PENGEMBANGAN DAN IMPLEMENTASI SISTEM BERBASIS WEBSITE UNTUK PENINGKATAN PELAYANAN ADMINISTRASI DAN INFORMASI DESA BENDUNGAN(DEVELOPMENT AND IMPLEMENTATION OF A WEB-BASED SYSTEM TO IMPROVE ADMINISTRATIVE SERVICES AND INFORMATION MANAGEMENT IN BENDUNGAN VILLAGE)

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ABSTRACT

Administrative services for correspondence in Bendungan Village were previously conducted manually, involving the use of handwritten records and document archiving through Microsoft Word and Excel, which were then printed in physical form. This method led to various issues, such as delays in services, data inconsistencies, and inefficient use of time and resources. To address these challenges, a web-based administrative information system was developed, designed to assist village administrative staff in processing letter submissions digitally, managing village news, and receiving community feedback and complaints directly. The system development process involved the design of an Entity Relationship Diagram (ERD), Use Case Diagram, Flowchart, Activity Diagram, and wireframe interface. The system was implemented using the Laravel framework, Visual Studio Code as the development environment, and MySQL as the database management system. The system was evaluated using black box testing to ensure its functionalities worked according to the testing scenarios and usability testing to assess ease of use and user satisfaction. The test results showed that all core features of the system functioned well, with responsive performance and meeting user needs. The usability testing resulted in a 100% task completion rate. an efficient average time per task, and a low error rate of 0.58 errors per task. This information system has proven to facilitate a more practical, systematically documented, and easily monitored process for letter submissions, while also supporting information transparency and encouraging community participation in providing feedback.

Keywords: Village, Administration, Information System, Waterfall