

ABSTRAK

PT PLN ICON PLUS SBU Regional Sumbagsel masih menggunakan proses manual dan semi-otomatis dalam pelaporan pemeliharaan Inside Plant (ISP), yang menyebabkan ketidakefisienan, kesalahan data, dan keterlambatan pelaporan. Untuk mengatasi hal tersebut, penelitian ini merancang aplikasi berbasis web bernama AMPERA dengan pendekatan Workflow Management. Aplikasi ini mempermudah pegawai lapangan (Serpo) dalam mengisi laporan secara digital, yang kemudian ditinjau oleh admin. AMPERA dikembangkan menggunakan framework Laravel dan metode Waterfall, serta dilengkapi fitur seperti formulir multi-tahap, unggah foto, pelacakan status laporan, dan ekspor laporan ke format PDF. Hasil pengujian menunjukkan bahwa sistem ini meningkatkan akurasi data, mengurangi kesalahan manusia, dan mempercepat alur pelaporan. Dengan otomatisasi alur kerja, AMPERA mampu mendukung koordinasi tim yang lebih baik dan pengelolaan data yang lebih terstruktur dan transparan.

Kata kunci: Workflow Management, Inside Plant, Pelaporan Pemeliharaan, Laravel, Aplikasi Berbasis Web, Waterfall.

ABSTRACT

PT PLN ICON PLUS SBU Regional Sumbagsel still relies on manual and semi-automatic processes for reporting Inside Plant (ISP) maintenance, leading to inefficiencies, data errors, and slow reporting. To address these issues, this study develops a web-based application called AMPERA using the Workflow Management approach. The application streamlines the reporting process, enabling field staff (Serpo) to submit structured reports digitally, which are then reviewed by administrators. Built with the Laravel framework and developed using the Waterfall model, AMPERA includes features such as multi-step forms, photo uploads, real-time status tracking, and report export in PDF format. Testing shows that the system improves data accuracy, reduces human error, and enhances transparency in maintenance workflows. By automating reporting procedures, AMPERA supports better coordination, faster response times, and more reliable data management.

Keywords: *Workflow Management, Inside Plant, Maintenance Reporting, Laravel, Web-Based Application, Waterfall.*