

ABSTRACT

Along with the phenomenon of decline in oil prices drastically in February 2016 to the lowest level since 1990. This phenomenon occurs because of the oil production at the level of overproduction. Many oil and gas companies are now aggressively doing efficiency to realize the stability of the company, both costs and resource efficiency made the company can survive in a situation where the decline in revenue. In the process of implementation, the company refers to the activity of enterprise supply chain that fully describes the company operationally. There are a variety of disorders that occur in the process of supply chain resulted in disruption to the operational activities are not the realization of cost efficiency. In a previous study noted that the oil and gas industry supply chain risk is the risk that a very significant effect on the micro and macro economics.

PetroChina International Companies in Indonesia is one of the companies engaged in the Upstream Oil and Gas Industry. During the operational activity, an interruption in the supply chain each year who are able to threaten business continuity. Thus the need for a supply chain risk management aims to ensure the stability of the company's business.

In this research, analysis and supply chain risk mitigation actions using House Of Risk (HOR) model. The model is a form of the development of a method of Failure Mode and Effect Analysis (FMEA) and Quality Function Deployment (QFD). The results of the analysis as well as risk mitigation actions undertaken to minimize the impact of losses caused by events such risks proactively with cost efficiency.

From the analysis identified 21 risk events that occur during the process of the supply chain, and there are 18 risk agents which triggers risks. Nine of them belong to the category of priority risk agents which showed that the risk of the agent has a share of 78.39% of the overall risks that may be experienced by the company. To overcome these priority risk agents found seven risk mitigation actions that the company can do to minimize the impact to the company.

Keywords: House Of Risk (HOR), Oil and Gas Industry, Operations Management, Supply Chain Risk Management.