ABSTRACT

Logistics plays a crucial role in supporting national economic growth, yet the efficiency of this sector in Indonesia still faces various obstacles. This is evident from the logistics costs, which account for 23% of the country's total GDP, indicating a high burden of logistics costs on product prices. This condition also affects the performance of the national logistics system, as reflected in Indonesia's 2023 Logistics Performance Index (LPI) score of 3.0, ranking 61st globally. This study aims to design and develop a web-based information system to support logistics service distribution management. The method used is prototyping, which enables iterative development based on user feedback. The system is built using PHP with the Laravel framework and MySQL as the database, and it includes features such as LSP account management, service management, and distribution monitoring. Testing results through Black Box Testing showed that all functions operated correctly. Usability testing also yielded positive results, accompanied by several suggestions from participants. Furthermore, the evaluation using the System Usability Scale (SUS) resulted in an average score of 77.5, indicating that the system is fairly feasible and acceptable. Therefore, this system has the potential to serve as a digital solution to support the efficiency and effectiveness of logistics distribution in Indonesia.

Keywords: Logistics information system, transportation, prototyping