ABSTRACT

Sales prediction analysis requires intelligent data mining techniques with accurate prediction models and high reliability. In most cases, business highly relies on information as well as demand forecast of the sales trends. This research uses B2B Sales Data for analysis. Data provide by sales on how Telecommunication company should manage its sales team, products and also budgeting flows. The accurate estimates enable Telecommunication Company to survive the market war and increase with market growth. Comprehensible predictive models were studied and analyzed using a technique of machine learning to get the prediction of the future sale improved. It is hard to cope with big data and sale prediction accuracy if the system of traditional forecast is used. In this study, machine learning technique was also used to analyze the reliability of B2B sales. In addition, at the end of this research, other measures and techniques used to predict sales were introduced. The predictive model with best performance evaluation is recommended to forecast the trending B2B sales. The study results are put into an order of reliability and accuracy of the best method to predict and forecast including estimation, evaluation, and transformation. The best performance model found was Gradient Boost Algorithm. The result form graph the data close together from beginning till end of data target MSE and MAPE result are the best result than other method, MSE =24,743,000,000.00 and MAPE =0.18. This model performed maximum accuracy in predicting and forecasting of the future B2B sales.

Keywords—Machine Learning Techniques, Prediction, Reliability, Sales forecasting, B2B (Business to Business), Telecommunication