“Workload Analysis to Determine the Optimal Number of Employees and Employee Competency Mapping Based on Job Description (Case Study: Department of Industrial Engineering, ITS, Surabaya)”

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ABSTRACT

Workload should be borne in an organizational unit, it is closely related to the efficiency and the effectiveness of a company. This is because the workload that included in the arrangement of human resources is a critical resource in the company. Many ways to do in terms of the efficiency of human resources, one of them is to optimize the number of employees in order to perform the activity properly. ITS, as one of the well known universities in Indonesia, is also not free of workload problems. The existence of four statutes changes and adjustments on the Organization and Governance (OTK), making the ITS must reform the bureaucracy and reform the organizations to develop ITS. This resulted in many changes to job description made by the existing fields in the ITS, including who becomes the object of this study, Department of Industrial Engineering ITS, so the workload borne by every employee in every field does not match with the number of employees in that field own. Therefore we need an analysis of workload measurement to determine the optimal number of employees that should be required by each field. In this study, will be used methods by KEP/75/M.PAN/7/2004 and NASA-TLx. Both
methods will be incorporated into a calculation that combines both methods to determine the optimal number of employees. In this calculation will use the variables X and Y in the form of the physical workload and mental workload values to search for Z, the coefficient of the workload. The calculation showed that there were excessive workload on the office secretary majors, head of sub-section, paymaster, purchasing clerk, personnel officer, and academic staff. Moreover, in this study was also conducted competency mapping of employees based on job description and classification of competencies in accordance with the classification level KKNI. The results of this mapping is the competence required at each position.

**Keywords:** workload, mental workload, the optimal number of employees, the calculation of workload per job, NASA-TLx, competency mapping of employees, KKNI.