

COMPARISON OF SAW METHOD AND AHP METHOD ON ANDROID SMARTPHONE SELECTION DECISION MAKING

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ABSTRACT

This study aims to analyze the comparison of the SAW and AHP methods in making decisions on the selection of an android smartphone that is worth buying based on existing specifications. SAW and AHP are methods that can be used to build a decision support system. The system build uses several criteria for input such as price, RAM, internal memory capacity, screen resolution, battery capacity, GPU, OS and charging speed. The system will be created using the Java programming language with MySQL as the database. After the two methods were compared using the program, there were differences in the ranking of the best smartphones between the SAW and AHP methods. In the program test using 10 data, there are differences in the final results in determining the ranking. Ranks 1 to 4 are filled by the same smartphone, while ranks 6-9 are filled by different smartphones and the last rank is filled by the same smartphone. In terms of calculation, the AHP method is more complex than the SAW method because the weight values of the criteria and sub-criteria are entered into the calculation process so that the results obtained are better than the SAW method where the weight values are determined by themselves or have been determined previously.

Keywords: SAW, AHP, Smartphone.