ABSTRACT

Maintenance is an integral activity of the business processes in PT Dirgantara Indonesia including the DMU 100 monoBLOCK Deckel Maho machine. However, the implementation of corrective maintenance activities are often late. This condition occur due to the limited amount of maintenance performers who has the ability to perform maintenance activities on this machine. Limitations due to corrective maintenance activities are carried out only based on individual experience and tacit knowledge of each maintenance performers without any written guidelines documents. Maintenance performers also handle more than one machine, so that DMU 100 monoBLOCK Deckel Maho machine has to queue for repairing. Whereas in the absence of production machines, the company can't get optimal business value. Low levels of knowledge transfer resulted in a low-maintenance performers knowledge sharing in the Maintenance Department. This condition can leads PT DI lost knowledge when expert employees retire or left the company for some other reasons.

This study uses SECI method to convert tacit knowledge of the parties involved in the activities of corrective maintenance of DMU 100 monoBLOCK Deckel Maho machine. In socialization stage, data exploration, interview, also tacit and explicit knowledge identification from each activity are done toward performer maintenance and other experts (as key persons). The result from converting tacit knowledge into explicit knowledge later in the stage of externalization it was being documented as a process flow document. In combination stage, best practice is selected by using several tools: Delphi method in determining criteria, AHP method in weighing each criteria and factor rating method in rating best practice. The best practice that has highest rating will be selected as the best one. In internalization stage, information about best practice is delivered to performer maintenance.Best practice not only facilitates the process of knowledge transfer and knowledge sharing among maintenance performers, but also being input for designing storyboard e-learning content in order to facilitate the learning process among maintenance performers, including for new maintenance performers.

Results of this study are that the best practices of corrective maintenance activities on DMU 100 monoBLOCK Deckel Maho machine (form of process flow document) for the following failure: coolant fluids damage and Alarm ENDAT Defective 100Z. All selected best practice are derived from the best practices of 2nd maintenance performers with score 5.00 of 5.00 for both maintenance of failure. Then the storyboard itself is designed into three categories, including machine system, maintenance course, and quiz for learning evaluation.

Keywords: corrective maintenance, knowledge transfer, SECI, best practice, storyboard