ABSTRACK

The world has entered an era of digitalization, which has changed the pattern of the digital economy and big data. When big data and good analytics are combined, one advantage is being able to detect prey markets. Data processing standards for analytics and data mining. The most popular is the CRISP-DM method. This is because the CRIPS-DM method is faster, concise, and precise in doing some research or solving a case. The project carried out this time is to apply analytical data and CRISP-DM to predict the market price of diamonds, namely that the average diamond price is \$53,909 with 0.79 carats, and decision making to determine the price of diamonds can be done using the random forest regressor model with 99% accuracy.

Keywords: Analytical data, CRISP-DM, Random Forest Regressor, Big data