

ABSTRAK

STUDI KELAYAKAN SISTEM INFORMASI BERBASIS WEB DALAM MANAJEMEN KEGIATAN PRAKTIKUM PADA LABORATORIUM JURUSAN ILMU KOMPUTER

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Evaluasi kelayakan sistem informasi laboratorium menunjukkan bahwa sistem layak diimplementasikan dengan nilai rata-rata 7.328, meskipun aspek ekonomi mendapat nilai tidak layak (5) akibat keterbatasan dana. Analisis menggunakan pendekatan TELOS dan PESTEL mengidentifikasi kesiapan perangkat keras, kesiapan sumber daya manusia, serta kesesuaian regulasi sebagai faktor pendukung utama, sementara tantangan utama mencakup keterbatasan anggaran, kapasitas penyimpanan sistem, dan ketiadaan pendanaan eksternal. Untuk mengatasi kendala tersebut, strategi optimalisasi sumber daya, pencarian pendanaan tambahan, pemantauan kapasitas penyimpanan, serta penerapan standar keamanan dan kepatuhan perlu diterapkan. Pengembangan sistem direncanakan berlangsung selama 3-6 bulan, dengan target utama 4 bulan, agar implementasi dapat berjalan secara efektif dan berkelanjutan, memberikan manfaat maksimal bagi lingkungan laboratorium.

Kata kunci : Evaluasi Kelayakan, Sistem Informasi Laboratorium, TELOS, PESTEL

ABSTRAK

FEASIBILITY STUDY OF A WEB-BASED INFORMATION SYSTEM IN PRACTICAL ACTIVITY MANAGEMENT IN COMPUTER SCIENCE DEPARTMENT LABORATORY

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The feasibility evaluation of the laboratory information system indicated that the system was feasible to implement with an average score of 7.328, although the economic aspect received a score of 5 due to funding limitations. The analysis using the TELOS and PESTEL approaches identified hardware readiness, human resource readiness, and regulatory compliance as key supporting factors, while key challenges included budget limitations, system storage capacity, and the lack of external funding. To address these constraints, resource optimization strategies, seeking additional funding, monitoring storage capacity, and implementing security and compliance standards were implemented. System development was planned for 3-6 months, with a target of 4 months, to ensure effective and sustainable implementation, providing maximum benefits to the laboratory environment.

Keywords: Feasibility Evaluation, Laboratory Information System, TELOS, PESTEL