ABSTRACT

The development of information technology has affected various sectors, including government. The Logistics Section of the Tanjung Priok Port Police, which is responsible for managing goods and information, still relies on manual methods such as spreadsheets to manage inventory. This method is prone to errors and is inefficient. To overcome these problems, a web-based inventory application was designed as a solution that allows real-time data access, easy updates, and accurate tracking. This application aims to improve inventory management efficiency, reduce errors, and speed up decision making. Thus, it is hoped that this application can support increased operational efficiency and become a useful solution for police agencies and other sectors.

In the process of developing the web-based inventory application, several stages were carried out, starting with a needs analysis survey in the Logistics Department of Polres Pelabuhan Tanjung Priok. After identifying the necessary requirements, a prototype of the web-based inventory application was created, starting with the design of the initial interface and database. In the prototyping process, the author determined the programs to be used, such as PHP and JavaScript programming languages, the CodeIgniter framework, and MariaDB for the database. After all programs in the prototype met the requirements and were approved by the Logistics Department of Polres Pelabuhan Tanjung Priok, testing was conducted by inputting real data that matched the needs analysis.

. The test results show that the data entered is approximately 30% of the KAPORLAP equipment inventory data and 100% of the ATK equipment inventory data. Data entry was performed concurrently by 7 users, resulting in input times varying by 1-2 seconds and page loading times for the data page varying by 1-2 seconds. These results are in line with the standards and requirements. Furthermore, the testing of other features indicates that all features and menus are functioning properly and meet the needs. The available menus include login menu, home menu, data items menu, incoming items menu, and others. Features available include edit, delete, add, search, and others. The evaluation questionnaire results indicate that the web-based inventory application is rated very well by users in terms of functionality and ease of use. Based on these results, it is concluded that the web-based inventory application meets and is suitable for the needs of the Logistics section of Polres Pelabuhan Tanjung Priok.

Keywords: Inventory Application, Logistics Division of the Police Resort, MariaDB.