

Create a Tableau Story using Baseball Data

By Syed Saqib Imam

Introduction:

Aim of this project was to create an explanatory data visualization from a data set that communicates a clear finding or that highlights relationships or patterns in a data set. My work should be a reflection of the theory and practice of data visualization, and your final deliverable will be a write up along with a Tableau Public workbook.

Summary:

Baseball Data consist of 1157 observation for name, handedness, weight, average score and home Runs.

We try to figure out using visualization answer for following questions

- Which Hand leading the Teams?
- Which Hand leading the Score?
- What factor impact the score?
- Finally comparison between Home Run and Average score.

Design:

- For first slide use bar chart to show which handed players leading and put additional commentary to clarify my finding.
- Second slide use line and bar charts to shows comparison between Handedness and Height, weight, Home runs and Average Score.
- Third slide used dashed line to calculate Body Mass Index for Left, Right and Both handed players.
- For last slide I compare Homerun versus Average using line chart and filter option for audience to select Average and Home runs.

Feedback:

My Initial submission can be seen in following link:

<https://public.tableau.com/profile/syed.saqib.imam#!/vizhome/Baseballinitialsubmission/Story1>

Review:

I got detailed feedback from colleague at Udacity Chat room.

what dataset is this about? I'm guessing baseball, but I believe your story should be clearly labeled.

Dominant Hand view: well amoung 1155 players... - well known? well established?

Graph: Consider changing count of number of records to number of players, Consider changing R/L/B to Right/Left/Both, Consider eliminating color as its not encoding something new, Consider eliminating legend as it doesn't appear to convey anything new, Consider eliminating Sheet 1 title

Handedness view

From previous story we know the dominant... - this is one story, consider re-wording to from previous slide/view. Also, consider splitting up into multiple sentences: ... and it really impacts the score too. Right handers get more home runs. Also - can you show this with a graph on this view/dashboard?

Handedness graphs

Consider rounding to 1 or 2 decimal places, Consider changing graph layout from stacked to side-by-side - since there's room available to the right, why not use it? Also, for people with smaller screens I think this may work better

Handedness 2 view

Consider splitting up descriptoin into multiple sentences - ... we can calculate BMI. This provides an indication of how healthy players are. I would leave off the range of 19 - 30 as that's shown in the graphs. Consider providing a hyperlink to Wikipedia or something providing an overview of BMI for those not familiar with it. You can use actions under Worksheet/Dashboard menu item for this.

Graphs

Consider providing a number at the end of the line which shows max BMI, hard to see from graph. Could also indicate where it goes higher than 25, I believe above that is bad... The axes are somewhat confusing to me - you have BMI on the x-axis and average BMI on the y-axis - I'm not sure what this graph is showing

Last slide/view

What is the average score? Is that like RBI? I'm not clear on this, you started off with handedness - is there a relationship between handedness and homeruns/average score?

Graph: Consider changing axes labels to Homeruns and Average vs. abbreviated versions

After improving on review my final visualization can be seen on link below

<https://public.tableau.com/profile/syed.sagib.imam#!/vizhome/Baseballfinalsubmission/Story2>

Review by Udacity Reviewer:

You are almost there. Just a few changes in the way the data is shown and you are good to go ahead.

Viz 1: Though it is an important finding, you can skip the exploratory chart. One might argue that you cannot infer anything from this finding. On the other hand, if you build a few more charts and use this chart as a starting point to draw some inference, then it might well be useful as well. :)

Viz 2: The line graph and bar graphs you have used are particularly not useful for this case. Hint: There are other types of charts that can help you visualize a continuous (numeric) variable with a discrete (categorical) variable.

Viz 3: The dashed/dotted line chart again is ambiguous and generally should be used specifically to highlight the time series relationship. Try using a scatter plot instead since both the axis variables are continuous. :)

Viz 4: This is again an chart where your claim of zero correlation between average and HR is not clear. Please try using a better chart to showcase this finding better :)

Summary:

Baseball Data consist of 1157 observation for name, handedness, weight, average score and home Runs. We try to figure out using visualization answer for following questions

- Which Hand leading the Teams?
- Which is relation between weight and height of players?
- BMI on relation to handedness?
- Finally comparison between Home Run and Average score.

Design:

- For first slide use bar chart to show which handed players leading and put additional commentary to clarify my finding. Bar charts suit best to show categorical value counts so that's why choose it.
- Second slide use Histogram to shows distribution of different handed players in context of weight and height. To show distribution Histogram seems to be best fit in comparison to Bar, Box or any other graph.
- Third slide used packed bubbles as try to represent two dimension and one measurement.
- For last slide Handedness relationship compare with Home Runs and Average with BMI, used scatter plot as it seems to be best to compare two continuous values and trend line to show relation for each type handed player.

Resubmission link:

Please see below link for reworked project.

<https://public.tableau.com/profile/syed.saqib.imam#!/vizhome/Baseballfinalresubmission/Story2>

Resources:

https://public.tableau.com/views/BMITableauDashboard/ICSDashboard?:embed=y&:showVizHome=no&:display_count=y&:display_static_image=y&:bootstrapWhenNotified=true