DEVELOPING AN ANDROID-BASED CASHIER BUSINESS TRANSACTION SYSTEM USING AGILE METHOD

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ABSTRACT

Grocery merchants in Indonesia often encounter challenges in streamlining the sales process due to conventional methods that are slow, unstructured, and susceptible to recording errors. These issues can result in customer loss, and financial setbacks and hinder business growth. This study aims to develop an Android-based cashier application for grocery merchants to expedite transactions and optimize inventory management. This study employs a qualitative approach, conducting in-depth interviews with grocery merchants to understand their needs and challenges in the transaction process. The data obtained is then used to design application features, such as inventory management with CRUD (Create, Read, Update, Delete) functions, barcode scanning using a smartphone camera, and sending digital receipts via WhatsApp, as well as electronic payment support via QRIS E-wallet and cash transactions. It is assumed that users have an Android device and stable internet access. The study results demonstrate that this application can reduce recording errors, accelerate the transaction process, and enhance customer satisfaction compared to conventional methods. This application is poised to become a valuable tool for improving the productivity and competitiveness of grocery merchants in the digital era. Integration of analytical features is recommended to assist merchants in monitoring sales performance and making strategic decisions.

Keywords: Android cashier application, Firebase Realtime, Grocery merchants, Digital payments, Digital transactions.