ABSTRACT

PT. Harum Maju Mapan faces challenges in managing unstructured daily expenses, which risks causing inefficiencies in financial management. This study aims to build a daily expenditure prediction model using a Data Mining-based Multiple Linear Regression (MLR) algorithm. The research method includes the stages of analysis, data collection, preprocessing, model building, and evaluation using a quantitative approach with the help of Python in Google Colab. The data used came from 7,478 transactions for the period from January to November 2024, which after going through the preprocessing stage produced 1,424 net data. Independent variables include the month, date, category, and nominal of the transaction. Model evaluation was carried out using RMSE, MAE, MAPE and R2. The results of the study showed that the MAE value is 2,434,600.77; RMSE is 6,758,423.87; MAPE is 487.96% and R2 is 0.44. To improve accuracy going forward, it is recommended to add more descriptive features and explore other predictive algorithms.

Keyword*: Data Mining, Multiple Linear Regression, Prediction, Daily Expenses.*