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SISTEM INFORMASI MANAJEMEN LAYANAN SERVIS MOTOR PADA BENGKEL NARTO MOTOR , dibawah bimbingan Christian Yulianto Rusli, M.Kom. dan Bambang Ismanto, M.Kom. 156 + xx halaman / 121 gambar / 25 tabel / lampiran / 31 pustaka (2019-2025)

ABSTRAK

Bengkel Narto Motor menangani rata-rata 10 hingga 15 unit kendaraan per hari, namun masih mengandalkan pencatatan manual yang tidak terstruktur dan tidak memiliki sistem monitoring real-time. Kondisi ini menyebabkan mekanik sulit memprioritaskan pengerjaan, admin kewalahan melayani pertanyaan status servis, dan pelanggan tidak dapat memantau progres kendaraan mereka. Pada periode tertentu, lonjakan pelanggan mengakibatkan beberapa di antaranya terpaksa membatalkan servis karena kapasitas bengkel sudah penuh. Penelitian ini mengembangkan sistem informasi manajemen layanan servis motor berbasis web menggunakan metode Waterfall, PHP dengan framework CodeIgniter 4, dan database MySQL. Sistem dirancang dengan dua tingkat pengguna yaitu admin dan pelanggan. Admin dapat mengelola data layanan, sparepart, mekanik, transaksi, dan booking servis secara real-time. Pelanggan dapat melakukan booking online, memantau status dan antrian servis, serta mengakses riwayat servis kendaraannya. Hasil pengujian White Box menunjukkan nilai cyclomatic complexity sebesar 5 dengan tingkat risiko rendah. Pengujian Black Box mengonfirmasi seluruh fitur utama berfungsi sesuai kebutuhan. Pengujian UAT yang melibatkan pemilik, admin, dan 15 responden pelanggan menunjukkan tingkat kepuasan tinggi, dengan 100% responden menyatakan sistem layak digunakan dan siap direkomendasikan.

Kata Kunci: *Sistem Informasi, Manajemen Layanan Servis, Bengkel Motor, Booking Online, Monitoring Real-Time, Metode Waterfall.*

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ABSTRACT

Narto Motor Workshop handles an average of 10 to 15 vehicles per day; however, it still relies on unstructured manual recording and lacks a real-time monitoring system. This condition causes mechanics to struggle with prioritizing work orders, the administrator to be overwhelmed by service status inquiries, and customers to be unable to track the progress of their vehicles. During peak periods, the surge in customers forces some of them to cancel their service plans due to the workshop reaching full capacity. This research develops a web-based motorcycle service management information system using the Waterfall method, PHP with the CodeIgniter 4 framework, and a MySQL database. The system is designed with two user levels: administrator and customer. The administrator can manage service, spare part, mechanic, transaction, and booking data in real time. Customers can perform online bookings, monitor their service and queue status, and access their vehicle service history. White Box Testing results show a cyclomatic complexity value of 5, indicating a low risk level. Black Box Testing confirms that all major features function as intended. User Acceptance Testing (UAT), involving the workshop owner, administrator, and 15 customer respondents, demonstrates a high satisfaction rate, with 100% of respondents stating that the system is suitable for use and ready to be recommended.

Keywords: *Information System, Service Management, Motorcycle Workshop, Online Booking, Real-Time Monitoring, Waterfall Method.*