

Stock Buy Signal Dashboard – Tableau Report:

Project Overview

This report presents an interactive Tableau dashboard analyzing stock performance for four major tech companies: **Apple (AAPL)**, **Google (GOOG)**, **Microsoft (MSFT)**, and **Netflix (NFLX)**. The dashboard integrates custom buy signal logic based on volume spikes and bullish price movement, helping users identify potential entry points for investment.

Signal Logic

Buy signals are flagged when:

- **Volume** exceeds its moving average
- **Close price** is greater than **Open price** (bullish candle)

Tableau Formula:

IF SUM([KVolume]) > WINDOW_AVG(SUM([KVolume]))

AND SUM([Close]) > SUM([Open])

THEN "Buy Signal" ELSE "No Signal" END

Dashboard Features

1. Time Series Chart

- Tracks Close price over time
- Highlights buy signal days with color markers

2. Volume Trend Analysis

- Line chart of KVolume vs. moving average
- Identifies volume spikes that support buy signals

3. Signal Summary Table

- Counts buy signals per company
- Ranks stocks by signal frequency

4. KPI Cards

- Highest Close

- Lowest Open
- Average Volume
- Total Buy Signals

5. Multi-Company Comparison

- Pie chart and bar charts for company distribution and value
- Interactive filters for company and date

Dataset Description

Column	Description
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Date	Trading date
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Open	Opening price
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High	Highest price of the day
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Low	Lowest price of the day
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Close	Closing price
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Adj Close	Adjusted close (dividends factored)
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Volume	Total shares traded
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KVolume	Volume normalized to thousands
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How to Use

1. Open stock_dashboard.twbx in Tableau Desktop or Tableau Public
 2. Connect to stock_data.csv if prompted
 3. Use filters to explore signals by company and date
 4. Review KPI cards and signal summaries for insights
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Conclusion

This dashboard brings together technical precision and business clarity to surface actionable buy signals from stock market data. By combining volume-based momentum with price-action logic, it empowers users to identify potential entry points with confidence. Whether used for personal analysis, stakeholder presentations, or portfolio demonstrations, this Tableau solution reflects a strategic blend of data engineering, financial insight, and visual storytelling.