ABSTRACT

DESIGN AND DEVELOPMENT OF WORKSHOP MANAGEMENT INFORMATION SYSTEM USING RAPID APPLICATION DEVELOPMENT (RAD) METHOD

(Case Study of Yanto Motor Workshop)

By

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Yanto Motor Workshop is a motorcycle repair shop located in Purwokerto, specifically at Jalan Kaliputih No. 53, Purwokerto Wetan, East Purwokerto District, Banyumas Regency, Central Java. Yanto Motor Workshop offers motorcycle repair services with an average of approximately 10 vehicles serviced daily. In its operations, the workshop consistently focuses on providing the best services and facilities to ensure customer satisfaction. However, the management of workshop operations, including data and reports, is still done manually using handwritten and relying on memory records, leading to various challenges, such errors in recording customer and supplier data, inconsistencies in revenue calculations, difficulty in monitoring spare part stock due to reliance on manual checks, and handwritten records that risk data and reports being lost, damaged, or difficult to read. This highlights the need to develop a web-based information system to help manage the workshop more effectively, efficiently, and in a controlled manner.Based on the background and problem formulation, the objective of this study is to design an information system aimed at addressing the challenges in managing workshop operations and providing a structured platform for recording data and reports for performance and operations at Yanto Motor Workshop. The proposed information system adopts the Rapid Application Development (RAD) methodology. The outcome of this study is a management system with features to manage customer data, suppliers, spare parts, services, spare part purchases and sales, as well as comprehensive service, purchase, and sales reports. The system also includes a service booking platform for customers. Functional testing with a success rate of 100% using Black Box Testing and usability evaluation through the System Usability Scale (SUS) yielded an average score of 84.1. Based on the analysis, it can be concluded that the Yanto Motor Workshop website has proven effective in enhancing workshop management, and improving the workshop's performance and operations by 100%, while enhancing customer service management by 86.4%.

Keywords: Workshop, Workshop Management, Website, Rapid Application Development.