

DOSMESTIC PASSENGER FORECASTING LOMBOK INTERNATIONAL AIRPORT USING FUZZY TIME SERIES METHOD

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ABSTRACT

PT Angkasa Pura I is one of the providers of aviation services in Indonesia who want to become a world-class airport management company that provides benefits and added value to stakeholders. One of the challenges for PT Angkasa Pura I is to provide a memorable airport experience experience for service users. This challenge can be answered by PT Angkasa Pura I by providing better service facilities and physical facilities than ever so that passengers get good service. In the improvement of adequate facilities required information about the passengers in the future. Therefore, it is necessary to forecast the number of passengers. The method used is the Fuzzy Time Series Because the data of the passengers is the time series data collected each year to determine the increasing number of passengers at Lombok International Airport. In this research will be compared between Fuzzy Time Series 'cheng' order 1 with order 2, the best model with the accuracy value indicator MAE and MAPE least used to predict the number of passengers in January 2018. The data used for forecasting is the data of domestic passenger numbers from year 2010-2017. From the results of this study can be concluded that the method of Fuzzy Time Series order 2 is better than in the Fuzzy Time Series orde 1. Then the accuracy value in the can that is $MAE = 15.228$; $MAPE = 8.54\%$ with forecasting results obtained for the next period is for January 2018 amounted to 258,750.

Keywords: *Fuzzy Time Series, Passenger, airport, Cheng*