***ABSTRACT***

*The big difference in the success and differences in the strength or weakness of an organization often occurs because of factors of site selection effort. In a competitive situation, these factors can be the location of the critical factors that make it very important. So that businesses can compete effectively executed, business location must be located and easy to reach. Choosing the right location means avoiding as much as possible the negative effects that may arise and get the location with the most positive factors. Once one organization to locate the location of his business to operate in a specified area, it will be a lot of costs incurred and difficult to reduce. Location decision often depends on the type of business. The purpose of this study is to make a decision support system application Simple Additive weighting method (SAW) in determining the feasibility of the location of the business establishments in the city of Gorontalo. Stage of development used in this study, using Simple Additive weighting. This method was chosen because it can determine the weight values ​​for each attribute, followed by perangkingan process that will select the best alternative, in this case the alternative in question is the determination of the location of the business establishment. Based on test results using white box testing where the value of V (G) = CC, where V (G) = 3 and CC = 3. The results of these calculations have met eligibility requirements in terms of software. While the results of testing black box testing found that the process input and output refers to the design of the software have been met and in accordance with the design.*

*Keywords: SPK, Simple Additive weighting, Business Establishment Location Selection, White Box Testing, Black Box Testing.*