

ABSTRACT

The development of information technology encourages higher education institutions to adopt integrated systems to improve the efficiency and effectiveness of academic services. Likewise, Telkom University's Faculty of Industrial Engineering (FRI) Laboratory faces challenges in managing room and asset loans that are still done manually with Excel, making it vulnerable to data inaccuracy, information delays, and lack of loan validation. This research aims to design an Enterprise Resource Planning (ERP) based information system using the Odoo open-source platform, especially the Meeting Rooms and Approvals modules, and the Quickstart method as a guide to system design to manage room and laboratory asset loans more effectively and efficiently. The results of black box testing show that almost all the main functions of the system run according to the scenario. However, the usability testing results show that the user satisfaction level is only 46%, which means that the system is not fully effective, efficient, and satisfying from the user's point of view. This study concludes that the designed system has almost fulfilled the basic functionality of the software, but still requires improvement in terms of integration between modules and simplification of process flow to meet the needs of the laboratory. Even so, this study shows the potential of information technology in improving student services and laboratory operations. With continued implementation and proper improvements, the system is expected to be fully implemented to become an integrated solution in the management of laboratory rooms and assets.

Keywords—ERP, Odoo, Quickstart, Room and Asset Loan Management