## DECISION SUPPORT SYSTEM FOR DETERMINING INDONESIA SMART PROGRAM SCHOLARSHIPS SDN KOTAKULON 3 BONDOWOSO USING SIMPLE ADDITIVE WEIGHTING (SAW)

Fahmi Dafrin Maulana
Study Program of Informatics Engineering
Majoring of Information Technology
Program Studi Teknik Informatika
Jurusan Teknologi Informasi

## **ABSTRACT**

Education is crucial for national development, yet many children in Indonesia struggle to access it due to financial constraints. To address this issue, the Ministry of Education and Culture launched the Indonesia Pintar (PIP) Program to provide scholarships to high-achieving and underprivileged students. SDN Kotakulon 3 in Bondowoso, with 106 students, implemented this program and faced challenges in the manual selection process for scholarship. The Simple Additive Weighting (SAW) method involves assigning weights to criteria, normalizing the decision matrix, calculating the weighted total, and ranking alternatives. Evaluation includes analyzing the system's accuracy in predicting decisions aligned with the Ministry of Education's policy, which was 58.97%. It also provides recommendations for improvement if any shortcomings or areas for system enhancement are identified. The results of black-box testing and user acceptance testing indicate high acceptance rates from various stakeholders, including the principal and administrative staff. Black-box testing showed a 100% success rate, while user acceptance testing revealed an 89% acceptance rate. These results demonstrate the system's potential for widespread application in scholarship selection processes across educational institutions.

**Keywords**: Decision Support System, Indonesia Pintar Program Scholarships, Simple Additive Weighting