

Web-Based Decision Support System for Internship Selection with AHP and PROMETHEE Methods (Case Study: Sidoarjo Library and Archives Service)

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ABSTRACT

In the process of selecting interns, the Sidoarjo Regency Library and Archives Service faces obstacles such as the large number of applicants with diverse backgrounds and limited time and objectivity in the assessment. To overcome this, this study developed a web-based Decision Support System (DSS) that integrates the Analytical Hierarchy Process (AHP) method and the Preference Ranking Organization Method for Enrichment Evaluation (PROMETHEE). The AHP method is used to determine the weight of importance of each selection criterion, namely GPA, semester, major, and institutional accreditation, while the PROMETHEE method is used to rank alternative participants based on the weight of the predetermined criteria. The system is built using the Next.js framework with a MySQL database, and tested using the Black Box method to ensure its functionality. The results of this system indicate that the DSS built is able to provide an objective, transparent, and efficient selection process, as well as support more accurate decision making in selecting interns who are in accordance with the needs of the agency.

Keywords: *Decision Support System, Web, Internship, AHP, PROMETHEE*