

ABSTRAK

Pertamina Hulu Energi *West Madura Offshore* (PHE WMO) sebagai anak perusahaan Pertamina Hulu Energi (PHE) merupakan salah satu tulang punggung untuk produksi Minyak dan gas Indonesia. *Warehouse operation dan Material Distribution atau biasa di sebut WOMD*, merupakan bagian dari *SCM (Supply Chain Management) Department* di PHE WMO, Hasil evaluasi didapatkan bahwa biaya operasional WOMD merupakan tertinggi ke 2 di *SCM (Supply Chain Management) department* khususnya adalah biaya *Material handling* (bongkar muat material). Untuk itu langkah-langkah efisiensi perlu dilakukan dan WOMD mengadopsi system *Cross Docking*. Penelitian ini bertujuan untuk mengetahui dan mengkaji keefektifan implementasi metode *Cross Docking* dan mengetahui perbandingan biaya operasional Biaya *Cross Docking* dan *Non Cross Docking*.

Penelitian ini menggunakan menggunakan metode Komparasi yang di lakukan di Divisi Warehouse Operation dan Material distribution PT Pertamina Hulu Energi *West Madura Offshore* – Lamongan Shorebase dengan sampel data material handling dari tahun 2017-2019.

Hasil Penelitian memperlihatkan bahwa terdapat perbedaan yang significant antara besarnya biaya operasional dengan menggunakan metode *Cross Docking* dan Metode *non-Cross Docking*. Dengan menerapkan metode *Cross Docking WOMD Department* bisa menghemat biaya Operasional kurang lebih 80-81 % per tahun khususnya biaya Material Handling. Selain itu juga dengan penerapan metode *Cross Docking* juga bisa menurunkan resiko HSSE karena dengan metode *Cross Docking* ini ada aktifitas yang berpotensi terjadi kecelakaan dapat dihilangkan.

Kata Kunci: *Cross Docking*, biaya operasional, *warehouse*

ABSTRACT

Pertamina Hulu Energi West Madura Offshore (PHE WMO) as a subsidiary of Pertamina Hulu Energi (PHE). It is one of the main supporters of Indonesia's oil and gas production. Warehouse operation and Material Distribution (WOMD) is part of the SCM (Supply Chain Management) department at PHE WMO. Evaluation results show that WOMD operational costs are the second-highest in the SCM (Supply Chain Management) department, specifically the material handling costs. Therefore, efficiency measures are needed to be taken and WOMD requires adopting a cross docking system. This study aims to determine and assess the effectiveness of the implementation of the cross docking method and determine the comparison of the operational costs of cross docking and non cross docking.

This study used a comparative method carried out at Warehouse Operation and Material distribution division in the PT Pertamina Hulu Energi West Madura Offshore - Lamongan Shorebase with the samples of material handling data from 2017-2019.

The results show that there was a significant difference between the number of operational costs using the cross docking and the non cross docking method. The application of the WOMD Department Cross docking method can save Operational costs of approximately 80-81% per year, especially the cost of material handling. Besides, the implementation of the cross docking method can also reduce Health and Occupational Safety (K3) risks since the activities that have the potential to cause accidents can be eliminated such as loading unloading activities in the warehouse area, open yards due to material, equipment sent by vendors or suppliers directly brought to ships that will take to offshore do not need to be dismantled in the warehouse or open yard.

Keywords: Cross Docking, Operational Costs, Warehouse

