Data Story Telling Project for Baseball Data

Introduction

This report presents the explanatory data visualization from baseball data set that communicates a clear finding or that highlights relationships, patterns or factors that have an impact on the player's performance. Data analysis starts with gathering the data from CSV file. Then, Assessing through Tableau Public workbook so this data set containing 1,157 baseball players including their handedness (right or left handed), height (in inches), weight (in pounds), batting average, and home runs. After that, storing and visualizing the data will be explained more below in Design section.

Summary

Data insights and conclusions are presented based on data analysis and different visualization's types. To asses baseball players performance we analyzed different variables (i.e. one, two or more variables) to figure out the relationship between then such as height, weight, handedness, batting average, and home runs. Below is my story that shows the insights.

1st draft story before feedback:
https://public.tableau.com/profile/wejdan.a#!/vizhome/storybeforefeedback/Story1?publish=yes

Final draft story after feedback:
https://public.tableau.com/profile/wejdan.a#!/vizhome/storyafterfeedback/IdentifyingBaseballPlayersPerformance?publish=yes

Design

In 1st draft we analyze the following:

1. In order to start analyzing we need to know ***how many players do we have?*** Number of Baseball Players based on Handedness displays in bar chart each bar for each hand type (R: Right, L: Left, B: Both). As a result, the right-hand players are the most with 737 followed by left then both.
2. After that, we need to know for each group of players ***what is the average weight and height?*** Average weight and height by handedness displays in bar chart. As a result, heights for baseball players have not much difference while average weight is more for one-handed ones (right or left-handed).
3. As weight and height are interesting factors that might affect the performance so we will investigate more ***what is sum/average for both***

weight and height? Average of weight and height vs. Sum of weight and height displays in scatter plot. In sum weight-height there is outliners because of duplicated data. While the average gives us a good result.

4. We will investigate other factor or variable which is batting average ***how many batting average players and what is the median of them?*** Sum and Median of Batting Average by Handedness displays in bar chart. As a result, sum of Batting Average by Handedness is more for right-handed players while the average is more for left-handed. For right-handed sum we have 130.2 followed by left then both. And for left-handed median we have .25 followed by right then both.
5. As batting average is interesting variable for left-handed we will check its relationship with home runs so we confirm the result in scatter plot colored by handedness that baseball players have good batting average and few players are having high records of home runs.
6. Finally focusing on home runs players filtered by Right-handed as they are the most. Sum and average of home runs by Handedness displays in bar chart. The sum of right-handed home runs is higher than others because we have more right-handed baseball players while batting average is more for left. For right-handed home-runs sum we have 31,395 followed by left then both. And for home-runs average we have 56.15 for left followed by right then both.

In final draft we analyze the following:

1. Same steps and insights as above
2. Add one more bar chart to confirm that right-handed players have scored good home runs.

Feedback

1. Story has the defaulted name, which is Story1 it was not clear for others

So we changed the story name to “Identifying Baseball Players Performance” to be recognized and understandable from first view.

2. The plots were so confused as they have no title.

We added clear title with caption.

3. Need to see who has the best score in home runs.

Add plot to show confirmation that right-handed players have scored good home runs.

Conclusion

As a result, the good baseball players performance are right-handed players that have scored good home runs with high height and weight.

Resources

N/A