

CAPSTONE PROJECT: NETFLIX DATA

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DATA VISUALIZATION WITH PYTHON

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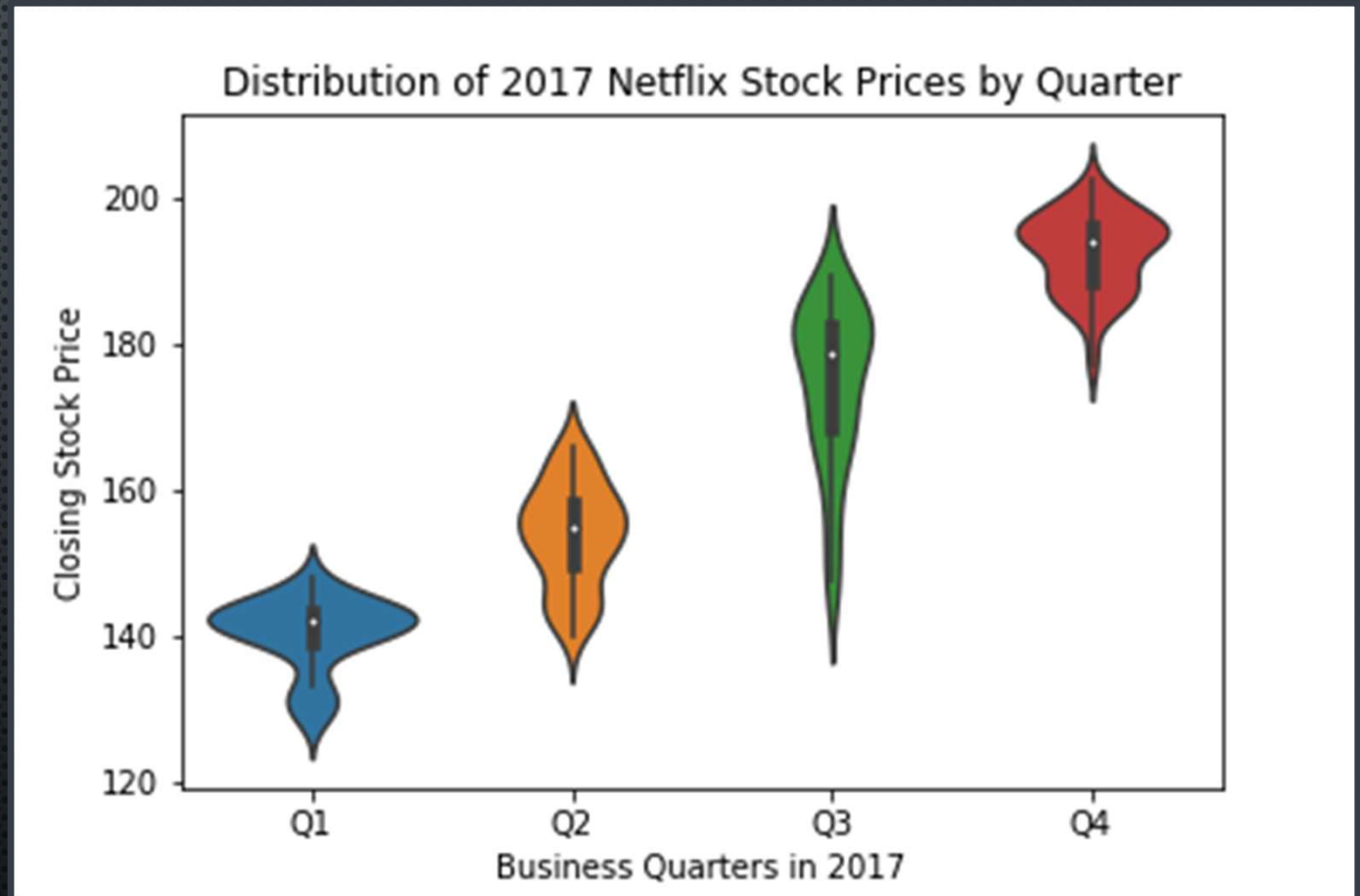
MY ROLE IN THE NETFLIX STOCK PROFILE TEAM

- MY TITLE IS A VISUALIZATION DEVELOPER FOR YAHOO FINANCE.
- MY CONTRIBUTION TO THE “NETFLIX STOCK PROFILE” TEAM IS TO ANALYZE, PREPARE, AND PLOT DATA OF NETFLIX’S PERFORMANCE IN 2017.
- MY VISUALIZATIONS WILL BE PLOTTED FROM THREE DIFFERENT DATASETS: NETFLIX’S MONTHLY STOCK PRICES AND VOLUME (NFLX.CSV), NETFLIX’S QUARTERLY STOCK PRICES AND VOLUME (NFLX_DAILY_BY_QUARTER.CSV), AND DOW JONES’ MONTHLY STOCK PRICES AND VOLUME (DJI.CSV).
- THESE DATA VISUALIZATIONS WILL HELP THE TEAM ASSESS THE RISK OF THE NETFLIX STOCK.

THE DISTRIBUTION OF THE STOCK PRICES FOR NETFLIX IN 2017

(VIOLIN PLOT)

- First impression of this visualization is that Netflix had a year of growth in 2017.
- This violin plot shows the stock price fluctuation in each quarter.
- In Q1, Netflix had the least price fluctuation of \$20.57 with the highest closing price of \$148.06 and lowest price of \$127.49.
- In Q2, Netflix had a price fluctuation of \$26.12 with the highest closing price of \$165.88 and lowest price of \$139.76.
- In Q3, Netflix had the most price fluctuation of \$42.91 with the highest closing price of \$189.08 and lowest price of \$146.17.
- In Q4, Netflix had a price fluctuation of \$25.67 with the highest closing price of \$202.68 and lowest price of \$177.01.
- In 2017, the average stock price was \$165.37.



NETFLIX STOCK AND REVENUE FOR THE PAST FOUR QUARTERS

(SIDE-BY-SIDE BAR PLOT)

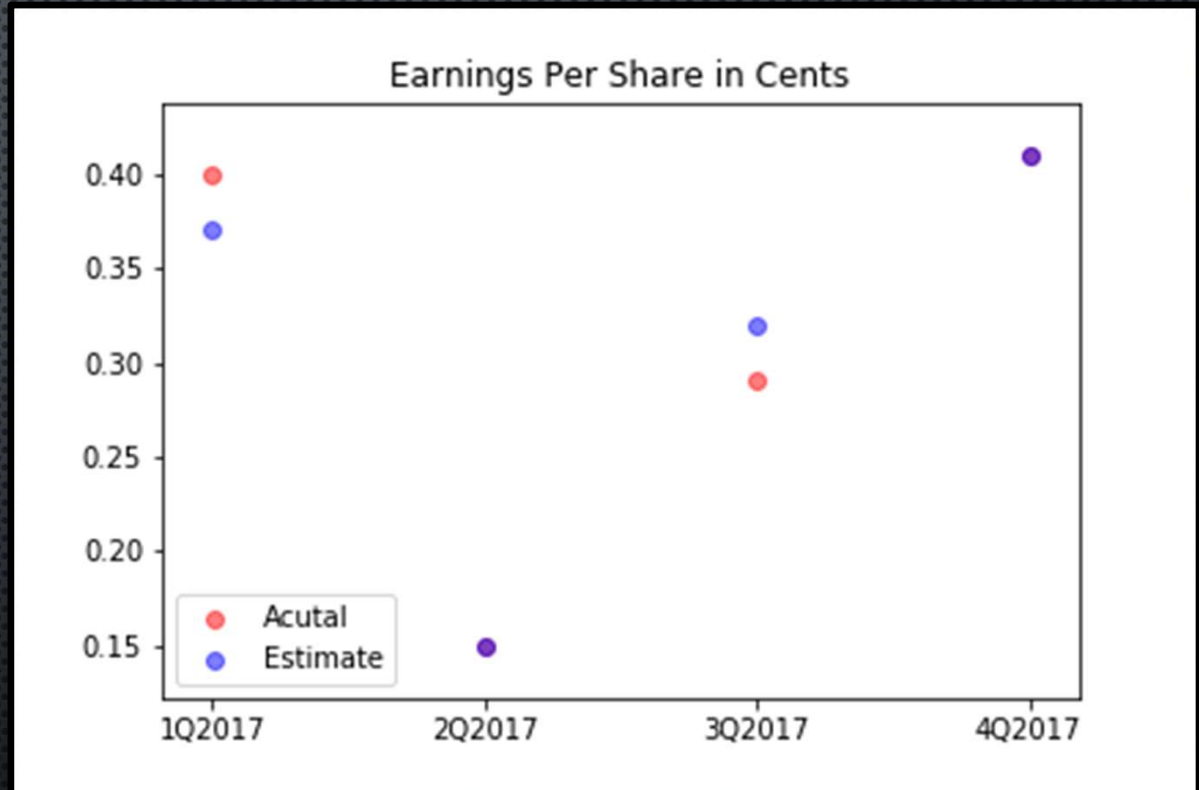
- This side-by-side bar plot shows that both Revenue and Earnings had a growth trend from Q2'17 to Q1'18.
- The bar plot also shows how little of Revenue constitutes Earnings:
 - In Q2'17, the Earnings was 2% of Revenue.
 - In Q3'17, the Earnings was 4% of Revenue.
 - In Q4'17, the Earnings was 6% of Revenue.
 - In Q1'18, the Earnings was 8% of Revenue.
- The Revenue has grown \$0.91B from Q2'17 to Q1'18.
- The Earnings has grown \$0.22B from Q2'17 to Q1'18.



NETFLIX EARNED VERSUS ACTUAL EARNINGS PER SHARE

(SCATTER PLOT)

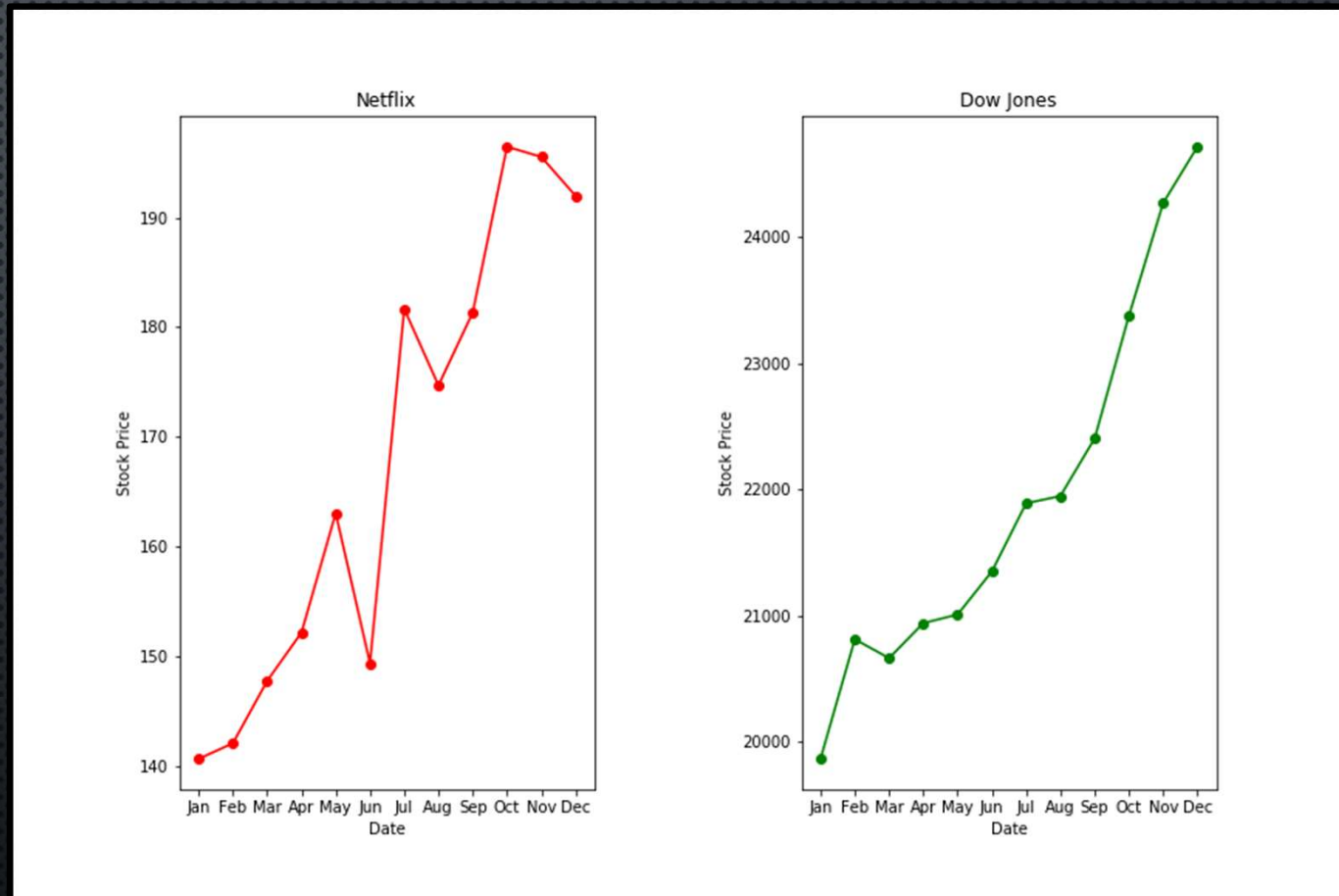
- This scatter plot shows the estimated earnings per share and the actual earnings per share in 2017.
- In Q1, the estimated earnings per share was less than actual (\$0.37 estimate vs. \$0.40 actual).
- In Q2, the estimated earnings per share met the actual (\$0.15 estimate vs. \$0.15 actual), hence the purple hue.
- In Q3, the estimated earnings per share was more than actual (\$0.32 estimate vs. \$0.29 actual).
- In Q4, the estimated earnings per share met the actual (\$0.41 estimate vs. \$0.41 actual), hence the purple hue.



NETFLIX STOCK AGAINST THE DOW JONES STOCK IN 2017

(LINE GRAPHS)

- In relation to the Dow Jones Industrial Average (DJIA), Netflix's 2017 overall performance shows an upward trend.
- Although, Netflix's stock prices had multiple declining periods between May & June, July & August, and October through December, while the DJIA's stock prices had only one period of decline between February and March.
- These line graphs clearly show that Netflix's stock prices were more volatile in 2017 than DJIA's stock prices.
- Netflix's stock prices are a mere fraction of the DJIA stock prices. In 2017, Netflix's highest closing stock price was at \$196.43 and the DJIA's highest closing stock price was \$24,719.22.





THANK YOU!