# Netflix Stock and Dow Jones Comparative Analysis

Prepared by: Andrew Hay

## Project overview

As a data visualization developer at Yahoo Finance! We were asked to help the "Netflix Stock Profile" team visualize the Netflix stock data comprising of studies, visualizations, and analyses that dive into different aspects the company's data.

For the purposes of the project, we will only visualize data for the year of 2017 and the Dow Jones Industrial Average will be used to compare the Netflix stock to the larter stock market.

### List of visualization figures

- Figure 1 Distribution of 2017 Netflix Stock Prices by Quarter
- Figure 2 Earnings Per Share in Cents
- Figure 3 Revenue and Earnings by Quarter
- Figure 4 Comparison of Netflix Stock price and the DJI Average

#### Data overview

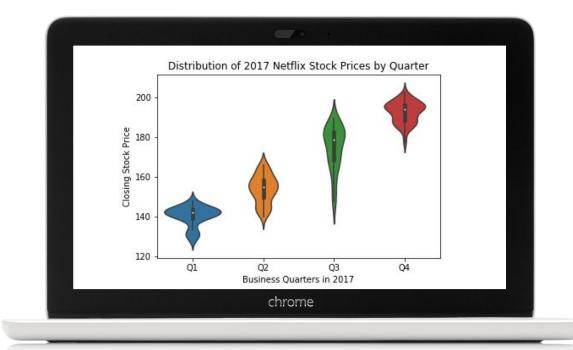
- NFLX is the stock ticker symbol for Netflix and DJI is the stock ticker symbol for the Dow Jones industrial Average, which is why the CSV files are named accordingly (NFLX.csv and DJI.csv)
- In the Yahoo Data, *Adj Close* is documented as adjusted close price adjusted for both dividends and splits.
  - o For simplicity, we changed the name of the column *Adj Close* to *Price* so that it is easier to work with the data.
- NFLX.csv and DJI.csv contain monthly data.
- NFLX\_daily\_by\_quarter.csv data are weekly.
- The netflix\_stocks\_quarterly.csv also adds a column representing the fiscal quarter for the data period.
- Financial Data Source: <u>Yahoo Finance</u>

# Distribution of 2017 Netflix Stock Prices by Quarter

# Distribution of 2017 Netflix Stock Prices by Quarter

We wanted to get an understanding of the distribution of the Netflix quarterly stock prices for 2017. Specifically, we wanted to see in which quarter stock prices fluctuate the most.

We accomplished this using a violin plot with four violins, one for each business quarter.



Based on the analysis, we observed that the closing stock price increased quarter-over-quarter, on average. Most of the prices fell, throughout the year, between 140 and 180. The highest and lowest prices were just north of 120 in Q1 and peaked over 200 in Q4, respectively.

## Earnings Per Share in Cents

## Earnings Per Share in Cents

Next, we charted the performance of the earnings per share (EPS) by graphing the estimate Yahoo projected for the Quarter compared to the actual earnings for that quarters.

We accomplished this using a scatter chart. Note that overlapping *Actual* and *Estimated* points are represented with the color purple.



The purple dots tell us that, in 2Q2017 and 4Q2017, the actual and estimate earnings per share were exactly on target.

## Revenue and Earnings by Quarter

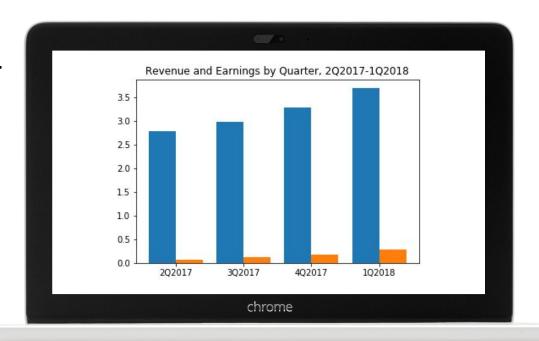
# Revenue and Earnings by Quarter

Next, we visualized the earnings and revenue reported by Netflix by mapping two bars side-by-side

Revenue appears to be trending upwards along with earnings.

Based on the data, Netflix is seeing a 2% increase in quarter over quarter.

For the period, roughly 5% of revenue constitutes earnings.

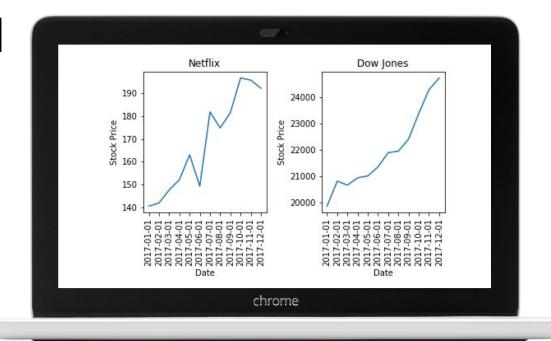


# Comparison of Netflix Stock price and the DJI Average

# Comparison of Netflix Stock price and the DJI Average

Finally, we compared Netflix stock to the Dow Jones Industrial Average in 2017. We accomplished this by plotting two line charts side by side in one figure.

Netflix followed the upward trend shown by the Dow Jones but was more volatile at several points (3 specifically) throughout the year. Throughout the course of the year Netflix, on average, represents 0.7% of the Dow Jones price.



#### Contact

**Andrew Hay** andrewsmhay@gmail.com <a href="https://andrewhay.ca">https://andrewhay.ca</a>

