FORECASTING METHODS

**Problem.** To review forecasting methods for the cryptocurrency exchange rate.

**What would we like to get?**

1) The trend of exchange rate in the nearest time interval or for several intervals (the number is set in advance);

2) The numerical value of the exchange rate.

**Methodology:**

1) Technical analysis;

2) Fundamental analysis.

*Literature:*

Article «*Forecasting models for the dynamics of the exchange rate on the basis of fundamental indicators*» (Slack);

Book «*Computer analysis of the futures market*» (DropBox).

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**Approaches:**

1) Multiple Regression (linear, non-linear, );

2) Discriminant analysis (standard or generalized);

3) Neural networks.

**Input Data.**

We will use both indices and methods of technical analysis (if necessary, transform them according to a selected approach), and the indicators (time series) that are used in fundamental analysis. So we will synthesize two methods!

**Example.** We presentedthe analysis of the cryptocurrency exchange rate (from Jen 1, 2017) using multiple regression and discriminant analysis. The problem was transformed to the classification task, but we also give a numerical forecast of the exchange rate for the nearest time interval. The significant indices and indicators were explored. Also we compared two results.