



ABSTRAK

Penelitian ini bertujuan untuk mengidentifikasi dan menganalisis pemborosan dalam proses operasional gudang di Nirmala Supermarket yang menyebabkan ketidakefisienan pengiriman produk dan mengganggu pemenuhan permintaan pasar. Evaluasi difokuskan pada aktivitas transportasi barang, bongkar muat, inspeksi, alokasi produk, hingga proses *loading*. Pendekatan yang digunakan adalah *value stream mapping (VSM)* untuk memetakan aktivitas operasional dan *waste assessment model (WAM)* untuk menganalisis keterkaitan antar jenis pemborosan. Hasil penelitian menunjukkan bahwa *non-value-added (NVA)* pada proses *inbound* dan *outbound* dapat diminimalkan melalui penerapan digitalisasi, otomatisasi, dan penataan ulang proses.

Beberapa rekomendasi perbaikan yang diusulkan mencakup digitalisasi dokumen, penggunaan teknologi *barcode* dan *RFID*, optimalisasi tata letak area penyimpanan, serta implementasi alat bantu seperti *conveyor* dan *lift* hidrolik. Dengan implementasi tersebut, *NVA* dalam aktivitas *inbound* dan *outbound* dapat berkurang secara signifikan, meningkatkan efisiensi operasional gudang dan memastikan kelancaran distribusi barang ke Nirmala Supermarket.

Kata Kunci: Pengelolaan Gudang, *Lean Warehousing*, *VSM*, *WAM*, Nirmala Supermarket



ABSTRACT

This study aims to identify and analyze inefficiencies in warehouse operations at Nirmala Supermarket that hinder product deliveries and disrupt market demand fulfillment. The evaluation focuses on activities such as goods transportation, unloading, inspection, product allocation, and loading processes. The research employs value stream mapping (VSM) to map operational activities and the waste assessment model (WAM) to examine the interrelations between different types of waste.

The findings reveal that non-value-added (NVA) activities in inbound and outbound processes can be significantly reduced through the adoption of digitalization, automation, and process reorganization. Key recommendations include digitizing documentation, utilizing barcode and RFID technologies, optimizing storage area layouts, and implementing tools such as conveyors and hydraulic lifts. These measures are expected to substantially decrease NVA activities, enhance warehouse operational efficiency, and ensure smooth distribution of goods to Nirmala Supermarket.

Keywords: *Warehouse Management, Lean Warehousing, VSM, WAM, Nirmala Supermarket*