

ABSTRAK

Distribusi Bantuan Langsung Tunai (BLT) sering menghadapi kendala terkait akurasi data dan keadilan dalam penentuan penerima. Penelitian ini bertujuan mengembangkan sistem pendukung keputusan berbasis web untuk memilih penerima BLT di Desa Panton Labu menggunakan metode *Multi Factor Evaluation Process (MFEP)*. Sistem dikembangkan dengan pendekatan *software engineering* model *Waterfall*, menggunakan bahasa pemrograman *PHP* dan *database MySQL*. Data dikumpulkan melalui observasi lapangan, studi literatur, dan wawancara dengan perangkat desa. Metode *MFEP* mengevaluasi calon penerima berdasarkan enam kriteria: pekerjaan, jumlah tanggungan, kepemilikan rumah, jenis bangunan, jenis lantai, dan pendapatan bulanan. Sistem dilengkapi fitur *Geographic Information System (GIS)* untuk memvisualisasikan lokasi rumah calon penerima dengan marker berwarna sebagai indikator kelayakan. Hasil pengujian pada 120 data menunjukkan 34,2% (41 individu) layak menerima bantuan dengan *threshold minimum score* 3,00. Sistem berhasil mengotomatisasi proses perhitungan, meningkatkan transparansi melalui pemetaan digital, dan menyediakan antarmuka yang mudah digunakan. Implementasi ini membuktikan efektivitas metode *MFEP* dalam mendukung pengambilan keputusan yang objektif, sistematis, dan tepat sasaran untuk program bantuan sosial di tingkat desa.

Kata Kunci : *Sistem Pendukung Keputusan, Bantuan Langsung Tunai, Multi Factor Evaluation Process, Geographic Information System, Pemetaan Digital.*

ABSTRACT

The distribution of Direct Cash Assistance (BLT) often faces challenges related to data accuracy and fairness in recipient selection. This study aims to develop a web-based decision support system for selecting BLT recipients in Panton Labu Village using the Multi-Factor Evaluation Process (MFEP) method. The system was developed following the Waterfall software engineering model, utilizing PHP for programming and MySQL for database management. Data were collected through field observations, literature reviews, and interviews with village officials. The MFEP method evaluates prospective recipients based on six criteria: employment status, number of dependents, homeownership, building type, floor type, and monthly income. The system incorporates a Geographic Information System (GIS) feature to visualize applicants' home locations, with color-coded markers indicating eligibility. Testing on 120 data entries revealed that 34.2% (41 individuals) qualified for assistance using a minimum threshold score of 3.00. The system successfully automated calculation processes, enhanced transparency through digital mapping, and provided a user-friendly interface. This implementation demonstrates the effectiveness of the MFEP method in supporting objective, systematic, and targeted decision-making for social assistance programs at the village level.

Keywords : *Decision Support System, Direct Cash Assistance, Multi-Factor Evaluation Process, Geographic Information System, Digital Mapping.*