

ABSTRACT

Online transactions conducted outside major e-commerce platforms, such as forums or social media, often carry a high risk of fraud due to the absence of standardized security systems. A commonly used solution is the use of escrow services, but their implementation typically relies on manual communication, which is vulnerable to abuse. This study aims to develop an escrow system based on Progressive Web App (PWA) technology on the Prantara platform to make transactions safer, more efficient, and more structured. The system development was carried out using an Agile approach with the Kanban method, focusing on end-user involvement in the system validation and testing process. Key features include authentication via Google OAuth 2.0, transaction creation and management, account validation, reporting, and an integrated chat system. Evaluation was conducted using User Acceptance Testing (UAT) to assess system functionality and user satisfaction. The testing results indicate that the system can facilitate informal online transactions with greater security and transparency. It also provides a responsive user experience across devices. Therefore, this research contributes to the digitalization of informal transactions by offering a reliable and accessible solution.

Keywords: *information system, escrow, progressive web app, transaction security, Prantara*