Tableau Story on Baseball Data

# Padmaraj Bhat

## **Summary:**

## Baseball 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. The idea is to present various visualization that shows differences among the performance of the baseball players.

## Story can be read at

<https://public.tableau.com/profile/padmaraj.bhat#!/vizhome/AnalysisonBaseballDataSet/Story1?publish=yes>

## **Design:**

## There are 3 versions to my Tableau story:

## Initial Version

## Second version post peer feedback.

## Final version post review by Udacity Experts.

### The details of the above design version will follow this page.

### **Initial Design**: was focused on the understanding the differences, if at all, between the players & the relation between performance and handedness. To be honest, exact initial version is not available. Accidentally, I have overridden it. Initial versions are usually ranked as 1.0. If so, my initial version available in the repository is in between 1.25 10 1.5.

### **Design Decision:**

### I wanted my story to be not only interactive and statistically correct but also to be distinctive and one which people would remember. Therefore, thought to start the story with a lighter note. I also wanted smooth ending so that the story does not sound too technical. So, tried my best to make first and last are catchy.

### There was only one conclusion I could draw. So, I have narrated the story in the order of how analyzed the dataset step by step. I included textual dashboards between the plot slides wherever explanations were not possible in the same slide. Those text dashboards also helped me to sync up with the viewer.

### Horizontal / Vertical Bars: I chose it show both for top batting averages and home runs. It helps to easily sort the players in the descending order and hence, user can easily see the top 20 odd players. Added HR, Avg and BMI in the tool tip for quick reference.

### Almost 99% percent of my Story visualizations are through horizontal or vertical bar plots. I chose it because,

### Very easy to convey the message

### Best for few categorical comparison (handedness)

### Best visualization technique for quantitative data are position along axis and length.

### Core was to identify the outlier and the correct IQR but those are exploratory and can be done through complicated plots. I wanted only explanatory plot in the story.

### Scatter plot: I used it to compare between two variables. Scatter plot is not only developer friendly but also viewer friendly. People can easily see the densely populated area (may be as a group of ants). To spice up, I added color to plot.

### Changes can be found at : <https://github.com/PadmarajBhat/DataAnalyst/blob/master/Tableau%20Story/Baseball%20Story%20Initial%20Version.pdf>

### 

### **Post First Feedback**: Though the overall focus remained the same, in the revised design gave importance to standardizing BMI in all the visualization and correcting the baseball terminologies. There were minor changes regarding punctuations, grammar corrections, font changes and summary to the slides were also given.

### Design Decision:

### Again, chose horizontal bars to prepare the “BMI” slide. To indicate that top performers have different BMI, included people (Name) to the “detail” portion of the “Marks” table. There are 3 different groups:

### BMI range for the top performers and most of the crowd.

### BMI region above top performer’s range

### and below to it.

### To emphasis the same used heavy colors (and it is also default coloring code in Tableau).

### To reduce the color hues, limited the BMI color to “3 stepped” colors in all the slides with bar plots.

### Gave clear description of identifying the Pitchers which was not so intuitive from the dataset.

### Changes can be found at: <https://github.com/PadmarajBhat/DataAnalyst/blob/master/Tableau%20Story/Analysis%20on%20Baseball%20DataSet%20Final%20Version.pdf>

### Or at Tableau: <https://public.tableau.com/profile/padmaraj.bhat#!/vizhome/AnalysisonBaseballDataSet_v2/Story1>

### **Post Udacity Feedback**: made changes to slide – “Plot of Number of Pitchers by Handedness” to correctly indicate the count of Pitchers through Bar Chart.

### **Design decision**: I had kept squares to show all the pitchers in a slide but it was not so user friendly. Converted the chart into counts (yet again) bar chart to indicate the Pitchers by handedness.

### Changes can be found at: <https://github.com/PadmarajBhat/DataAnalyst/blob/master/Tableau%20Story/Analysis%20on%20Baseball%20DataSet%20Final%20Version.pdf>

### Or at Tableau: <https://public.tableau.com/profile/padmaraj.bhat#!/vizhome/AnalysisonBaseballDataSet/Story1>

### **Feedback**:

### Tim M was kind enough to share the feedback and all his comments are saved in <https://knowledge.udacity.com/questions/7509>.

### Udacity Feedback : https://review.udacity.com/#!/reviews/1385627

### **Resources**: None

### **DataFile**: The dataset was used as is from

### https://www.google.com/url?q=https://s3.amazonaws.com/udacity-hosted-downloads/ud507/baseball\_data.csv&sa=D&ust=1533607218334000

### At

### https://docs.google.com/document/d/1w7KhqotVi5eoKE3I\_AZHbsxdr-NmcWsLTIiZrpxWx4w/pub?embedded=true