## IMPLEMENTING MULTI-OBJECTIVE OPTIMIZATION BY RATIO ANALYSIS (MOORA) METHOD ON TOURISM RECOMMENDATION SYSTEM IN BANTUL DISTRICT

ANISA NUR FAIZAH

Informatics Study Program, Faculty of Science & Technology Yogyakarta University of Technology Jl. North Ringroad Jombor Sleman Yogyakarta E-mail: anis6may03@gmail.com

## ABSTRACT

Artificial intelligence (AI) technology has emerged as a significant focus within the information technology industry, enabling in-depth data analysis and the generation of valuable insights. In Bantul Regency, Yogyakarta, the region's substantial tourism potential is often hindered by inadequate information coordination and infrastructure issues. In this context, developing a Decision Support System (DSS) utilizing the Multi-Objective Optimization by Ratio Analysis (MOORA) method is crucial for enhancing the tourist experience and addressing these challenges. Key issues include visitors' difficulties in selecting appropriate destinations and infrastructure deficiencies at specific tourist sites. By implementing the MOORA method, the decision support system can simultaneously evaluate various factors and provide more accurate recommendations. The steps in the solution entail the development of the MOORA model, the integration of tourist destination recommendation features, and the execution of tests. The findings indicate that the decision support system has effectively provided beneficial recommendations to users, enhancing the tourist experience and augmenting the local tourism sector's potential. Implementing the MOORA-based decision support system is anticipated to result in an augmentation of revenue for local tourism industry stakeholders and a favorable impact on the tourist experience in Bantul Regency.

Keywords: Recommendation, tourism, Bantul, MOORA.