

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**FORECASTING STOCK MARKET USING LINEAR
REGRESSION**

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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

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ABSTRACT

Recently, experts have been paying a lot of attention to stock market forecasting. Numerous forecasting techniques have been put forth, such as technical analysis, fundamental analysis, and time series analysis. In the study, linear regression is applied to forecast the stock market dataset from different KL transport and logistics industry companies. Transport and logistics refer to the procedures involved in the manufacture, storage, inventory, transportation, and distribution of certain commodities or services. The aims of the study are to identify and predict the relationship between variables by developing a regression model. The dataset, which contains the monthly stock market for a period of six years, was selected from the databases of Malaysia Airport Holdings Bhd (MAHB), Pos Malaysia & Services Holdings Bhd (PSHL), and GD Express Carrier Bhd (GDEX). In order to develop the regression models, the study focuses on two variables: opening price and high price. The Akaike information criterion (AIC) and Bayesian information criterion (BIC) values are compared in the evaluation of the regression models and the outcomes to ascertain which model is best suited to forecast the stock market price of each company. For the better possible result in future, the model could include more variable to determine accuracy prediction for stock market by using financial parameter such as traded volume, closing price and others.