DETERMINATION OF FREQUENCY OF PRODUCT RELOCATION IN WAREHOUSE: CASE STUDY IN A LOGISTICS COMPANY

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ABSTRACT

Warehouse has a significant effect on costs in supply chain. For products with short life cycles or high fluctuation of demand, the costs of the warehouse can be reduced by changing the position of the products in the warehouse periodically. Changes were made based by the consideration of the product’s demand to the position of the I/O (input/output) door because it will minimize the material handling cost which plays a significant role in the total cost in warehouse. However, if the changes are too frequent, it will also have an impact to the higher relocation cost. In this research, it determined the optimum frequency which minimizes the relocation and material handling costs. Research conducted in PT. X which serves the storage of electronic products. There are three scenarios that were evaluated in 20 months, they are once, twice, and four times relocation. The results showed that among the three scenarios, the frequency of four times relocation or once in every five months, is an optimal frequency for warehouse relocation in PT. X because it has the minimum cost.

Key words: Material Handling Cost, Relocation Cost, Total Cost in Warehouse, Frequency of Relocation, Warehouse, Fluctuative Demand, Relocation.
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