

ABSTRACT

The rapid growth of home-based laundry businesses, driven by modern lifestyle demands, requires business owners to manage resources more efficiently and systematically. However, in practice, many laundry businesses still rely on manual records or partially integrated digital systems, resulting in operational inefficiencies. The main problem addressed in this study is the lack of a system capable of supporting comprehensive operational efficiency in laundry management.

As a solution to this issue, an Android-based laundry management application was developed specifically to support operational activities in home laundry businesses. The application includes three user roles: admin, employee, and customer, with key features such as transaction recording, service management, employee management, digital and physical receipt printing, as well as integration with WhatsApp API and Bluetooth printers.

The system was tested using white box testing, black box testing, and user acceptance testing methods. A total of 75 black box test scenarios were successfully executed with 100% accuracy, while questionnaire results indicated positive user acceptance based on valid and reliable instruments. These results demonstrate that the application effectively improves time efficiency, reduces data entry errors, and contributes to the digital transformation of small-scale laundry businesses.

Keywords: Laundry, MSME, resource efficiency, Android application, digital management