## **ABTRACT**

The Occupational Health and Safety Management System (WHS3) is an indispensable part of the labor protection system to avoid the risk of loss in order to create effective and efficient performance. CV. XYZ is an industry that is moving into manufacturing, where there are 13 sections on the production floor involving conventional machinery and 1,000 workers involved. In implementing its Occupational Health and Safety Management System (SMK3), CV. XYZ has taken concrete steps by performing risk management in planning, evaluating, and carrying out improvement actions each period at the beginning of the year. However, even though CV.XYZ has implemented its risk management process, there are still recurring risks identified in risk management, and there are new risks that have not been identified within risk management. The risks were found in the third quarter of 2023 based on the findings in person. Which means that the risk management applied is still ineffective. It can be caused by unfulfilled plans with actual conditions. One way to complete it is to do risk register planning by doing risk register business process planning proposals, process approval through Standard Operating Procedures (SOPs), and the real-time risk register report interface dashboard model. The topic of this final task focuses on risk registry planning. The gap analysis of stakeholder needs is done against existing risk management processes to find the weaknesses of existing business processes, and the planning is based on improvements using the Business Process Reengineering (BPR) method supported by the fulfillment of the PDCA cycle against the planning proposal. The final outcome of this final task is a risk register planning proposal supported by process approval using Standard Operating Procedure (SOP), and an additional output is the design of a real-time risk register report interface dashboard model. SOP planning is carried out as a guideline for relevant stakeholders to implement the risk registration process. In addition, SOPs are intended for also as documents held as assets the company. The risk register design and the real-time risk register report dashboard interface model aim to make it easier for stakeholders to perform risk management, especially on risk documentation activities that have not been previously enforced by the company and monitoring of risk management that have been planned in real time. By doing so, risk register planning is expected to improve the efficiency of the risk management process because risk documenting, mitigation action planning, and risk management monitoring are carried out in real-time.

Keywords: K3 Management System (SMK3), Risk Register, Business Process Reengineering, Effective and Efficient