Final Report: Airline Safety

In my final video presentation, I used a PowerPoint to guide me through my audio portions. I used the PowerPoint to kind of help keep me on track and not allow me to drift off topic in my audio portions, and the visuals also helped in reiterating the message being explained. I ended up electing to use a total of nine visuals, each carrying their own respective purpose in displaying the overall message of my findings. The way I decided to place my slides was an item I found to be very relevant as it smoothly set up each corresponding slide. I started with total fatalities and I did this beginning with 1985 and by the third slide was basically almost up to current times 2019. The reason for this is I wanted to show the trend between the years and the improvement it showed as the years pasted. I then wanted to discuss flying in comparison to probably the biggest mode of transportation; motor vehicle. In these slides I wanted to show the large difference in fatalities between the modes of transportation, which would then also reiterate how much safer flying is in comparison to driving. This particular analysis of mode of transportation I decided to show in two different ways; bar chart and pie chart. The reason for this is that from our course chat room, I learned some people are not in favor of pie chart and have issues trying to depict the analysis from them, and because of this I chose to also throw in there the bar chart. To ensure that the message I was sending was very clear and transparent. In the following three charts I decided to tap into the finance portions of aviation. In the first slide I displayed airline accidents in comparison to operating and net profits. In this visualization we can see that even though accidents could defiantly impact profits, it is not the only factor to look into. In fact, in this chart, we can see that there has to be another influence in the diminishing total profits. To compliment the first chart, I then added another chart displaying some of the top expenses; labor and fuel expense against base fare. In that chart we see the steady incline in costs but a steady decrease in fares. I displayed this chart to show there could be a possible link to ticket costs and operating expenses that are affecting majority of airline companies. The purpose of this chart was not only to show this opportunity but also ignite possible another research into this topic because this could have a positive impact on the company if discovered.

Overall, in this video presentation I wanted to display the overall picture of the aviation safety based on the data I was able to compile. I went out to ensure to present any bits of data I found to be significant and also any finding I felt may be of interest to aviation companies in additional possible projects. In this project I was dealing with an un informed audience I wanted to get all the facts out. The difference in presenting to general audience from a technical group is that with the general audience you want to be mindful of your nomenclature and really get down the overall point of the objective. When dealing with an internal group you display a more technical analysis and additional insights more suitable for the groups purpose. If I was able to do this project all over from the beginning. One of the biggest things I would have done is probably included data on seating capacity. I am curious in wondering if this could have been a factor in the increase in number of fatalities in the mid 80's to late 90's. Another thing I would have done is include more spatial visualization possible showing exact locations of the fatal accidents to see if there is some insight there.

References:

1) Airlines For America | Data & Statistics
2) Data | National Highway Traffic Safety Administration (NHTSA)
3) data/airline-safety.csv at master · fivethirtyeight/data · GitHub
4) Airline Data Project (mit.edu)