



PROJECT REPORT

AIRPORT PASSENGER TRAFFIC FORECAST AT JENDRAL AHMAD YANI INTERNATIONAL AIRPORT SEMARANG USING DOUBLE EXPONENTIAL SMOOTHING METHOD

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ABSTRACT

In this time, technology must really be used as well as possible, especially during a pandemic like today. The transportation sector is certainly greatly affected during phases like this. The decrease in the number of passengers that is so volatile is certainly very pronounced. Operational costs are of course very expensive because of so little income. Therefore, to overcome these problems, a prediction system is needed that aims to predict the number of passengers in the coming month. Of course, with the use of this technology, operational costs can be adjusted according to the number of passengers that have been predicted in advance.

To solve this problem, a forecasting algorithm which name is Double Exponential Smoothing will be used to make a prediction in the future. The first step is to collect flight history data for the last three years. To implement this program, the user must determine the alpha that will be used to perform a prediction calculation process. Then from all the results of calculations with an alpha range of 0.1 to 0.9, a comparison process will be carried out to determine which calculation results are the best.

From this project it can be concluded that with a prediction system. Budget efficiency can be applied according to the amount of income that tends to decrease due to the pandemic. The calculation results obtained are the best alpha value is 0.

Keyword: Double Exponential Smoothing, Forecasting, Alpha

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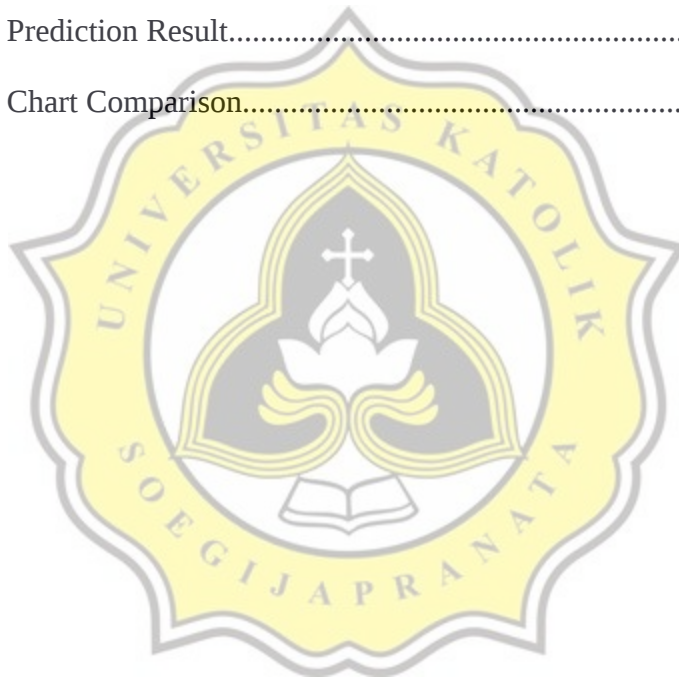
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