Ryan Long DSC640 5.3 Summary

Visualizations

The overall approach taken was similar to the blog post and research performed for the executive summary, which was to contrast the safety record of air to motor vehicle travel to dispute media claims. However, with the infographic a mix of both images and data visualizations was used to achieve this contrast. The first background image shows several EMTs surrounding a stretcher of a wrecked car. Coupled with the sensationalized text, this opener triggers danger and fear associated with motor vehicle travel.

The next level of the infographic displays an elderly woman grieving the loss of her spouse to motor vehicle travel. To the right of the widow, source supported data is displayed in the form of a simple pie chart showing deaths by transportation mode which maintains motor vehicle travel is more dangerous than air travel.

The following level of the infographic contains text on the left-hand side summarizing the historical safety record of the two modes of transportation from fatalities perspective. A footnote indicates the factual source of this information. A clustered bar chart displays the fatalities from 2017-2019, clearly showing an immaterial number of deaths for air travel compared to motor vehicle.

Another level down, the infographic changes the focus using a bright sun, crisp white airplane, and cites the increase of flight hours alongside a line chart showing the increasing trend for the period of 2014-2019.

The infographic closes out with reaffirming text and a closing from the airline.

The colors for each of the visualizations and text within the infographic was chosen intentionally. Green was used to represent or highlight anything related to Air travel, while red was used for motor vehicle of emphasis. The data visualizations are all very simple and easy to digest in a quick manner for the reader.

How was this audience different than the internal teams?

The audience for the infographic is assumed to be much broader than the internal team and simplicity is necessary because there is no opportunity to clarify with the reader. While the data sources were the same, the arrangement and setup of the visualizations was condensed and simplified for ease of consumption. The information presented requires no prerequisite information and each level of the infographic could stand on its own without explanation.

What did you choose not to share with the external audience?

Financial figures such as revenue per mile / passenger, and broader ranges (time periods) of the datasets were omitted. The information not shared is beneficial for an internal audience to deepen the understanding and provide additional considerations for analytical problem solving. Including it would clutter the graphic and not provide as much value to an external audience.

Ethical Considerations

This infographic would not seem out of place on a social media site or sidebar of certain news websites. The car wreck and elderly widow are dramatic and bold, and not likely to be used by traditional entities looking to improve reputation of their industry. These images support an agenda by creating uneasiness towards one mode of travel.

While all the data presented in the visualizations was taken from actual sources and are cited, the subjective inclusion of certain time periods could be interpreted as unethical. For example, the line chart displayed showing flight hours is for the years 2014-2019. The years prior to 2014 were relatively flat, and starting the x-axis at 2014 gives only the impression of an upward trend. Another example, the pie chart includes an "Other" category which is not explicitly explained within the infographic. The use of colors, red (stop, bad) for motor vehicle and emphasis on bold statements, compared to the green (go, good) for airline could be considered misleading.

These projects continue to be an enlightening experience about the power of presentation. Because this task is outward facing it shows how easy it is to use legitimate sources of information to influence readers one way or another. Outcomes of the choices made in how the information is displayed must be considered before publication.

Sources

https://www.bts.gov/content/transportation-fatalities-mode

https://www.ntsb.gov/safety/Pages/research.aspx

https://www.ntsb.gov/safety/data/Pages/AviationDataStats2019.aspx

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