# Crypto Data Set USD/MATIC



Present missing value before cleaning

## Data Cleaning



Replaced space and underscore



Filtered data history

# Raw Data

Value_IN(MATIC) ▼	Value_OUT(MATIC) ▼	Current Value @ \$0.703172221747878/MATIC ▼	Txn Fee(MATIC) <sup>▼</sup>	Txn Fee(USD) ▼	Historical \$Price/MATIC ▲
0.14		0.1	0.02	0.01	
677.99	0	476.74	0.02	0.02	
0	0		0.01		
0	0		0.01		
0			0.02	0.01	
0			0.02	0.01	
0.14		0.1	0.01	0.01	
0	0				
0.96		0.68	0.34	0.24	
0	0		0.03	0.02	
0			0.51	0.36	
0	0		0.03	0.02	
0			0.64	0.45	
0	0		0.04	0.03	
0.94		0.66	0.02	0.02	
0	0		0.04	0.03	
26		18.28	0.33	0.23	
0	0		0.57	0.4	
0			0.04	0.03	
0	0		0.03	0.02	
0			0.31	0.22	
0	0		0.02	0.01	
0			0.26	0.18	
0	0		0.27	0.19	
0			0.06	0.04	
0	0		0.7	0.49	
0	0		0.01	0.01	
1.48	0	1.04	0.02	0.01	

Blockno	0	
UnixTimestamp	0	
DateTime (UTC)	0	
Value_IN(MATIC)	0	
Value_OUT(MATIC)	0	
CurrentValue @ \$0.703172221747878/MATIC	0	
TxnFee(MATIC)	0	
TxnFee(USD)	0	
Historical \$Price/MATIC		
dtype: int64		

#### Line plot of Historical \$Price/MATIC



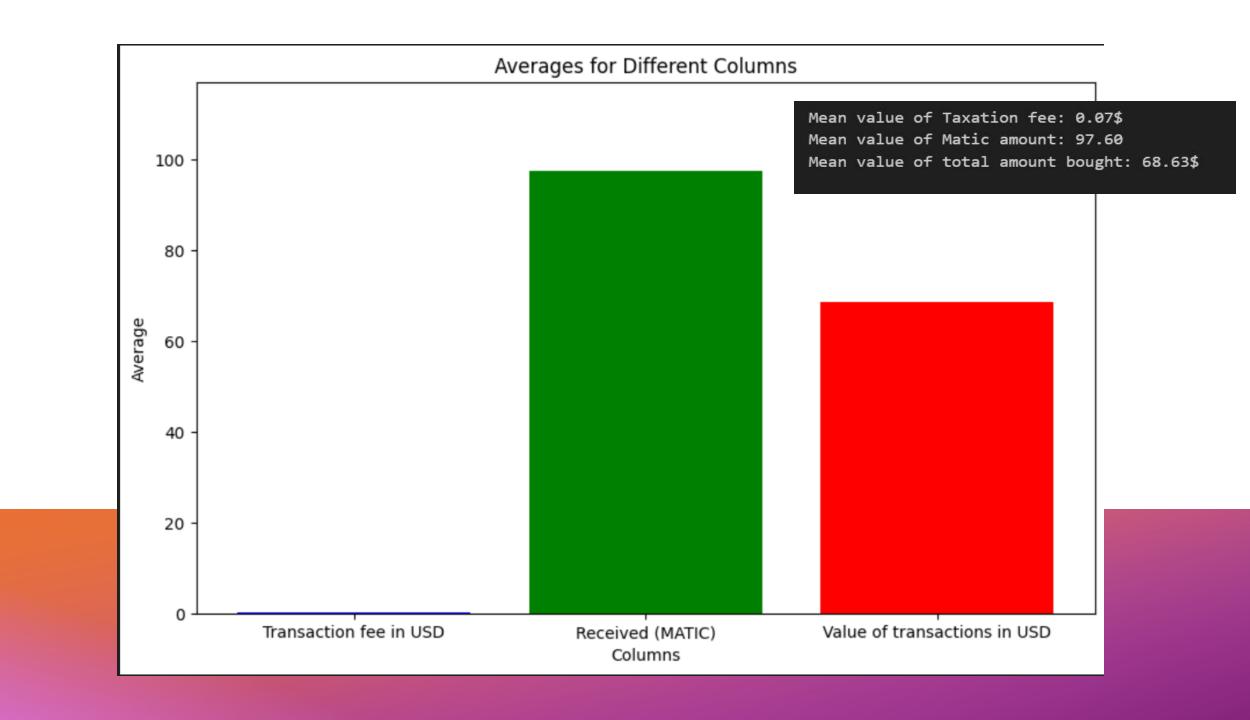
# Statistiska summeringar

```
Statistics of MATIC from 2024-02-08 to 2024-04-16
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Mean Price in February: 1.00 $/MATIC Standard Deviation: 0.03 $/MATIC Average MATIC bought: 32.97
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Mean Price in March: 1.08 \$/MATIC Standard Deviation: 0.08 \$/MATIC Average MATIC bought: 74.32

Mean Price in April: 0.88 \$/MATIC Standard Deviation: 0.07 \$/MATIC Average MATIC bought: 194.24



### Kruskal Wallis Test

Kruskal-Wallis Test Statistic: 934.8117765882337

P-value: 6.744812031263725e-08

The result is significant. The medians are different.

### Regression analys

- **Data Setup:** We loaded the dataset and identified TxnFee(MATIC) as the dependent variable and Value\_IN(MATIC) as the independent variable.
- **Splitting the Data:** The dataset was split into training (80%) and testing (20%) sets to train and evaluate the model.
- **Model Building:** A simple linear regression model was built using the training data to predict transaction fees (TxnFee(MATIC)) based on the transaction value (Value IN(MATIC)).
- **Model Evaluation:** The model was evaluated using Mean Squared Error (MSE) and R-squared (R<sup>2</sup>) metrics, with the results showing whether the transaction value (Value\_IN(MATIC)) can predict transaction fees accurately.
- **Conclusion:** The evaluation results (e.g., low R<sup>2</sup> value) suggest that Value\_IN(MATIC) might not be a strong predictor of TxnFee(MATIC), indicating the need to explore other variables or modeling approaches to better understand the factors influencing transaction fees.

