; The data from the previously referenced airline safety dataset, in combination with the data from the automobile crash dataset afforded us the opportunity to reinforce our stance with the adequate visualizations.

Throughout the project, we picked our various storytelling techniques and themes, using them as guidelines across all the milestones, in order to increase the clarity and readability of the project, making it easier to follow. So why did I choose to tell this story the way I did? Firstly, I had to consider the kind of information being passed across; travel data and information are not things people would take likely, but because these documents tend to be rather voluminous, I wanted to take an approach that would carefully summarize the points and make them easy to follow, while pairing that with a clear language that they can take in and understand, free of too much technical jargon, in order to keep their attention throughout. To prepare the data, I had to inspect the different columns, and make sure the data I was using was against the same time periods, in order to produce accurate results.

In a given audience, the individuals can be subdivided into three main groups:

- **The "lay" audience:** This group has no special or expert knowledge. They connect with the human interest aspect of articles. They usually need background information; they expect more definition and description; and they may want attractive graphics or visuals.
- The "managerial audience: This group may or may not have more knowledge than the lay audience about the subject, but they need knowledge so they can make a decision about the issue. Any background information, facts, or statistics needed to make a decision should be highlighted.
- The "experts": This group may be the most demanding audience in terms of knowledge, presentation, and graphics or visuals. Experts are often "theorists" or "practitioners." For the "expert" audience, document formats are often elaborate and technical, style and vocabulary may be specialized or technical, source citations are reliable and up-to-date, and documentation is accurate.

Knowing and understanding these groups was very important when switching from presenting to an internal audience vs an external audience; the internal audience would be made up of a mixture of groups 2&3, while the external could be anywhere

from 1-3, and so because of the uncertainty of that range, it would be safest to assume they fall into group 1. Now what does this mean? This means that the internal presentation was more technical in terms of language and visualizations, while the external was simpler to understand, as it was less technical.

Overall, I would say this was a very good experience for me, as I was able to see what goes into telling a full story with data science, as well as arguing against a stated point or stance. I am very pleased with how I approached it, but if I could go back and change one thing, I would have added another supplemental dataset, as the points were strong, but they can always be made stronger.

References

Muraski, Michel. "Writing@CSU." Welcome to Writing@CSU, writing.colostate.edu/guides/page.cfm?pageid=328&guideid=19.

Airline Safety Dataset, Aviation Safety Network

Monroe County Crash Data_2003 to 2015, Data Catalog, Data.Gov