

ABSTRAK

Hanifah, Lika (2026), *Perencanaan Strategis Sistem Informasi dan Teknologi Informasi di SMA N 1 Singaraja Berbasis Ward and Peppard dan COBIT 2019*. Tesis, Ilmu Komputer, Program Pascasarjana, Universitas Pendidikan Ganesha.

Tesis ini sudah disetujui dan diperiksa oleh Pembimbing 1: I Gede Aris Gunadi, S.Si., M.Kom. dan Pembimbing II: Dr. Ir. I Made Gede Sunarya, S.Kom., M.Cs.

Kata kunci: COBIT 2019, Perencanaan Strategis SI/TI, SMA Negeri 1 Singaraja, Tata Kelola SI/TI, Ward and Peppard.

Penelitian ini bertujuan untuk menyusun perencanaan strategis Sistem Informasi dan Teknologi Informasi (SI/TI) di SMA Negeri 1 Singaraja menggunakan *framework Ward and Peppard* serta mengevaluasi tata kelola SI/TI menggunakan kerangka kerja COBIT 2019. Penelitian ini menggunakan metode *mixed methods* dengan pendekatan *sequential exploratory* yang menggabungkan metode kualitatif dan kuantitatif secara berurutan. Subjek penelitian meliputi kepala sekolah, wakil kepala sekolah, tim pengembang informatika, tenaga administrasi, guru, dan pihak lain yang terlibat dalam pengelolaan SI/TI. Data dikumpulkan melalui observasi, wawancara, dokumentasi, dan kuesioner *capability level* COBIT 2019. Tahap penelitian diawali dengan analisis kondisi eksisting organisasi, bisnis, dan SI/TI menggunakan *framework Ward and Peppard* melalui analisis SWOT, PEST, *Value Chain*, *Porter's Five Forces*, *Critical Success Factors* (CSF), dan *McFarlan's Strategic Grid* untuk mengidentifikasi kebutuhan strategis SI/TI. Hasil analisis tersebut selanjutnya digunakan sebagai dasar penentuan ruang lingkup evaluasi tata kelola SI/TI menggunakan COBIT 2019 pada domain APO02 (*Managed Strategy*), APO03 (*Managed Enterprise Architecture*), APO06 (*Managed Budget and Costs*), dan APO07 (*Managed Human Resources*) melalui analisis *capability level* dan *gap analysis*. Berdasarkan hasil analisis dan evaluasi tersebut disusun strategi bisnis SI, strategi TI, strategi manajemen SI/TI, portofolio aplikasi, serta *roadmap* implementasi SI/TI yang selaras dengan visi, misi, dan tujuan organisasi sekolah. Hasil penelitian menunjukkan bahwa pemanfaatan SI/TI telah mendukung proses akademik dan administrasi sekolah, namun masih terdapat kelemahan pada aspek integrasi sistem, dokumentasi tata kelola, pengelolaan anggaran, dan kompetensi sumber daya manusia. Evaluasi menggunakan COBIT 2019 menunjukkan bahwa domain APO02 dan APO07 berada pada *capability level* 2 (*Managed Process*), sedangkan domain APO03 dan APO06 berada pada *capability level* 1 (*Performed Process*). Berdasarkan hasil tersebut, direkomendasikan peningkatan *capability level* menuju level 3 melalui penyusunan standar operasional prosedur, penguatan dokumentasi tata kelola, peningkatan pengelolaan anggaran, pengembangan kompetensi sumber daya manusia, serta penyempurnaan *arsitektur enterprise*. Disimpulkan bahwa integrasi *framework Ward and Peppard* dan COBIT 2019 mampu menghasilkan perencanaan strategis SI/TI yang selaras dengan kebutuhan organisasi serta memberikan rekomendasi peningkatan tata kelola SI/TI secara berkelanjutan.

ABSTRACT

Hanifah, Lika (2026). Strategic Planning of Information Systems and Information Technology at SMA N 1 Singaraja Based on Ward and Peppard and COBIT 2019. Thesis, Computer Science, Postgraduate Program, Ganesha University of Education.

This thesis has been reviewed, examined, and approved by Supervisor I, I Gede Aris Gunadi, S.Si., M.Kom., and Supervisor II, Dr. Ir. I Made Gede Sunarya, S.Kom., M.Cs.

Keywords: COBIT 2019, Information Systems and Information Technology Strategic Planning, IT Governance, SMA Negeri 1 Singaraja, Ward and Peppard.

This study aims to develop a Strategic Information Systems and Information Technology (IS/IT) Plan for SMA Negeri 1 Singaraja using the Ward and Peppard method and to evaluate IS/IT governance using the COBIT 2019 framework. The study employed a mixed methods approach with a sequential exploratory design, integrating qualitative and quantitative methods in sequence. The research participants included the principal, vice principal, information technology development team, administrative staff, teachers, and other stakeholders involved in IS/IT governance. Data were collected through observations, interviews, documentation, and a COBIT 2019 capability level questionnaire. The research began with an analysis of the organization's current business and IS/IT conditions using the Ward and Peppard method, incorporating SWOT analysis, PEST analysis, Value Chain analysis, Porter's Five Forces, Critical Success Factors (CSF), and McFarlan's Strategic Grid to identify strategic IS/IT requirements. The results of this analysis were then used to determine the scope of the IS/IT governance evaluation using COBIT 2019, focusing on the APO02 (Managed Strategy), APO03 (Managed Enterprise Architecture), APO06 (Managed Budget and Costs), and APO07 (Managed Human Resources) domains through capability level assessment and gap analysis. Based on the analysis and evaluation results, business IS strategy, IT strategy, IS/IT management strategy, an application portfolio, and an IS/IT implementation roadmap aligned with the school's vision, mission, and organizational objectives were developed. The findings indicate that IS/IT has supported the school's academic and administrative processes; however, weaknesses remain in system integration, governance documentation, budget management, and human resource competencies. The COBIT 2019 evaluation revealed that the APO02 and APO07 domains achieved Capability Level 2 (Managed Process), while the APO03 and APO06 domains remained at Capability Level 1 (Performed Process). Based on these findings, improvements toward Capability Level 3 are recommended through the development of standard operating procedures, strengthening governance documentation, improving budget management, enhancing human resource competencies, and refining the enterprise architecture. It is concluded that integrating the Ward and Peppard method with the COBIT 2019 framework produces an IS/IT strategic plan that aligns with organizational needs while providing recommendations for the continuous improvement of IS/IT governance.