ELVIANA MASHITOH, 22.230.0063

SISTEM PENDUKUNG KEPUTUSAN PEMILIHAN *SUPPLIER* TERBAIK PADA TOKO ANTIKA BERBASIS WEB MENGGUNAKAN METODE *SIMPLE ADDITIVE WEIGHTING* (SAW), di bawah bimbingan Bapak Wachid Darmawan, M.Kom. dan Bapak Wahyu Setianto, M.Kom.

162 + xvi halaman / 109 gambar / 51 tabel / 24 daftar pustaka (2013-2025)

ABSTRAK

Toko Antika merupakan usaha yang bergerak di bidang penjualan kebutuhan harian khususnya sembako yang menghadapi permasalahan dalam memilih supplier. Sejauh ini, pemilihan supplier hanya berfokus pada satu faktor, yaitu harga terendah, menyebabkan keputusan yang dihasilkan kurang optimal dan menimbulkan berbagai kendala seperti barang yang diterima tidak sesuai pesanan, kemasan rusak, tanggal kedaluwarsa terlalu dekat, kehabisan stok, serta keterlambatan pengiriman. Untuk menyelesaikan permasalahan tersebut, dirancang Sistem Pendukung Keputusan berbasis web guna mempermudah pemilik toko untuk memilih supplier secara objektif. Sistem ini menerapkan metode Simple Additive Weighting (SAW) dengan lima aspek penilaian yaitu harga, kualitas barang, ketersediaan stok barang, kecepatan pengiriman, dan kemudahan retur. Data didapatkan dengan melakukan observasi, wawancara, dan studi literatur. Pengembangan sistem menerapkan model Waterfall yang mencakup tahapan yaitu Communication, Planning, Modeling, Construction, dan Deployment. Alur kerja sistem dimodelkan menggunakan UML, perancangan antarmuka dilakukan dengan Lembar Kerja Tampilan (LKT), dan implementasi dilakukan dengan bahasa PHP menggunakan framework CodeIgniter 4 serta basis data MySQL. Uji sistem dilakukan dengan pendekatan White box, Black box, dan User Acceptance Test (UAT). Hasil penelitian memperlihatkan sistem dapat menghasilkan output berupa pilihan supplier terbaik secara cepat dan tepat sesuai dengan kriteria penilaian yang berlaku. Sistem masih memiliki potensi untuk dikembangkan lebih lanjut, misalnya melalui versi mobile atau integrasi dengan manajemen stok, sehingga proses pengambilan keputusan menjadi lebih efektif.

Kata Kunci : Sistem Pendukung Keputusan, Supplier, SAW, Toko Antika

ELVIANA MASHITOH, 22.230.0063

DECISION SUPPORT SYSTEM FOR SELECTING THE BEST SUPPLIER AT ANTIKA STORE BASED ON WEB USING SIMPLE ADDITIVE WEIGHTING (SAW), under the supervision of Mr. Wachid Darmawan, M.Kom. and Mr. Wahyu Setianto, M.Kom.

162 + xvi pages / 109 images / 51 tables / 24 bibliography (2013-2025)

ABSTRACT

Toko Antika is a business engaged in the sale of daily necessities, especially groceries, which faces problems in selecting suppliers. So far, supplier selection has only been based on one factor, namely the lowest price, so that the resulting decision is less than optimal and causes various obstacles such as goods received not according to the order, damaged packaging, expiration dates that are too close, out of stock, and late delivery. To overcome these problems, this study developed a web-based Decision Support System (DSS) that can help shop owners in selecting suppliers objectively. The system was built using the Simple Additive Weighting (SAW) method with five assessment criteria, namely price, quality of goods, stock availability, speed of delivery, and ease of return. Data collection was carried out through observation, interviews, and literature studies. The system development method uses the Waterfall model which includes Communication, Planning, Modeling, Construction, and Deployment. System modeling uses UML, display design uses Display Worksheet (LKT), and implementation is done using PHP with the CodeIgniter 4 framework and MySQL database. System testing uses the White box, Black box, and User Acceptance Test (UAT) methods. The research results show that the developed system is capable of providing fast, accurate, and measurable recommendations for the best suppliers based on several established criteria. This system can still be developed further, such as providing a mobile version or integrating the system with stock management to increase the effectiveness of decision making.

Keywords : Decision Support System, Supplier, SAW, Toko Antika