Project Overview

Title: Analysis of Top Cybersecurity Firms' Stock Performance

Objective:

- To analyze the stock performance of leading cybersecurity firms (Palo Alto Networks, Zscaler, and Fortinet) over a specified period.
- To provide insights into stock trends, volume traded, and price variations to assist in strategic decision-making.

Data Sources

Stock Data:

- Historical stock data for the firms obtained from reliable financial data sources (e.g., Yahoo Finance, Bloomberg).

Time Frame:

- The analysis covers the period from January 1, 2020, to December 1, 2023.

Methodology

Data Analysis:

- Average adjusted closing prices, stock trading volumes, and open prices were calculated.
- Comparative analysis of stock performance among the three firms.

Tools Used:

- Data visualization and analysis were conducted using Power BI.

Visualizations and Analysis

Figure 1: Average Adjusted Closing Price and Traded Stocks Volume

Description:

- The first visual displays the average adjusted closing price and traded stocks volume for Fortinet (FTNT).

Key Findings:

- The average adjusted closing price for FTNT was \$48.84, with a total traded volume of 6 billion shares over the period.
- A notable spike in the price is observed around mid-2020, followed by fluctuations leading to a gradual increase until mid-2023.

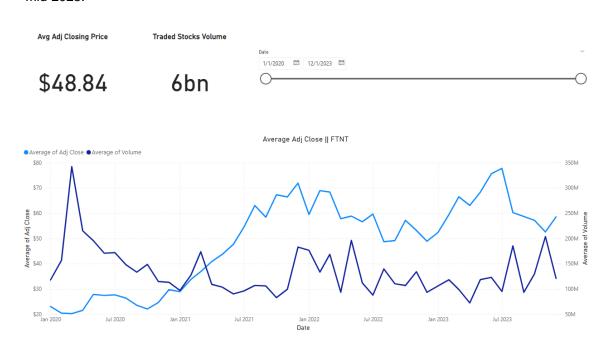


Figure 2: Stock Volume Comparison Across Firms

Description:

- The second visual provides a comparison of the stock trading volumes among Fortinet (FTNT), Palo Alto Networks (PANW), and Zscaler (ZS).

Key Findings:

- FTNT leads with the highest trading volume of 6 billion shares, followed by PANW with 4 billion and ZS with 2 billion.
- The pie chart highlights FTNT's dominance in trading volume.

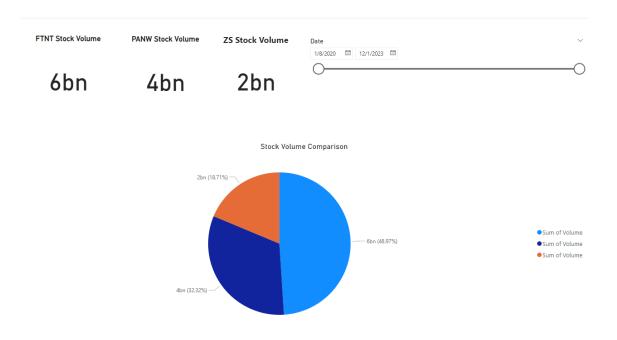


Figure 3: Open Price Analysis for FTNT, PANW, and ZS

Description:

- The third visual examines the open prices for all three firms.

Key Findings:

- FTNT shows the lowest minimum open price of \$19.39, while ZS has the highest maximum open price of \$371.06.
- The average open prices indicate a steady increase in value over the period, with notable peaks for PANW and ZS in late 2022 and early 2023.

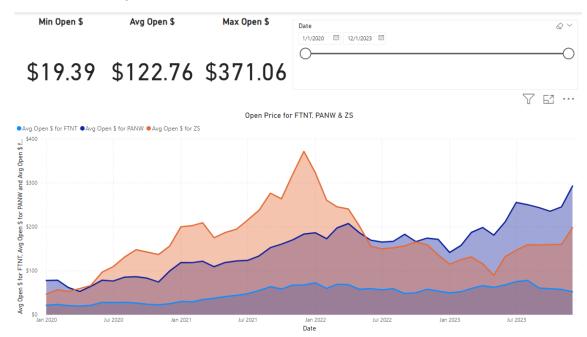


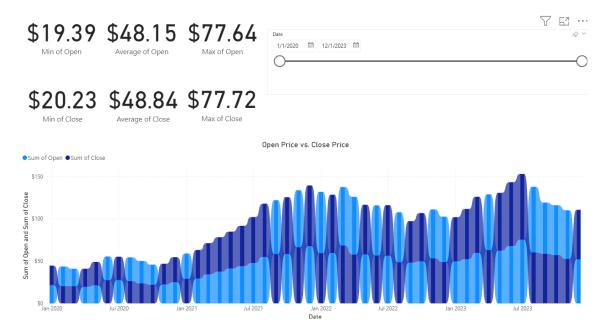
Figure 4: Open Price vs. Close Price

Description:

- The fourth visual compares the open and close prices of the stocks over time.

Key Findings:

- The general trend shows that the close prices often exceed the open prices, reflecting a positive market sentiment for the cybersecurity sector.
- The chart indicates periods of significant volatility, especially in mid-2022 and mid-2023.



Conclusion

Summary of Findings:

- The analysis shows that FTNT has a strong trading volume, but ZS exhibits the highest price growth potential.
- The market for cybersecurity stocks appears to be generally bullish, with periodic corrections that could present opportunities for strategic investments.

Recommendations:

- Investors should consider the long-term growth potential of ZS, given its rapid price increase.
- FTNT's strong volume and relatively stable price make it a solid choice for more risk-averse investors.