UDACITY

Return to "Data Foundations" in the classroom

DISCUSS ON STUDENT HUB

Analyze Survey Results

REVIEW

HISTORY

Meets Specifications

Dear student,

I enjoyed reviewing your awesome work and appreciate your time & efforts.

you have done a very nice report: detailed, clear, deep analysis, with very good insights & charts. It's not that common to pass this project from the first attempt, but you did really professional job. Sure you are going to show even better performance in next steps ;)

thank you.. and good luck!

Submission Phase

A PDF report has been uploaded and a excel workbook has been uploaded in a single zipped folder file

you have provided the needed files in right format, thank you.

Exploration Phase

The project clearly states four or more questions, then addresses those questions in the rest of the analysis. The solutions to the questions should range in being found from a single column to being found using multiple columns.

At least one question/solution must make use of multiple columns.

yes you have generated at least four nice questions to make the report about, and investigated them using charts and analysis, very good job.

Student uses means, medians, and modes to generate insights.

Stating the mean, median, and mode is insufficient. Please include in the written description a short insight related to each one.

For example here is an insight based on median:
The median number of hours slept by survey respondents who were employed was 4 hours. The median number of hours slept by unemployed survey respondents was 12. It looks like those who are unemployed get much more sleep based on the median. (this data is fake for this example)

This is awesome !
A very nice report that's shown here, all needed summary statistics values are provided along with a convenient insight for each !

Student uses standard deviation and range to generate insights.

Stating the standard deviation and range is insufficient. Please include in the written description a short insight related to each one.

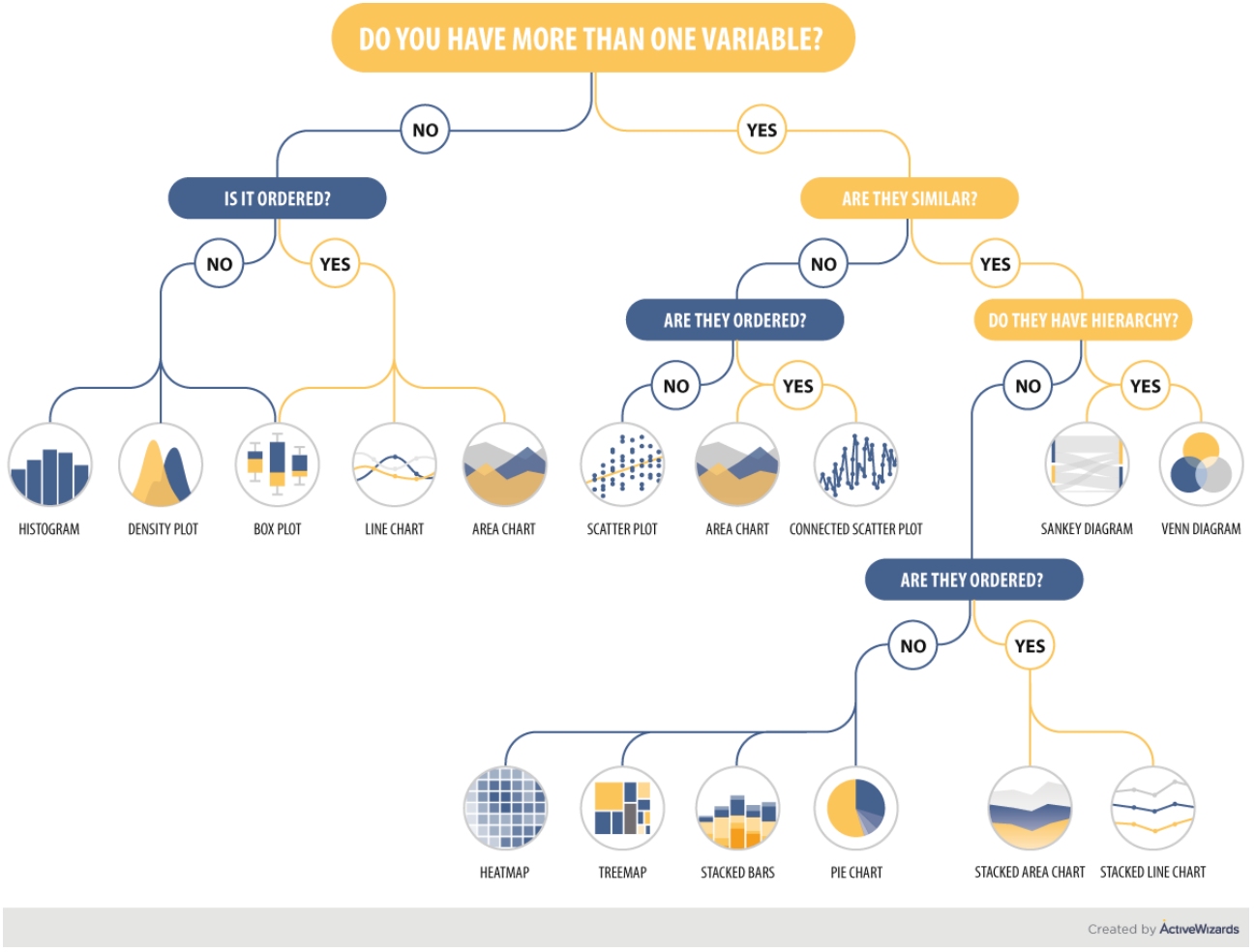
For an example, please review the finished slide example in the classroom, which can be found in the Analyze Survey Data project lesson (concept 7: Finished Example Slide).

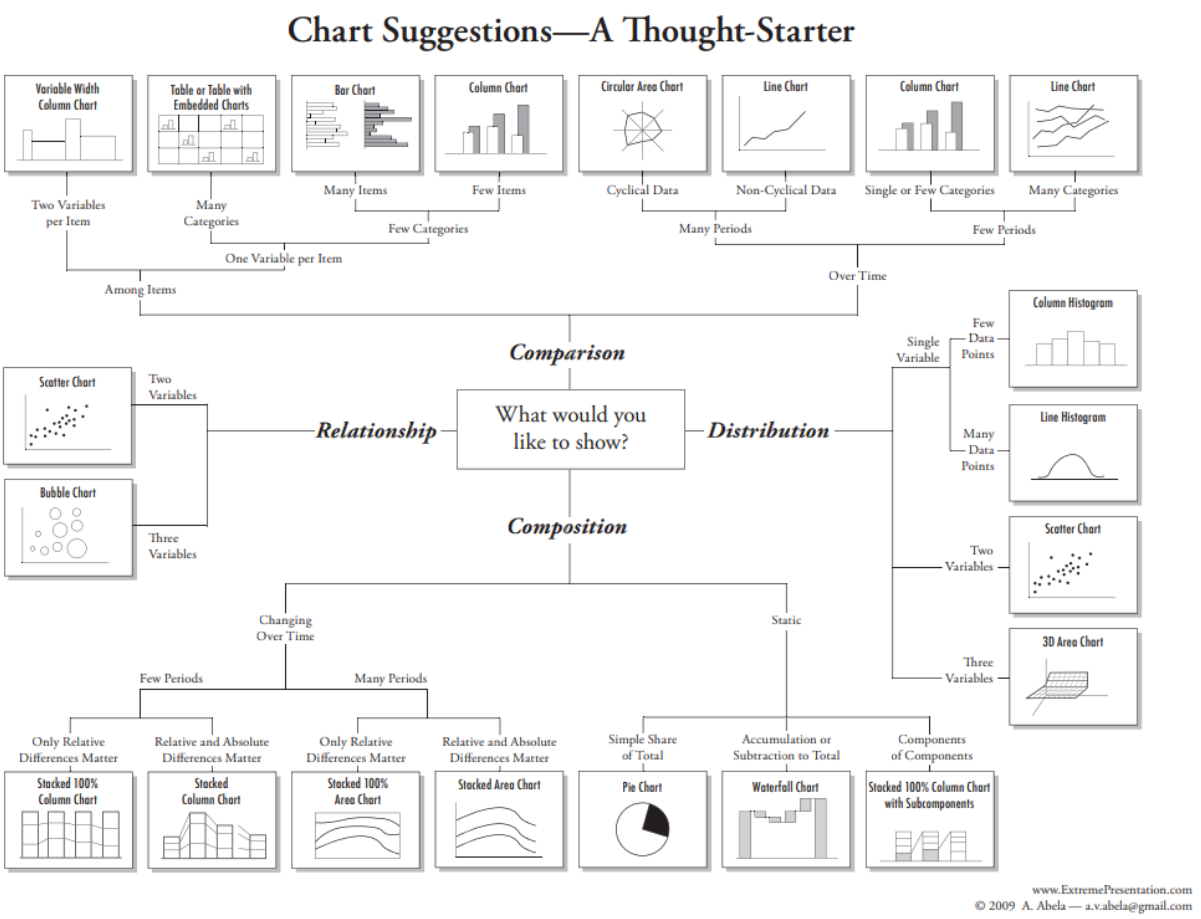
Great, standard deviation and range are added to the report and used to generate insights, very good work !

Student uses at least two different plots to explore the data. These plots may include histograms, box-plots, scatterplots, and bar charts to explore data and gain insights.

All slides must contain a visualization. Screenshots of values in a table does not count.

different plots have been used to explore the data. in a very great performance, appreciated !
for more information and details about plots, here is a summery :
https://datavizcatalogue.com/index.html


DO YOU HAVE MORE THAN ONE VARIABLE?
NO
YES
IS IT ORDERED?
ARE THEY SIMILAR?
NO
YES
NO
YES
ARE THEY ORDERED?
DO THEY HAVE HIERARCHY?
NO
YES
NO
YES
HISTOGRAM
DENSITY PLOT
BOX PLOT
LINE CHART
AREA CHART
SCATTER PLOT
AREA CHART
CONNECTED SCATTER PLOT
SANKEY DIAGRAM
VENN DIAGRAM
ARE THEY ORDERED?
NO
YES
HEATMAP
TREEMAP
STACKED BARS
PIE CHART
STACKED AREA CHART
STACKED LINE CHART
Created by ActiveWizards



An appropriate visual is chosen to present the data. All labels are legible and the visual has appropriate axis labels.

Every visualization should have

- **chart title**
- **x axis title**
- **x axis labels**
- **y axis title**
- **y axis labels**

Please refer to the finished slide example page in the classroom for an example.

this part is satisfied !

- what to improve :
- using heat maps is a good idea, if it's easy for the reader to make a comparison between the values, otherwise using other chart type will be better.
- it's better to represent the original values in the visualization , then make the comparison of measures of center (calculations) in the written description.

Communication Phase

The results of the analysis are presented such that any limitations are clear. The analysis does not state or imply that one change causes another based solely on a correlation.

The results do not imply facts about a larger group of individuals based on descriptive values. Language is only applied to the specific data provided. Unless a correct analysis beyond the course material is conducted that allows for inference.

This data is from Survey Respondents and is not from the entire Udacity Student population. This must be acknowledged at least once in the submission.

completed !

The analysis associated with answering a particular question uses the appropriate variables, summary statistics, and plots that could provide an answer.

Statistics

Quantitative Variables

When describing quantitative variables, it is common to use the statistics discussed earlier:

1. Measures of center - mean, median, mode
2. Measures of spread - standard deviation, range, IQR

Categorical Variables

However, when you are analyzing categorical variables, measures of center and spread **Do Not** make sense.

In cases of describing categorical variables, you need to use percentages or counts. Not means, medians, modes, standard deviations, or ranges.

Important Last Thought

With this in mind, think of the variable type of the columns you are analyzing, and determine which plots and statistics make sense for your analysis.

Plots You Can Use For Categorical Variables

If you have categorical data, here is a list of the possible univariate (one variable) plots you can make:

1. Bar Chart
2. Pie Chart

Plots You Can Use For Quantitative Variables

If you have quantitative data, here is a list of the possible univariate plots you can make:

1. Histogram
2. Box Plot

Plots to Compare 2 Variables

If you are interested in comparing two **quantitative** variables, then the main way to perform this comparison is with a scatterplot. However, if one of the variables is related to time, then a line plot is frequently used.

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RETURN TO PATH

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