

***Sistem Pendukung Keputusan Pemilihan Calon Ketua Ukm Paduan Suara
dengan Metode Analytical Hierarchy Process (AHP)***

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ABSTRACT

The selection of candidates for the position of Chairperson of the Gema Aluna Wijadja Choir Student Organisation at Jember State Polytechnic continues to face challenges in the form of a lack of objectivity in the assessment process and the absence of structured criteria on which to base decision-making. This study aims to develop a Decision Support System (DSS) based on the Analytical Hierarchy Process (AHP) to improve the objectivity, transparency and consistency of the selection process. The development of the system draws on literature reviews regarding DSS, the AHP method and the Laravel framework. The research methodology comprised the stages of requirements analysis, design, implementation, and system testing. Research data were collected through literature reviews, observations, and interviews involving mentors, trainers, administrators, and former students. The results indicate that the developed web-based application is capable of accurately calculating criterion weights and determining candidate rankings using the AHP method. The system's calculations were consistent with manual calculations; expert validation demonstrated a high level of ranking consistency, whilst Black Box testing and User Acceptance Testing proved that the system functions in accordance with requirements and is well received by users. Consequently, the developed system can support the process of electing the chairperson in a more objective, consistent, and structured manner.

Keywords: *Decision Support System, Analytical Hierarchy Process, Chairperson Election, Laravel, University Choir.*