

ABSTRACT

To maintain the company's position in the aviation industry, each airline has its strategy to overcome losses due to the impact of the Covid-19 pandemic. One strategy that is often applied by airlines is the dynamic pricing strategy. The ever-changing flight ticket prices serve to maximize the company's revenue. The purpose of this study is to propose the optimum pricing with a dynamic pricing model which in this model will produce an optimum pricing policy based on historical sales. This final project uses dynamic pricing to maximize revenue by modeling the effect of price on demand. The method used in this research is Multiple Regression with the help of Jupyter Notebook software in Python in the data processing. Furthermore, the author uses cross-validation which serves to evaluate the demand model and price prediction used. This final project using data from PT. Trigana Air with flights from Wamena-Jayapura on 01 February 2021 to 28 February 2021.

The demand model used produces an accuracy of 61.24% with a standard deviation of 28,6%. Meanwhile, the ticket price prediction model used produces an accuracy of 55,4% with a standard deviation of 22,5%. Based on the dynamic pricing model that has been applied by optimizing sales profits based on the optimal price variable, there is an increase in revenue on March 12, 2021 with a profit of IDR38.220.644 or an increase of 22,6%.

Keywords—multiple regression, machine learning, dynamic pricing