## Github Repository Link:

https://github.com/Ashish032002/Sentiment Analysis

## 4. Recommendations:

Actionable insights and Suggestions for trading these stocks and future Improvements based on my Analysis.

# a. BA (Boeing)

## **Actionable Insights:**

- 1. **Sentiment-Price Correlation:** Boeing's stock price shows a moderate correlation with negative sentiment, indicating that when negative sentiment increases, the stock price tends to drop. This could be a signal for traders to take caution and consider reducing their exposure to Boeing's stock during periods of high negative sentiment.
- 2. **Momentum Trading:** The mentions\_over\_time data suggests that Boeing's stock price tends to increase when the number of mentions is high, indicating a potential momentum trading opportunity. Traders could consider buying Boeing's stock when the number of mentions is increasing, as it may be a sign of growing interest and potential price appreciation.

### **Future Improvements**

- Integrate Multiple Data Sources: Incorporating data from multiple sources, such as news articles, financial reports, and social media, could provide a more comprehensive understanding of the market sentiment and its impact on Boeing's stock price.
- 2. **Real-time Data Feed:** Integrating a real-time data feed could enable traders to react more quickly to changes in market sentiment and make more informed trading decisions.

# a. COIN (Coinbase)

## **Actionable Insights:**

- 1. **Sentiment-Price Correlation:** Coinbase's stock price shows a strong correlation with positive sentiment, indicating that when positive sentiment increases, the stock price tends to rise. This could be a signal for traders to take a bullish stance on Coinbase's stock during periods of high positive sentiment.
- 2. **Momentum Trading:** The mentions\_over\_time data suggests that Coinbase's stock price tends to increase when the number of mentions is high, indicating a potential momentum trading opportunity. Traders could consider buying Coinbase's stock when the number of mentions is increasing, as it may be a sign of growing interest and potential price appreciation.

### **Future Improvements:**

- 1. **Integrate Cryptocurrency Data:** Incorporating data on cryptocurrency prices, such as Bitcoin and Ethereum, could provide a more comprehensive understanding of the market sentiment and its impact on Coinbase's stock price.
- 2. **Conducting a comparative** analysis of Coinbase's stock with its peers, such as Robinhood or Square, could provide valuable insights into the relative performance of the stocks and help traders make more informed investment decisions.

# b.FDX (FedEX)

### **Actionable Insights:**

- 1. **Sentiment-Price Correlation:** FedEx's stock price shows a weak positive correlation with positive sentiment, indicating that when positive sentiment increases, the stock price tends to rise. This could be a signal for traders to take a bullish stance on FedEx's stock during periods of high positive sentiment.
- 2. **Momentum Trading:** The mentions\_over\_time data suggests that FedEx's stock price tends to increase when the number of mentions is high, indicating a potential

momentum trading opportunity. Traders could consider buying FedEx's stock when the number of mentions is increasing, as it may be a sign of growing interest and potential price appreciation.

#### **Future Improvements**

- Integrate Multiple Data Sources: Incorporating data from multiple sources, such as news articles, financial reports, and social media, could provide a more comprehensive understanding of the market sentiment and its impact on FedEx's stock price.
- 2. **Network Analysis:** Conducting a network analysis of the mentions\_over\_time data could help to identify key influencers or clusters of influencers that are driving the sentiment and price movements of FedEx's stock, such as industry experts or logistics professionals.

# c. INTC(Intel)

### **Actionable Insights:**

- 1. **Monitor Sentiment:** Keep a close eye on sentiment trends related to INTC. Positive sentiment spikes could be a potential buying opportunity, while negative sentiment might signal a need for caution or potential selling.
- 2. **Leverage Media Attention:** Pay attention to media coverage and online discussions about INTC. Increased mentions can be a positive indicator, suggesting growing interest and potential price appreciation.

#### **Future Improvements:**

- 1. **Integrate Multiple Data Sources:** Combine data from news articles, social media, financial reports, and economic indicators to gain a more comprehensive understanding of INTC's price drivers.
- Consider Time-Series Analysis: Analyze the correlation between variables over time to identify patterns and trends that might not be apparent in a static correlation matrix.

# d. LUNR(Intuitive Machines)

#### **Actionable Insights:**

- 1. **Sentiment-driven trading strategy**: Intuitive Machines shows a strong correlation between negative sentiment and price drops. Traders could use this insight to develop a sentiment-driven trading strategy, where they take a cautious approach when negative sentiment is high.
- 2. **Identify potential market movers**: The correlation map reveals that certain stocks a strong correlation with each other. Traders could use this information to identify potential market movers and adjust their portfolios accordingly.

#### **Future Improvements:**

- 1. **Integrate data from multiple sources**: To enhance the analysis, it would be beneficial to integrate data from multiple sources, such as news articles, financial reports, and social media, to gain a more comprehensive understanding of market sentiment and identify potential market-moving events in the space technology sector.
- 2. Use more advanced sentiment analysis techniques: To improve the accuracy of the sentiment analysis, consider using more advanced techniques, such as machine learning algorithms, natural language processing, and aspect-based sentiment analysis, to gain a more nuanced understanding of market sentiment surrounding LUNR and other space technology stocks

# e. LW(Lamb Weston)

- 1. Limited Influence of Sentiment and Mentions: Based on the weak correlations, it appears that sentiment and mention count have a limited influence on LW's stock price. Investors might want to focus on other factors that could be driving price movements.
- 2. **Consider Other Factors:** Explore fundamental factors like financial performance, industry trends, and economic conditions that might have a stronger impact on LW's stock price.

## **Future Improvements:**

- 1. **Integrate Multiple Data Sources:** Combine data from news articles, social media, financial reports, and economic indicators to gain a more comprehensive understanding of LW's price drivers.
- 2. **Explore Causality:** Use techniques like Granger causality testing to investigate whether changes in sentiment or mention count actually cause changes in the closing price, or if there are other underlying factors at play.

# f. MKC(Mc Cormick)

#### **Actionable Insights:**

- Limited Influence of Sentiment and Mentions: Based on the weak correlations, it
  appears that sentiment and mention count have a limited influence on MKC's stock
  price. Investors might want to focus on other factors that could be driving price
  movements.
- Consider Other Factors: Explore fundamental factors like financial performance, industry trends, and economic conditions that might have a stronger impact on MKC's stock price.

#### **Future Improvements:**

- 1. **Integrate Multiple Data Sources:** Combine data from news articles, social media, financial reports, and economic indicators to gain a more comprehensive understanding of MKC's price drivers.
- Utilize Advanced Sentiment Analysis: Employ more sophisticated sentiment analysis
  techniques, such as natural language processing (NLP) and machine learning, to
  capture nuances in sentiment and improve accuracy.

# g. QCOM (Qualcomm)

## **Actionable Insights:**

## **Actionable Insights for Traders:**

#### 1. Short-Term Trading Strategy:

- Sell on Negative Sentiment: If traders are looking for short-term gains, they
  might consider selling QCOM stock when negative sentiment spikes, as it
  often leads to price declines.
- Avoid Buying on Positive Sentiment: While positive sentiment might not have a strong impact on the price, traders should be cautious about buying on positive sentiment alone, as the effect might be limited.

#### 2. Long-Term Investment Strategy:

- Fundamental Analysis: For long-term investors, focusing on fundamental factors like financial performance, industry trends, and economic conditions might be more crucial than short-term sentiment fluctuations.
- Diversification: Investors might consider diversifying their portfolio to reduce risk and mitigate the impact of negative sentiment on QCOM.

#### **Future Improvements:**

- 1. Integrate Technical Analysis: Combine technical analysis techniques (e.g., charts, indicators) with sentiment analysis to identify potential trading opportunities and support decision-making.
- 2. Consider Algorithmic Trading: Explore the use of algorithmic trading strategies to automate trading decisions based on predefined rules and conditions.
- 3. Backtesting: Test trading strategies using historical data to evaluate their performance and identify potential pitfalls.

# h. SMCI (Super Micro Computer Inc.)

### **Actionable Insights:**

- **1.** If traders are looking for short-term gains, they might consider selling SMCI stock when negative sentiment spikes, as it often leads to price declines.
- **2.** For long-term investors, focusing on fundamental factors like financial performance, industry trends, and economic conditions might be more crucial than short-term sentiment fluctuations.

#### **Future Improvements**

- 1. Integrate Technical Analysis: Combine technical analysis techniques (e.g., charts, indicators) with sentiment analysis to identify potential trading opportunities and support decision-making.
- 2. Consider Algorithmic Trading: Explore the use of algorithmic trading strategies to automate trading decisions based on predefined rules and conditions.

# i. TSLA (TESLA)

### **Actionable Insights:**

1. **Sell on Negative Sentiment:** If traders are looking for short-term gains, they might consider selling TSLA stock when negative sentiment spikes, as it often leads to price declines.

2. Avoid Buying on Positive Sentiment: While positive sentiment might not have a strong impact on the price, traders should be cautious about buying on positive sentiment alone, as the effect might be limited.

#### **Future Improvements:**

- 1. **Integrate Technical Analysis:** Combine technical analysis techniques (e.g., charts, indicators) with sentiment analysis to identify potential trading opportunities and support decision-making.
- 2. **Consider Algorithmic Trading:** Explore the use of algorithmic trading strategies to automate trading decisions based on predefined rules and conditions.

# j. VZ (Verizon)

### **Actionable Insights:**

- 1. Limited Influence of Sentiment and Mentions: Based on the weak correlations, it appears that sentiment and mention count have a limited influence on VZ's stock price. Investors might want to focus on other factors that could be driving price movements.
- 2. Consider Other Factors: Explore fundamental factors like financial performance, industry trends, and economic conditions that might have a stronger impact on VZ's stock price.

#### **Future Improvements**

- 1. Integrate Multiple Data Sources: Combine data from news articles, social media, financial reports, and economic indicators to gain a more comprehensive understanding of VZ's price drivers.
- 2. Use techniques like Granger causality testing to investigate whether changes in sentiment or mention count actually cause changes in the closing price, or if there are other underlying factors at play.

# k. WBA (Walgreens)

#### **Actionable Insights:**

- 1. **Buy on Positive Sentiment:** Traders might consider buying WBA stock when positive sentiment spikes, as it often leads to price increases.
- Sell on Negative Sentiment: Be cautious about selling on negative sentiment alone, as the impact might be limited. However, if other factors (e.g., negative news, financial concerns) support the negative sentiment, it could be a signal to consider selling.

3. Pay attention to media coverage and online discussions about WBA. Increased mentions can be a positive indicator, suggesting growing interest and potential price appreciation.

### **Future Improvements:**

- 1. Combine technical analysis techniques (e.g., charts, indicators) with sentiment analysis to identify potential trading opportunities and support decision-making.
- 2. Test trading strategies using historical data to evaluate their performance and identify potential pitfalls.