

**WEB-BASED SCAFFOLDING INVENTORY MANAGEMENT SYSTEM
FOR OPTIMIZING STOCK RECORDS
(Case Study: Tata Bhuana, Bantul, DIY)**

Dandy Ahmad Alfitra, Anna Dina Kalifia, S.Kom., M.Cs.
Information Systems Study Program, Faculty of Science and Technology
Universitas Teknologi Yogyakarta
Jl. Ringroad Utara, Jombor, Sleman, Yogyakarta
E-mail: dandyahmad64@gmail.com, anna.dina.kalifia@staff.uty.ac.id

ABSTRACT

Tata Bhuana is a company engaged in the rental and sale of scaffolding in Yogyakarta, established in 2002. Currently, the inventory data of scaffolding is recorded using manual books, leading to errors in inventory records and data loss. This negatively impacts order fulfillment and target achievement. The objective of this research is to address these issues by implementing a web-based scaffolding inventory management system. The design utilizes Unified Modeling Language (UML) for visual representation of structure and interactions, while the development process follows the Waterfall method, consisting of structured and sequential stages. The database implementation uses MySQL for data storage, and PHP as the programming language for system implementation. The result of this study is a web-based inventory management system equipped with features such as the ability to add incoming and outgoing item data, search for item data, manage item repairs and orders, and generate inventory reports. Black box testing results indicate that the developed system functions as intended and meets the expectations of the involved actors.

Keywords: Inventory Management System, Scaffolding, Web, Unified Modeling Language, Waterfall.