

ABSTRAK

PT. Sarana Pembangunan Palembang Jaya (SP2J) merupakan Badan Usaha Milik Daerah (BUMD) yang bergerak dalam pengelolaan jaringan gas alam di Kota Palembang. Dalam proses penanganan pengaduan keluhan pelanggan, penentuan prioritas masih dilakukan secara subjektif berdasarkan pertimbangan koordinator teknisi. Kondisi tersebut berpotensi menyebabkan ketidakkonsistenan dalam penentuan prioritas, kurang optimalnya alokasi teknisi, serta hasil penentuan prioritas yang kurang akurat. Untuk mengatasi permasalahan tersebut, dibangun Sistem Pendukung Keputusan berbasis *website* yang menerapkan metode *Simple Additive Weighting* (SAW) untuk menentukan prioritas penanganan pengaduan keluhan pelanggan. Kriteria yang digunakan meliputi tingkat urgensi, lama waktu pelaporan, jenis pelanggan, dan jarak ke lokasi. Pengembangan sistem menggunakan metode *Rapid Application Development* (RAD) yang terdiri dari tahapan *Requirements Planning*, *User Design*, *Construction*, dan *Cutover*. Pengujian sistem dilakukan menggunakan metode *Black Box Testing* untuk memastikan seluruh fungsi sistem berjalan sesuai dengan kebutuhan pengguna. Hasil penelitian menunjukkan bahwa sistem mampu menghasilkan perankingan prioritas pengaduan menggunakan metode SAW, dimana alternatif A2 (Pipa Bocor) memperoleh nilai preferensi tertinggi sebesar 0,9375 sehingga menjadi prioritas utama penanganan. Hasil tersebut dapat mendukung pengambilan keputusan dalam menentukan prioritas penanganan pengaduan secara objektif, sistematis, dan terukur.

Kata Kunci: Sistem Pendukung Keputusan; *Simple Additive Weighting*; Prioritas Pengaduan; *Rapid Application Development*; *Website*.

ABSTRACT

PT. Sarana Pembangunan Palembang Jaya (SP2J) is a Regional-Owned Enterprise (BUMD) engaged in the management of natural gas networks in Palembang City. In handling customer complaints, the process of determining complaint handling priorities is still conducted subjectively based on the judgment of the technician coordinator. This condition may lead to inconsistencies in priority determination, suboptimal allocation of technicians, and inaccurate priority determination results. To address these issues, a web-based Decision Support System was developed by implementing the Simple Additive Weighting (SAW) method to determine the priority of customer complaint handling. The criteria used in the assessment process include urgency level, reporting time, customer type, and distance to the location. The system was developed using the Rapid Application Development (RAD) method, which consists of the Requirements Planning, User Design, Construction, and Cutover phases. System testing was conducted using the Black Box Testing method to ensure that all system functions operate according to user requirements. The results of this study indicate that the system is capable of generating customer complaint priority rankings using the SAW method, where alternative A2 (Leaking Pipe) obtained the highest preference value of 0.9375, making it the top handling priority. These results can support decision-making in determining complaint handling priorities objectively, systematically, and measurably.

Keywords: Decision Support System; Simple Additive Weighting; Complaint Priority; Rapid Application Development; Website.