Abstract

Advances in digital direction include a wide variety of data, including text, photography, video, and posting on social media or the web. The more attractive the data, the greater the opportunity to attract users attention as of the destinations. The resulting impact was an unwavering increase and decrease in tourists. Often, as the number of travelers increases, existing baggage/facilities do not meet the needs of tourists. Changes in the calendar, such as the number of holidays/days, are one of the increasing factors of tourists irregular arrival. In this study, there was a prediction of the number of travelers extracted by the National Statistical Office (BPS). Google Trends runs by adding data about external variables. Google Trends material is used to help create models in the ARIMAX method. In this work, prediction using ARIMA and ARIMAX methods is performed. The predictor is derived from the ARIMA method with a MAPE value of 28.03% and RMSE of 3680.09. Google News uses the ARIMAX method with a MAPE value of 2.48% and RMSE of 1100.81. We can infer that the ARIMAX model is the best model from the comparison of the real values of the two methods. The ARIMAX model can be used to predict the number of arrivals for travelers within a year.

Keywords: Prediction, Tourists, ARIMAX, Google Trends.

