

ABSTRACT

Inventory management is a critical factor in ensuring smooth production and sales processes. Excessive inventory can lead to high storage costs and potential losses if goods remain unsold, while insufficient inventory may result in product scarcity and missed sales opportunities. Currently, PT. Tunas Daihatsu relies on Microsoft Office Excel for inventory management, which has resulted in sluggish stock management processes and delays in generating monthly company reports. Furthermore, the use of Microsoft Office Excel poses security risks, as there is a potential for unauthorized access to data due to inadequate access controls, thus compromising data integrity.

Hence, this study aims to address these issues by developing a web-based goods data management application. The application is designed to handle incoming and outgoing goods, manage damaged goods, and generate monthly reports. The development process follows the System Development Life Cycle (SDLC) methodology, employing a waterfall model approach that includes system planning, analysis, design, implementation, testing, and maintenance phases. Additionally, User Acceptance Testing (UAT) is conducted to ensure the application meets user expectations and needs.

The results of the testing process demonstrate that the application features perform well and meet user requirements. This research highlights the effectiveness of the Waterfall methodology in delivering a satisfactory product that meets user needs.

Keywords – *System Inventory, Inventory Management, Waterfall, System Development Life Cycle.*