

ABSTRACT

PT Wirontono Baru is a company engaged in shrimp processing, with its main products being perishable items. Large-scale storage requires a warehouse as a temporary holding facility and a distribution center for inventory. To ensure optimal warehouse functionality, an efficient layout is needed to maximize capacity and minimize material handling distances. The main problem addressed in this research is the inefficiency of the existing cold storage layout, which still uses a random storage system, leading to longer product retrieval times and reduced operational efficiency. This study aims to optimize the storage layout of finished goods by applying the Shared Storage method and the Cube per Order Index (COI) approach. The Shared Storage method allows flexible placement of goods based on space needs and product movement, while COI is used to prioritize storage locations based on product volume and activity frequency (throughput). Validation was conducted by comparing the existing and proposed layouts in terms of travel distance and storage capacity. The results show that the proposed layout can reduce the total travel distance from 1,474.9 meters to 1,195.5 meters and increase storage capacity from 302 pallets to 320 pallets..

Keyword: *Warehouse layout, perishable product, cold storage, shared storage, Cube per Order Index (COI).*