

Managing uncertainty in supply chain management of vessel chartering in oil & gas industry

ABSTRACT

Uncertainty is a condition that needs to be dealt with by Supply Chain Management (SCM) in many organization. The factors that contributed to the uncertainty have to be understood in order to manage it in the best and practical ways. Uncertainty in an Oil & Gas firm propagates through the supply chain network including vessel sourcing activities that involved offshore transportation and installation activities. It is important to have a sustainable and reliable vessel supply in supporting offshore activities. Therefore, this paper presents the analysis of uncertainty in supply chain management process of vessels in the Oil & Gas Industry. This research is conducted by analysing quantitative data from vessel sourcing database focuses on uncertainty recorded from January to August 2012. It has been found that, the major causes of uncertainty is due to the unavailability of vessel with 51% of causes of uncertainty recorded. This is due to the increment of vessel utilization from year 2011 to 2012. However the uncertainty can be appropriately managed by implementing product departmentalization instead of customer departmentalization which is currently practiced by the firm under study. It can be concluded that, there are four factors that contributed to uncertainty which are vessels availability, project management plan, project requirement, and vendor reliability.

Keyword: Strategic sourcing; Uncertainty; Vessel chartering