ABSTRAK

Perdagangan *cryptocurrency* memiliki tingkat *volatilitas* yang tinggi sehingga kesuksesan trader tidak hanya berkaitan dengan kondisi pasar, tetapi juga dapat dipengaruhi oleh faktor personal trader. Penelitian ini bertujuan untuk mengidentifikasi faktor personal yang paling berpengaruh terhadap kesuksesan trader *cryptocurrency* menggunakan *Random Forest Regressor*. Data penelitian diperoleh melalui kuesioner dari 238 responden dengan variabel Usia, *Fear of Missing Out* (FOMO), *Emotional Control* (EC), *Risk Tolerance* (RT), *Trading Discipline* (TD), *Trading Activity* (TA), dan Kesuksesan Trader (KT). Tahap prapemrosesan dilakukan melalui normalisasi Min-Max pada variabel usia dan *feature extraction* menggunakan Mean, Variance, dan Standard Deviation. Konfigurasi akhir menggunakan gabungan *Feature Extraction* Mean + *Variance* + *Standard Deviation*, target Y berupa *Standard Deviation* Kesuksesan Trader, serta pembagian data 70:30 dengan 166 data *training* dan 72 data *testing*. Model menggunakan 100 decision *Tree* dengan *random_state* 42. Hasil pengujian menghasilkan MAE sebesar 0,2079. Berdasarkan *Feature Importance*, Mean *Trading Activity* memiliki nilai *Importance* tertinggi sebesar 0,1193 atau 11,93%. Hasil tersebut menunjukkan bahwa *Trading Activity* merupakan faktor personal yang paling dominan dalam model prediksi kesuksesan trader *cryptocurrency*.

Kata kunci: *Cryptocurrency*, Trader, Faktor Personal, *Random Forest Regressor*, *Feature Importance*.

ABSTRACT

Cryptocurrency trading has a high level of volatility, meaning that trader success is influenced not only by market conditions but also by personal factors. This study aims to identify the personal factors that have the greatest influence on cryptocurrency trader success using a Random Forest Regressor. The research data were collected through a questionnaire from 238 respondents, with the variables of Age, Fear of Missing Out (FOMO), Emotional Control (EC), Risk Tolerance (RT), Trading Discipline (TD), Trading Activity (TA), and Trader Success (KT). The preprocessing stage involved Min-Max normalization of the Age variable and feature extraction using Mean, Variance, and Standard Deviation. The final configuration used a combination of Mean + Variance + Standard Deviation for feature extraction, with the target variable (Y) being the Standard Deviation of Trader Success, and a 70:30 data Split consisting of 166 training data and 72 testing data. The model used 100 decision Trees with a random_state of 42. The evaluation results produced an MAE of 0.2079. Based on Feature Importance, Mean Trading Activity had the highest Importance value of 0.1193 or 11.93%. These results indicate that Trading Activity is the most dominant personal factor in the cryptocurrency trader success prediction model.

Keywords: *Cryptocurrency, Trader, Personal Factors, Random Forest Regressor, Feature Importance.*