

ABSTRAK

Perawatan mesin secara terjadwal merupakan salah satu faktor penting dalam menjaga kinerja dan keandalan mesin agar tetap beroperasi secara optimal. Pada PT Bringin Karya Sejahtera Cabang Palembang, proses perencanaan dan pencatatan *preventive maintenance Scenting Machine* masih menggunakan dokumen dan pencatatan sederhana sehingga berpotensi menyebabkan keterlambatan jadwal, kesulitan pengelolaan data, serta kurang efektifnya penyusunan laporan maintenance. Untuk mengatasi permasalahan tersebut dirancang Aplikasi Perencanaan *Preventive Maintenance Scenting Machine* Berbasis *Website*. Pengembangan sistem menerapkan metode *Rapid Application Development* (RAD) melalui tahapan perencanaan kebutuhan, desain sistem, pengembangan, dan implementasi. Data penelitian diperoleh melalui observasi, wawancara, studi pustaka, serta pengumpulan dokumen pendukung. Sistem menggunakan Laravel dan MySQL serta memiliki empat peran pengguna, yaitu admin, teknisi, supervisor, dan pimpinan. Berdasarkan pengujian black box, seluruh fitur utama aplikasi telah berfungsi sesuai kebutuhan dan rancangan sistem sehingga dapat mendukung proses perencanaan preventive maintenance secara lebih terstruktur, mempermudah pengelolaan data kegiatan *maintenance*, serta membantu penyusunan laporan pada PT Bringin Karya Sejahtera.

Kata Kunci: *Preventive Maintenance, Scenting Machine, Sistem Informasi, Website, Rapid Application Development (RAD), Laravel.*

ABSTRACT

Scheduled machine maintenance is one of the essential factors in maintaining machine performance and reliability to ensure optimal operation. At PT Bringin Karya Sejahtera Palembang Branch, the planning and recording process of Scenting Machine preventive maintenance is still carried out using documents and simple records, which may lead to maintenance schedule delays, difficulties in data management, and less effective maintenance report preparation. To address these issues, a Web-Based Scenting Machine Preventive Maintenance Planning Application was developed. The system was developed using the Rapid Application Development (RAD) method, which consists of the requirements planning, system design, development, and implementation phases. The research data were collected through observation, interviews, literature study, and supporting document collection. The application was developed using Laravel and MySQL and provides four user roles: administrator, technician, supervisor, and management. Based on black-box testing, all main application features functioned according to the system requirements and design, enabling more structured preventive maintenance planning, facilitating maintenance data management, and supporting maintenance report preparation at PT Bringin Karya Sejahtera.

Keywords: Preventive Maintenance, Scenting Machine, Information System, Website, Rapid Application Development (RAD), Laravel.