Airline Safety has been questioned, by the news, and because of this, travelers are thinking too much if they want to fly or not. As a frequent traveler I got interest to use this problem and the following work intent to show the facts of the airplane traveling, the problem is focused on safety and the facts that can show that travel by plane is safer than other ways to travel [1].

For this final presentation I put together the work made during this class, I improved some of the charts and I corrected some others. I kept the color code selected on week 4&5 for the blog, blue and red, and grey for comparison with past years in the data, data provided and collected on different websites (please check references) was cleaned, organized following these steps: data was collected using different sources, from the website of the NHTSA data from car crashes was scrapped using Beautiful Soup in Python. The rest of the data was downloaded from the websites cited on references; all data was processed using Python.

The process of cleaning the data included, detecting missing values, dropping rows with missing values (refers to the Jupyther notebook for more details), data was sorted and described to have a better understanding of means and other statistics.

The first part of the project (dashboard) was focused on internal clients, meaning executives of the airline industry interested on knowing what is happening, for this presentation the dashboard included more detailed bar graphics, and it was focused on understanding of negative numbers and comparing with positive trends like the decreasing number of airplane accidents. The rest of the work was focused on general public, blog, infographic and final presentation, everything was written in a light version, more oriented to inform this audience on being aware of the positive and negative numbers, both numbers were shown in order to encourage the public to take a more informed decision about traveling.

This presentation has been recorded focused on general public, intending to present the actual situation in the news about airline safety concerns, and immediately showing statistics provided by the Bureau of Aircraft Accidents Archives, the National Highways traffic safety Administration and Statista, other general information was pulled from websites like Gopacking.com. Other resource that was very helpful was Airline Data Project. All numbers were review and plot to show facts about the safety of flying.

Visualizations like: Line graphs, Stacked bars, tree maps, pie charts, and bars were used to analyze and understand the facts behind the numbers. Fatalities and fatal accidents by airline and grouped in 2-time dimension columns 1985-1999 and 2000-2014, from this data you can find 3 graphs, incident by airlines where I build a bar chart to show the reduction in the number of incidents by airlines in the last period shown (2000-2014). I selected simple visualizations like line and bars because most of general publica does not have knowledge on other complicated graphs than might require some level of technical knowledge to understand. The focus here is to get the attention of the travelers and potential travelers.

The blog and the Infographic were used to create the recording on the presentation, making some adjustments to make the presentation lighter and enjoyable.

What I would do different would be using better tools to add animation to the presentations and better graphics for the infographic, as well as using some linear regression to show a possible future of the airline industry

References

[1] <https://gobackpacking.com/popular-methods-of-transportation/>

<https://www-fars.nhtsa.dot.gov/Main/index.aspx>

[Airline Data Project (mit.edu)](http://web.mit.edu/airlinedata/www/Revenue&Related.html)

<http://www.baaa-acro.com/statistics/crashs-rate-per-year>

<https://github.com/gloriaypradal/DSC640_Airplane.git>

<https://venngage.com/blog/color-blind-friendly-palette/>