

SISTEM INFORMASI INVENTARIS BARANG DAN ASSET DESA BERBASIS WEBSITE PADA KANTOR BALAI DESA PURWOSARI KECAMATAN COMAL, dibawah Bimbingan Satriedi Wahyu Binabar, S.Si., M.Kom dan Ari Putra Wibowo, M.Kom.,

ABSTRAK

Kantor Balai Balai Desa Purwosari, Kecamatan Comal, Kabupaten Pematang, menghadapi tantangan dalam pengelolaan barang dan aset desa, terutama terkait akurasi data, efisiensi proses, dan transparansi laporan. Sebelumnya, pengelolaan aset dilakukan secara manual menggunakan Microsoft Excel, yang rawan kesalahan dan menyulitkan pemantauan kondisi fisik aset. Data sering terduplikasi, dan laporan tidak selalu terupdate. Untuk mengatasi hal ini, dikembangkan Sistem Informasi Inventaris Barang dan Aset Desa Berbasis Web dengan PHP dan framework CodeIgniter 4, serta database MySQL. Sistem ini bertujuan meningkatkan efisiensi dan akurasi pengelolaan aset melalui otomatisasi. Fitur utamanya meliputi pencatatan aset yang terstruktur, validasi data, dan pembaruan data real-time, yang menghindari kesalahan dan memastikan informasi selalu up-to-date. Sistem juga mencakup pengajuan barang dan pemeliharaan aset, menggantikan proses manual yang meningkatkan transparansi dan mengurangi kesalahan administratif. Selain itu, sistem menyediakan laporan otomatis yang lebih efisien dan akurat. Pengembangan sistem mengikuti metode waterfall, dimulai dengan komunikasi dan wawancara untuk memahami kebutuhan pengguna, diikuti dengan perencanaan, pemodelan, konstruksi, dan deployment. Pengujian sistem mencakup White Box, Black Box, dan User Acceptance Test (UAT), yang menunjukkan bahwa sistem memenuhi kebutuhan pengguna, dengan antarmuka yang mudah dipahami dan fungsi yang berjalan baik. Secara keseluruhan, sistem ini berhasil meningkatkan efisiensi, efektivitas, dan transparansi dalam pengelolaan barang dan aset desa. Walaupun demikian, masih ada ruang untuk pengembangan lebih lanjut, seperti penambahan fitur penjadwalan pemeliharaan rutin dan pemberitahuan otomatis untuk pengajuan barang dan pemeliharaan.

Kata Kunci: Sistem Informasi, Inventaris Barang dan Aset Desa, Waterfall, Pengelolaan Aset

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WEB-BASED VILLAGE ASSET AND INVENTORY MANAGEMENT INFORMATION
SYSTEM AT THE VILLAGE OFFICE OF PURWOSARI, COMAL SUB-DISTRICT
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ABSTRACT

Balai Desa Purwosari, Comal District, Pematang Regency, faces challenges in the management of village goods and assets, particularly related to data accuracy, process efficiency, and report transparency. Previously, asset management was done manually using Microsoft Excel, which was prone to errors and made it difficult to monitor the physical condition of assets. Data was often duplicated, and reports were not always up-to-date. To address this, a Web-Based Village Goods and Asset Inventory Information System was developed using PHP and the CodeIgniter 4 framework, with a MySQL database. This system aims to improve the efficiency and accuracy of asset management through automation. Its key features include structured asset recording, data validation, and real-time data updates, which help prevent errors and ensure the information is always current. The system also includes item requests and asset maintenance features, replacing the manual process and improving transparency while reducing administrative errors. Additionally, the system provides automated reports that are more efficient and accurate. The system development follows the waterfall method, starting with communication and interviews to understand user needs, followed by planning, modeling, construction, and deployment. System testing includes White Box, Black Box, and User Acceptance Testing (UAT), which show that the system meets user requirements, with an interface that is easy to understand and functions that work well. Overall, this system successfully improves the efficiency, effectiveness, and transparency of village goods and asset management. However, there is still room for further development, such as adding features for routine maintenance scheduling and automated notifications for item requests and maintenance.

Keywords: *Information System, Village Asset and Inventory, Waterfall, Asset Management*