ABSTRACT

This research focuses on the improvement and design of practicum SOP in Industrial Engineering Laboratory, Faculty of Industrial Engineering Telkom *University. The problem in this study is the practicum procedure that applies from* the Quality Assurance Unit is not in accordance with the implementation of practicum in the Industrial Engineering Laboratory and practicum procedures have not referred to ISO 9001: 2015 which in its application must consider the risks to minimize and reduce excessive corrective action so that first risk mitigation can be performed. Therefore, the purpose of this study is to establish the risk register and to improve and design the Practical SOP in accordance with clause 8.6 of ISO 9001: 2015. The data collected in this study are existing conditions, data on potential risks, organizational structure, job description, ISO 9001: 2015 requirements and Telkom University academic guidelines for 2015. Existing conditions are compared to the requirements of ISO 9001: 2015 so that gaps are obtained. The actual condition data in the form of potential internal and external negative risk data is processed using risk assessment to be documented in the form of risk register. Then do the design process with input gap result and risk register. The results of the process design are improved with the business process improvement method with the step to apply improvement technique. The result of this research is the improvement and design of SOP of practicum which has fulfilled ISO 9001: 2015, gap, and risk register.

Keyword: ISO 9001:2015, Practicum, Risk Register, Business Process Improvement, Standard Operating Procedure.