

## ***ABSTRACT***

*Abstract—Tourism is one of the important and leading sectors that contributes to the national economy. The level of tourist satisfaction with a tourist attraction can be seen from the reviews given, one of the platforms that can be used to view tourist reviews is Google My Business. The application of sentiment analysis uses three sentiments, positive, negative, and neutral. By applying sentiment analysis and multidimensional using the Decision tree method, it can be seen the sentiments given by tourists to a tourist attraction. As in this study, a review of tourist objects in the provinces of East Java, Central Java, West Java, Banten and DKI Jakarta obtained 12,680 data. then after preprocessing and labeling it produces 8,615 clean data. labeling uses two libraries namely transformer and textblob and for each library will be tried with three different data splits namely 70:30, 80:20 and 90:10 which aims to find out the right combination for making this machine learning model. From the results of sentiment analysis using a decision tree algorithm with labeling using a transformer library and a 70:30 data split, an accuracy value of 78% is obtained. The prediction results will be displayed on the dashboard using Power BI to make it easier to understand the data.*

*Keywords— [Sentiment Analisis, Multidimensional Analisis, Decision tree, Transformer, Textblob, Power BI]*