CRYPTO STORE TRADING ANALYSIS WRITE UP

INTRODUCTION

Crypto Store is a cryptocurrency trading platform that enables users to buy and sell digital assets through a variety of transaction types, including peer-to-peer (P2P), business-to-business (B2B), business-to-consumer (B2C), and over-the-counter (OTC) trades. This analysis aims to provide insights into key aspects of Crypto Store's trading activity by examining trade types, transaction fees, time-based trading patterns, currency and coin preferences, transaction completion ratios, and profitability metrics.

DATA PREPARATION

To prepare the data for analysis, several pre-processing steps were performed. Power BI was for further analysis and visualization. They include:

1. Power Query was used for converting numerical columns to standardized decimal formats, ensuring accurate calculations

2. Creating and consistently formatting date and time columns from split fields to enable reliable time-based analysis.

3. Checking for duplicate records and missing values to uphold data integrity.

4. Defining key measures within the Data Model, such as "Total Trade Fee" and "Ratio of Fee to Amount," using DAX formulas for dynamic calculations.

5. Creating bins for date and time columns to group data effectively for analysis.

EXPLORATORY DATA ANALYSIS

The analysis seeks to answer several questions:

- Trade Type Analysis:

1. What factors are driving a higher completion rate for sell trades compared to buy trades? 2. Are sell trades more likely to be completed, pending, or cancelled compared to buy trades?

- Fee Analysis:

1. What accounts for certain transactions having zero fees?

2. Which traders generate the highest revenue through transaction and network fees?

- Time-Based Analysis:

1. Why does peak trading activity occur from 3 pm to 7 pm?

2. What influences the lower volume of transactions between 2 am and 8 am?

- Currency and Coin Analysis:

1. Why does USDT contribute more revenue than BTC?

2. Why are most transactions conducted in USD rather than GHS, the local currency?

3. How frequently and significantly do rates fluctuate for specific coins?

- Transaction Patterns and Ratios:

1. What is the overall trade completion rate, and does it differ by trade amount or type?

2. How does the fee-to-transaction amount ratio vary with transaction size, and what trends can be observed?

- Profitability Metrics:

1. Why is there a lack of profit from buy trades?

2. What led to the highest profitability in September?

ANALYSIS AND INSIGHTS

With a data-driven approach, I have identified several key insights that shed light on the underlying trends and patterns within the dataset.

* Type Analysis:

• Sell trades may be completed more quickly as they are potentially driven by traders reacting to market changes, such as deciding to cash out or reduce exposure. The data supports this, showing a high frequency of sell trades with 17,994 sell trades compared to 4,698 buy trades. • Sell trades are more likely to be completed, with an 82.5% completion rate compared to 68.3% for buy trades, indicating faster execution for sell orders. Buy trades, on the other hand, are more frequently pending at 18.6% versus 8.9% for sell trades, likely due to traders waiting for ideal conditions.

* Fee Analysis:

• Transactions with no fees might occur as part of promotional offers or agreements where platforms waive fees to attract more users. Additionally, certain types of trades, such as peer-to-peer deals or trades involving specific coins, may not incur fees based on platform policies.

• High-volume traders, such as institutions or frequent retail traders, may generate the most revenue from transaction fees. Their large and consistent trading volumes can contribute significantly to the platform's fee income. The total transaction fees generated amounted to $66,521.66, emphasizing the substantial revenue potential from consistent, high-volume trading activity.

* Time-Based Analysis:

• Peak trading activity from 3 pm to 7 pm could align with local activity patterns, where traders in Ghana and Malawi might be more active during these times, especially after work hours. The data specifically shows the highest trading volume at 6 PM, with 1,537 trades during this peak hour. However, this peak could also coincide with global market overlaps if traders are engaging with international platforms or reacting to global news.

• Lower trading volume between 2 am and 8 am with only 3,155 trades completed during this off-peak period would likely reflect local trading patterns in Ghana and Malawi, where traders might not be active during the early morning hours, possibly due to time zone differences with more active regions or due to cultural and economic factors.

* Currency and Coin Analysis:

• USDT may generate more revenue than BTC because it is a stable coin frequently used in trading pairs. Its stable nature could make it a popular choice for traders, which might lead to higher transaction volumes and more fees. While USDT generated $5,277.26 in fees, BTC’s higher volatility led to even more significant revenue generation at $60,820.55.

• USD is likely favoured for most transactions with a count of 22,391 in the dataset, as it is widely accepted across global exchanges. Local currencies like GHS might not be as easily traded or as liquid on international platforms, making USD or stable coins like USDT more commonly used for transactions.

• Cryptocurrency rates can fluctuate frequently due to factors like market sentiment, regulatory changes, and news events. Popular coins like Bitcoin and Ethereum could see larger fluctuations compared to lesser-known coins.

* Transaction Patterns and Ratios:

• Smaller trades may generally be completed faster due to higher market liquidity, which makes it easier to find matches. Larger trades, especially those involving institutional investors, might take longer to execute as they require finding appropriate counterparties and minimizing price slippage.

• The fee-to-transaction amount ratio could decrease with larger transactions since exchanges may offer reduced fees for high-volume trades. Smaller transactions might carry higher relative fees because of minimum fee structures.

* Profitability Metrics:

• Lack of profit from buy trades could be attributed to market downturns or suboptimal entry points. If a trade is initiated in a declining market or without proper timing, the trade might not yield the expected returns.

• Higher profitability in September led to generating a total of $11,722.24 in fees. This might be linked to favourable market conditions such as a price rally in major cryptocurrencies like Bitcoin or Ethereum. Positive news or increased trading volumes during this time could have contributed to greater profitability.

CONCLUSION

The cryptocurrency trading trends in Ghana show that peak trading occurs from 3 pm to 7 pm, likely due to after-work activity. Low trading volume between 2 am and 8 am suggests reduced activity during these hours. Stable coins like USDT are preferred over BTC, and transactions are predominantly in USD rather than local currencies like GHS. The lack of profitability from buy trades and monthly profit spikes reflect the volatility of the market, influenced by both local and global factors. Understanding these dynamics can help improve platform strategies and better cater to traders’ needs.

RECOMMENDATIONS

1. Leverage peak hours (3 pm to 7 pm) for promotions or campaigns to maximize trading activity.

2. Use zero-fee transactions as part of promotional offers or targeted incentives for high-frequency traders to attract more users.

3. Encourage use of local currencies (GHS) by increasing support for them.

4. Focus on stable coin trading to appeal to users seeking stability.

5. Provide market insights and tools to help users make informed buy trade decisions.

6. Offer real-time analytics and alerts to help traders navigate market volatility.

7. Streamline the process for large trades to minimize delays and offer reduced fees for institutional traders.

LIMITATIONS

This analysis is limited by incomplete data for May and November, which may impact the accuracy of certain findings.