

DESIGN AND CONSTRUCTION OF A WEB-BASED INVENTORY AND CONSTRUCTION EQUIPMENT RENTAL INFORMATION SYSTEM WITH WHATSAPP GATEWAY NOTIFICATION AT CV RINJANI KARYA KONSTRUKSI

Ikbal Adi Putra, Joko Sutopo

*Information Systems Study Program, Faculty of Science and Technology
University of Technology Yogyakarta
Jl. Ringroad Utara, Jombor, Sleman, Yogyakarta
Email: ikbaladip@gmail.com, jksutopo@uty.ac.id*

ABSTRACT

CV Rinjani Karya Konstruksi is a civil contractor and construction equipment rental company. The company is facing challenges in managing its construction equipment inventory, particularly in the efficient recording of equipment borrowed for internal projects and rented by external parties. The recording process is conducted using Microsoft Excel and relies on physical documents such as delivery notes and purchase orders, making it prone to delays in recording, data inconsistencies, and input errors. This research aims to design and build a web-based inventory information system that can handle borrowing and rental transactions, record equipment stock in real time, and generate more efficient reports. The methods used include problem identification, interviews, literature review, needs analysis, system design using UML, and implementation using the Laravel framework with a MySQL database. The system was tested using black box testing. The test results showed that all system functionality ran well and met user needs, although several bugs were found. The system is capable of recording construction equipment transactions, providing real-time equipment availability information, and simplifying reporting.

Keywords: *Information System, Inventory, Construction Equipment, Laravel*