Create a Tableau Story - Baseball

Kritesh Harpaul

Western Governors University

INTRODUCTION

The purpose of this project is to create a visualization using Tableau from a given dataset. This explanatory visualization should communicate the findings through a tableau story where the patterns and trends are effectively highlighted. Below is the initial version and final version of the project.

Initial Version:

https://public.tableau.com/profile/kritesh.harpaul#!/vizhome/Baseball_players_performance_v1/Story1?publish=yes

Final version:

https://public.tableau.com/profile/kritesh.harpaul#!/vizhome/Baseball_players_performance_final/BaseballPerformancefactors?publish=yes

SUMMARY

This project uses baseball data of 1157 players. Physical attributes like height, weight and handedness are used to find relationships with performance data like batting average and home runs. These insights are prepared in the form of a tableau story.

DESIGN

I started off by just understanding what was in the dataset. I plotted a few graphs to find some relationships. I looked at the physical attributes of the players and how the data was distributed in terms of those. By using a pie graph to visualize the distribution, I found that the number of right handers were much greater than left handers. Using histograms to show distribution, the weight and height distributions had some peaks but did resemble a bell shape.

Next, I looked at the performance data namely home runs and batting average. By using a scatter plot to highlight any clustering, the data seemed to be clustered around a batting average of 0.22 and 0.27 and home runs less than 50. 2 outliers were excluded. I did notice that there were a few top performers and I wanted to explore the physical attributes of these top performers.

I then compared the weight, height, and handedness to the performance factors (home runs and batting average). To ensure a great visual comparison, I used scatter plots and plotted each of them and found noticed that shorter batters tend to perform better with the best performance been at 67 inches tall. In terms of weight, 2 significant performance peaks occurred at 201 lbs and 209 lbs. Considering the data had more right handers than left handers, it was no surprise to see that right handers had better performance data.

To complete my story, I used data from the top performers in each category to plot scatter plots to highlight where these top performers lie. Based on the feedback below, I added and removed certain elements to complete the final version of my story

FEEDBACK

I had 2 people that provided me with feedback. There comments are as follows:

Feedback 1:

Colors are not the same on all slides. The story lacks flow so maybe add more plots and more data in the caption on top.

Feedback 2:

Some axis names are not consistent.

Based on the feedback, I added more detail to my captions so that the story would flow better. Further, I changed my color pallet to colors suitable for people who are colorblind. I also fixed the axis and added correct titles.

CONCLUSION

After careful analysis of this sample of players, it was found that players with a weight of 201 lbs and 209 lbs performed much better than players in other weight classes. The top performers had a height of 67 inches with right handers outperforming left handers.

RESOURCES

Guru99. (2020). *Tableau Charts & Graphs Tutorial: Types & Examples*. Retrieved from Guru99: https://www.guru99.com/tableau-charts-graphs-tutorial.html

SB Nation. (2019, January 8). *Bless You Boys*. Retrieved from A complete beginner's guide to baseball stats: Batting statistics, and what they mean: https://www.blessyouboys.com/2019/1/8/18171919/baseball-stats-for-beginners-batting-average-on-base-percentage-explained