

**RANCANG BANGUN SISTEM INFORMASI MONITORING REALISASI
KEGIATAN PEMERINTAHAN MENGGUNAKAN METODE *RAPID
APPLICATION DEVELOPMENT* (STUDI KASUS: DISKOMINFOSTANDI
KOTA BEKASI)**

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ABSTRAK

Pengelolaan data kegiatan pemerintahan pada Diskominfostandi Kota Bekasi sebelumnya masih bergantung pada spreadsheet, Google Form, dan proses rekapitulasi manual. Kondisi tersebut berpotensi menyebabkan duplikasi data, kesalahan perhitungan capaian, keterlambatan pelaporan, serta kurang optimalnya penyajian informasi bagi pimpinan dalam melakukan monitoring dan evaluasi kegiatan. Penelitian ini bertujuan untuk merancang dan membangun Sistem Informasi Pengelolaan Data Kegiatan Pemerintahan Berbasis Web (SIPDA) sebagai platform terpusat untuk mendukung proses pencatatan, perhitungan, validasi, monitoring, dan pelaporan data kegiatan pemerintahan. Metode pengembangan sistem yang digunakan adalah Rapid Application Development (RAD) dengan tahapan Requirement Planning, User Design, Construction, dan Implementation. Tahap Requirement Planning dilakukan melalui observasi, wawancara, dan analisis PIECES terhadap sistem berjalan. Tahap User Design dilakukan dengan menyusun use case diagram, activity diagram, sequence diagram, class diagram, CDM, PDM, dan desain antarmuka. Tahap Construction dilakukan dengan membangun sistem menggunakan framework Laravel 12 dan database MySQL. Tahap Implementation dilakukan melalui pengujian Black Box Testing dan User Acceptance Testing (UAT). Hasil penelitian menunjukkan bahwa SIPDA berhasil dirancang dan dibangun dengan fitur registrasi dan login, manajemen hak akses berbasis role, input realisasi kegiatan, perhitungan capaian fisik otomatis, validasi data kegiatan, dashboard monitoring interaktif, laporan rekapitulasi, ekspor Excel, cetak detail laporan melalui print browser, pengelolaan Program dan Bagian, Master Kegiatan, serta Audit Log. Sistem juga berhasil menyajikan data realisasi kegiatan dalam bentuk dashboard yang menampilkan ringkasan capaian, grafik, tabel rincian, serta modal detail kegiatan. Hasil Black Box Testing menunjukkan bahwa 33 dari 33 skenario pengujian memperoleh status berhasil dengan persentase keberhasilan 100%. Hasil UAT menunjukkan bahwa 50 dari 50 skenario pada aktor Operator OPD, Verifikator, Pimpinan, dan Admin memperoleh status berhasil dengan tingkat penerimaan pengguna 100%. Dengan demikian, SIPDA telah mampu menjawab kebutuhan perancangan sistem, penyajian informasi dashboard, serta pengujian fungsionalitas dan kelayakan sistem sesuai kebutuhan operasional instansi.

Kata kunci: Monitoring Kegiatan, Laravel, *Rapid Application Development (RAD)*, Audit Log, SPBE

DESIGN AND CONSTRUCTION OF A MONITORING INFORMATION SYSTEM FOR GOVERNMENT ACTIVITY REALIZATION USING THE RAPID APPLICATION DEVELOPMENT METHOD (CASE STUDY: DISKOMINFOSTANDI CITY OF BEKASI)

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ABSTRACT

The management of government activity data at Diskominfostandi Kota Bekasi previously relied on spreadsheets, Google Forms, and manual recapitulation processes. This condition has the potential to cause data duplication, calculation errors in achievement progress, reporting delays, and suboptimal information presentation for leaders in conducting activity monitoring and evaluation. This study aims to design and develop a Web-Based Government Activity Data Management Information System (SIPDA) as a centralized platform to support the process of recording, calculating, validating, monitoring, and reporting government activity data. The system development method used in this study is Rapid Application Development (RAD), which consists of Requirement Planning, User Design, Construction, and Implementation stages. The Requirement Planning stage was carried out through observation, interviews, and PIECES analysis of the existing system. The User Design stage was conducted by designing use case diagrams, activity diagrams, sequence diagrams, class diagrams, CDM, PDM, and user interface designs. The Construction stage was carried out by developing the system using the Laravel 12 framework and MySQL database. The Implementation stage was conducted through system testing using Black Box Testing and User Acceptance Testing (UAT). The results show that SIPDA was successfully designed and developed with several main features, including user registration and login, role-based access management, activity realization input, automatic physical achievement calculation, activity data validation, interactive monitoring dashboard, recapitulation reports, Excel export, report detail printing through the browser print feature, Program and Division management, Master Activity management, and Audit Log recording. The system also successfully presents activity realization data through a dashboard that displays achievement summaries, charts, detailed tables, and activity detail modals. The Black Box Testing results show that 33 out of 33 test scenarios were successfully completed, resulting in a 100% success rate. The UAT results show that 50 out of 50 scenarios involving Operator OPD, Verificator, Leader, and Admin actors were successfully completed, resulting in a 100% user acceptance rate. Therefore, SIPDA is considered capable of addressing system design needs, dashboard-based information presentation, and functional and feasibility testing in accordance with the operational needs of the institution.

Keywords: Activity Monitoring, Laravel, Rapid Application Development (RAD), Audit Log, SPBE.