

Diah Triana Sanjaya. 2025. Pengembangan Sistem Informasi Manajemen Pembelajaran Kejuruan Berbasis Web di SMK Negeri 2 Bangkalan. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura. Dosen Pembimbing: Nuru Aini, S.Kom., M.Kom.

ABSTRAK

SMK Negeri 2 Bangkalan mengalami hambatan dalam penerapan sistem informasi secara optimal. Proses pencatatan presensi dan jurnal guru yang masih dilakukan secara manual menyebabkan ketidakteraturan serta keterlambatan informasi. Penelitian ini bertujuan untuk merancang dan menguji sistem informasi manajemen pembelajaran kejuruan berbasis web guna mempermudah pengelolaan presensi guru dan jurnal guru secara efisien, sebagai pengganti metode manual yang rawan kelalaian pengisian dan kehilangan data. Metode yang digunakan dalam penelitian ini ialah *Research and Development* dengan pendekatan model *waterfall*. Tahapan model ini meliputi analisis kebutuhan, perancangan sistem, implementasi, pengujian, dan pemeliharaan. Sistem diuji berdasarkan standar ISO 25010 pada aspek *functional suitability*, *performance efficiency*, dan *maintainability*. Hasil dari pengujian pada aspek *functional suitability* dengan rata-rata 98%, aspek *performance efficiency* sebesar 1,1 detik, aspek *maintainability* menunjukkan bahwa sistem memiliki kemampuan pemeliharaan dan pengembangan yang baik, dan aspek *usability* sebesar 97%. Berdasarkan hasil tersebut, sistem informasi manajemen pembelajaran kejuruan berbasis web dinyatakan sangat layak untuk diterapkan di SMK Negeri 2 Bangkalan karena memberikan kemudahan akses serta pengelolaan data presensi dan jurnal guru secara digital yang lebih terorganisasi.

Kata Kunci: ISO 25010, Jurnal, Presensi, Sistem Informasi, SMK Negeri 2 Bangkalan, *Waterfall*

Diah Triana Sanjaya. 2025. Development of a Web-Based Vocational Learning Management Information System at SMK Negeri 2 Bangkalan. Bachelor Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, University of Trunojoyo Madura. Supervisor: Nuru Aini, S.Kom., M.Kom.

ABSTRACT

SMK Negeri 2 Bangkalan experienced obstacles in the optimal implementation of information systems. The process of recording teacher attendance and journals, which is still conducted manually, has caused irregularities and delays in information delivery. This study aims to design and evaluate a web-based vocational learning management information system to facilitate efficient management of teacher attendance and journals, as a replacement for the manual method that is prone to input errors and data loss. The method used in this study is Research and Development with a waterfall model approach. The stages of this model include requirement analysis, system design, implementation, testing, and maintenance. The system was tested based on the ISO 25010 standard on the aspects of functional suitability, performance efficiency, and maintainability. The results of the testing on the functional suitability aspect showed an average of 98%, the performance efficiency aspect recorded a load time of 1.1 seconds, the maintainability aspect indicated that the system has good maintainability and scalability, and the usability aspect reached 97%. Based on these results, the web-based vocational learning management information system is considered highly feasible to be implemented at SMK Negeri 2 Bangkalan because it provides ease of access and more organized digital management of teacher attendance and journal data.

Keywords: Attendance, Information System, ISO 25010, Journal, SMK Negeri 2 Bangkalan, Waterfall