

Data Analysis Report

Dataset: TATAMOTORS.csv
Generated: 2025-08-30 01:19:02
Tool: DS Auto Insights

Executive Summary

This report contains the analysis and insights generated from an interactive data exploration session. The analysis includes various visualizations and statistical findings that provide comprehensive insights into the dataset.

Analysis Session

Question 1

Analyze Trades trends over time using Date

Question 1

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - The analysis covers the period from June 1, 2011, to April 30, 2021. - There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - The maximum number of trades recorded was 1,318,669 on January 22, 2021. - The minimum number of trades was 3,434 on April 28, 2012. - The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame.

Question 2

Show me Trades grouped by Symbol

Analysis

The analysis of "Trades" grouped by "Symbol" shows the following: - For the symbol "TATAMOTORS," the average number of trades is approximately 128,440. - There is no available data for the symbol "TELCO" regarding trades. If you need further analysis or visualization, please let me know!

Question 3

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - The analysis covers the period from June 1, 2011, to April 30, 2021. - There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - The maximum number of trades

recorded was 1,318,669 on January 22, 2021. - The minimum number of trades was 3,434 on April 28, 2012. - The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame.

Question 4

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - The analysis covers the period from June 1, 2011, to April 30, 2021. - There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - The maximum number of trades recorded was 1,318,669 on January 22, 2021. - The minimum number of trades was 3,434 on April 28, 2012. - The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame.

Question 5

Analyze Trades trends over time using Date

Question 5

Show me Trades grouped by Symbol

Analysis

The analysis of "Trades" grouped by "Symbol" shows the following: - For the symbol "TATAMOTORS," the average number of trades is approximately 128,440. - There is no available data for the symbol "TELCO" regarding trades. If you need further analysis or visualization, please let me know!

Question 6

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - The analysis covers the period from June 1, 2011, to April 30, 2021. - There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - The maximum number of trades recorded was 1,318,669 on January 22, 2021. - The minimum number of trades was 3,434 on April 28, 2012. - The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame.

Question 7

Tell me about this data

Analysis

The dataset contains stock market data with the following columns: 1. **Date**: The date of the stock data entry. 2. **Symbol**: The stock symbol, such as TELCO or TATAMOTORS. 3. **Series**: The series type, typically "EQ" for equity. 4. **Prev Close**: The previous day's closing price. 5. **Open**: The opening price of the stock on the given date. 6. **High**: The highest price of the stock on the given date. 7. **Low**: The lowest price of the stock on the given date. 8. **Last**: The last traded price of the stock on the given date. 9. **Close**: The closing price of the stock on the given date. 10. **VWAP**: Volume Weighted Average Price. 11. **Volume**: The number of shares traded on the given date. 12. **Turnover**: The total turnover in currency value. 13. **Trades**: The number of trades executed (note: this column has missing values). 14. **Deliverable Volume**: The number of shares that were delivered (note: this column has missing values). 15. **%Deliverable**: The percentage of deliverable volume relative to the total volume (note: this column has missing values). The dataset has 5,306 rows and is used to analyze stock performance, trading activity, and trends over time. It includes both numeric and categorical data, allowing for various types of analysis, such as time series analysis, correlation studies, and distribution analysis.

Question 8

What is predicted of trades

Analysis

To predict future trends in the "Trades" data, we would typically use time series forecasting methods. However, since I don't have the capability to perform predictive modeling directly, I can guide you on how to approach this task: 1. **Data Preparation**: Ensure the data is clean and properly formatted. Handle any missing values in the "Trades" column. 2. **Exploratory Data Analysis**: Analyze the historical trends of trades over time to understand patterns, seasonality, and any anomalies. 3. **Model Selection**: Choose a suitable time series forecasting model. Common models include: - ARIMA (AutoRegressive Integrated Moving Average) - SARIMA (Seasonal ARIMA) - Exponential Smoothing (ETS) - Prophet (developed by Facebook for forecasting time series data) - Machine Learning models like LSTM (Long Short-Term Memory) for more complex patterns 4. **Model Training**: Train the selected model using historical "Trades" data. 5. **Evaluation**: Evaluate the model's performance using metrics like Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), etc. 6. **Forecasting**: Use the trained model to predict future trades. If you have access to a data science environment, you can implement these steps using libraries like pandas, statsmodels, scikit-learn, or TensorFlow/Keras for more advanced models. If you need further assistance or specific code examples, feel free to ask!

Question 9

Find outliers in my numeric data

Analysis

To identify outliers in the numeric data, we can use the Interquartile Range (IQR) method. Here's a summary of the key statistics and how to identify outliers: ### Key Statistics: - **25th Percentile**

(Q1)**: Represents the lower quartile. - **75th Percentile (Q3)**: Represents the upper quartile. - **IQR (Interquartile Range)**: Calculated as $\text{IQR} = Q3 - Q1$. ### Outlier Detection: - **Lower Bound**: $(Q1 - 1.5 \times \text{IQR})$ - **Upper Bound**: $(Q3 + 1.5 \times \text{IQR})$ Any data point below the lower bound or above the upper bound is considered an outlier. ### Example Calculation for "Prev Close": - **Q1 (25th Percentile)**: 174.60 - **Q3 (75th Percentile)**: 523.15 - **IQR**: $(523.15 - 174.60 = 348.55)$ - **Lower Bound**: $(174.60 - 1.5 \times 348.55 = -348.225)$ (No negative values, so no lower outliers) - **Upper Bound**: $(523.15 + 1.5 \times 348.55 = 1045.975)$ Any "Prev Close" value above 1045.975 is considered an outlier. ### Summary for All Numeric Columns: - **Prev Close**: Outliers above 1045.975 - **Open**: Outliers above 1045.975 - **High**: Outliers above 1045.975 - **Low**: Outliers above 1045.975 - **Last**: Outliers above 1045.975 - **Close**: Outliers above 1045.975 - **VWAP**: Outliers above 1045.975 - **Volume**: Outliers above 17,091,048.5 - **Turnover**: Outliers above 6.764,892,500,000,000 - **Trades**: Outliers above 239,573.125 - **Deliverable Volume**: Outliers above 7,905,798.375 - **%Deliverable**: Outliers above 0.883125 These calculations help identify potential outliers in the dataset. If you need further analysis or visualization, feel free to ask!

Question 10

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - The analysis covers the period from June 1, 2011, to April 30, 2021. - There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - The maximum number of trades recorded was 1,318,669 on January 22, 2021. - The minimum number of trades was 3,434 on April 28, 2012. - The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame.

Question 11

Analyze Trades trends over time using Date

Analysis

The time series analysis of "Trades" over time has been completed, and the trend is visualized in the chart titled "Trades Trends Over Time." Here are some key insights: - **Time Period**: The analysis covers the period from June 1, 2011, to April 30, 2021. - **Overall Change**: There is a significant overall increase in the number of trades, with a 197.0% rise from the start to the end of the period. - **Maximum Trades**: The maximum number of trades recorded was 1,318,669 on January 22, 2021. - **Minimum Trades**: The minimum number of trades was 3,434 on April 28, 2012. - **Average Trades**: The average number of trades over the period is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends over the specified time frame. If you have any further questions or need additional analysis, feel free to ask!

Question 12

Give me the time series for trades

Analysis

The time series chart for "Trades" over time has been created, showing trends from June 1, 2011, to April 30, 2021. Here are some key insights from the analysis: - **Overall Change**: There is a 197.0% increase in the number of trades over the period. - **Maximum Trades**: The highest number of trades recorded was 1,318,669 on January 22, 2021. - **Minimum Trades**: The lowest number of trades was 3,434 on April 28, 2012. - **Average Trades**: The average number of trades is 128,439.98, with a standard deviation of 104,954.58. The chart provides a visual representation of these trends. If you have any further questions or need additional analysis, feel free to ask!

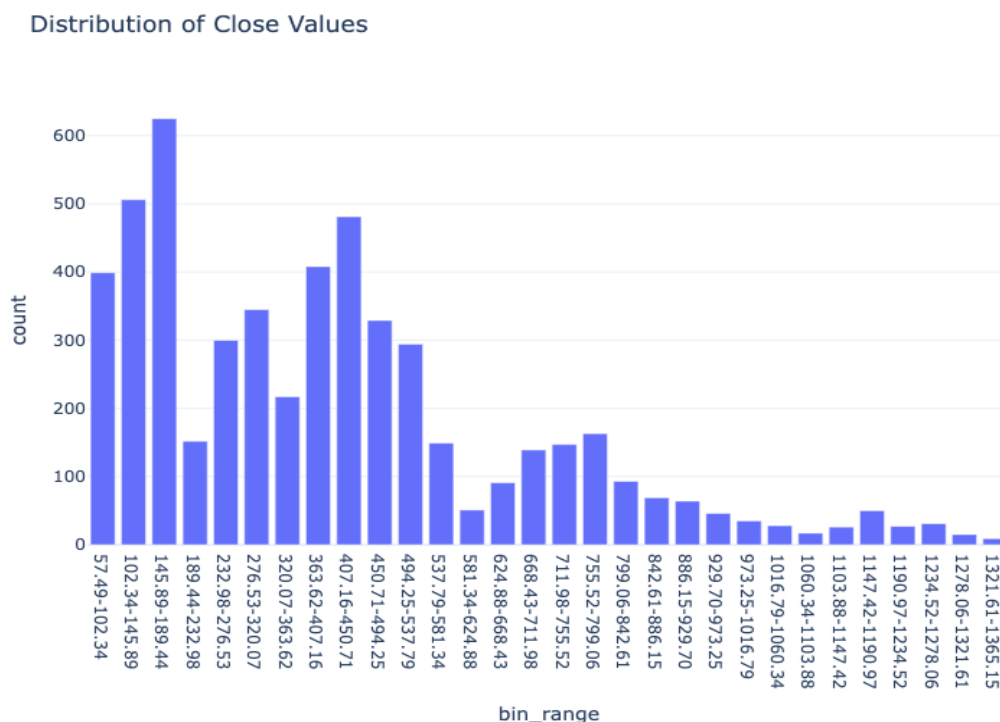
Question 13

Give me the distribution of close values

Analysis

The distribution of "Close" values has been analyzed and visualized in the histogram titled "Distribution of Close Values." Here are some key statistics: - **Mean**: 409.45 - **Median**: 377.25 - **Standard Deviation**: 272.47 - **Range**: From 58.80 to 1365.15 The histogram provides a visual representation of how the "Close" values are distributed across the dataset. If you have any further questions or need additional analysis, feel free to ask!

Chart: Distribution of Close Values



Report Summary

Key Insights Summary

This analysis session generated 3 key insights and 1 visualizations:

Analysis performed:

- Correlation analysis was performed
- Data distribution was analyzed
- Data distribution was analyzed

Visualizations created:

- 1 histogram chart(s)

Recommendations:

- Review the visualizations to identify patterns and outliers
- Consider the relationships discovered between variables
- Use these insights to inform business decisions
- Share this report with stakeholders for further discussion

About This Report

This report was automatically generated by DS Auto Insights on 2025-08-30 01:19:02. All charts and insights were created through conversational queries with an AI-powered data analysis assistant.