ABSTRACT

The economic foundation movement of industrial era into the knowledge era has involved the project PT LEN Railway System which operates in the construction of the railway signaling project. The movement occurs in the process of project planning company that is still in the form of tacit knowledge (experience) that workers will be lost when the worker is not in the company again. Therefore, the conversion of knowledge worker is needed; particularly for the worker who still has a tacit knowledge into documented knowledge in the form of explicit knowledge, as of the knowledge is stored in the company.

In this research, the project planning at PT LEN Railway System will create the SOP of best practice from each activity. Those activities are creating WBS, determining the project schedule, project costing, supplier selection, project design manufacture and procurement. This research uses SECI method (Socialization, Externalization, Combination, Internalization). In socialization stage, data exploration is done toward workers regarding business, and tacit and explicit knowledge from each activity. The result from data exploration of converting tacit knowledge into explicit knowledge is then documented in externalization stage. In combination stage, best practice from the activity is selected by using several tools: Delphi method in determining criteria, AHP method in weighing each criteria and factor rating to rate best practice. The best practice later will be combined with activity process from PMBOK. In internalization stage, information about best practice is delivered to the employees.

The results from the combination of best practice with the activity of the PMBOK will become a reference for company to make the SOP for each project planning activities. Best practice that selected from the result of factor rating calculation obtain following create WBS is the best practice from second respondent with score 8,710, for determine project schedule is the best practice from second respondent with score 8,067, for determine project cost is the best practice from third respondent with score 9,554, for supplier selection is the best practice from first respondent with score 8,330, for create project design is the best practice from first respondent with score 8,368 and for procurement is the best practice from first respondent with score 8,195.

Keywords: Knowledge management, SECI method, Knowledge conversion