

Return to "Business Analytics Nanodegree" in the classroom

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# Analyze NYSE Data

#### **REVIEW**

#### HISTORY

## **Meets Specifications**

Congratulations on passing this project!

Terrific job done, particularly with the visualization and robust financial forecast model constructed.

I hope you have had a good learning experience at Udacity so far.

Keep up the great work!

#### **Submission Phase**

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A PDF report have been uploaded as part of a zipped folder.

PDF report well received with thanks.



Student provided an Excel file as part of a zipped folder or link to Google Sheet (in case the student used Google Sheets instead of Excel) necessary for review. This file should include their Profit and Loss statement and forecasts. The Google link should be included in the PDF or slides document.

The spreadsheet (Excel or Google Sheets) should contain individual tabs for the dataset, calculation of the summary statistics, dashboard for Profit and Loss statement, and Forecasting model with scenarios. There can be additional tabs in the Workbook that are needed for the dashboard and forecasting model.

Well done, your Excel spreadsheet contains all the necessary information for the Profit, Loss statements and forecasts within specific worksheet tabs along with the calculations for the summary statistics.

## **Exploration of Summary Statistics**



Student uses the measures of center and spread and at least one numeric summary statistic to generate insights.

Stating the summary statistics is insufficient. Please include in the written description a short insight related to each one.

For example here is an insight based on mean:

The mean total revenue for companies categorized under Pharmaceutical industry (\$26,325,440,909.09) was higher compared to mean total revenue for all healthcare industries (\$23,142,217,458.76). It looks like companies in the Pharmaceutical industry have a higher total revenue on

average than all industries categorized under Health Care.

Nice job in calculating the measures of central tendency for the quantitative data and providing related insights based on the median and mean.

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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 example, please review the finished slide example in the classroom, which can be found in the Analyze NYSE S&P 500 dataset project lesson (Finished Example Slide).

Nice job in calculating the measures of spread for the quantitative data. Your file contains the measures for the summary statistics: standard deviation, range and variance.

More Significance of standard deviation:

A low standard deviation indicates that the data points tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values.

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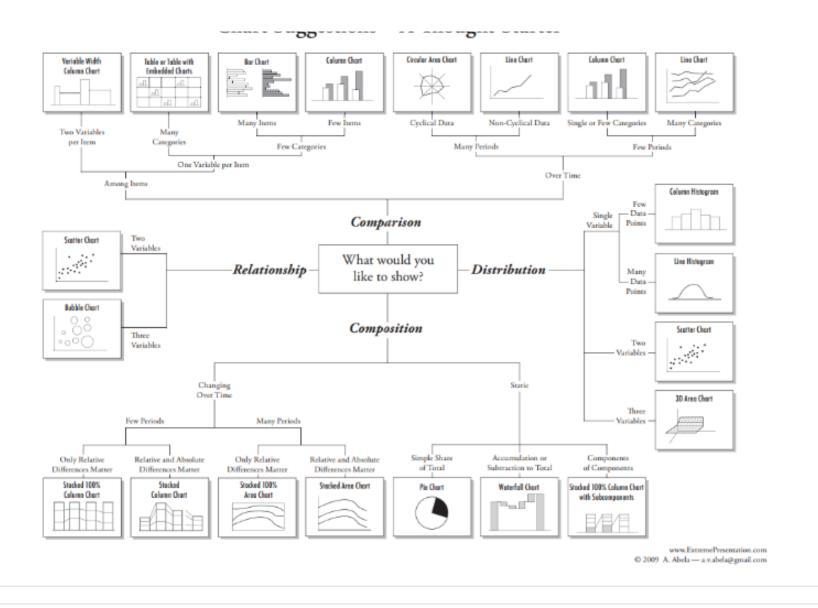
Student uses at least one plot to explore the data. The plots may include histograms, box-plots, scatterplots, and bar charts to explore data and gain insights.

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

Good job with the bar chart and box plot, which the latter one is ideal to show the distribution of the data.

Please see the image and link for further insights on choice of chart.

## Chart Suggestions—A Thought-Starter



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 (including which year's data the chart depicts)

- 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.

Nicely done! Your visualization is very clear and easy to understand. You have included all the required features within the visualization, including the chart title, x and y axis labels and titles.

For further insight see the link regarding do's and don'ts when creating charts.

### **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.

Your analysis does not state or imply facts and changes caused by correlation. Well done!



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

Nice work using appropriate variables, summary statistics, and plots with answering a particular question.

#### **Business Metrics**



Student has input the correct formula for each business metric in the income statement and forecast model.

Good job! Looking through the income statement and the financial forecast, you used the correct formula for each business metric in the income statement and forecast model.



The student provides appropriate assumptions based on gross margin, revenue growth and operating margin for the financial model scenarios.

Your assumptions for each scenario were appropriate given the historical metrics and statistics (such as the revenue growth rate, gross margin and operating margin). Based on the scenario, the assumptions changed to reflect the correct assumptions and model it for the financial model.

## **Excel Functions and Modeling**



Student demonstrates using VLOOKUP or INDEX and MATCH statements. The student can use the appropriate functions such as OFFSET and MATCH to create forecast scenarios.

Your income statement uses a combination of spreadsheet functions, such as INDEX, MATCH for the financial statements. Your financial forecast also uses the OFFSET function to change the assumptions based on the chosen scenario. Excellent job!



## RETURN TO PATH