

Project: Create a Tableau Story

Summary

In this project, I have created an explanatory data visualization using Tableau. I selected baseball dataset, which contains 1,157 baseball players' physical characteristics (handedness, weight and height) and their performance on batting average and home runs. This report aims to present the steps taken to create a visualization in order to investigate the statistics and to communicate the patterns on the differences among the performance of the baseball players.

Initial version:

<https://public.tableau.com/profile/anne5609#!/vizhome/InitialWorkbook/Story1?publish=yes>

Final version:

https://public.tableau.com/profile/anne5609#!/vizhome/FinalWorkbook_15521885274800/Story1?publish=yes

Design

In this dataset, the players' physical characteristics include handedness, weight and height, while the performance metrics are the numbers of home runs and batting average.

My story starts by presenting the total number of players in the dataset by handedness. Initially, I showed the exact number of each group on top of the bars along with the percentage of total on the y-axis. After receiving feedback, I agreed that there was too much information and removed the number of each group from the graph. Then, I highlight the distribution of weight and height of the players and the relationships between height/weight and home runs/batting average. Next, I aim to investigate the relationship between performance and

handedness. At first glance, it seems right-handed players have the highest numbers of home runs and batting average. However, if taking into consideration the skewed distribution of this dataset given more than 60% of players being right-handed, this conclusion would be biased. By taking the average, instead of the sum, the result shows lefties perform the best in both categories! The story continues by examining the summary of home runs and batting average of the top players. It turns out the majority of the top players are either right or left handed. Among the top 5 players, there are more left handed players than right handed ones.

Another feedback received is to include a final summary to wrap up the story. In the last slide, I therefore discuss the high percentage of lefties in baseball and the fact that some top-players being left handed. I did a research on this observation and one study highlights the reason being the dimensions of the diamond favor the left handed people.

The final change made according to the feedback would be to change the title from "Story 1" to "Explanatory Analysis of Baseball Players Data".

Feedback

1. The initial title "Story 1" is too vague and doesn't help the audience understand what the presentation is about.
2. In the initial version, the first slide shows the exact number of each handedness group. With the percentage of total on the y-axis, there seems to be too much information. For example, does the audience need to know there are 737 right-handed players, 316 left-handed players and 104 ambidextrous players when they can already see the percentage of total of each group?
3. There should be a summary page at the end to wrap up the story.

Resources

1. <https://en.wikipedia.org/wiki/Baseball>
2. <http://blogs.discovermagazine.com/discoblog/2008/07/08/why-do-so-many-lefties-play-baseball-its-built-for-them/#.XIRpwShKhPY> Summary