

Part 1. Graphic inquisition

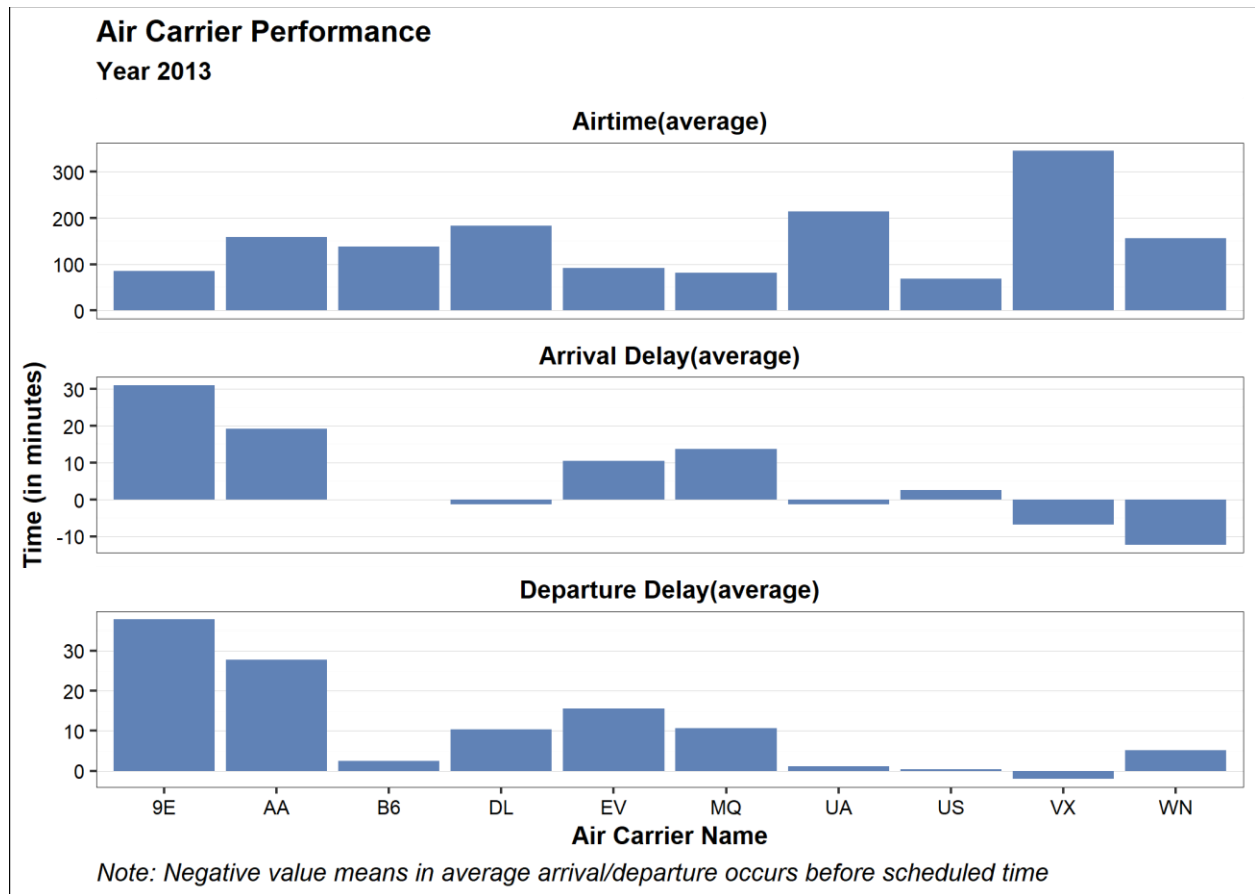
Source of the figure: https://www.statisticshowto.com/wp-content/uploads/2014/01/Fox_welfare-jobs-ff-1.jpg



My findings from above figure of Fox News are given below -

1. This graph does not comply with the Gestalt principles regarding simplicity and figure-ground. Presence of wheel shaped objects in the ground takes more attention than the figure.
2. There is scope to work with the operations of this figure. Title for X and Y axis, grid line and scale on Y axis are missing. Color used in bars and the numbers seem like to be different layers and makes the figure somewhat haphazard that is difficult to decode.
3. This figure can be a perfect example of why maximizing the data-ink and erasing non data ink is important. The wheel shaped objects that have been unnecessarily used here might distract or impede the viewer's interpretation of the data. Also, the strong bar colors, color of background and number box colors have made it look like someone has put different layers of things together to make this figure. Title size is also unnecessarily bigger in ratio to figure.
4. This figure is hugely criticized for its graphical data integrity and lie factor. According to source, Y axis includes every individual residing in a household in which one or more people received benefits in the fourth quarter of 2011. On the other hand, X axis includes only individuals who worked, not individuals residing in a household where at least one person works. Thus, they have shown a larger number of people who were on welfare than the number of people who had jobs. Beside this, I can add, they have shown bigger effect in figure than the data. The actual effect is somewhat 6% in data, but in figure the bar is almost 4 times bigger. Seems like they have started their scale in Y axis from 100.
5. This figure could be easier to read alone with title of X axis and Y axis, proper grid line and proper annotation.

Part 2. Graphic Design



In this figure I have shown average time of different parameters of Air Carriers that can provide a quick view of the performances of those carriers. This graph can provide a quick view of the carrier performance to the passengers so that they can plan their flights accordingly. It can also be used by the governing bodies to improve the performance or utilize the carriers which are less used or reduce the airtime of the carriers that are overly used.

Average airtime: It provides the average time the carriers spent in travels. Governing bodies can use this to use these carriers in an efficient way.

Average arrival delay: It shows the average arrival delay in minutes. Passengers can get help from this and plan their journey accordingly. Managing team can also use this to improve the timing. Negative value indicates in average arrival occurs before scheduled arrival time.

Average departure delay: It shows the average departure delay in minutes. Passengers can get help from this and plan their journey accordingly. Managing team can also use this to improve the timing. Negative value indicates in average departure occurs before scheduled departure time.

As I have criticized a bar plot designed by Fox News, I have tried to incorporate all the 5 criteria of good graphs in my designed bar plot.