

ABSTRACT

Digital transformation at the village government level is essential to improve service efficiency, information transparency, and community participation. This study aims to design and develop a web-based Village Information System that integrates population data management, letter administration, community complaints, and village information publication. The research was conducted in Batujajar Timur Village using the Rapid Application Development (RAD) methodology, allowing for fast and flexible development. The initial stages involved field observation and interviews to identify user needs, which were then formulated into functional requirements and visualized through UML diagrams and an Entity Relationship Diagram (ERD) for database design.

The system was developed using Laravel for the backend and React with TypeScript for the frontend, with a responsive interface optimized for various devices. After development, the system underwent feature testing and User Acceptance Testing (UAT) to ensure its functionality and usability. Test results showed that the system performed well, was user-friendly for village officials, and effectively supported digital administration and information dissemination. The system not only addresses the functional requirements but also contributes to advancing digital governance in rural areas and can serve as a model for similar implementations in other villages.

Keywords: Village Information System, Laravel, React, RAD, Digitalization