



GROUP W

Forecasting Cryptocurrencies

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Presentation Agenda



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01 Bussiness Understanding

04 Modelling

02 Data Exploration

05 Predictions

03 Data Preparation



Business Understanding



Investments4Some

The company wanted to start taking advantage of the new technologies the world has to offer in its advantage. Unfortunately for them they did not have the expertise to do so.

Our Envovement

As the company did not have the necessary skills to successfully predict the market values for cryptocurrencies they reached out to us in order to get the proper help from professionals.

What was needed

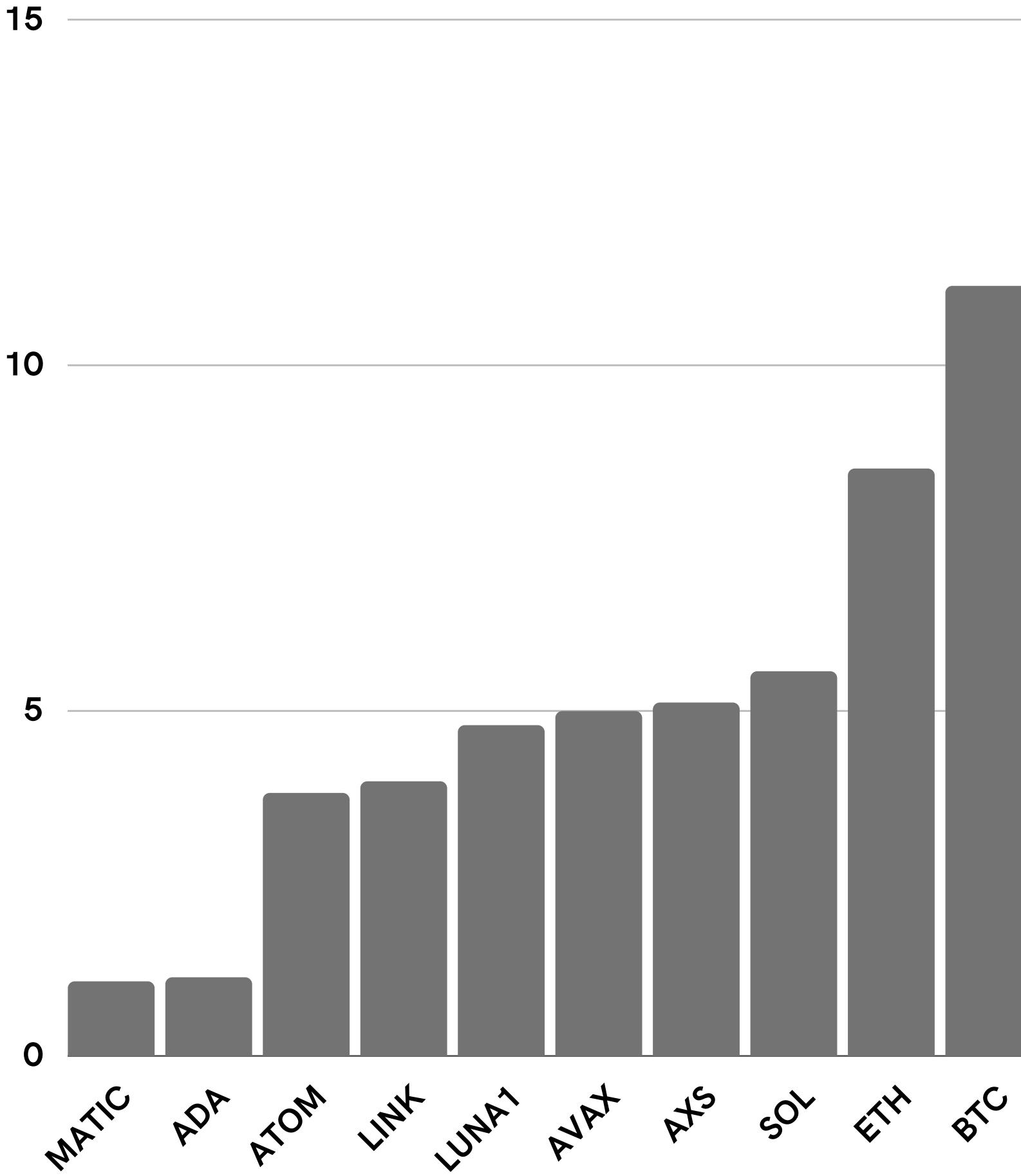
For us to help, we needed a dataset with the daily prices and some metrics to analyze the coin value. This dataset contained ten different cryptocurrencies so the team could predict better the different coins.



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Data Exploration

Logarithm of the higher closing
prices by cryptocurrency





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Data Preparation

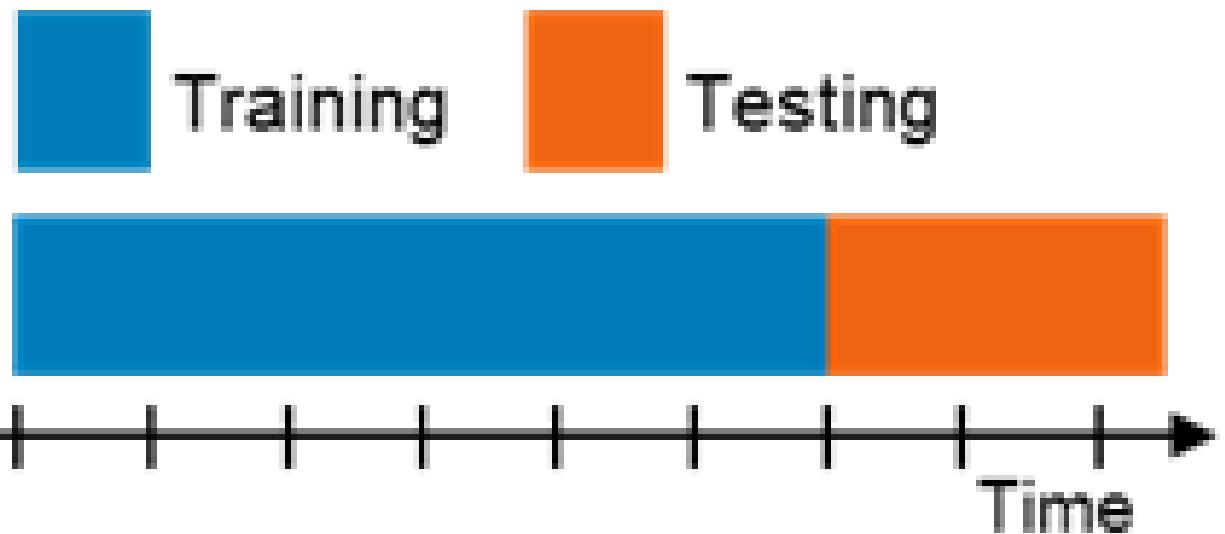
- 1 NEW DATASETS FOR EACH CRYPTO**
- 2 FINANCIAL INDICATORS:**
 - MOVING AVERAGE
 - MACD
 - STOCHASTIC OSCILLATOR
 - S&P500
 - ...
- 3 SCALING**
- 4 FEATURE SELECTION**
- 5 INITIAL DATES**



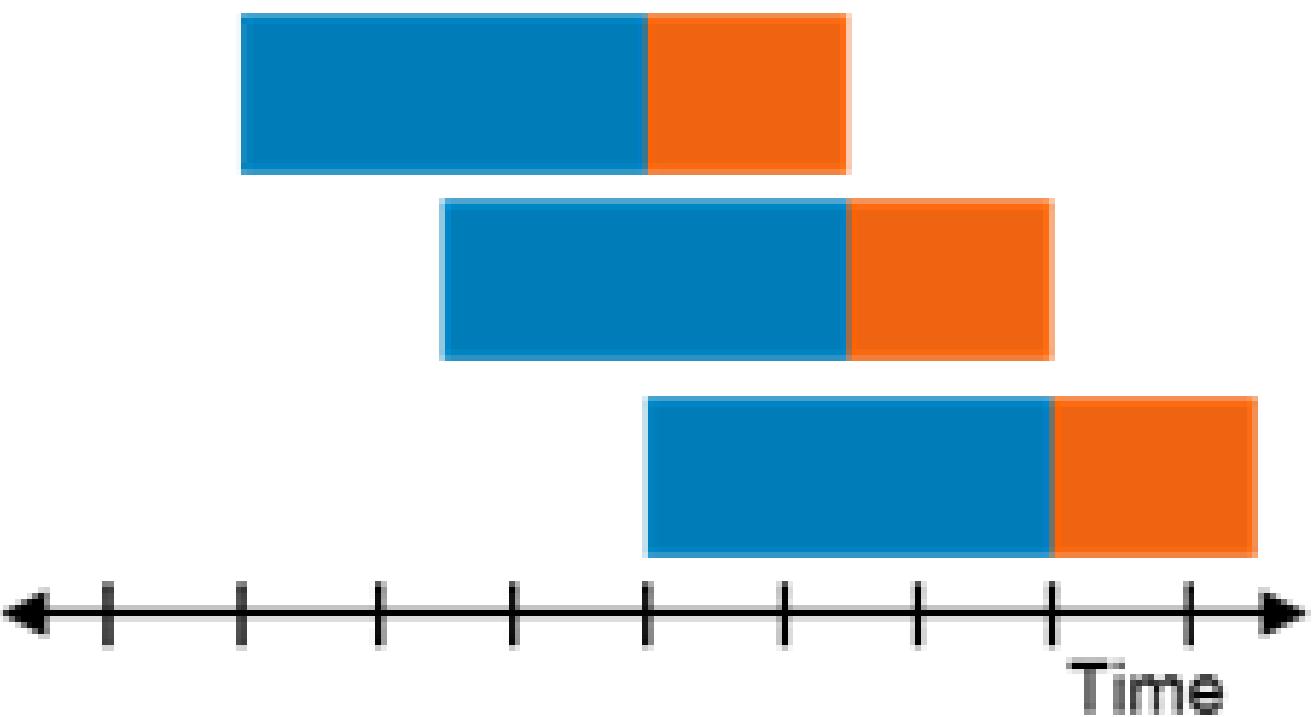
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Data Preparation

Time-based Estimation



Time-based cross-validation



Data Modelling



Random
Forest

Gradient
Boost

XGradient
Boost

Neural
Networks

Long
Short-term
Memory



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Model associated with each currency

Cardano (ADA)

Random Forest

10/05
Closing Price:
0,78\$

Costmos (ATOM)

XGBoost

10/05
Closing Price:1
17,02\$

Avalanche (AVAX)

XGBoost

10/05
Closing Price:1
51,72\$

Luna1Eterra (LUNA1)

Gradient Boost

10/05
Closing Price:1
70,53\$

Axielnfity (AXS)

Random Forest

10/05
Closing Price:1
30,4\$

Polygon (MATIC)

Gradient Boost

10/05
Closing Price:
1,04\$

Bitcoin (BTC)

Gradient Boost

10/05
Closing Price:1
35615,83\$

Ethirium (ETH)

Random Forest

10/05
Closing Price:
2637,5\$

ChainLink (LINK)

XGBoost

10/05
Closing Price:
10,86\$

Solana (SOL)

XGBoost

10/05
Closing Price:
81,45\$

Thank You!

If you have any questions or comments please let us know!



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