INTISARI

Pertumbuhan pesat platform e-commerce di Indonesia seperti Shopee, Lazada, dan Tokopedia memberikan peluang signifikan bagi pelaku Usaha Mikro, Kecil, dan Menengah (UMKM) untuk meningkatkan daya saing bisnis secara digital. Namun, banyak pelaku UMKM masih mengalami kesulitan dalam menentukan platform e-commerce yang paling sesuai dengan kebutuhan dan karakteristik usaha mereka. Penelitian ini bertujuan untuk menerapkan metode Multi-Attribute Utility Theory (MAUT) dalam sebuah Sistem Pendukung Keputusan (SPK) berbasis web guna membantu UMKM, dalam mengambil keputusan secara objektif dan terstruktur. Sistem dibangun menggunakan bahasa pemrograman PHP dan basis data MySQL. Proses pengambilan keputusan dilakukan secara otomatis melalui tahapan pengambilan data sub-kriteria, input bobot dan nilai alternatif, normalisasi berdasarkan jenis kriteria (Benefit atau Cost), perhitungan nilai utilitas, dan perankingan hasil akhir. Kriteria penilaian mencakup kemudahan penggunaan, fitur promosi, hingga keamanan sistem. Hasil implementasi sistem menunjukkan bahwa Shopee (A1) merupakan platform yang paling sesuai, dengan nilai akhir 0,8927, disusul Tokopedia (A3) sebesar 0,8285, dan Lazada (A2) sebesar 0,7690. Validasi dilakukan dengan membandingkan hasil sistem dan perhitungan manual, dan diperoleh selisih sangat kecil, menunjukkan sistem bekerja secara akurat dan konsisten. Fitur seperti cetak PDF dan riwayat perhitungan menambah nilai fungsionalitas sistem. Sistem ini terbukti membantu pelaku UMKM dalam membuat keputusan secara efisien dan berbasis data.

Kata Kunci: Sistem Pendukung Keputusan (SPK), Multi-Attribute Utility Theory (MAUT), E-Commerce, Usaha Mikro, Kecil, dan Menengah (UMKM), Platform Digital.

ABSTRACT

The rapid growth of e-commerce platforms in Indonesia, such as Shopee, Lazada, and Tokopedia, has provided significant opportunities for Micro, Small, and Medium Enterprises (MSMEs) to enhance their business competitiveness digitally. However, many MSMEs actors still face difficulties in determining the most suitable e-commerce platform for their business needs and characteristics. This study aims to implement the Multi-Attribute Utility Theory (MAUT) method within a web-based Decision Support System (DSS) to assist MSMEs in making objective and structured decisions. The system is developed using the PHP programming language and MySQL database. The decision-making process is carried out automatically through several stages sub-criteria data collection, input of weights and alternative values, normalization based on the type of criteria (Benefit or Cost), utility value calculation, and final result ranking. The evaluation criteria include ease of use, promotional features, and system security. The system implementation results indicate that Shopee (A1) is the most suitable platform with a final score of 0.8927, followed by Tokopedia (A3) with 0.8285, and Lazada (A2) with 0.7690. Validation was performed by comparing the system results with manual calculations, revealing a very small discrepancy, which indicates that the system functions accurately and consistently. Features such as PDF export and calculation history enhance the system's functionality. This system has proven to be helpful for MSMEs in making efficient, data-driven decisions.

Keywords: Decision Support System (DSS), Multi-Attribute Utility Theory (MAUT), E-Commerce, Micro, Small, and Medium Enterprises (MSMEs), Digital Platform.