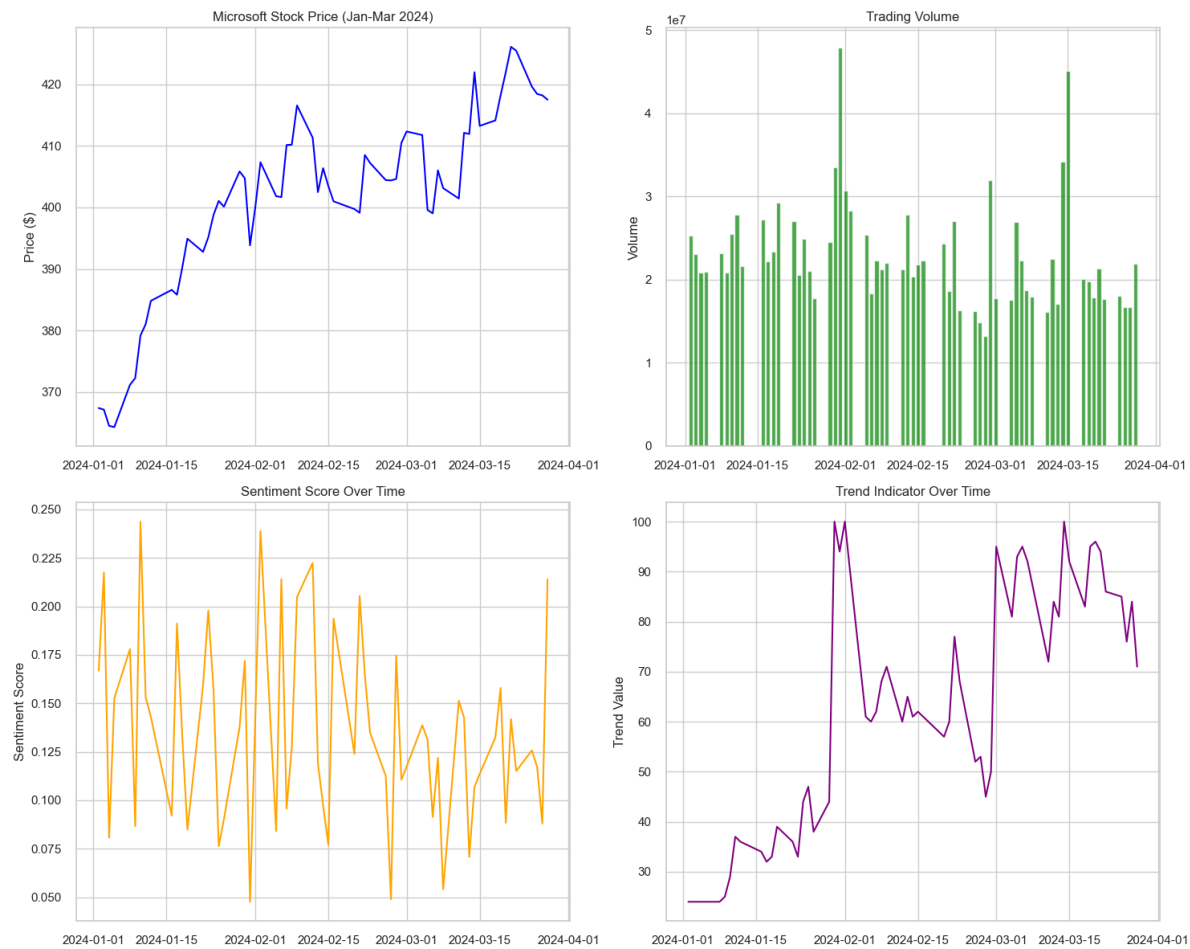


Exploratory Data Analysis

Key observations:

- Price ranges from 364 to 426 with an average around \$400
- Volume shows significant variability (13M to 48M shares)
- Sentiment scores range from 0.048 to 0.244 (neutral to slightly positive)
- Trend values range from 24 to 100 (showing wide variation in technical indicators)



Price Time Series

- Shows steady upward trend with some volatility
- Notable dip around January 31, 2024
- Strong recovery and new highs in March

Volume Time Series

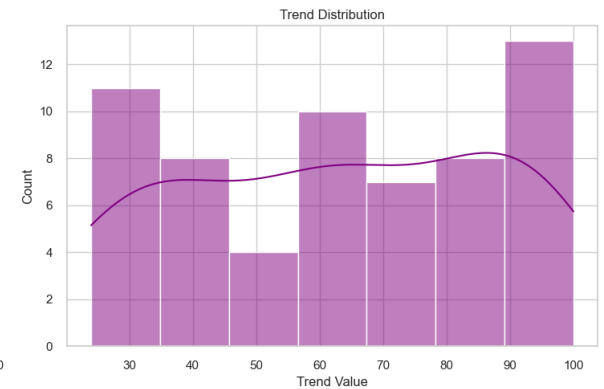
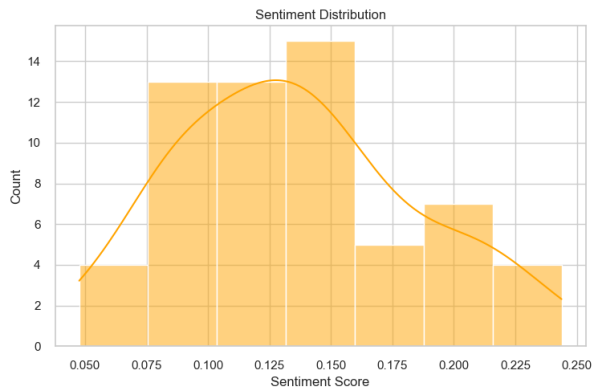
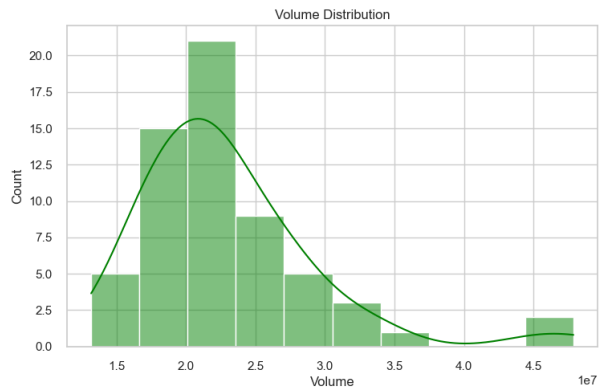
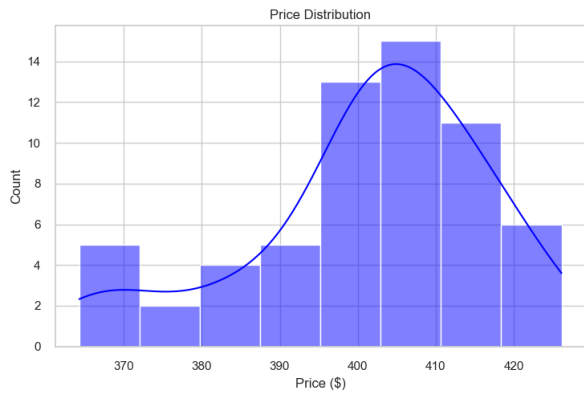
- Spikes observed on January 31 and March 15
- Generally ranges between 15-30M shares
- No clear seasonal pattern visible

Sentiment Time Series

- Fluctuates between 0.05 and 0.24
- Highest sentiment on January 10, 2024
- Several days with sentiment below 0.1

Trend Time Series

- Shows significant volatility
- Peaked at 100 on January 30 and February 1
- Generally higher values in latter half of period



Price Distribution

- Slightly right-skewed distribution
- Most values clustered between 390–390–415
- Few outliers at both ends

Volume Distribution

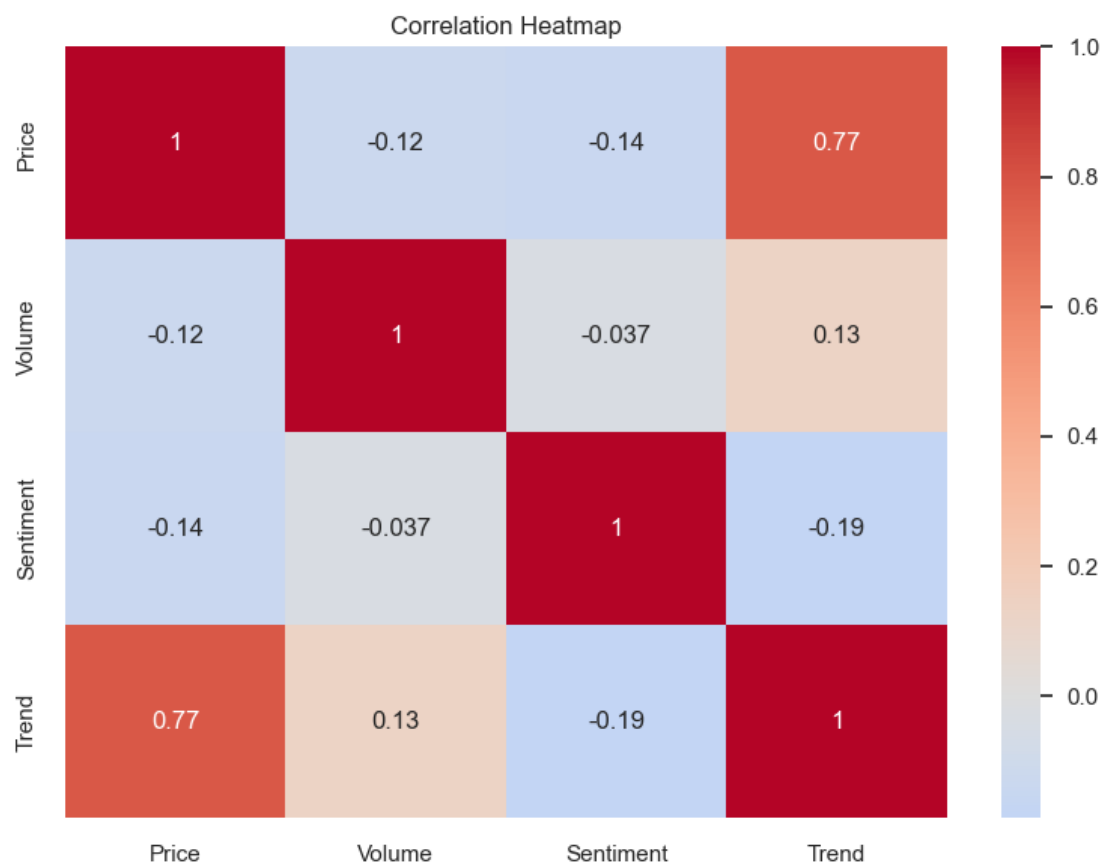
- Right-skewed with long tail
- Most trading volumes between 15-30M shares
- Several high-volume outliers

Sentiment Distribution

- Roughly normal distribution
- Center around 0.12-0.15
- Few extreme values

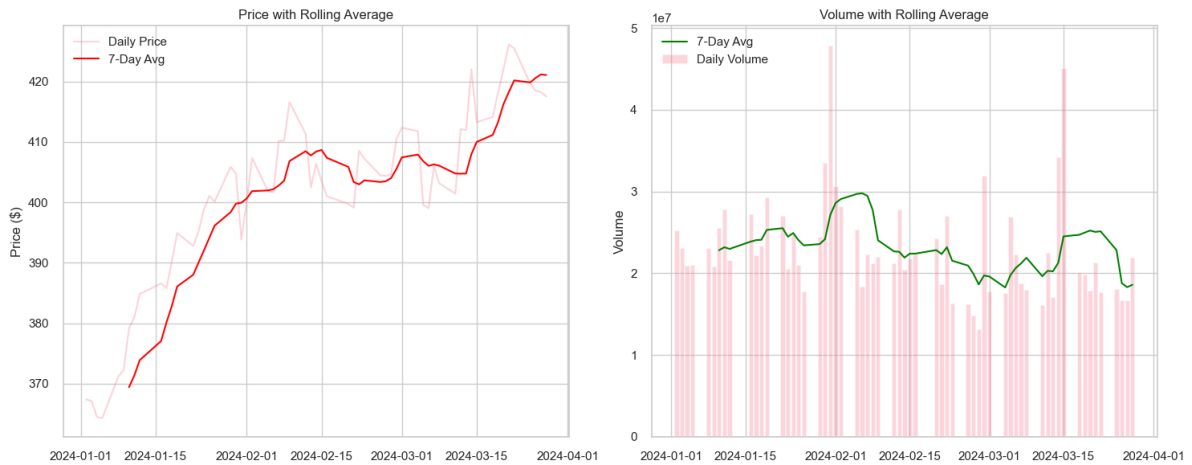
Trend Distribution

- Bimodal distribution
- Peaks around 30-40 and 90-100
- Wide range of values



Key correlations:

- High positive correlation between Price and Trend (0.77)

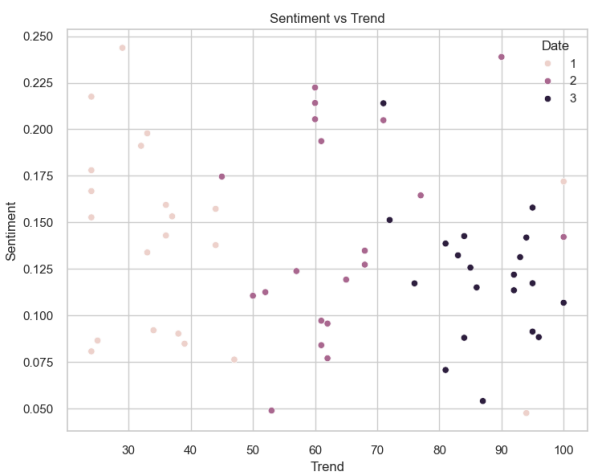
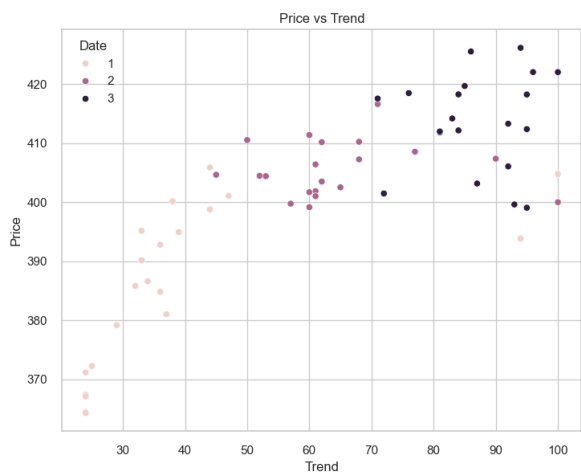
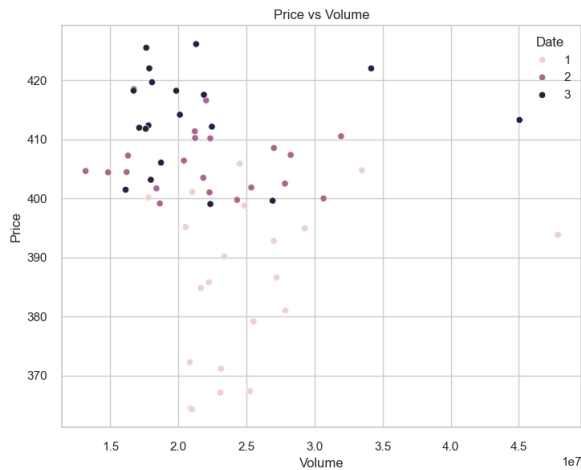


Price Rolling Avg

- Shows smoother trend than raw prices
- Clear upward trajectory despite some dips
- Recent consolidation in March

Volume Rolling Avg

- More stable view of trading activity
- Shows volume spikes were temporary
- Baseline around 20-25M shares



Price vs Volume

- No clear linear relationship
- Some high-volume days correspond with price drops
- Highest prices achieved on moderate volume

Price vs Sentiment

- Weak positive relationship
- Some high sentiment days correspond with price increases
- But many high price days had only moderate sentiment
- Positive relationship as expected
- Higher trend values generally correspond with higher prices

- Some dispersion in the relationship

Key Insights

1. The stock showed an overall upward trend during this period despite some volatility
2. Volume spikes often coincided with price movements (both up and down)
3. Sentiment shows weak predictive power for price movements
4. Trend technical indicators show stronger relationship with price
5. The strongest single correlation is between Price and Trend indicators
6. No evidence of strong multicollinearity between variables
7. The data suggests technical factors (Trend) may be more influential than sentiment in this period