

Abstract

This study investigates the problem of predicting company revenue by examining financial accounting data such as Debt to Equity, Earnings per Share, and Net Margin Profit. This research is important because it can help managers and business owners make better data-driven decisions, increase operational efficiency, and improve the company's financial success in the future. The goal of this research is to predict revenue using financial statement data, specifically equity, assets, net income, and liabilities, using an Exploratory Data Analysis (EDA) approach and the Linear Regression and KNearest Neighbor (KNN) methods as predictive models to assess how well the model predicts revenue. The data used in this study are collected from several Indonesian companies listed on the Indonesia Stock Exchange (IDX) between 2008 to 2023, including quarterly financial reports. The results show that the LR model has a R2 value of 0.80286 and the KNN model has a R2 value of 0.94531. The KNN model exceeded Linear Regression in predicting revenue, with K = 2 and the highest R2 value of 0.94531. The results reveal that the K-Nearest Neighbor model is the most effective at predicting revenue with 94.531% accuracy.

Keywords: exploratory data analysis, predicting revenue, linear regression, KNN