Netflix Stock Analysis

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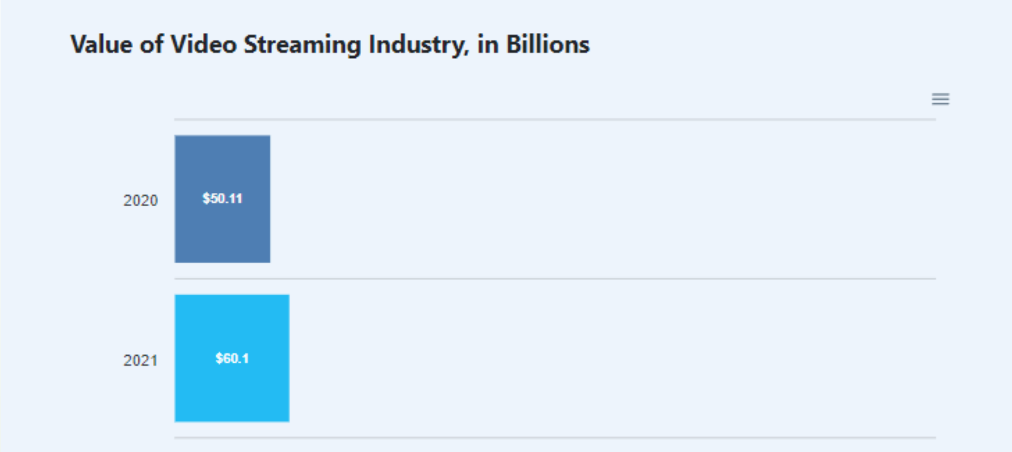
Problem Statement

- As a beginner data analyst in an investment firm, he is tasked by his manager to analyze if Netflix is a company worth investing in due to the increase in streaming activities around the world caused by the pandemic. He is to use the publicly available information and statistics to conclude whether the company should Invest in Netflix.

Streaming services - Info

- Video and music streaming is a global industry that just keeps growing. The global video streaming industry was valued at a whopping $50.11 billion in 2020 and rose to $60.1 billion by 2021 quite possible influenced by the pandemic.
- Streaming increased by 21% over Q3 2020 globally. Looking at individual regions, Africa had the greatest surge in streaming activity, increasing 273%. Oceania had the second highest increase at 80%. North America's streaming market has steadily increased by 2% over the past few years. Netflix, too saw a huge spike in subscriptions in Q1 2020 due to COVID-19 restrictions



Dataset

Multiple Datasets were downloaded and cleaned after before they were used on tableau(Click to access tableau). The data contains information on the stock prices of Netflix, Disney and Amazon, along with various data on Netflix financials

- Date
- Company
- Open
- High
- Close
- Adj Close
- Volume

- Period
- Revenue
- Operating Expense
- Net Income after tax
- Number of subs
- Company
- Date

Otherwise, access my tableau with the link below
https://public.tableau.com/views/Capstone_16651429209540/NFLXstock?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Dataset #1

Variable	Type	Description
Date	Date	Trading Date
Company	String	Company Name
Open	Number	Open Price for stated date
High	Number	Highest Price for stated date
Close	Number	Closing Price for stated date
Adj Close	Number	Adjusted Closing price for stated date
Volume	Number	Volume traded for stated date

The dataset above is downloaded from Yahoo Finance for Netflix, Amazon and Disney respectively.

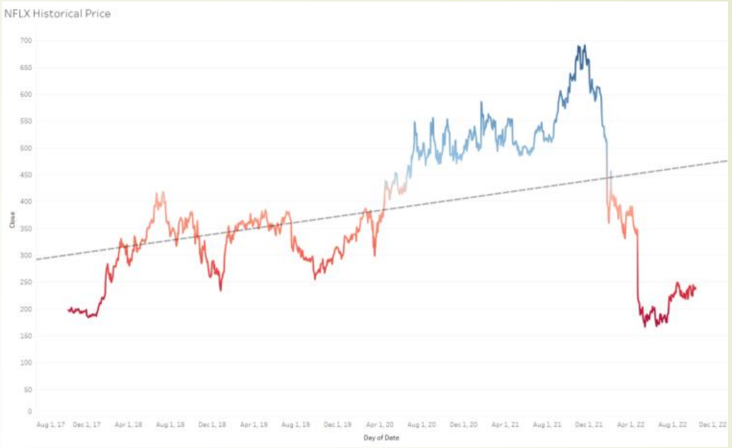
Dataset #2

Variable	Type	Description
Period	String	The relevant quarter of the financial year
Revenue	Number	Revenue from operation for the quarter
Operating Expense	Number	Expense Incurred from operation for the quarter
Net income after tax	Number	Net income for the quarter
Number of subs	Number	Number of subscribers for the quarter for each company

The financials data above is downloaded from Netflix's financial report and the number of subscribers are downloaded from their respective companies' annual reports and cleaned on Excel before they were uploaded to tableau. Netflix Amazon Disney

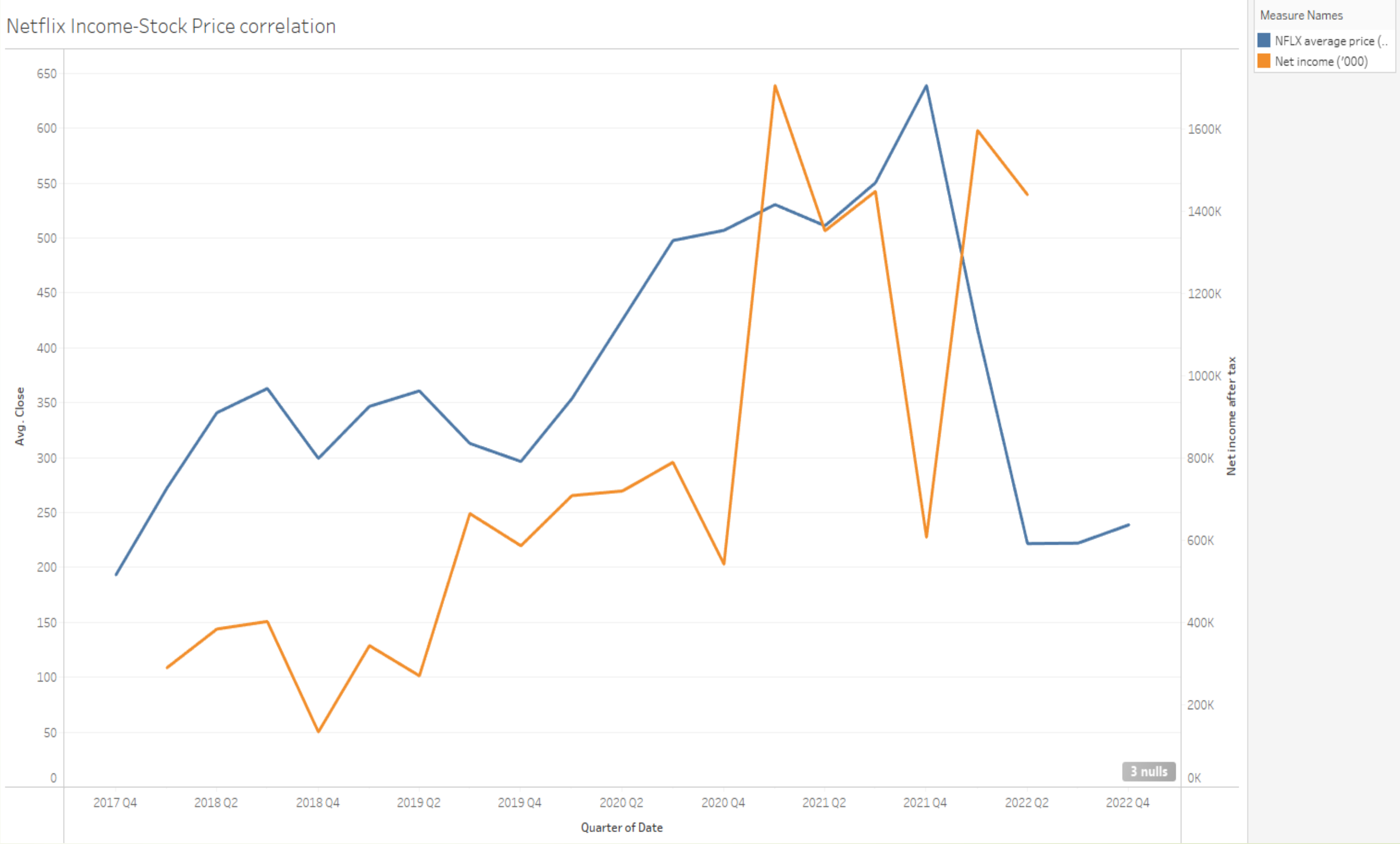
NFLX Historical Price Observation

- Observation: While there may be an upwards trend over the past 5 years, if we were to track the price from 2020 onwards, we see a downwards trend instead.
- This is caused by 2 major crashes at the start of year, on 21st January following the company's first subscriber loss and 20th April as the company announces that they plan to charge primary account holders an extra fee for every "sub account," or password sharer, to make up for lost revenue.



Netflix Income and average stock price correlation

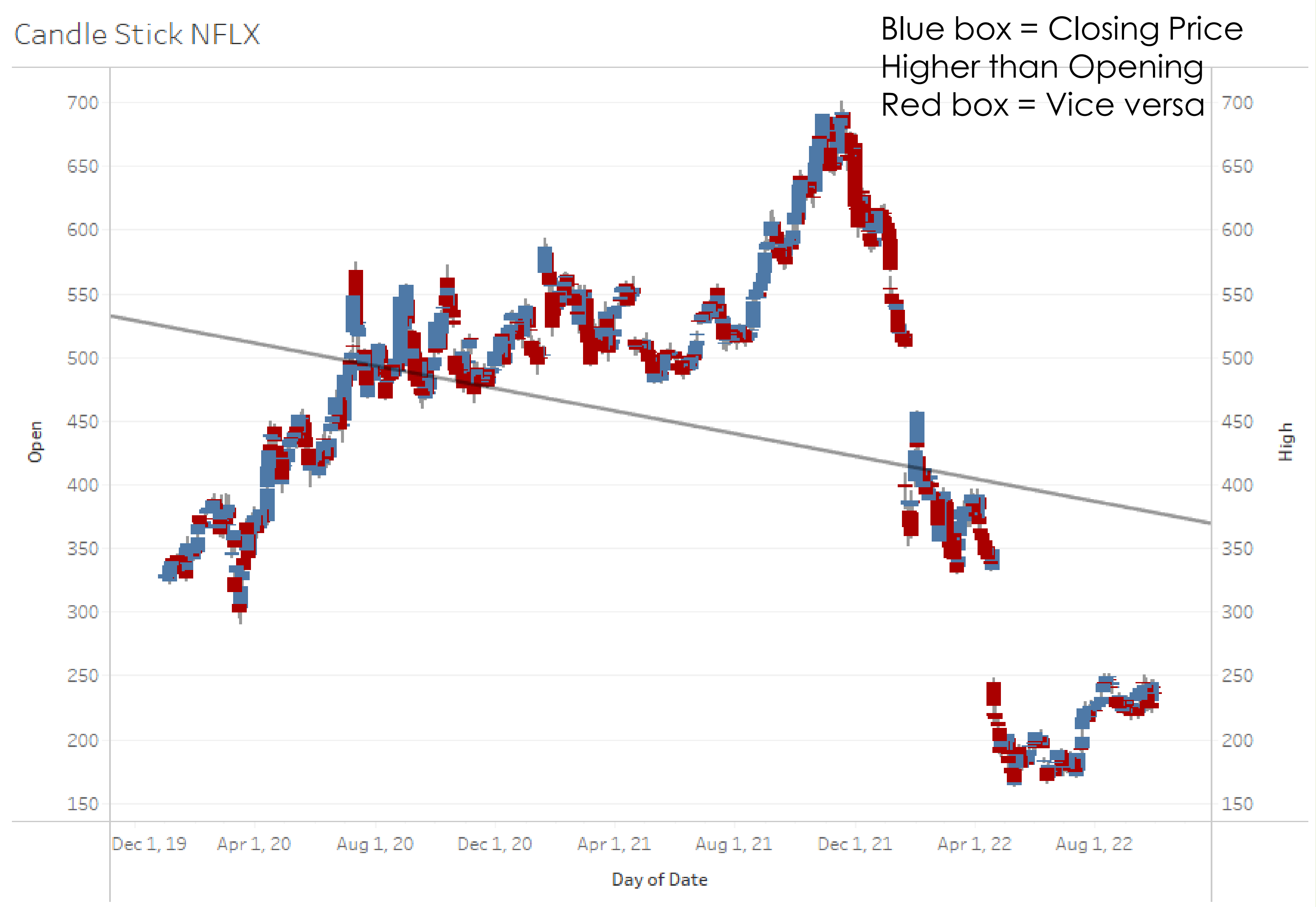
- Observation: The net income of Netflix is directly proportionate to the price of the stock, though there is usually a slight delay due to the income being released quarterly.
- As we can see, after 4Q22, the stock price of Netflix has crashed from an all time high of $683.9 to the $200 range where it has since been maintaining ever since.
- This is caused by the 2 major crashes as mentioned before.



Netflix Candle Stick Analysis

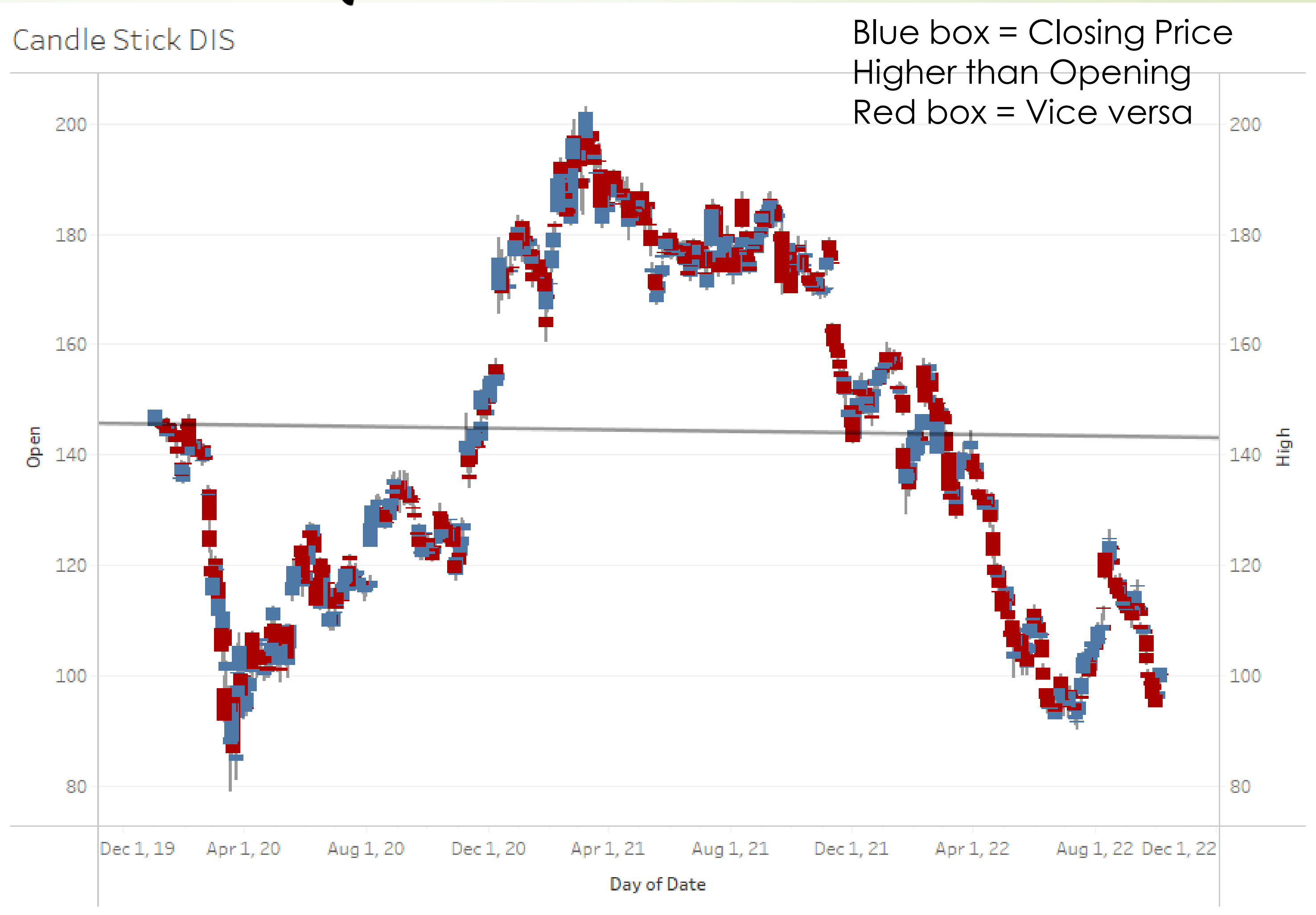
NETFLIX

- As mentioned before, while the would be an upwards trend in the past 5 years, narrowing the period to 2020 onwards would show a downward trend.
- We can see at the start of 2022, Netflix started to see more red boxes as compared to blue, and on 20th January when the company reports its first loss of subscribers, Netflix price crashed from $508 to $400 within a day, causing the price to reach below its trend line
- The second crash happened on 20th April as the company announces that they plan to charge primary account holders an extra fee for every "sub account," or password sharer, to make up for lost revenue, causing the stock to crash yet again from $333 to $245 within a day.
- While it seem like there are more blue boxes at the second half of the year with the hope of reversing the existing downtrend, at this point the price is way below the trend line.



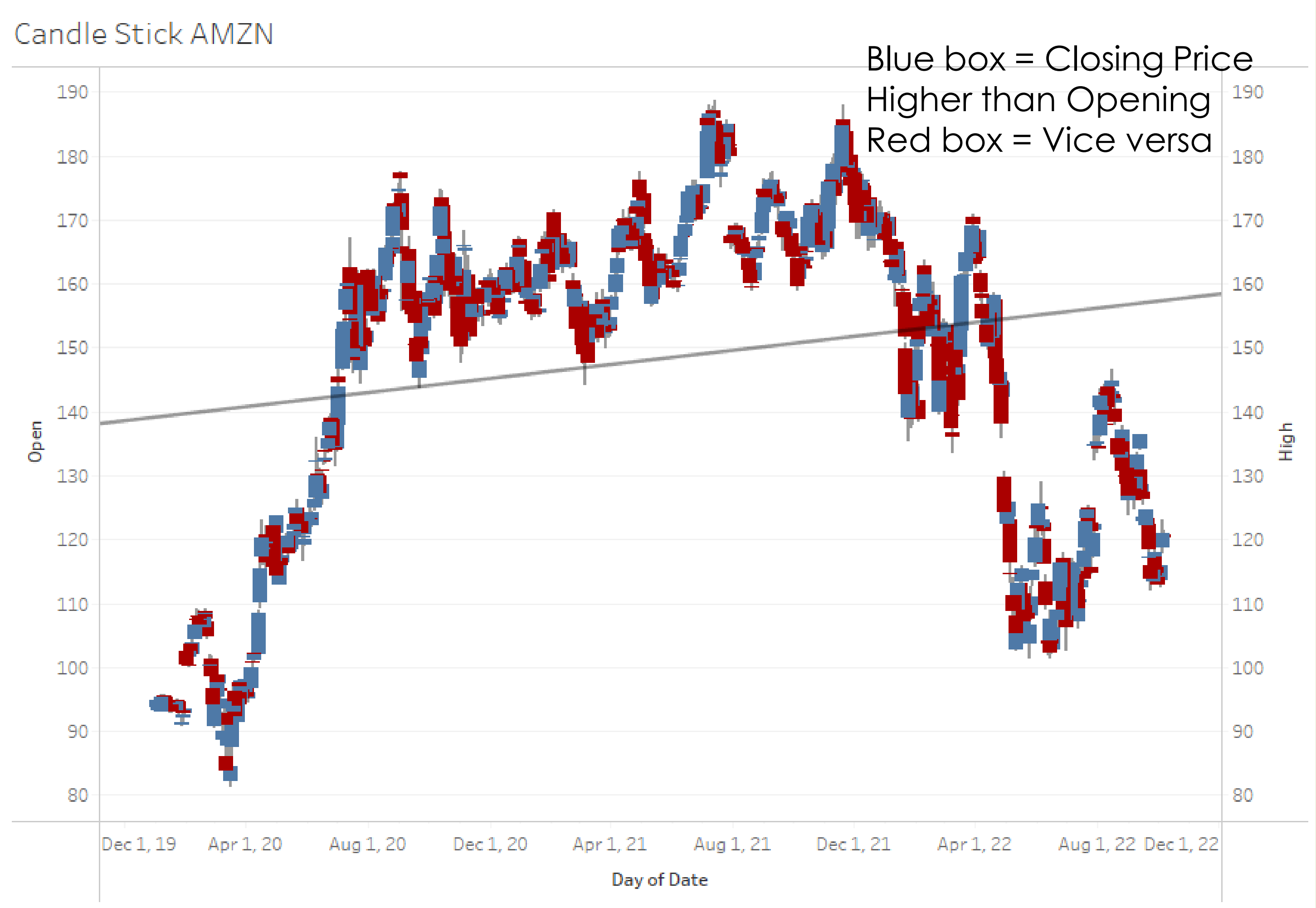
Disney Candle Stick Analysis

- For Disney, we see a very slight downward trend. 2020 was a rough year for Disney due to the pandemic. From January 2020 to March, its price went from $145 to $84.
- There is however, a surge in Disney price towards the second half of 2020 of as parts of the world started opening again, creating an upward trend, passing the trend line in November 2020 and reached its peak of $203 in March 2021.
- However, as we go on further, while Disney+ subscribers seems to be increasing very quickly, there seems to be yet another downward trend towards the end of 2021, caused by disappointing earning reports as their theme parks and attractions perform below expectations. This will go on to happen a few more times alongside Netflix crash beginning 2022, causing its price to go well below the trend line.



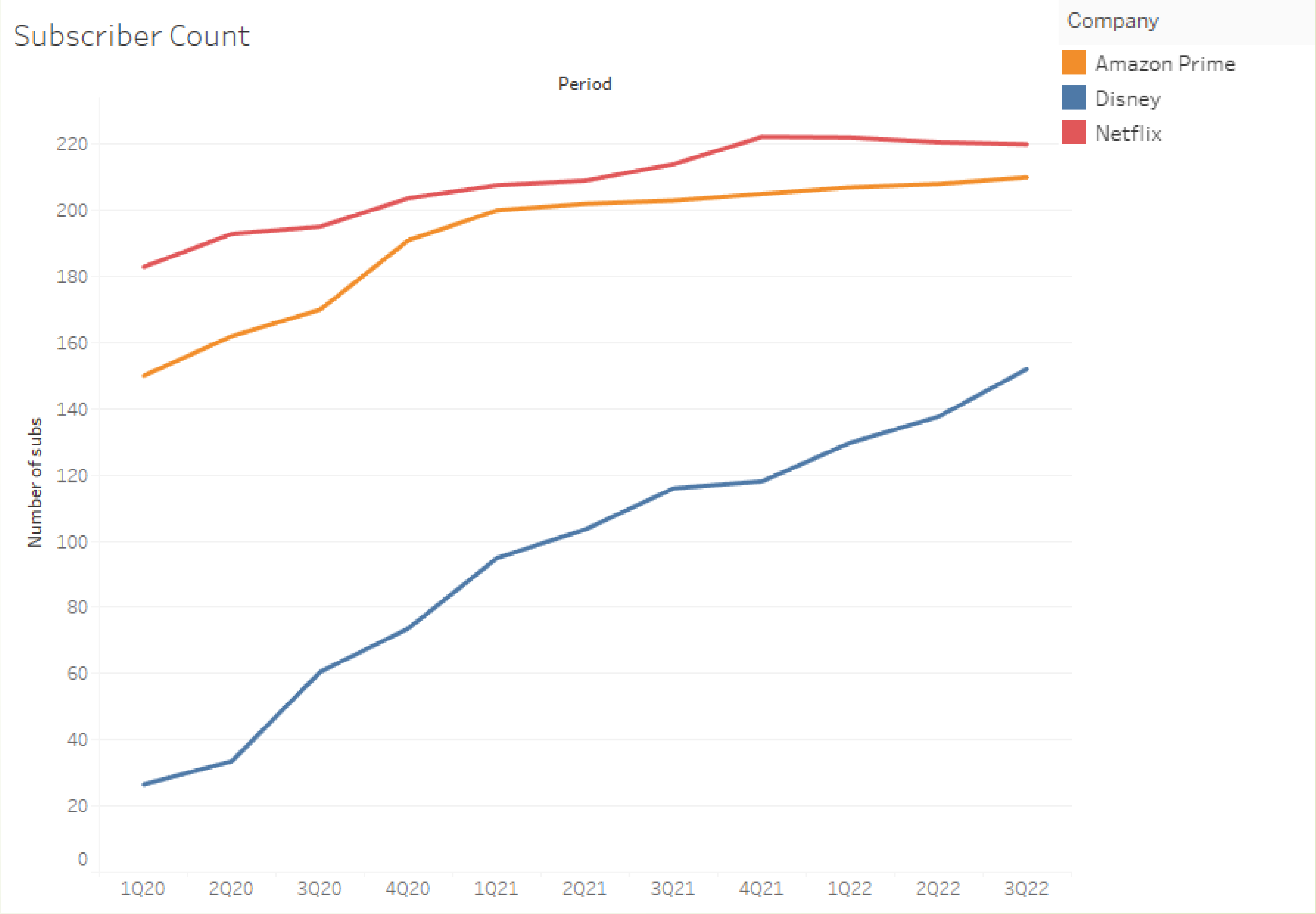
Amazon Candle Stick Analysis

- For Amazon, we see an upwards trend from 2020 onwards. Due to the pandemic, the reliance on e-commerce services has peaked, making it a great year for Amazon, surging its price from $88 in Mar 2020 to $180 in Aug 2020.
- Amazon continued to maintain its price for the next year or so, staying well above its trend line until January 2022 where we see it dipping below the trendline again.
- From April to May 2022, the Price crashed from a high of $168 to a low of $104, alongside Netflix's crash this is also caused by the decrease in revenue from the previous quarter due to the economy reopening.
- However, we can see the prices recovering in the second half of 2022 following the company positive earning reports the following quarter and there being a possibility of downtrend reversal from the candlesticks.



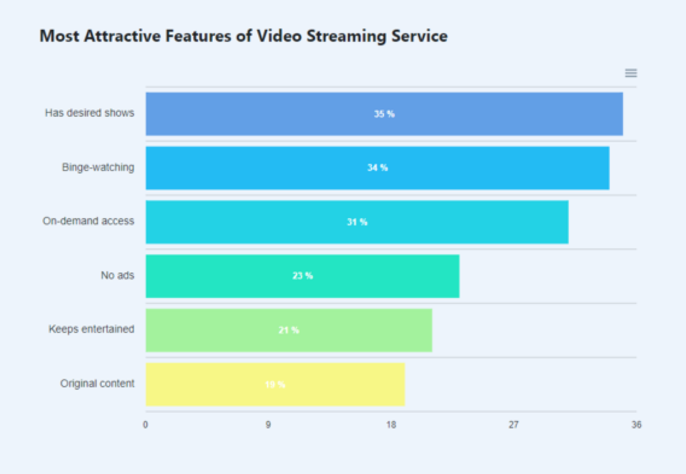
Streaming services subscriber count

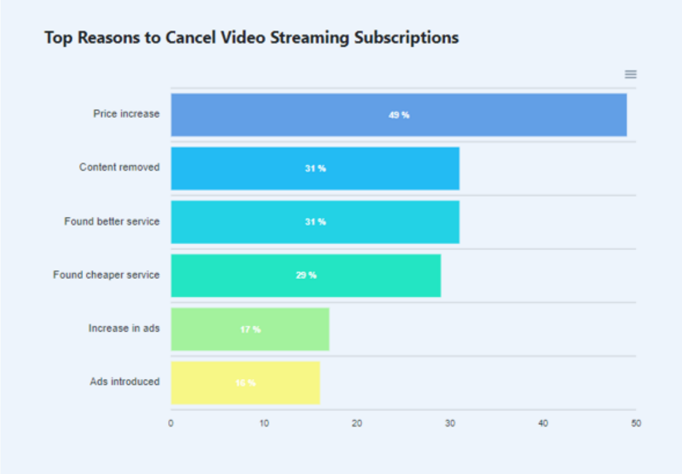
- Looking at the total subscriber count, Netflix continues to be at the top, however Amazon Prime can be seen slightly behind, acquiring subscribers at a quicker pace. (Do note that it may not be a fair comparison due to Amazon Prime members receiving access to Prime Videos for free)
- Netflix was also the only 1 of 3 to lose subscribers in the first and third quarter of 2022, which was what caused the price to crashed initially.
- Disney shows by far the greatest growth among all 3 as it has gained a total of 125.6 million subscribers from 1Q20. Combined with its other services, Hulu and ESPN+, Disney exceeds Netflix at 221 million subscribers as compared to 220 million.



Qualitative Findings

- From a survey in 2021 for people aged 18 and above, 35% said the top feature of streaming services was having access to shows that they want
- The main reason people cancel their subscription is due to price increase, with 49% of the population having that as their main reason. 31% of the population said it would be specific content being removed.





Following this qualitative findings, if we were to look at the attractive features of streaming services, both Disney and Amazon would seem more attractive with them having IP for franchises like Starwars, Marvel, and Lord of the rings respectively.
Netflix has also increased their stream service pricing at the beginning to 2022. While Netflix does not have a wide range of its own IP, they are also losing the rights to stream various shows as the contract expires.

The bank of America has double-downgraded the stock and reduced its share price target to $300 from $605, while several other firms also slashed estimates by more than half, including JPMorgan, Wells Fargo and Pivotal.

Conclusion

- While Netflix remains as the biggest streaming service provider to date, Netflix poor decisions to increase its pricing while not having the perks its competitors has caused both its revenue, subscribers and stock price to crash. Was this unfounded confidence stemming from the fact that it used to be a monopoly just a few years back?
- Disney and Amazon on the other hand, has been steadily growing and have their own large and unique IPs. Though we need keep in mind that not all their revenue comes from their streaming services, and there are other streams of services of which Disney, especially is suffering from.
- I recommend that instead of Netflix, perhaps the investment firm should look at other tech companies or streaming services, as looking at the figures and trendlines from before, and that there are too much negative news revolving around Netflix, and now that streaming services is not a monopoly anymore, they need to pull up their socks to regain the unanimous number 1 streaming service status it once had.