

**Decision Support System for Determining Maintenance Priorities for
Electronics and Instrumentation Laboratory Equipment Using the SAW
(Simple Additive Weighting) Method**

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ABSTRACT

The laboratory is a place that is used to carry out practical learning that can significantly increase one's understanding, in this case is a student, related to the material being taught. The Electronic and Instrumentation Laboratory is one of the laboratories belonging to the Department of Engineering, Jember State Polytechnic. The Electronics and Instrumentation Laboratory has a sufficiently comprehensive facility for practical work and research in the field of electronics and instrumentation. One of them is that the user does not want to record the borrowing or condition of the equipment, thus causing the data in the logbook to not be used as reference material for maintenance priority scales and the procurement of new equipment, because the data is incorrect and not properly traced. The creation of a decision support system to determine priorities for equipment maintenance in the laboratory using the SAW (Simple Additive Weighting) method, providing convenience and efficiency in data collection, checking and also reporting the condition of laboratory equipment. Based on the results of black box testing and user acceptance testing, this decision support system is usable at a 92.3% suitability level.

Key words: Laboratory, SAW, Blackbox