DESIGNING INVENTORY CONTROL DECISION SUPPORT SYSTEM FOR EMPTY CONTAINERS

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ABSTRACT

Movement of containers from one port to another port is one of the important factors that should be controlled in a shipping company engaged in container systems, given the role that also has contributed to the company's costs. This study developed decision making tool for the inventory control problem of empty container so each container terminals. Empty container logistics is an important resource and every shipping company tries to operate and manage empty containers efficiently. Because there is an imbalance between the activities of the port, the empty containers must be repositioned periodically from surplus areas to. However, it is not easy to completely forecast demand of empty container, therefore it is necessary to build an efficient way to reposition empty containers. This paper consider the area that lacked empty containers and proposean efficient inventory policies to control the empty container inventory.

To fulfill the demand, repositioning empty containers from the container terminal and also consider renting empty container from the other party with zerolead time. For therental of containers, empty containers mustbe returned to the tenant after the specified period. Then the design of decision aids applied to several scenarios, including the use of secondary data.

Keywords: Empty Containers, Inventory Management, Inventory Policy, Decision Support System.