

## **ABSTRACT**

*Buleleng Regency is one of the regencies located in Bali Province with enormous tourism attraction and potential. However, the number of tourists visiting Buleleng Regency is still less than other districts in Bali Province. This is due to the lack of information, promotion, and tour package recommendations for tourists who want to visit various tourist attractions in Buleleng Regency. Therefore, the purpose of this Final Project is to design a tour package recommendation application for Buleleng Regency.*

*The design of the Buleleng Regency tour package recommendation application using R-Shiny is carried out by the Agglomerative Hierarchical Clustering method supported by the R programming language. The stages of the process are initialization, distance calculation and data merging. After that, forming and cutting the dendrogram according to the cluster to determine the recommendation of tour packages.*

*The result of this Final Project is an application to determine the recommendation of Buleleng Regency tour packages based on clustering values. The menus contained in this application are homepage, data display, data visualization, cluster results, entrance ticket prices, and tour packages. Testing on this design uses black box testing and User Acceptance Testing to ensure that the application runs according to user needs.*

*This Buleleng Regency tour package recommendation application is expected to help tourism marketing staff in determining tour package recommendations. This can make it easier for tourists to determine the choice of tour packages that match their interests and preferences. Thus, it is expected to be able to increase the number of tourists in Buleleng Regency so that it can compete with other districts in Bali Province.*

**Keywords – Agglomerative Hierarchical Clustering, Recommendation Application, Buleleng Regency, Tour Packages, Tourism**