

ABSTRACT

Warehousing has a critical role in supply chain management and is becoming increasingly more important. The objective of warehouse layout design is to optimize warehouse functions and achieve maximum efficiency and space utilization. The implementation of redesign layout by using racking system is one technique to improve existing warehouse layout in warehouse no. 2 in term of the space utilization to increase storage capacity and increase picking efficiency to achieve greater effectiveness and efficiency of warehouse operations.

The purpose of this research is to enhance knowledge and awareness of a layout design that will help the researcher understand Yusen's warehouse operation process. This research presents the result from the data analysis and identifies the problems that the company has been facing and proposes of possible improvements for warehouse efficiency. The secondary data was basically obtained from historical data of company which can support the study. The primary data was mainly gathered from the observation of actual work in the warehouse operation. Tools such as warehouse operation process map-receiving & putting away and loading, inbound & outbound material flow, the relevant data for analyzing the cause of problems are used to understand existing warehouse operation processes. Moreover, an interview with Logistics General Manager was conducted to review the current situation of Yusen Company, the current warehouse layout design, warehouse operation process flow, customer requirement, the critical issues in depth details and objective to achieve future targets.

At the end of the research, the researcher provided guidelines and recommendations for implementation of warehouse redesign by installing the racking system. The new layout design was able to increase potential improvement in term of optimize space, increasing picking efficiency and increasing profit of the company from racking investment.