ABSTRACT

The analysis of financial accounting transactions is essential to gain insights that can improve business performance, reduce costs through the identification of more efficient methods, and improve the profitability and financial health of the company. This research aims to explore the prediction of corporate earnings by analyzing financial accounting data such as Debt to Equity, Earnings per Share, and Net Margin Earnings. This research is relevant because it provides insights that can assist managers and business owners in making more accurate data-driven decisions, which in turn can improve operational efficiency and long-term financial success. This research adopts an Exploratory Data Analysis (EDA) approach and applies Decision Tree (DT) and Support Vector Regression (SVR) methods to model earnings predictions based on financial variables, including equity, assets, net profit, and liabilities. The data used in this study was obtained from Indonesian companies listed on the Indonesia Stock Exchange (IDX) for the period 2008 to 2023. The analysis results show that the Decision Tree model has an R² value of 0.86, which is higher than the Support Vector Regression model which produces an R² value of 0.77. Thus, this study found that the Decision Tree model is more effective in predicting company revenue with an accuracy rate of 86%.

Keywords: financial analysis, decision tree, exploratory data analysis, support vector regression, revenue