Data Visualization Report

Title:

Visualization of Stock Price Data

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<u>Insights</u>

In finance, every financial year is divided into 4 quarters which a tuple of three months like (January, February, March) and so on.

Here for 2018 year, we had the data for the last quarter only which comprises October, November and December. For remaining the years till 2023 we have the data for all the four quarters.



The sum of volume for the Amazon stock was as the lowest in the month of November in year 2019 where as in the current year we can there is a drastic drop in the volume of its stocks from September 2023 and October 2023 which indicates limited interest of people in its stocks.

But still we can still see sum of the open, close, high and low prices were the highest in the month of November for year 2018 where as they were the lowest in the December for 2018. Where as from 2018 to 2023 the sum of open, close, high and low prices the highest in the month of July for year 2021.

The below table shows the price variation of stock's value based on the sum of percentage change for every month:

Year	Month of max price increase	Month of max price decrease
2018	November	December
2019	January	August
2020	April	September
2021	June	May
2022	July	November
2023	January	August

From the above the table, we can infer that the most of the net price increase for the Amazon stock's price was in the first two quarters of every financial year and net price decrease for the Amazon stock's price was in the last two quarters of every financial year.



The sum of volume for the Apple stock was as the lowest in the month of July in year 2023 and currently it is continuing to drop in volume from September 2023 to October 2023 which indicates the less interest of people in the stock during this period.

But still we can still see sum of the open, close, high and low prices were the highest in the month of August for year 2018 where as they were the lowest in the October for 2023 which is the lowest value for it from year 2018 to year 2023. Whereas from 2018 to 2023 the sum of open, close, high and low prices the highest in the month of August for year 2023.

In the year 2019, 2020 and 2021 there has been a monotonic linear increase in the price of stock. Also, the maximum price change was in the month august in year 2023 in the positive direction indicating the price increase.

The below table shows the price variation of stock's value based on the sum of percentage change for every month:

Year	Month of max price increase	Month of max price decrease
2018	October	November
2019	December	August
2020	March	September
2021	November	September
2022	July	December
2023	February	September

From the above the table, we can infer that the most of the net price decrease for the Apple stock's price was in the last two quarters of every financial year.



The sum of volume for the Facebook stock was as the lowest in the month of August in year 2021 where as in the current year we can there is a drastic drop in the volume of its stocks from September 2023 and October 2023 which indicates limited interest of people in its stocks similar to the above two stocks.

But still we can still see sum of the open, close, high and low prices were the highest in the month of August for year 2018 where as they were the lowest in the January for 2018. Whereas from 2018 to 2023 the sum of open, close, high and low prices the highest in the month of august for year 2021.

We also observed that stock decreased in value after year 2021 and are still dipping in value. The maximum price change in the positive direction was in the second quarter of year 2023.

The below table shows the price variation of stock's value based on the sum of percentage change for every month:

Year	Month of max price increase	Month of max price decrease
2018	November	October
2019	January	September
2020	August	September
2021	August	January
2022	November	June
2023	January	July

From the above the table, we can infer that the most of the net price increase for the Facebook stock's price was in the last two quarters of every financial year and net price decrease for the Facebook stock's price was in the last two quarters of every financial year.



The sum of volume for the Google stock was as the lowest in the month of August in year 2021 where as in the current year we can there is a drastic drop in the volume of its stocks from September 2023 and October 2023 which indicates limited interest of people in its stocks.

But still we can still see sum of the open, close, high and low prices were the highest in the month of December for year 2021 where as they were the lowest in the October for 2023 currently. Whereas from 2018 to 2023 the sum of open, close, high and low prices the highest in the month of December for year 2021. Also, we can see that there is a monotonic linear increase in the price in year 2021 whereas there is monotonic linear decrease in the year 2022

The below table shows the price variation of stock's value based on the sum of percentage change for every month:

Year	Month of max price increase	Month of max price decrease
2018	November	December
2019	January	June
2020	March	September
2021	August	September
2022	July	April
2023	March	July

From the above the table, we can infer that the most of the net price increase for the Google stock's price was in the first two quarters of every financial year and net price decrease for the Google stock's price was in the last two quarters of every financial year.



The sum of volume for the Netflix stock was as the lowest in the month of August in year 2021 where as in the current year we can there is a drastic drop in the volume of its stocks from September 2023 and October 2023 which indicates limited interest of people in its stocks.

But still we can still see sum of the open, close, high and low prices were the highest in the month of November for year 2021 where as they were the lowest in the October for 2023. Whereas from 2018 to 2023 the sum of open, close, high and low prices the highest in the November of July for year 2021.we can also infer that there is a linear increase in the value during year 2020 and 2021.

The below table shows the price variation of stock's value based on the sum of percentage change for every month:

Year	Month of max price increase	Month of max price decrease
2018	November	October
2019	January	August
2020	December	October
2021	August	January
2022	July	April
2023	January	September

From the above the table, we can infer that the most of the net price increase for the Netflix stock's price was in the last two quarters of every financial year and net price decrease for the Netflix stock's price was in the last two quarters of every financial year.