

Comparative Analysis of SAW and Fuzzy Tahani Methods in Decision Support  
Systems for Hospital Service Evaluation

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***ABSTRACT***

*This study aims to develop and implement a Decision Support System (DSS) for service evaluation at RSUD Besuki, which had not been previously applied. The research compares two methods, Fuzzy Tahani and Simple Additive Weighting (SAW), to determine which method is more suitable. The SAW method, which uses weighted summation, proved to be more appropriate for precise data compared to Fuzzy Tahani, which is based on fuzzy set membership degrees. The web-based DSS developed using the SAW method has been successfully tested through blackbox testing, demonstrating that all features function correctly, as well as through User Acceptance Testing (UAT), indicating that the application has met most of the users' needs and expectations. This study provides a technology-based solution that is beneficial for improving the service evaluation system at RSUD Besuki.*

***Key word:*** Decision Support System (DSS), Simple Additive Weighting (SAW), Fuzzy Tahani Method, Hospital Service Evaluation, Comparative Analysis, Service Quality Assessment, Evaluation Methods, Fuzzy Logic, Weighted Summation, Web-Based Application, Next.js, PostgreSQL