Abstract

The Learning Management System (LMS) has become a central platform supporting the learning process at Telkom University. However, challenges persist in motivating students to complete courses comprehensively, thereby achieving optimal learning outcomes. This research aims to enhance user motivation within the LMS through the implementation of gamification using the Mechanics, Dynamics, Aesthetics (MDA) framework, rooted in motivational design from the Attention, Relevance, Confidence, Satisfaction (ARCS) model. The study delves into the design of gamification features using the MDA framework based on the motivational design of the ARCS model. The test results indicate that all participants were able to complete assigned tasks without significant obstacles. The tables depicting usability testing and TAM evaluation results demonstrate that the utilization of gamified LMS yields improvements in Perceived Ease of Use (PEU), Perceived Usefulness (PU), and Attitude Toward Technology (AT). A comparison with the results of testing the LMS before gamification shows an escalation across all TAM categories, with an average improvement of 0.8. In conclusion, through gamification design informed by TAM analysis, user motivation within the LMS experiences a noteworthy enhancement. The testing, utilizing the ARCS model and MDA framework, provides evidence that gamification implementation can contribute to a more engaging and effective learning experience.

Keywords: Learning Management System, gamification, Mechanics-Dynamics-Aesthetics (MDA) framework, Attention-Relevance-Confidence-Satisfaction (ARCS), user motivation, TAM evaluation.