

**PENERAPAN *LEAN WAREHOUSING* DALAM *BUSINESS*
PROCESS IMPROVEMENT UNTUK MENINGKATKAN
EFEKTIVITAS OPERASIONAL PADA DEPARTEMEN
FINISHED GOODS PT. XYZ**

Bunga Hardiyana Putri

ABSTRAK

Departemen Finished Goods PT XYZ masih menghadapi berbagai pemborosan yang menyebabkan proses operasional kurang efisien, seperti waktu tunggu, aktivitas pemeriksaan berulang, dan pencatatan stok secara manual. Penelitian ini bertujuan mengidentifikasi pemborosan, menganalisis akar penyebabnya, serta menyusun usulan perbaikan proses bisnis melalui penerapan konsep Lean Warehousing. Metode yang digunakan meliputi Value Stream Mapping (VSM), Waste Relationship Matrix (WRM), Value Stream Analysis Tools (VALSAT), Process Activity Mapping (PAM), dan Fault Tree Analysis (FTA). Hasil penelitian menunjukkan bahwa process waste merupakan pemborosan yang paling dominan dengan skor WRM sebesar 40 (17.09%). Analisis PAM mengidentifikasi 14 aktivitas yang terdiri atas 9 value added, 2 necessary non-value added, dan 3 non-value added, dengan aktivitas waiting supervisor check, supervisor check, dan product checking sebagai aktivitas yang dieliminasi. Perbaikan menghasilkan penyederhanaan business process, rancangan Kanban, serta pengembangan web reporting untuk mendukung pengendalian operasional. Berdasarkan validasi bersama manajemen, usulan perbaikan dinilai sesuai dengan kebutuhan operasional. Usulan tersebut mampu meningkatkan efisiensi proses sebesar 16,94% peningkatan value added, mengurangi aktivitas yang tidak bernilai tambah, serta mendukung pengelolaan gudang yang lebih efektif.

Kata kunci: *Lean Warehousing, Business Process Improvement, Waste, Continuous Improvement, Finished Goods.*

IMPLEMENTATION OF LEAN WAREHOUSING IN BUSINESS PROCESS IMPROVEMENT TO ENHANCE OPERATIONAL EFFECTIVENESS IN THE FINISHED GOODS DEPARTMENT OF PT XYZ

Bunga Hardiyana Putri

ABSTRACT

The Finished Goods Department of PT XYZ continues to experience various forms of waste that reduce operational efficiency, including waiting time, repetitive inspection activities, and manual inventory recording. This study aims to identify waste, analyze its root causes, and develop business process improvement proposals through the implementation of the Lean Warehousing concept. The research employed Value Stream Mapping (VSM), Waste Relationship Matrix (WRM), Value Stream Analysis Tools (VALSAT), Process Activity Mapping (PAM), and Fault Tree Analysis (FTA). The results indicate that process waste is the most dominant type of waste, with a WRM score of 40 (17.09%). PAM analysis identified 14 activities, consisting of 9 value-added activities, 2 necessary non-value-added activities, and 3 non-value-added activities. The eliminated activities were waiting for supervisor approval, supervisor inspection, and product checking. The proposed improvements include business process simplification, the design of a Kanban system, and the development of a web-based reporting system to support operational control. Based on validation with the company's management, the proposed improvements were considered appropriate for operational requirements. The implementation of these proposals is expected to improve process efficiency by increasing value-added activities by 16.94%, reducing non-value-added activities, and supporting more effective warehouse management.

Keywords: *Lean Warehousing, Business Process Improvement, Waste, Continuous Improvement, Finished Goods.*