ABSTRACT

Process both preventive maintenance and corrective maintenance machine at PT Indonesian Aerospace especially in Maintenance Department has knowledge which is shaped as an experience of mechanic which is useful for the maintenance process for the next period. Experience of the mechanic is still a tacit knowledge that is stored in the minds of mechanics theirself and it can be easily lost if not documented properly. Therefore, it is necessary to documenting knowledge through knowledge conversion from tacit knowledge to explicit knowledge. Explicit knowledge has been well documented that it can be used as a learning tool for others mechanic in Maintenance Department.

Knowledge conversion process using the SECI method which consists of four stages: Socialization, externalization, Combination, and Internalization. At socialization stage conducted interviews to take mechanic's knowledge possessed in Maintenance Department regarding assembly spindle bearing and repairing cross roll bearing process on Toshiba BMC 100 (5) machine. Knowledge gained from the interview process were documented in the form of tacit knowledge into explicit knowledge in the form of guidance procedure. Brainstorming is done to look for best practice of assembly spindle bearing and repairing cross roll bearing guidance procedure on Toshiba BMC 100 (5) machine. Best practice guidance procedure maintenance in the form of explicit knowledge is converted into tacit knowledge through FGD form.

Results of this study are based on a storyboard which is made from engine maintenance best practice processes that will be used as e-learning content. E-learning is used as a learning tool for mechanic regarding the business process engine maintenance at the Department Maintenance PT Indonesia Aerospace in the next period.

Keywords: best practices, brainstorm, e-learning, explicit knowledge, storyboards, tacit knowledge.