

Predicting Trade Execution Time

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My goal is to predict trade execution time with the use of trading data from our company's trade order management system Moxy.

The problem

Timing is everything when trading on the market, stock prices can quickly go up and go down just as quickly. This is why it would be important to be able to predict how fast a trade can be electronically executed in my company's software Moxy.

Trade execution time can be defined as the time from when the order is placed into the market to the time the order is completely filled. This is all done over the internet using an electronic trading protocol called FIX.

The solution

With the use of Data Science, we can better predict execution times and determine how certain features affect execution time.

Data

From our Moxy SQL database, we will use the following features to predict Execution Time:

- **ExecTime**
- **PlaceTime**
- **placeID**
- **PlaceQty**
- **BrokerKey**
- **SecType**
- **SecKey**
- **limit**
- **price**
- **EstPrice**
- **Algo**
- **TranCode**
- **ExchangeID**
- **IndGrpID**
- **SectorID**
- **Currency**
- **MFTotalCost**