

ABSTRAK

Penelitian ini bertujuan merancang dan membangun Sistem Informasi *Safety Walk and Talk* berbasis web untuk mendukung pelaporan temuan *safety* dan 5S pada PT XYZ. Proses pelaporan sebelumnya masih menggunakan komunikasi dan media yang terpisah sehingga menyebabkan kesulitan dalam pemantauan status, penyimpanan dokumentasi, penelusuran riwayat, dan penyusunan rekap laporan. Analisis permasalahan dilakukan menggunakan metode PIECES, sedangkan pengembangan sistem menerapkan metode Waterfall dengan pemodelan UML. Sistem dibangun menggunakan PHP 8.2, Laravel 11, MySQL, HTML, CSS, dan JavaScript. Fitur sistem meliputi pembuatan laporan, unggah dokumentasi, penugasan PIC, pembaruan status, pencatatan penyelesaian, riwayat laporan, pencarian dan filter data, dashboard, pengelolaan data master, serta ekspor laporan. Pengujian dilakukan menggunakan black box testing dan User Acceptance Testing terhadap 11 responden yang mewakili seluruh aktor sistem. Hasil black box testing menunjukkan bahwa seluruh fungsi utama berjalan sesuai kebutuhan. UAT memperoleh skor aktual sebesar 905 dari skor ideal 1.100 atau sebesar 82,27% dengan kategori sangat sesuai. Pengukuran berdasarkan enam aspek PIECES juga memperoleh persentase keseluruhan sebesar 82,27%, dengan nilai tertinggi pada aspek Information and Data sebesar 83,18%. Hasil tersebut menunjukkan bahwa sistem telah sesuai dengan kebutuhan pengguna dan mampu mendukung proses pelaporan, pemantauan, penyelesaian, pengelolaan dokumentasi, serta penyajian informasi secara lebih terstruktur dan terintegrasi.

Kata kunci: *Safety Walk and Talk*, sistem informasi berbasis web, PIECES, User Acceptance Testing, Waterfall.

ABSTRACT

This study aims to design and develop a web-based Safety Walk and Talk Information System to support the reporting of safety and 5S findings at PT XYZ. The previous reporting process relied on separate communication channels and media, which caused difficulties in monitoring report status, storing documentation, tracking report history, and preparing report recapitulations. The problems were analyzed using the PIECES framework, while the system was developed using the Waterfall method and UML modeling. The system was implemented using PHP 8.2, Laravel 11, MySQL, HTML, CSS, and JavaScript. Its features include report creation, documentation uploads, PIC assignment, status updates, completion records, report history, data search and filtering, dashboards, master data management, and report export. Testing was conducted using black-box testing and User Acceptance Testing involving 11 respondents representing all system actors. The black-box testing results showed that all main functions operated according to the defined requirements. The UAT obtained an actual score of 905 out of an ideal score of 1,100, resulting in 82.27%, which was categorized as highly appropriate. The evaluation based on the six PIECES aspects also obtained an overall percentage of 82.27%, with the highest score recorded in the Information and Data aspect at 83.18%. These results indicate that the system meets user needs and supports a more structured and integrated process for reporting, monitoring, resolving findings, managing documentation, and presenting information.

Keywords: *Safety Walk and Talk, web-based information system, PIECES, User Acceptance Testing, Waterfall.*