

ABSTRACT

Asset inventory management is one of the most important operational functions of a company, especially for Telkom Corporate University Bandung, which has high-tech assets. The problems faced include a manual asset recording system and a fragmented system that causes data inaccuracy, asset misplacement, and ineffective strategic decision-making. This study aims to develop an integrated website application to optimize asset inventory management with core features including digital inventory tracking, automatic asset location and status tracking, automatic report generation, maintenance reminders, and an analytical dashboard for decisionmaking. The development methodology uses the Agile Framework with steps including system design, system implementation, system testing, and deployment. Laravel was selected as the backend framework with an MVC architecture, data was stored in MySQL, and a responsive web design was implemented using Bootstrap and JavaScript for the user interface. Functionality and performance were tested through unit testing, integration testing, and user acceptance testing, which demonstrated that the application meets functional requirements. The research results show that this application is capable of improving asset record accuracy from 40% to 85%, reducing asset search time by 70%, and offering real-time visibility into inventory status. This system has proven effective in optimizing asset management processes and enhancing strategic decision-making at Telkom Corporate University Bandung.

Keywords: Laravel, Inventory Management, JavaScript, Web Application.