

**PENGAMANAN CONTROL AKSES PADA SISTEM PENDUKUNG
KEPUTUSAN PENERIMA BANTUAN SOSIAL
MENGUNAKAN RBAC DAN SAW**

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ABSTRAK

Penyaluran bantuan sosial di tingkat desa masih menghadapi berbagai permasalahan, seperti proses seleksi penerima yang bersifat subjektif, kurang transparan, serta lemahnya pengendalian hak akses pengguna sistem. Kondisi tersebut berpotensi menimbulkan ketidaktepatan sasaran dan menurunkan kepercayaan masyarakat terhadap program bantuan sosial, sekaligus membuka peluang terjadinya manipulasi dan penyalahgunaan data. Penelitian ini bertujuan untuk merancang dan membangun sistem pendukung keputusan penerima bantuan sosial BPNT Otonom di Desa Buruk Bakul dengan menerapkan *Role-Based Access Control* (RBAC) digunakan untuk mengatur hak akses pengguna berdasarkan peran, yaitu Admin Desa, Operator Bantuan Sosial, dan RT/RW, sehingga setiap pengguna hanya dapat mengakses fitur sesuai kewenangannya dan metode *Simple Additive Weighting* (SAW) diterapkan untuk membantu proses penilaian kelayakan calon penerima bantuan secara objektif berdasarkan 3 kriteria utama, meliputi keluarga miskin dan tidak menerima bantuan lain, status DTKS, kartu bengkalis sejahtera. Penilaian dilakukan menggunakan bobot kriteria yang telah ditetapkan sebelumnya oleh pihak desa. Hasil penelitian menunjukkan bahwa penerapan RBAC mampu meningkatkan keamanan dan keteraturan pengelolaan data bantuan sosial, sedangkan metode SAW menghasilkan proses perangkaan yang objektif dan terukur berdasarkan kriteria dan bobot yang telah ditentukan sebelumnya. Sistem yang dibangun diharapkan dapat meningkatkan ketepatan sasaran, transparansi, serta akuntabilitas dalam penyaluran bantuan sosial di tingkat desa.

Kata Kunci: Bantuan Sosial, Keamanan Sistem, RBAC, SAW, Sistem Pendukung Keputusan

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ABSTRACT

The distribution of social assistance at the village level still faces various challenges, such as subjective recipient selection processes, lack of transparency, and weak control of system user access rights. These conditions may lead to inaccurate targeting and reduce public trust in social assistance programs, while also creating opportunities for data manipulation and misuse. This study aims to design and develop a decision support system for BPNT Otonom social assistance recipients in Buruk Bakul Village by implementing Role-Based Access Control (RBAC) to manage user access rights based on roles, namely Village Admin, Social Assistance Operator, and RT/RW, ensuring that each user can only access features according to their authority. In addition, the Simple Additive Weighting (SAW) method is applied to support an objective assessment of the eligibility of prospective beneficiaries based on three main criteria: poor households not receiving other assistance, DTKS status, and possession of the Bengkalis Sejahtera Card. The assessment is conducted using criterion weights predetermined by the village authorities. The results show that the implementation of RBAC improves the security and organization of social assistance data management, while the SAW method produces an objective and measurable ranking process based on predefined criteria and weights. The developed system is expected to enhance targeting accuracy, transparency, and accountability in the distribution of social assistance at the village level.

Keyword: Decision Support System, Information Security, RBAC, SAW, Social Assistance