

## **ABSTRACT**

*Talent management plays an important role in HR management which is also related to performance management at every stage, from recruitment, mapping, development, evaluation, to talent retention. The problem that the talent management at PT Angkasa Pura II (Persero) has not implemented people analytics so that its implementation can be more optimal, precise, and effective. People analytics is a new strategic tool that has emerged to advance the transformation of HR management, one of which is talent management supported by information technology with a big data analytics-based approach. The accuracy of decisions is very important in managing talent so that investment costs can be effective and the results are as expected so that people analytics are needed as a useful decision-making tool.*

*This study aims to explore how the implementation of people analytics by predicting the performance of talents in the following year based on previous year's performance data and becoming a significant variable. So that we get a picture of potential talents, performance contributions, and a description of the retention efforts needed so that talents are able to maintain their future performance and position.*

*The study used talent performance data for Middle Leader levels from 2016 to 2019 which were processed using the multinomial logistic regression method to get predictions quickly with good accuracy and significant variables. For better accuracy predictions are also carried out with random forest. Determination of the sample by purposive sampling where the sample data is determined by the researcher by setting several criteria.*

*Data processing produces predictions of performance in the following year and a significant variable is the performance data of the previous 2 years. Get projections of potential talents and images to design the retention strategy needed to retain or enhance talent performance. Suggestions for future research are to apply it with a wider coverage and more data in order to get prediction results with more utilization, better accuracy, and predictions using other methods as well. The suggestion for companies is that the implementation of people analytics in managing talent and performance can be carried out, the stages that use performance data are recommended to consider the data for the last 2 years. The prediction result is a probability so it is not a certainty. Companies can use it to develop retention strategies in the form of designing development programs to providing rewards as compensation and increasing motivation and enthusiasm for talents and other employees.*

*Keywords: Talent Management, Performance, People Analytics, Predictive Analysis.*