

ABSTRACT

Telkom University opens two types of lecture classes namely regular class and international class. However, the registration data of the last three years shows that there is a decrease in ratio of the number of SMB participants to the international class capacity. Meanwhile, the ratio is one of the quality objectives of the Admission Directorate until 2023. On the other hand, there are also international study programs that have ratio achievement below the achievement of the regular class ratio in 2019. Limited number of staff can also be an obstacle in marketing Telkom University to schools on-site in various cities in Indonesia. Therefore, an analysis is needed before determining the location to be held marketing activities or roadshows. Based on this, this study aims to design a DSS that can show the priority of the location of the roadshow, so that it can be used to facilitate the Directorate of Admission as a reference in determining cities to conduct roadshow activities.

Weighted Sum Model (WSM) as one of the DSS methods was chosen to help recommend suitable cities to be chosen in the roadshow agenda. The method is applied in the form of a system that will be built with the Rapid Application Development (RAD) development model. The RAD model was chosen because it is feasible to be applied to small teams with short project duration. In testing the system, the blackbox method is used to test the functional application of the scenario in accordance with business processes.

This research produces a system that can provide a table of recommendations for alternative cities in the location of the roadshow. The system can also map these alternatives to GIS and provide additional information related to registrants from the city. The system successfully carries out its functions according to business processes so that it can be used to facilitate the Admission Directorate in determining the appropriate city for a roadshow.

Keywords: SMB, Geographic Information System, Decision Support System, Rapid Application Development, Weighted Sum Model.