**CRYPTOCURRENCY**

**PRICE ANALYSIS**



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# Summary

In recent decades, popularity of cryptocurrency has grown exponentially, earning it tremendous influence in our digital culture. In simple terms, cryptocurrency is the digitalized asset used as a medium of exchange for financial transactions, creation of additional units of currency and to verify the transfer of assets.

# DATA Source

Data source which I have decided to use for the project is based on cryptocurrency market scenario. It includes historical cryptocurrency prices for all crypto tokens with attributes which include historical open, close, high, low, date, rank, trading volume and market cap. Below is the link to the data source.

<https://www.kaggle.com/jessevent/all-crypto-currencies#crypto-markets.csv>

I selected this data source due to the emerging phenomenon of cryptocurrencies. Being the digital financial assets with guaranteed decentralized technology, its value on the market and its popularity around the globe have been increasing immensely, with number of challenges and concerns for business and industrial economics. The concept interests me and I hope to learn about this phenomenon as I prepare this data visualization project.

**NOTE:** There are chances where I will use more data sources depending on the dashboard information requirement.

## OBJECTIVES (GOALS) OF ANALYSIS

* Market dominance of cryptocurrency for each quarter.
* Analyze the ranking and its fluctuations with the amount of time.
* Perform predictions/ forecast on the data sample.
* Top exchange market dominance based on trade volume.
* Relationship between trade volume and Bitcoin price.

## KEY INSIGHTS

Key insights to be focused in th data visualization project :

* Growth in Market Cap over the period.
* Ranking of cryptocoins.
* Market Distribution
* Bitcoin Price Dependency

## CALCULATIONS INVOLVED

Our target variable is the total units sold per video game (Units\_total). Our objective is to establish a

* Close Ratio = (Close – Low) / (High - Low)
* Spread = USD (High - Low) per day

Close Ratio and Spread are already included in the data source, but I am planning to remove those fields and use these by creating calculated fields while exceuting the project. I might need to create more calculations eventually according to the requirement of more key insights.

## CHALLENGES

Challenges that can be expected during the project execution :

* Tableau Integration with multiple files resulting into data load which slows down the application leading to performance issues.
* Page navigation to other dashboards
* View switching with selection of sheets
* URL selection which can link to correct websites & tableau reports.
* Blending of primary and secondary data sources according to the requirement of the project.

## ADDITIONAL DATA SOURCES

There may be requirement of data sources

* <https://www.kaggle.com/mengyuanemmm/cryptocurrency#BTC.csv>
* <https://www.kaggle.com/mengyuanemmm/cryptocurrency-analysis/data>
* <https://www.kaggle.com/adammcmurchie/graphing-cryptocurrency-reports/data>
* <https://www.kaggle.com/wangqiyuan/bitcoin-ema-crossover-trading-strategy/data>

## REFERENCES

* <https://www.investinblockchain.com/cryptocurrency-market-review-q2-2018/>
* <https://clootrack.com/consumer-analysis-5-exceptional-insights-of-cryptocurrency-wallets/>
* <https://link.springer.com/article/10.1007/s40812-019-00138-6>

## Data Dictionary

Table : Data Dictionary

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Example** |
| slug | The type of cryptocurrency | Bitcoin, Ethereum |
| symbol | Symbol of the coin slug | BTC, ETH |
| open | All historic open values for all cryptocurrencies | 134.44 |
| high | All historic high values for all cryptocurrencies | 147.49 |
| low | All historic low values for all cryptocurrencies | 134 |
| close | All historic close values for all cryptocurrencies | 144.54 |
| volume | Total amount of coins traded in last 24 hours | 46862700 |
| market | Capitilization of cryptocurrency | 1542813125 |
| Close ratio | Daily close rate, min-maxed with the high and low values for the day | 0.5438 |
| Spread | Difference between the buy and sell prices | 12.88 |