ABSTRACT

PO Rajawali Project is one of heavy equipment rental companies. One of leased heavy equipment is Kobelco SK200 Excavator. Kobelco SK200 is machine that most often rented by customers. With high frequency of rentals and usage, this machine often gets damaged. In order to be able to reused, corrective maintenance activities need to be carried out on damaged components. Problems arise when in corrective maintenance activities still depend on mechanics who are more skilled and only certain mechanics that can perform corrective maintenance activities on certain machines. Documentation regarding corrective maintenance activities from expert mechanics is needed. It is useful to assist mechanics in learning process of corrective maintenance activities so the mechanics do not need to depend on expert mechanics.

The purpose of this study is to create e-Learning content design for corrective maintenance activities. Method that used is SECI and ADDIE. SECI method is used to design e-Learning content while ADDIE is used to create e-Learning applications using moodle platform.

The results that obtained in this study are design of e-Learning contents in form of best work guidelines on corrective maintenance activities of undercarriage component damage of Kobelco SK200 Excavator. The content design was obtained from process of exploring knowledge and brainstorming results from two speakers, namely senior mechanics and senior assistants.

From evaluation stage, it can be seen that average of respondents quiz value increased after the use of e-Learning. Based on Paired T Test at 5% real level, it was concluded that the use of e-Learning was able to improve mechanical competence in corrective maintenance activities. For further research, should add study objects and speakers so the content that produced is more complete.

Keywords: Corrective maintenance, e-Learning, SECI, ADDIE, moodle