



NETFLIX CAPSTONE PROJECT

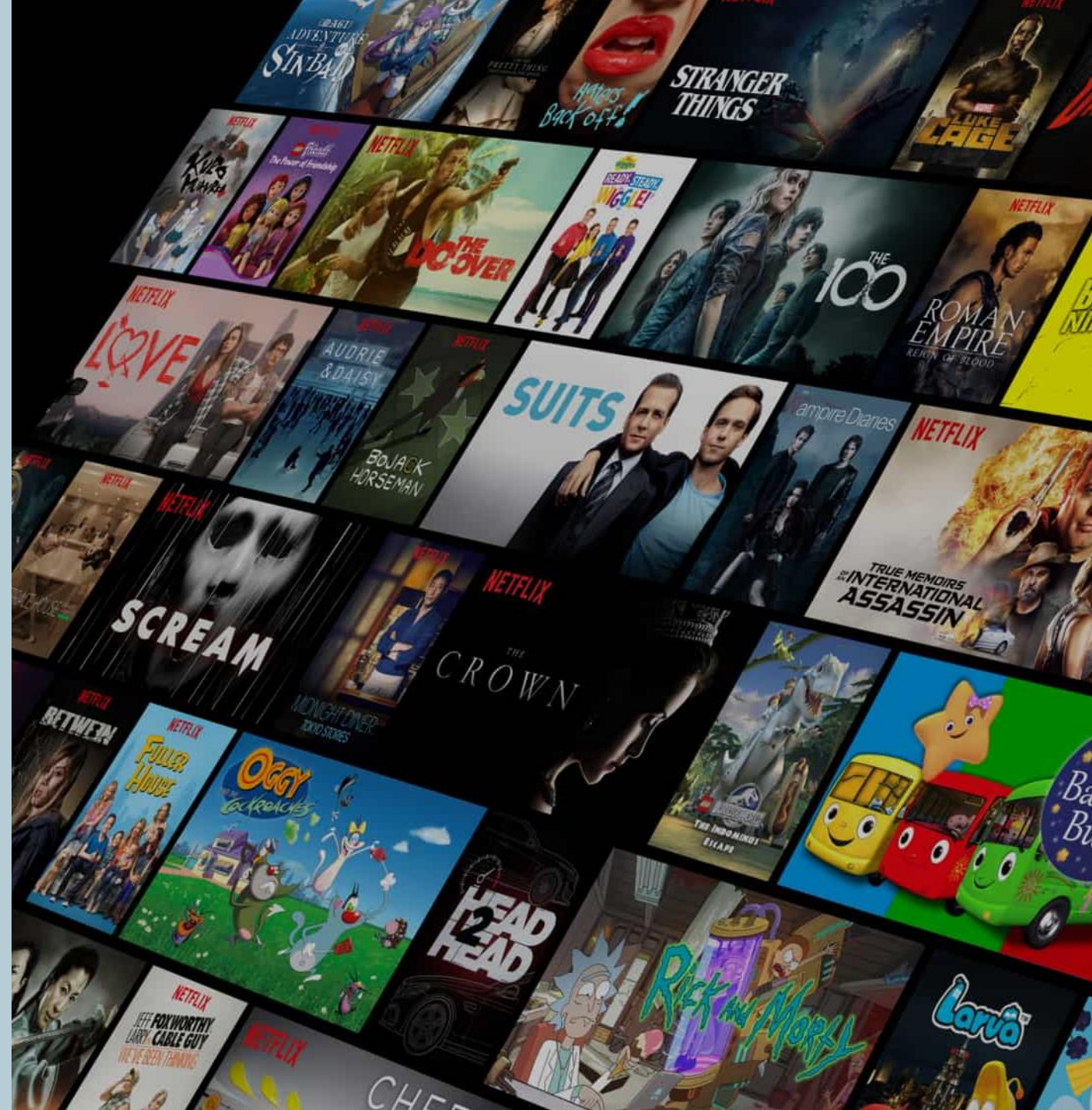
Fanny Ummelen, 07-01-2019

INTRODUCTION

Netflix currently has more than 150 million subscribers in more than 190 countries.

Maybe this is an interesting company to invest in?

In this presentation we will visualize recent Netflix data, to answer this question!



QUESTIONS TO BE ANSWERED

- How was the Netflix stock price distributed throughout 2017?
→ *Violin plots of the stock price for every quarter*
- Can the Netflix earnings per share be predicted?
→ *Scatter plots of both the actual earnings and those predicted by Yahoo*
- What are the trends in revenue and earnings at Netflix?
→ *Bar charts showing both revenue and earnings for every quarter*
- How did Netflix perform compared to Dow Jones Industrial Average?
→ *Line plots of the stock price versus time*

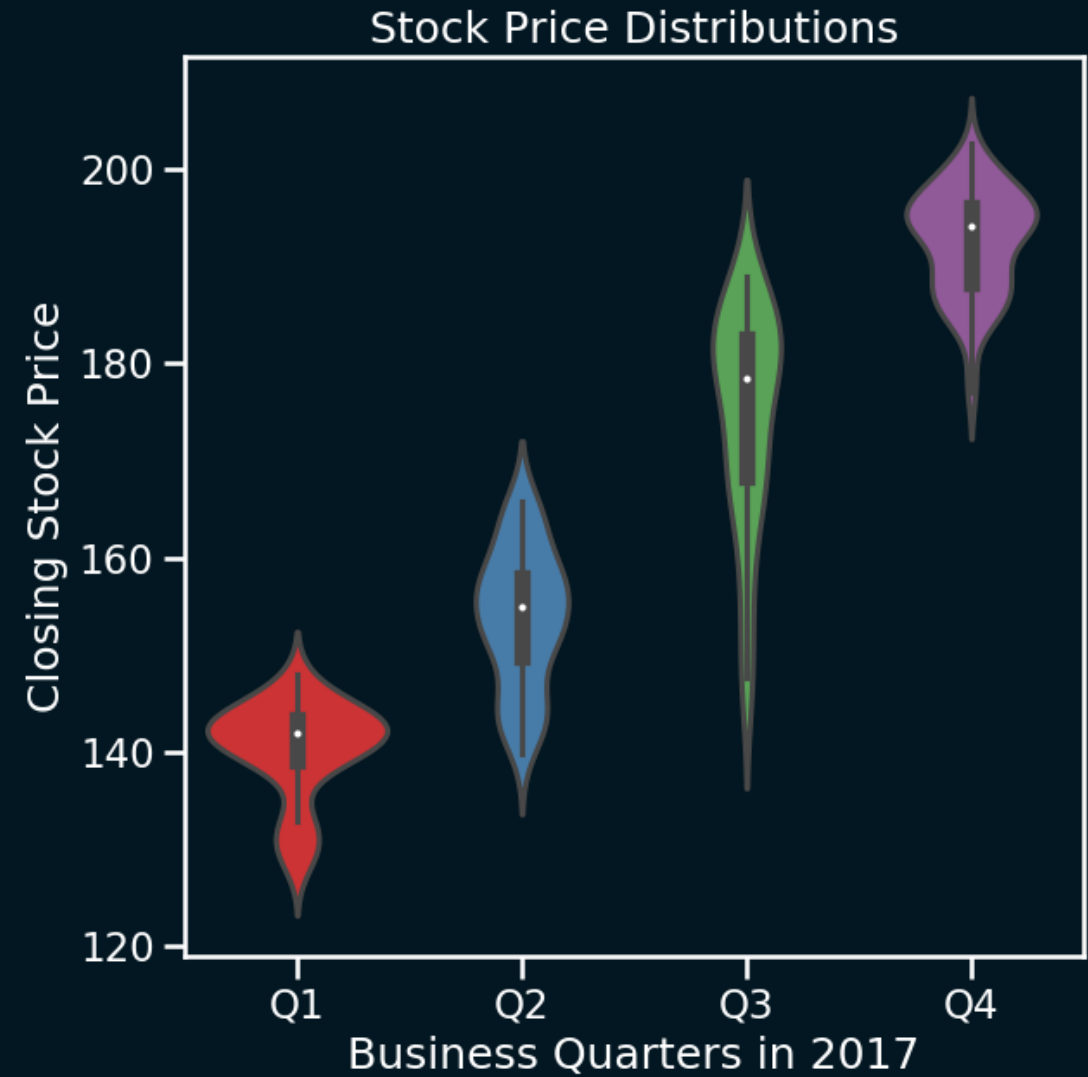
All visualization were created by Fanny Ummelen of the “stock profile” team

HOW WAS THE STOCK
PRICE DISTRIBUTED
THROUGHOUT 2017?

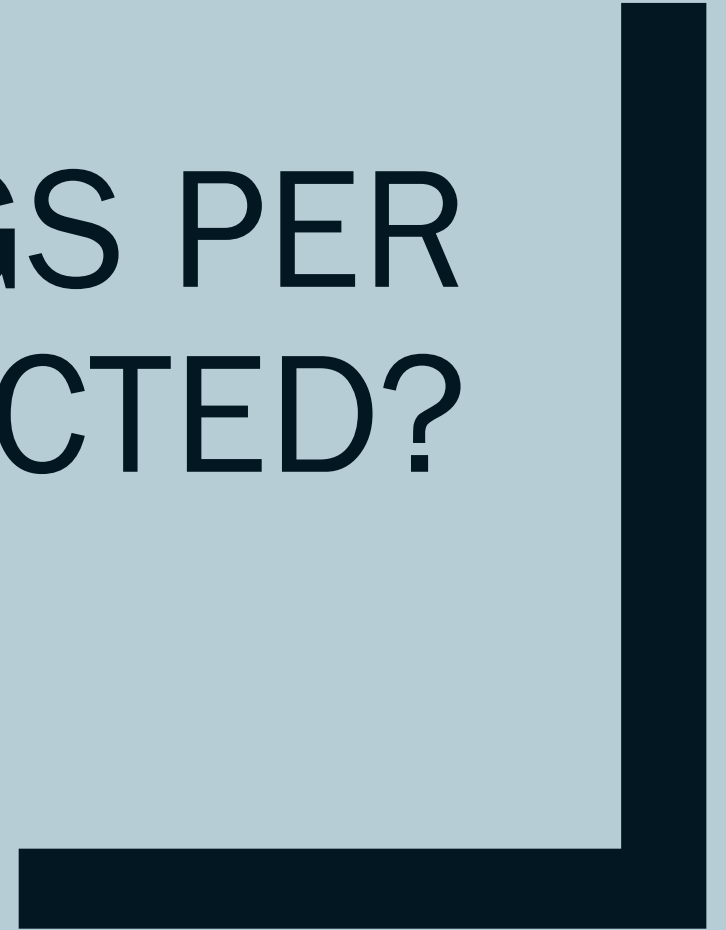


STOCK PRICE DISTRIBUTION

- The stock price increased significantly in 2017!
- Lowest stock price in 2017: **\$127**
- Highest stock price in 2017: **\$203**
- **90%** of 2017 stock prices fall in the range **\$139** to **\$196**
- In **Q3** stock prices fluctuated the most

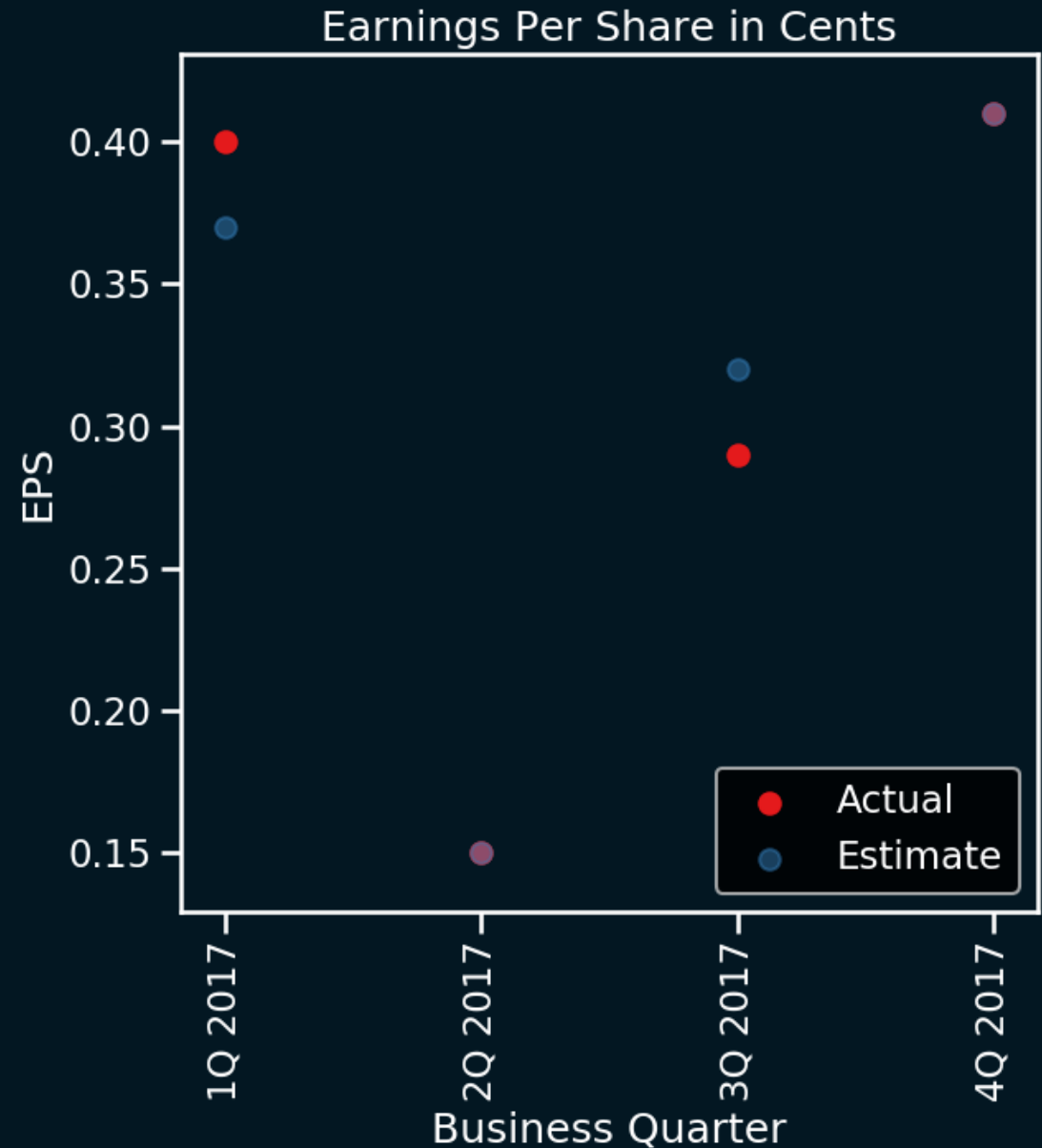


CAN THE EARNINGS PER
SHARE BE PREDICTED?



PREDICTION VS REALITY

- The mean squared error in the EPS is **0.02**
- Purple = red + blue
 - This indicates a **perfect** match in **Q2** and **Q4**

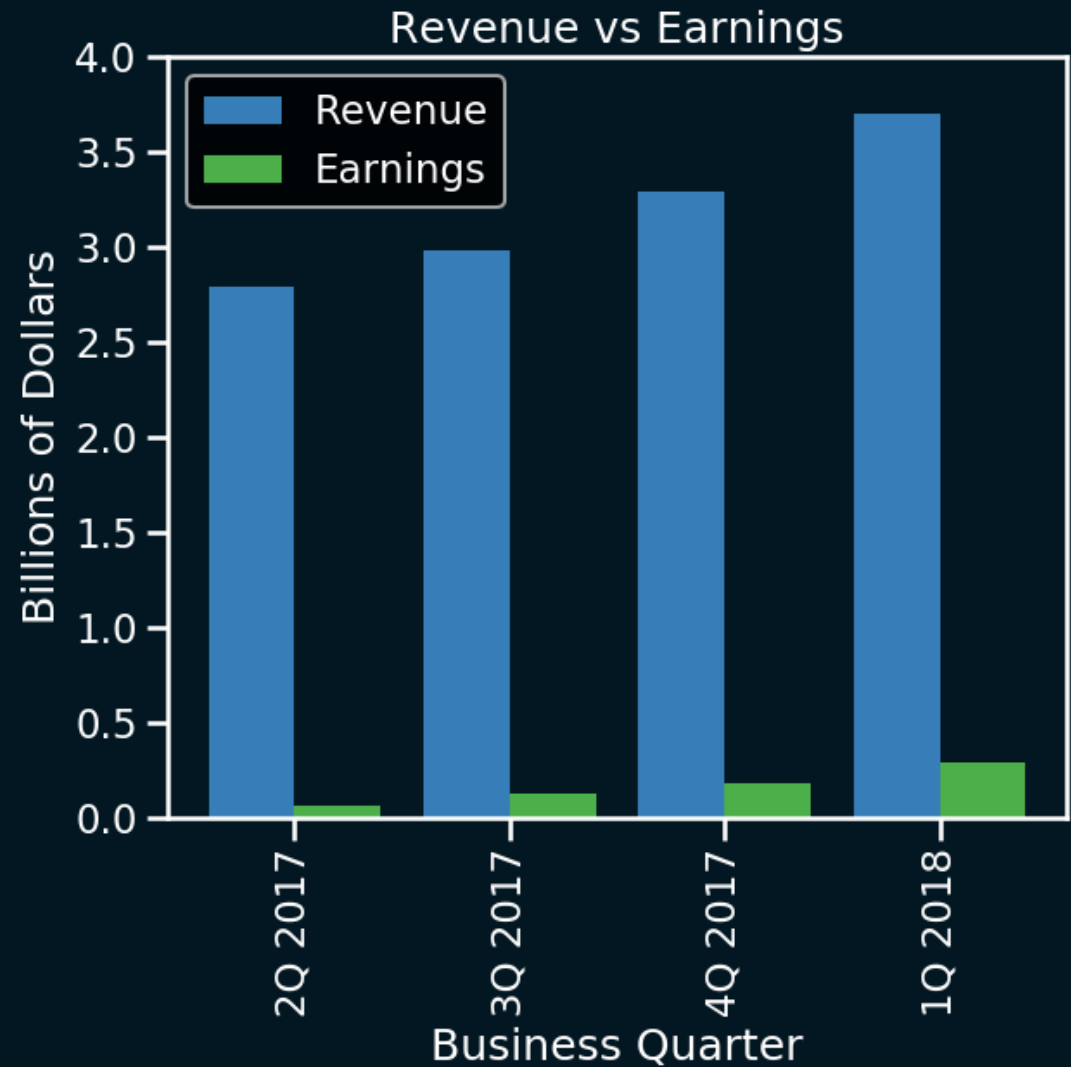


WHAT ARE THE TRENDS IN
REVENUE AND EARNINGS
AT NETFLIX?

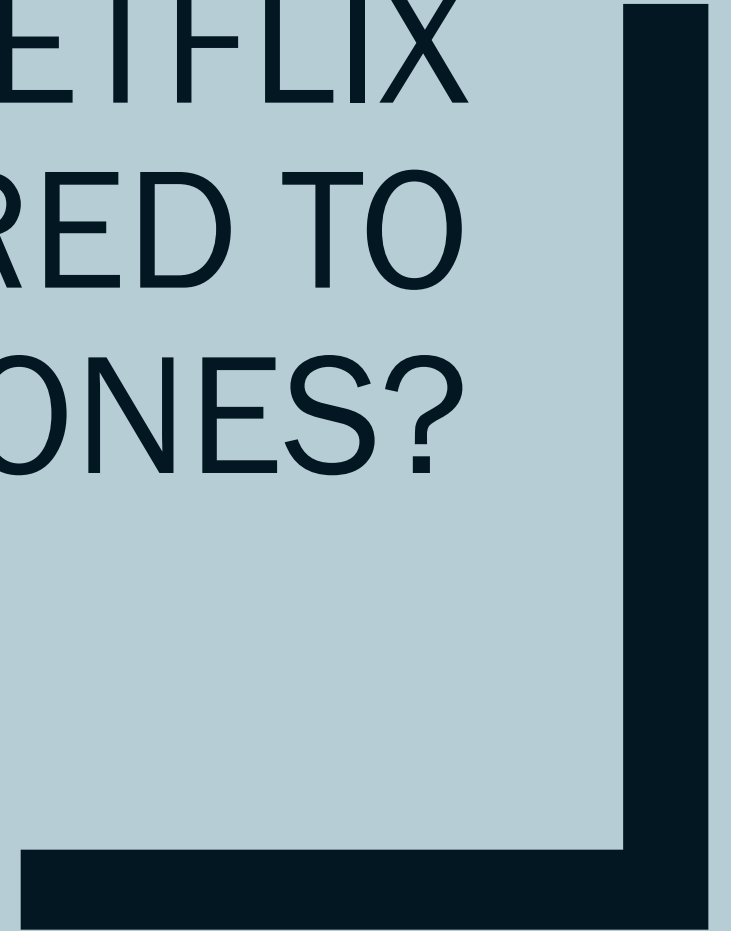


PROFIT PER QUARTER

- Both the Revenue and Earnings have increased tremendously over the last year!
 - Increase in Revenue: 33%*
 - Increase in Earnings: 342%*
- Also Earnings become an increasingly large percentage of the Revenue:
 - 2Q 2017: 2.4%*
 - 1Q 2018: 7.8%*

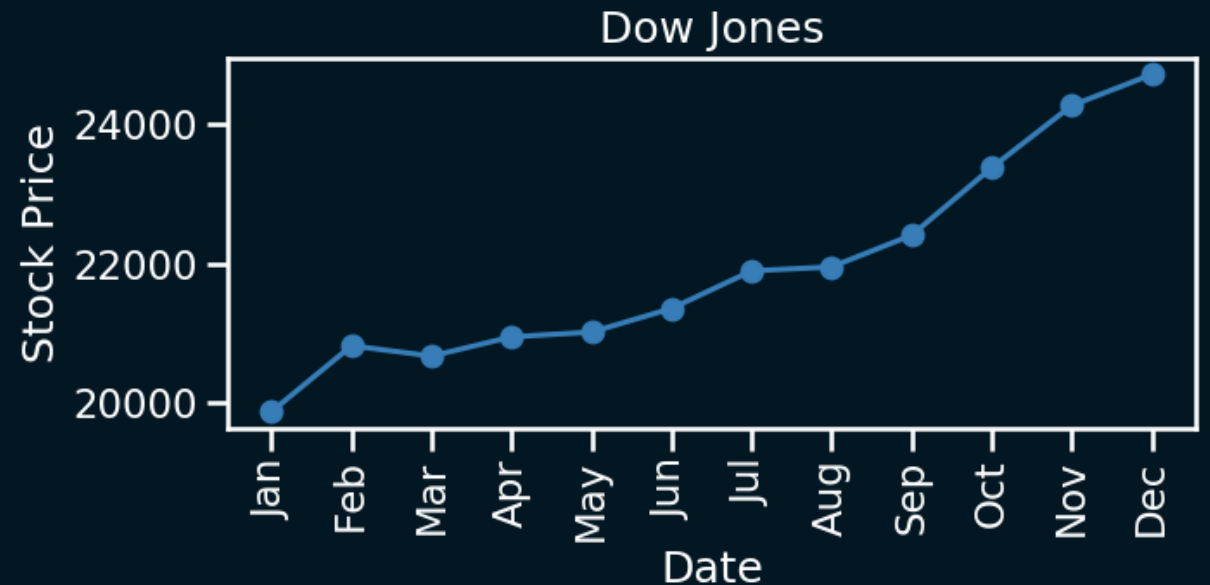
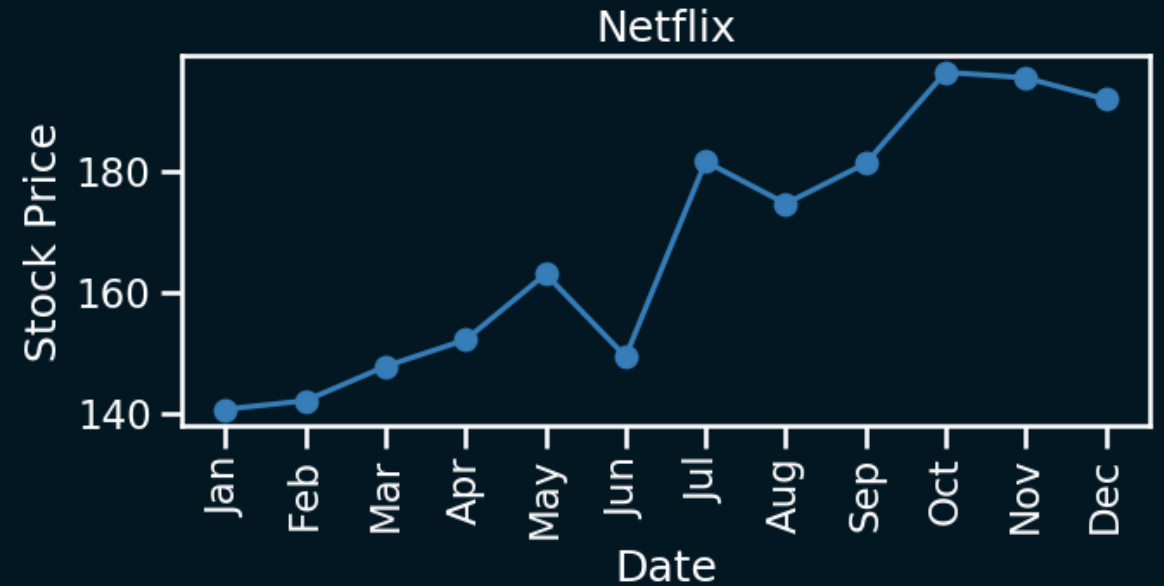


HOW DID NETFLIX
PERFORM COMPARED TO
DOW JONES?



STOCK PRICE EVOLUTION

- The Netflix stock price is on average **0.77%** of the Dow Jones stock price
- Relatively, the Netflix stock price increased more than the Dow Jones stock price this year:
 - *Netflix increased with **34%***
 - *Dow Jones increased with **26%***
- The Netflix stock price is more volatile: its graph contains more peaks and bumps



RECOMMENDATION FOR FURTHER RESEARCH

- Calculation of the standard deviation for the scatter plot, the bar chart and the line graphs
- Comparison of Netflix to other steaming services
- Searching for correlations between the stock price and other variables (for instance number of subscribers)