ABSTRACT

Aquascape enthusiasts, especially beginners, often have difficulty choosing aesthetically pleasing accessories within a limited budget, especially in Micro, Small and Medium Enterprises (MSMEs) such as the Mina Restu Purwanegara Ornamental Fish Market. This limitation often reduces the visual quality of aquascape results, causing a mismatch with user expectations. This research develops a web-based recommendation system to help users choose the optimal combination of accessories. The system combines a Rule Based approach to filter options based on rules of thumb, such as budget constraints and fauna proportions, with the Simple Additive Weighting (SAW) method to score alternatives based on aesthetics, variety, and efficiency. Implementation is done using the Laravel framework, PHP, and MySQL, with an interface that includes preference input, recommendations, and feedback. Test results show the system is able to produce consistent and appropriate recommendations, verified through functional testing. This system increases user satisfaction with aesthetic and functional aquascape, while supporting MSMEs in improving services and sales efficiency, making a practical contribution to technology development in the aquascape sector.

Keywords: aquascape, recommendation, decision making, MSMEs, efficiency