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PENGEMBANGAN SISTEM INFORMASI KLASIFIKASI PENERIMA BANTUAN ALAT BANTU DENGAN PENDEKATAN NAIVE BAYES DI DINAS SOSIAL KABUPATEN BATANG, dibawah bimbingan Devi Sugianti,M. Kom. dan Nur Ika Royanti, S. Kom., M. Kom.

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ABSTRAK

Dinas Sosial Kabupaten Batang bertugas menangani urusan sosial dan tugas pembantuan dari Bupati, dengan komitmen memberikan layanan optimal sesuai motto "Melayani sepenuh hati, bekerjasama memberi solusi." Salah satu tantangan utama lembaga ini adalah distribusi alat bantu sosial, seperti kursi roda, alat bantu dengar, dan lainnya. Kendala yang ditemukan meliputi penerima bantuan yang berulang tanpa pemerataan, lambannya validasi, serta minimnya sistem pendukung untuk seleksi yang efektif. Sebagai solusi, dirancang sistem informasi berbasis Naive Bayes untuk mengklasifikasikan penerima bantuan secara merata. Model ini, dengan data penerima bantuan sosial alat bantu disabilitas di Dinas Sosial Kabupaten Batang, menunjukkan akurasi 80%, presisi 71%, dan recall 100%. Akurasi menggambarkan 80% prediksi benar; presisi menunjukkan 71% prediksi positif benar, dan recall menandakan semua kasus positif teridentifikasi, meski presisi rendah mengindikasikan adanya false positive. Pengembangan sistem ini memberikan manfaat signifikan bagi Dinas Sosial Kabupaten Batang. Aplikasi berbasis Naive Bayes yang dihasilkan membantu petugas dalam mengelola data secara selektif dan tepat sasaran, meningkatkan efisiensi serta keadilan dalam distribusi bantuan. Dengan keandalan akurasi 80%, sistem ini meminimalkan kesalahan distribusi dan menjadi acuan inovasi pelayanan sosial yang lebih modern, responsif, dan transparan. Penelitian ini juga membuka peluang untuk pengembangan sistem pada skala data yang lebih besar, menjadikan proses pengelolaan data lebih adaptif dan efektif demi kenyamanan serta kesejahteraan masyarakat.

Kata Kunci: Sistem Informasi, Klasifikasi, Naive Bayes, Bantuan Sosial, Knowledge Discovery in Databases (KDD).

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**DEVELOPMENT OF AN ASSISTIVE DEVICE AID RECIPIENT
CLASSIFICATION INFORMATION SYSTEM USING THE NAIVE BAYES
APPROACH AT THE SOCIAL SERVICE OFFICE OF BATANG REGENCY,**

Under the guidance of Devi Sugianti, M. Kom., and Nur Ika Royanti, M. Kom.

129 + xii pages / 59 figures / 10 tables / 3 appendices / 33 references (2019 - 2023)

ABSTRACT

The Social Service Office of Batang Regency is tasked with handling social affairs and assisting the Regent, with a commitment to providing optimal services under the motto, "Serving wholeheartedly, collaborating to provide solutions." One of the main challenges faced by this institution is the distribution of social assistance tools, such as wheelchairs, hearing aids, and others. Issues encountered include recurring aid recipients without equitable distribution, slow validation processes, and a lack of supportive systems for effective selection. As a solution, an information system based on Naive Bayes was designed to classify aid recipients fairly. Using data on recipients of disability aid tools at the Social Service Office of Batang Regency, the model achieved an accuracy of 80%, a precision of 71%, and a recall of 100%. Accuracy reflects that 80% of predictions were correct, precision indicates that 71% of positive predictions were accurate, and recall signifies that all positive cases were identified, although the low precision suggests the presence of false positives. The development of this system provides significant benefits to the Social Service Office of Batang Regency. The Naive Bayes-based application assists officers in managing data selectively and accurately, enhancing efficiency and fairness in aid distribution. With a reliability accuracy of 80%, this system minimizes distribution errors and serves as a reference for more modern, responsive, and transparent social service innovations. This research also opens opportunities for system development on larger data scales, making data management processes more adaptive and effective to ensure community comfort and well-being.

Keywords: *Information System, Classification, Naive Bayes, Social Assistance, Knowledge Discovery in Databases (KDD).*