ABSTRACT

Digitalization in the business world is rapidly growing, including in transaction management systems for grocery stores, which are still widely relying on manual record-keeping. Manual methods have several drawbacks, such as being prone to errors, time-consuming, and making it difficult to prepare sales reports. To address these issues, this research aims to design and implement a digital Point of Sales (POS) system using the Laravel framework with PHP programming language. The system development follows the waterfall method, which consists of several stages: requirements analysis, system design, implementation, testing, and maintenance. In the requirements analysis stage, information related to the sales business process in grocery stores was collected to define the necessary functionalities. The system design phase included user interface design and database modeling to ensure structured and efficient transaction recording. The implementation resulted in a POS application with core features such as sales transaction recording, product data management, and generation of daily and monthly sales reports. The system was then tested using the blackbox testing method, focusing on functionality testing without examining the source code. The test results show that all features work properly according to user requirements, minimize recording errors, accelerate transaction processes, and improve efficiency in generating sales reports. Therefore, the developed POS system can support grocery stores in managing sales operations more effectively, accurately, and professionally.

Keywords: Digitalization, Point of Sales, Laravel, Waterfall, Blackbox Testing.