

ABSTRAK

Learning Management System (LMS) atau Sistem Manajemen Pembelajaran merupakan perangkat lunak yang dirancang untuk mendukung proses pembelajaran daring berbasis internet. Sistem ini berperan penting dalam memfasilitasi kegiatan belajar-mengajar di lingkungan digital melalui pengelolaan materi, aktivitas, serta evaluasi pembelajaran secara terstruktur. UPN “Veteran” Yogyakarta mengembangkan LMS berbasis daring bernama Spada Wimaya, yang merupakan pengembangan dari *platform* sebelumnya untuk mendukung pelaksanaan pembelajaran jarak jauh secara lebih efektif dan efisien. Namun berdasarkan hasil pra-survei ditemukan beberapa kelemahan yang disampaikan oleh responden, seperti stabilitas sistem, penanganan *error*, dan keamanan. Oleh karena itu penelitian ini bertujuan untuk mengevaluasi kualitas sistem informasi manajemen pembelajaran Spada Wimaya di UPN “Veteran” Yogyakarta.

Penelitian ini bertujuan untuk mengevaluasi kualitas LMS Spada Wimaya berdasarkan standar ISO/IEC 25010, yang mencakup delapan karakteristik kualitas perangkat lunak, yaitu *functional suitability*, *performance efficiency*, *compatibility*, *usability*, *reliability*, *security*, *maintainability*, dan *portability*. Pengujian dilakukan melalui observasi dan evaluasi langsung menggunakan berbagai alat uji untuk memperoleh hasil yang objektif.

Hasil evaluasi menunjukkan bahwa sistem Spada Wimaya telah memenuhi lima dari delapan karakteristik kualitas sesuai standar ISO/IEC 25010, yaitu *functional suitability* dengan nilai satu, *compatibility* dengan skor 100%, *usability* dengan skor 82,13%, *maintainability* yang memenuhi aspek identifikasi Land, serta *portability* dengan skor 100%. Namun, karakteristik *performance efficiency* memperoleh nilai rata-rata D, *reliability* mencapai 92% yang masih di bawah batas minimal yaitu 95%, dan *security* berada pada level tiga (*high*), belum memenuhi standar minimal level satu (*low*). Oleh karena itu, disarankan adanya peningkatan pada aspek *performance efficiency*, *reliability*, dan *security* agar sistem Spada Wimaya dapat sepenuhnya memenuhi seluruh kriteria kualitas yang ditetapkan dalam ISO/IEC 25010.

Kata Kunci: Sistem Manajemen Pembelajaran, ISO/IEC 25010, Evaluasi Kualitas Sistem

ABSTRACT

A Learning Management System (LMS) is software designed to support online learning processes via the internet. It plays a crucial role in facilitating teaching and learning activities in a digital environment by managing learning materials, activities, and assessments in a structured manner. UPN “Veteran” Yogyakarta has developed an online learning management system called Spada Wimaya, an enhanced version of its previous platform aimed at improving the effectiveness and efficiency of distance learning. However, based on preliminary survey results, several issues were identified by respondents, including system stability, error handling, and security concerns. Therefore, this study aims to evaluate the quality of the Spada Wimaya learning management system at UPN “Veteran” Yogyakarta.

This study evaluates the quality of Spada Wimaya based on the ISO/IEC 25010 software quality standard, which encompasses eight characteristics: functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability. The evaluation was conducted through direct observation and testing using multiple analytical tools to obtain objective results.

The findings indicate that Spada Wimaya meets five out of the eight ISO/IEC 25010 quality characteristics: functional suitability with a score of 1, compatibility with 100%, usability with 82.13%, maintainability fulfilling the identification aspect, and portability with 100%. However, performance efficiency received an average grade of D, reliability achieved 92%, which is below the minimum threshold of 95%, and security was rated at level three (high), falling short of the minimum acceptable level one (low). Therefore, improvements in performance efficiency, reliability, and security are recommended to ensure that the Spada Wimaya system fully meets the software quality standards defined in ISO/IEC 25010.

Keywords: *Learning Management System, ISO/IEC 25010, System Quality Evaluation*