

Abstract

At private label universities in Indonesia, new students are still the main thing in terms of achieving university operational income. This study intends to improve the performance of new student admissions management at ITTelkom Surabaya, where for 4 consecutive years the achievements have always not met the target.

The method used in this study is k-means *clustering* to classify ITTelkom Surabaya student data by utilizing the data mining process, then the results of the *clustering* are predicted using simple linear regression to be able to predict student achievement as a result variable and year as a causal variable, then make proposed marketing strategy based on the results of the clusters that have been formed to be able to meet the predicted outcomes.

The results of this study are a combination of clusters with the highest student/parent student profiles obtained from East Java province, information systems study program, parents' income of 5-10 million per month, other parents' occupations and student ethnicity from Java. The highest forecasting results are found in the income variable of students' parents in cluster 3 with a prediction of 1292 students in 2024. And the most frequently used marketing strategy proposals in each cluster are internet marketing and ads.

It is hoped that with the proposed marketing strategy based on this research, it can continue to be developed not only limited to researchers' suggestions, but from the ITTelkom Surabaya marketing team who continue to innovate from year to year so that new student admissions can continue to increase.

Keyword : k-means clustering, forecasting, simple linear regression