

ABSTRACT

The increasing number of events usually formed a committee in small to large fields involving event organizers. In this study, the survey results were used to Telkom University students in Roadshow, Try Out and other committees. However, there are often problems in the implementation process caused by poor planning and supervision processes to have less clear financial statements.

To anticipate this problem and create a web application-based event management application that provides appropriate budget recommendations. So by using Genetics Algorithm is an optimization algorithm that can provide optimal results. This application is expected to help financial management reduce errors in the RAB creation process and provide recommendations to users.

Based on the test results, six experiments were conducted to see the optimal fitness value. In this study the highest optimal fitness value was 2,400 in the 4th generation, with a crossover probability of = 0.85, and a probability of mutation = 0.15. The results obtained in each calculation will vary, it happens because the random value used in each experiment is different. In this study genetic algorithm successfully recommended items that fit the maximum budget parameters of divisions, indoor or outdoor categories.

Keywords: *Event Management, Budgeting System, Genetic Algorithms, Knapsack Problem, Web Application,*