Air Travel Safety

Presentation

I began my presentation with a compilation of news reports of recent airline accidents, followed by headlines regarding the uptick of occurrences. My first goal was to show that air travel has become safer over the years. I used line charts to demonstrate that the number of accidents and fatalities have been in a downward trend. My second goal was to show that air travel was not more dangerous than traveling by vehicle and generally one of the safest ways to travel. First, I compared the annual fatalities related to vehicles and airplanes using a dual-axis line chart. Then, I used a bar chart to show the total number of fatalities for five different modes of transportation (vehicle, pedestrian, motorcycle, airplane, and bicycle) over the same time period. I also used waffle charts to show the percentage of fatalities associated with each. Since I approached this project as a JetBlue employee, my final goal was to promote the airline. First, I provided some general information about the ten leading airlines. I used bar plots to show the total flights, passengers carried, and total number of accidents and fatal accident for each. I used gauges to show the percentage of accidents that were fatal and a bar plot to show the number of accidents per five million flights. I did this to demonstrate how safe it is to fly with JetBlue. Now that this was established, I wanted to show other reasons to choose the airline. I used a line plot to show that average JetBlue ticket prices are well below the average of all domestic airlines. I also used an image of the JD Power awards JetBlue received for Customer Satisfaction and ended with an advertisement promoting the airline.

Data

Most of the data I used for this project was obtained from different websites. After scrapping the data using Python, I had to prepare it to be usable in Tableau. For example, the Fatalities and Fatality Rates dataframe pulled from NHTSA had to be transposed and reorganized. I used Power BI for a few visuals (waffle chart and gauges); however, they simply involved manually create a new table with a few rows of data.

Audience

When delivering a presentation, it is important to be able to adapt to the audience. A general audience may not have any prior knowledge of the topic. The presentation should not be too technical, otherwise the audience may quickly lose interest. An internal audience should have an understanding of the topic and a more technical approach should be taken. Also, the objective of the presentation will likely change depending on the audience. For example, my presentation was used to promote JetBlue to a general audience. It would not have been appropriate to include financial information, such as the company's net income information that I included in the Executive Summary.

Changes

I enjoyed the content of this project and had a lot of fun working on it. If I had to do it all over again, I would use Power BI for more of the visualization. I decided to use Tableau to gain as much experience as possible, but I really like the variety of visuals available in Power BI. I would also change the design of my dashboard. For me, creating the dashboard was the most difficult project; however, I feel like my creativity improved with each additional project and feel I could create a much better dashboard now.