

# Fund Price Prediction

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An MVP Model Time Series for Testing Purposes  
~Not Investment Advice~



# Process Steps to Get You Results

**1. Understanding Your Needs & Dataset**  
Problem /Solution

**2. Technical Approach**  
Model Forecasting

**3. Assessing Data Set**  
Time Series Components  
Decomposition

**4. Models & Methods**  
Testing Models- ARIMA &  
SARIMAX

**5. Conclusion Results**

Choosing the right Model

01

# Understanding Your Needs, and Dataset

# Problem & Stakeholder

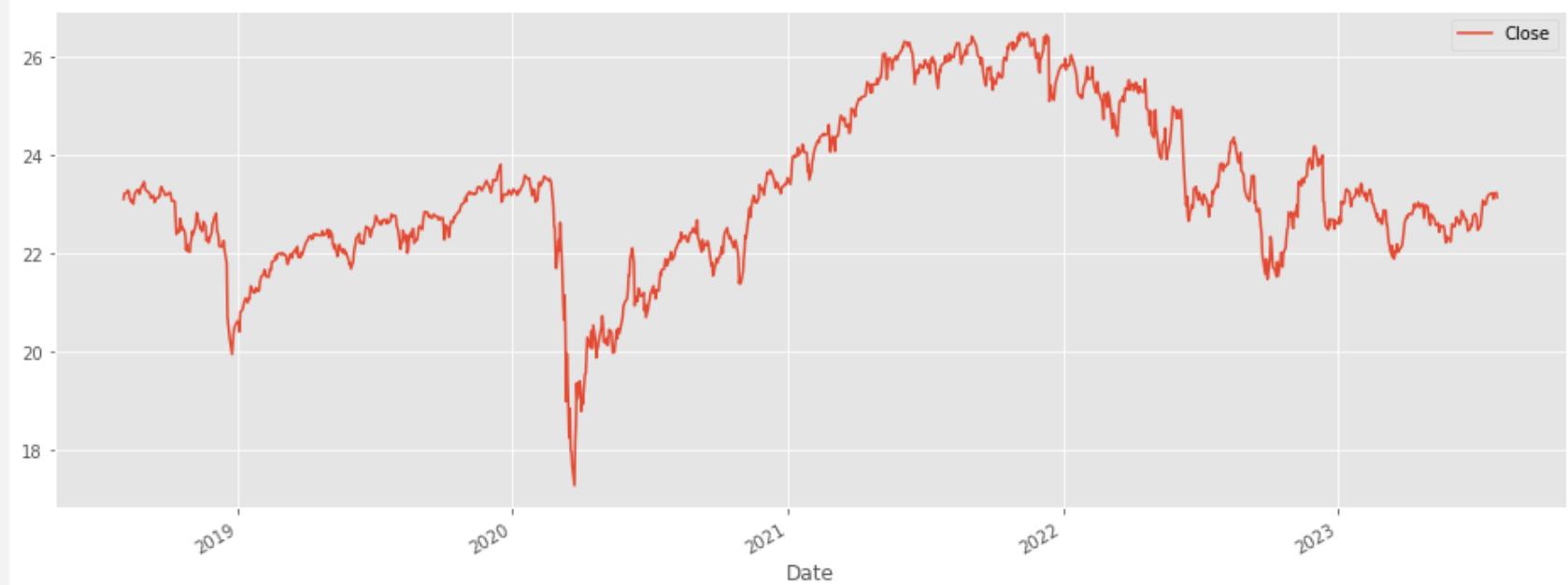
1. Predicting Fund Prices i.e. AMECX Fund Projection
2. Finding the right Partner
3. Stake holder: Capital Investment Management Company

# Solution

1. Technical – MVP Model Time Series Forecasting 1 year of Fund price
2. Discovery of what is needed to standarize future Modeling

# Broad Understanding

## 5 Year Close Price History & Stats (AMECX Fund)



\$23. Avg. Price



\$26.50 Max



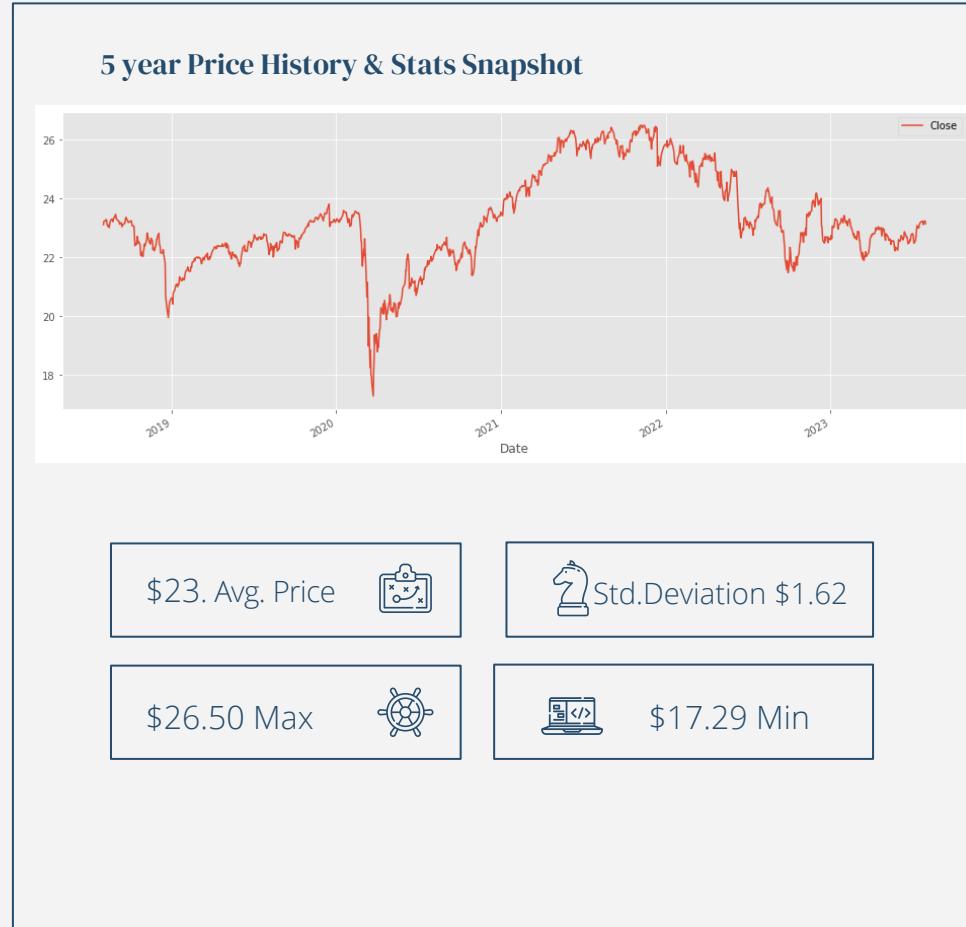
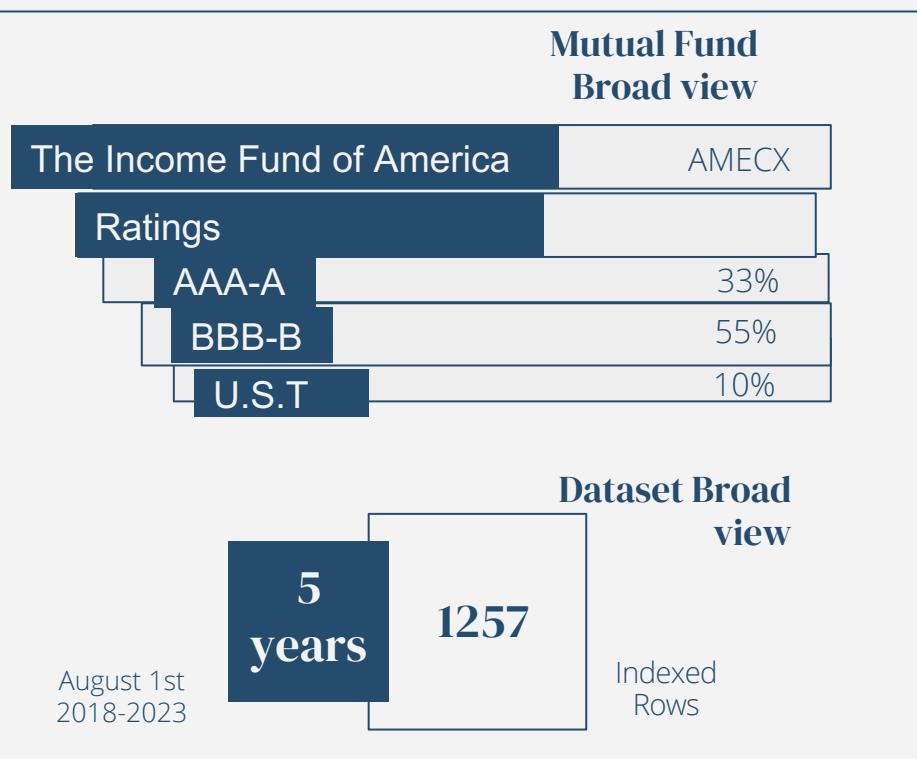
Std.Deviation \$1.62

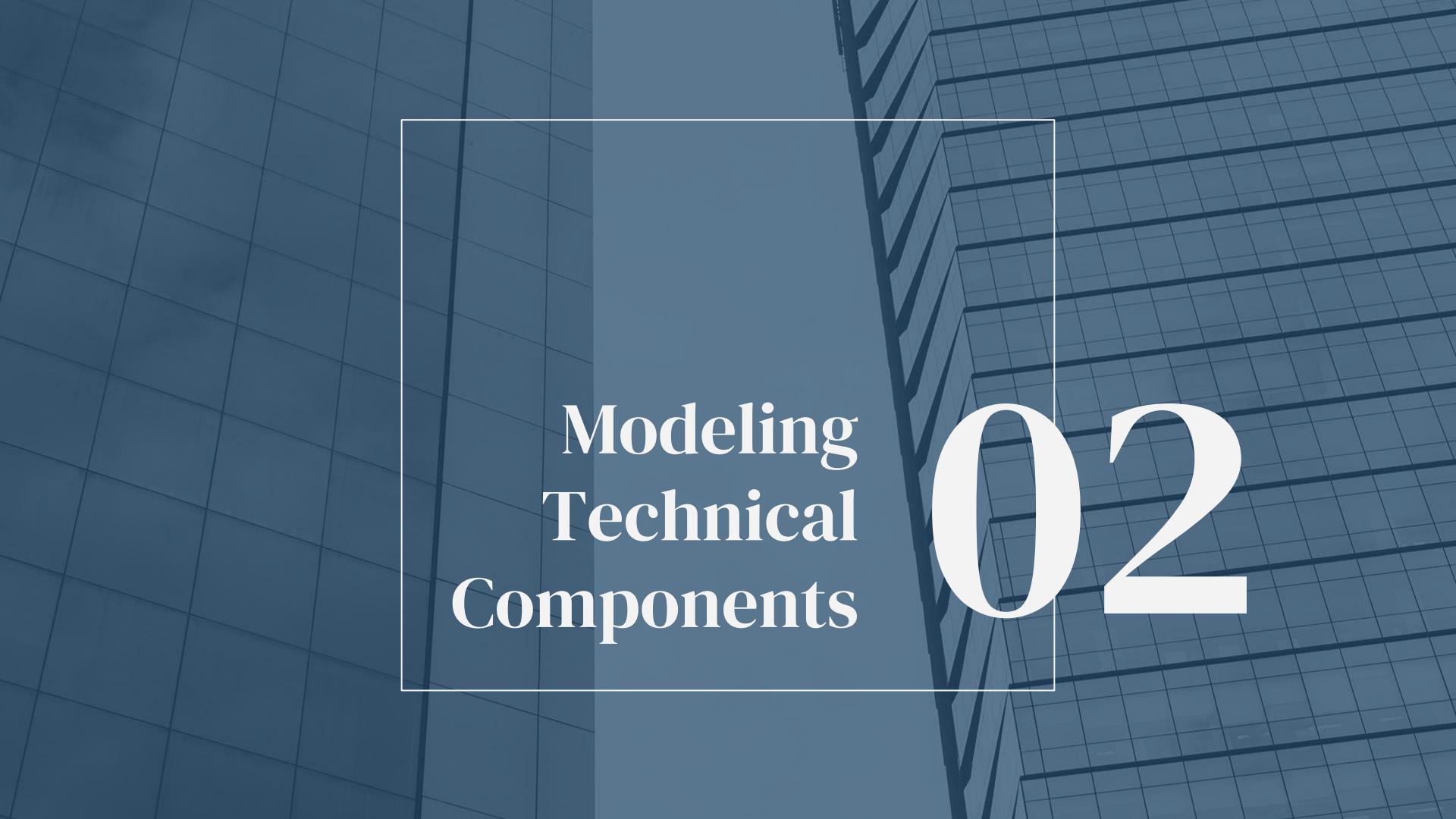


\$17.29 Min



# Broad Understanding continued...





# Modeling Technical Components

# 02

# Components of the Technical Solution

## 2) Dataset Preparation

Exploratory Techniques to understand and clean the Data



## 1) The Dataset

Data set: AMEX



## 3) Set up for Forecasting

Assesing key components of the DataSet  
Setting up for Success



## 4) Modeling Forecast

Performing Actual Models



Evaluating Metrics to find the Best Prediction Model



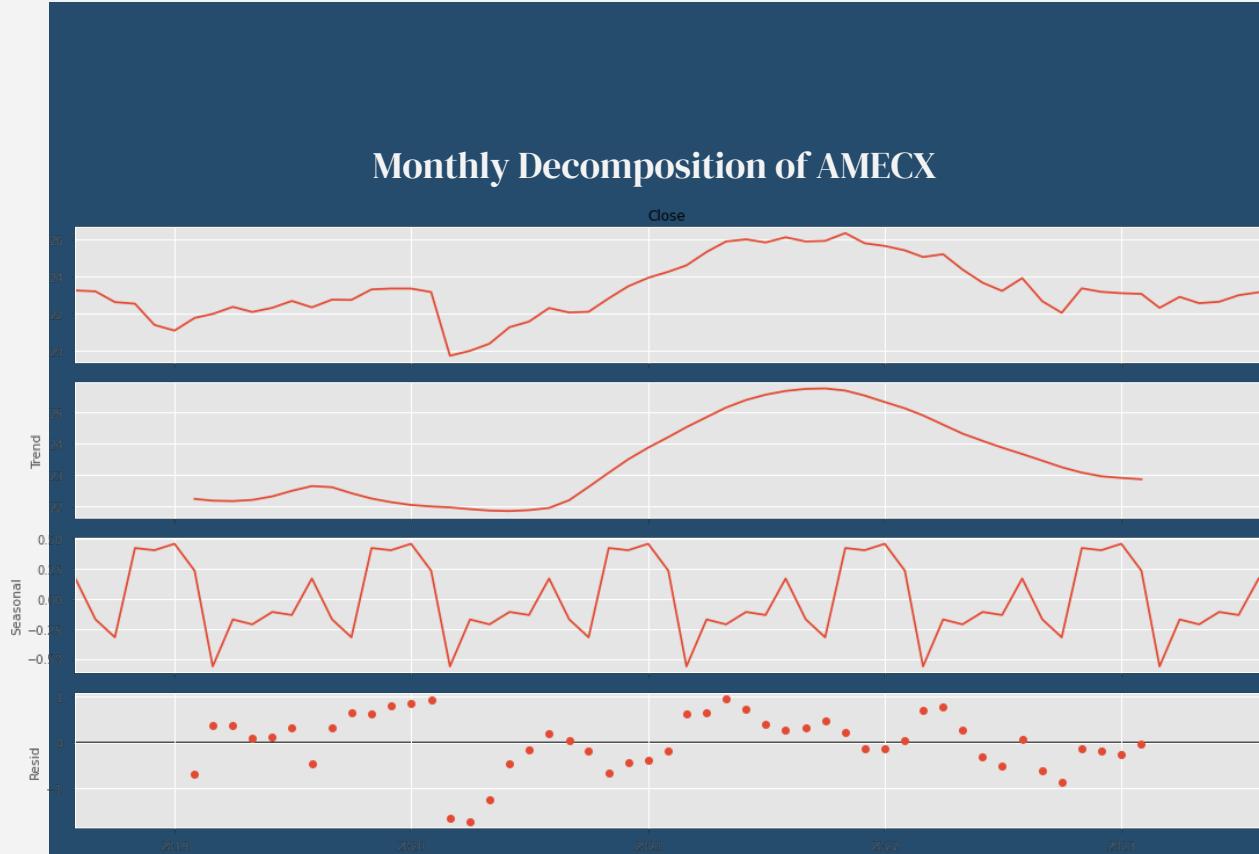
03

# Assesing Dataset

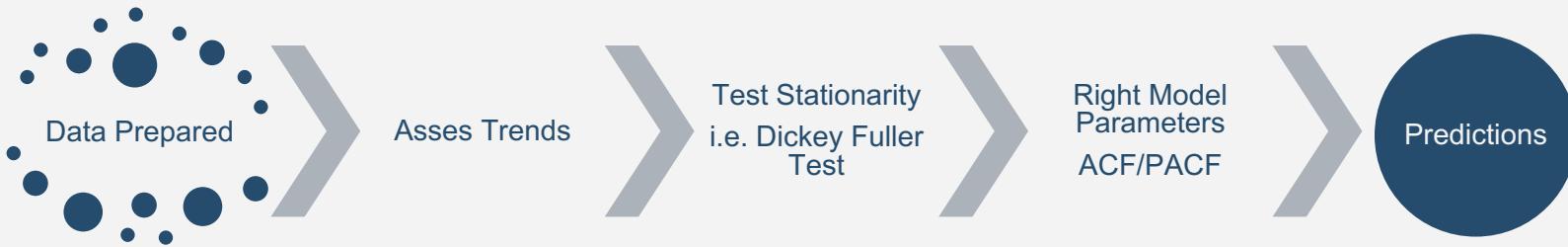
# Assessing Dataset: Checking for Stationarity

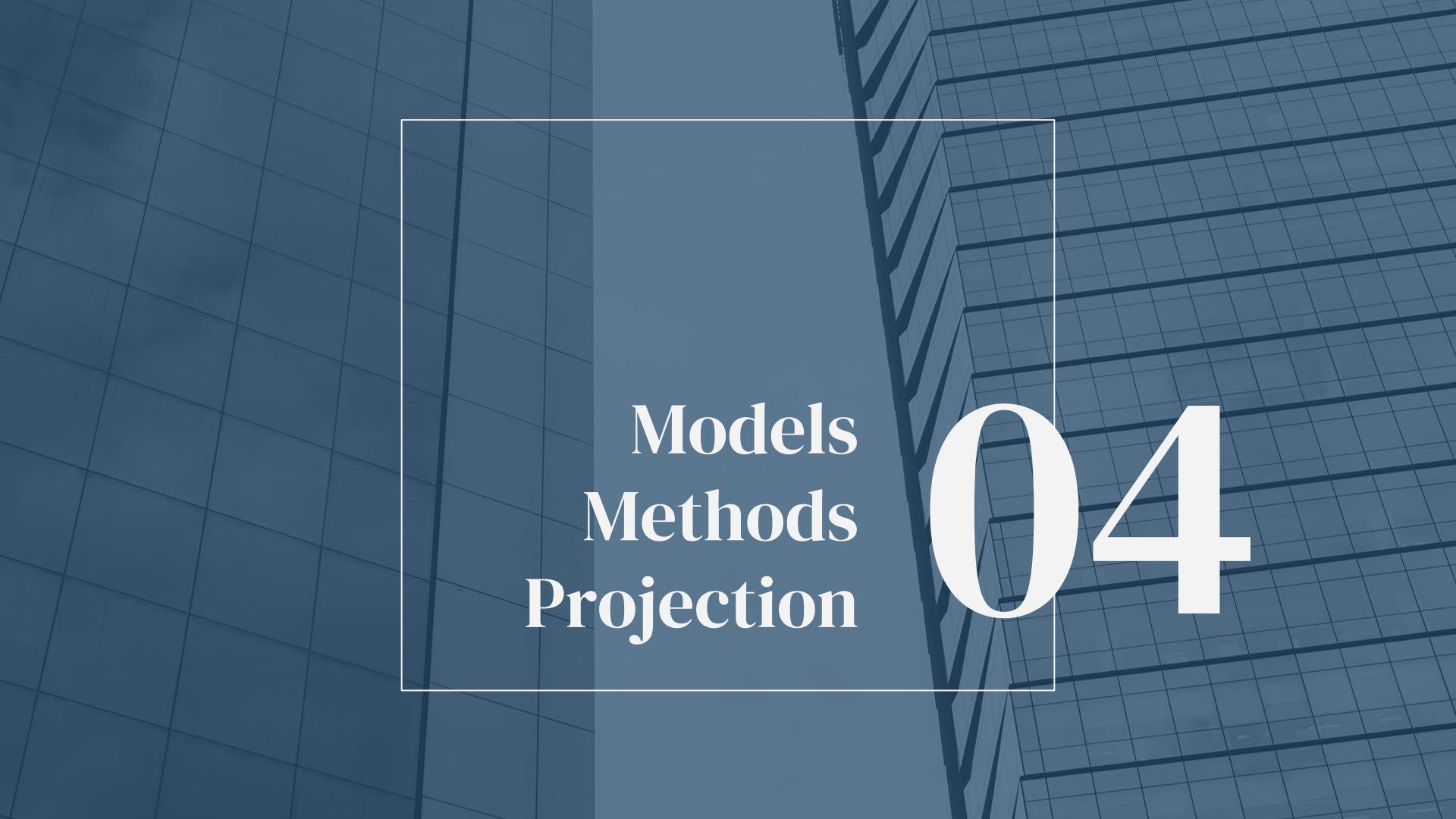
## COMPONENTS

- Data
- Trend
- Seasonality
- Residual



# Applying Components for Predictions





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# Models Methods Projection

# 04

## Models

Models have technical performance metrics. Models comparison metrics results are shown below and the best model is the SARIMAX highlighted below:

MODEL NAME	AIC	RMSE
AR/MA_1	101.09	1.23
AR/MA_2	102.91	1.27
ARIMA	102.44	1.46
SARIMAX	99.855	1.04

SARIMAX-  
1 year  
projection  
on price  
range  
US\$21-  
\$22.25

Fund AMECX FORECAST





Conclusion:

05

# Time Series Reproducibility with additional success components



## Use Most Performant Model

SARIMAX

## Capturing the right timing

Time series adapted to the right fit of time.

## Conducting testing

Testing starts with AMECX.

## Choosing Portfolio Addressing multiple funds

Over 8,000 funds available.



# Thanks

Does anyone have any questions?

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[yourcompany.com](http://yourcompany.com)



# Fabolous Team ! Do Business with us!



# Our Pricing

\$100K

120 Hours

- Assessing Funds
- Finding Data Sets
- MVP Models
- Research
- Model Validation
- Model Documenting

Your benefit

\$20 MM \* 0.04  
=\$800,000

