ABSTRAK

RANCANG BANGUN SISTEM PENDUKUNG KEPUTUSAN (SPK) DENGAN METODE *SIMPLE ADDITIVE WEIGHTING* (SAW) UNTUK OPTIMALISASI SELEKSI TAHAP AWAL CALON KARYAWAN PADA PT. LAUTAN TEDUH INTERNIAGA

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PT. Lautan Teduh Interniaga menghadapi tantangan dalam proses rekrutmen untuk lebih dari 40 cabang dealer di wilayah Lampung. Proses seleksi yang masih bersifat manual menyebabkan pemrosesan berkas yang lambat dan kesulitan untuk mengelola pelamar karena tingginya tingkat turnover karyawan. Penelitian ini bertujuan merancang dan membangun sistem *e-recruitment* berbasis web bernama "Lautan Karir" menggunakan metode *Simple Additive Weighting* (SAW) untuk otomatisasi perankingan seleksi administrasi serta digitalisasi tes psikotes DISC dan PAPI Kostick melalui modul *Computer Assisted Test* (CAT). Sistem dikembangkan menggunakan framework PHP Laravel dengan metode *Prototype* melalui tiga iterasi bersama tim HRD dan *Programmer* perusahaan, dengan pembagian hak akses ke dalam tiga peran yaitu Pelamar, HRD, dan Super Admin. Pengujian fungsional menggunakan *black-box testing* menunjukkan tingkat keberhasilan 100% pada seluruh 10 skenario uji. Pengujian penerimaan pengguna menggunakan *System Usability Scale* (SUS) terhadap 12 responden menghasilkan nilai rata-rata 90,83 yang termasuk *Grade* A kategori *Acceptable*. Sistem Lautan Karir terbukti mampu mengotomatisasi perankingan pelamar secara objektif dan mendigitalisasi pelaksanaan tes psikotes, sehingga meningkatkan efisiensi dan objektivitas proses rekrutmen di PT. Lautan Teduh Interniaga.

Kata kunci**:** Sistem Pendukung Keputusan, *E-Recruitment*, *Simple Additive Weighting*, *Computer Assisted Test*, *Prototype.*

ABSTRACT

DESIGN AND DEVELOPMENT OF A DECISION SUPPORT SYSTEM (DSS) USING THE SIMPLE ADDITIVE WEIGHTING (SAW) METHOD FOR OPTIMIZING THE INITIAL SELECTION OF JOB CANDIDATES AT PT. LAUTAN TEDUH INTERNIAGA

By

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PT. Lautan Teduh Interniaga faces challenges in managing the recruitment process for more than 40 dealer branches across the Lampung region. The manual selection process results in slow document processing and difficulties managing applicants due to high employee turnover rates. This research aims to design and develop a web-based e-recruitment system named "Lautan Karir" using the Simple Additive Weighting (SAW) method to automate administrative selection ranking, along with the digitalization of DISC and PAPI Kostick psychometric tests through a Computer Assisted Test (CAT) module. The system was developed using the PHP Laravel framework with the Prototype methodology through three iterative cycles involving the company's HRD and Programmer teams, dividing access rights into three roles: Applicant, HRD, and Super Admin. Black-box testing demonstrated a 100% success rate across all 10 test scenarios. User acceptance testing using the System Usability Scale (SUS) involving 12 respondents yielded an average score of 90.83, classified as Grade A in the Acceptable category. The Lautan Karir system successfully automates objective applicant ranking based on the SAW method and digitalizes psychometric testing, thereby improving the efficiency and objectivity of the recruitment process at PT. Lautan Teduh Interniaga.

Keywords: Decision Support System; E-Recruitment; Simple Additive Weighting; Computer Assisted Test; Prototype.