ABSTRAK

ANALISIS *SUPPLY CHAIN* PADA SISTEM PRODUKSI *HULL OF CONSTRUCTION* DI DIVISI KAPAL NIAGA PT PAL INDONESIA (PERSERO)

Penelitian ini ditujukan untuk memodelkan dan menganalisis kinerja *supply chain* pada sistem produksi *hull of construction* Divisi Kapal Niaga PT PAL Indonesia (Persero), dan untuk mengetahui faktor penyebab ketidakoptimalan serta merekomendasikan upaya peningkatan kinerja *supply chain*. Adapun metoda penelitian yang digunakan ini mengacu pada *Supply Chain Process Standards and Reference Models* (SCOR model) versi 12.0. Alat analisis yang digunakan untuk memberikan rekomendasi adalah SCOR *process,* SCOR *performance*, *benchmarking*, diagram *fishbone*, serta *business process re-engineering.*

Berdasarkan hasil penelitian, ditemukan bahwa kinerja *supply chain* Departemen Konstruksi Lambung DKN PT PAL Indonesia (Persero) berdasarkan aspek ketepatan (*reliability*) terhadap kuantitas, waktu, dan kualitas dan disertai dokumentasi yang akurat dan lengkap hanya dicapai sebesar 75,78% berada di bawah target strategis perusahaan yakni 100%, sedangkan berdasarkan aspek kecepatan (*responsiveness*) yang bermula dari proses pengadaan hingga proses pengiriman menuju *work centre* berikutnya adalah sebesar 243,13 hari yang melebihi 63,13 hari dari target strategis perusahaan. Adapun penyebab ketidakoptimalan tersebut disebabkan berbagai faktor antara lain, (1) adanya keterlambatan kedatangan material dan *equipment* pada proses pengadaan, (2) revisi desain kapal yang menyebabkan *rework pada proses fabrikasi*, (3) kerusakan mesin, (4) terjadinya deformasi material dan keterbatasan ruang kerja *assembly* dan *sub assembly*, dan (5) tidak tersedianya sumber daya manusia yang kompeten disebabkan tenaga kerja organik ditugaskan pada proyek lain dan kurangnya kompetensi yang dimiliki tenaga kerja kontrak. Adapun rekomendasi upaya perbaikan yang dapat dilakukan berdasarkan *business process re-engineering* adalah dengan melibatkan proses dan fungsi *quality control* disetiap proses *supply chain* sehingga dapat meminimalisir kendala yang terjadi dan meningkatkan kinerja *supply chain* dan proyek.

Kata Kunci : *benchmarking, business process re-engineering*, diagram *fishbone*, *hull of construction,* SCOR Model, kinerja *supply chain*, proyek.

ABSTRACT

ANALYSIS OF CHAIN SUPPLY IN PRODUCTION SYSTEM
HULL OF CONSTRUCTION IN NIAGA SHIP DIVISION
PT PAL INDONESIA (PERSERO)

This study is aimed at modeling and analyzing supply chain performance in the hull of construction production system of the PT PAL Indonesia (Persero) Commercial Ship Division, and to determine the factors that cause un optimal and recommend efforts to improve supply chain performance. The research method used refers to the Supply Chain Process Standards and Reference Models (SCOR model) version 12.0. The analytical tools used to provide recommendations are the SCOR process, SCOR performance, benchmarking, fishbone diagrams, and business process re-engineering.

Based on the results of the study, it was found that the supply chain performance of the DKN Hull Construction Department of PT PAL Indonesia (Persero) based on the aspect of reliability to quantity, time and quality and accompanied by accurate and complete documentation was only reached 75.78% below the target the company's strategy is 100%, while the speed aspect (responsiveness) starts from the procurement process until the delivery process to the next work center is 243.13 days which exceeds 63.13 days from the company's strategic target. The causes of these optimizations were due to various factors, among others, (1) the delay in the arrival of materials and equipment in the procurement process, (2) revision of the ship design that caused rework in the fabrication process, (3) engine damage, (4) material deformation and limitations assembly and sub assembly workspaces; and (5) the unavailability of competent human resources caused by organic workforce assigned to other projects and the lack of competency of contract workers. The recommendations for improvement efforts that can be made based on business process re-engineering are by involving quality control processes and functions in each supply chain process so as to minimize the constraints that occur and improve the supply chain and project performance.

Keywords: benchmarking, business process re-engineering, fishbone diagram, hull of construction, SCOR model, supply chain performance, project.