

ABSTRACT

The rapid growth of digital transformation in the education sector drives higher education institutions to adopt the Smart Classroom concept as a means to enhance the quality of learning services, making them more effective, flexible, and integrated. However, implementing Smart Classroom still faces several challenges, particularly in the area of sustainable IT service management that aligns with institutional needs. This study aims to design a technical implementation guide for Smart Classroom using the mapping approach from ITIL V3 to ITIL 4, supporting the management of modern, adaptive, and value-driven IT services. The research employs literature review, business process analysis, and validation through case studies of implementation within higher education environments. The results produce an integrated Smart Classroom Framework based on ITIL mapping, which supports the entire service lifecycle, including planning, service delivery, monitoring, and continuous improvement. The guide emphasizes the integration of technology, data, processes, and people as part of the Internet of Everything (IoE) ecosystem to support both hybrid and digital learning environments. Implementation evaluations demonstrate increased service effectiveness, operational efficiency, and user satisfaction toward the Smart Classroom services. This guide is expected to serve as a practical reference for educational institutions in implementing Smart Classroom systematically, measurably, and aligned with sustainable IT service management standards.

Keywords— IoE, Smart Classroom, ITIL, Panduan