

## **Container Inventory Management: Factors influencing Container Interchange**

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### **ABSTRACT**

Efficient and effective management of empty containers and empty container repositioning is an important issue in the liner shipping industry. Many alliance agreements of carriers have provisions to interchange containers but not practiced in real life scenario. It is hard to find any previous literature on container exchange except the technical details of alliance agreements. The researchers reiterate the conditions provided in carriers' alliance agreements to interchange containers and in principle recommend container interchange as an efficient and effective container inventory management mechanism. Accordingly, the research attempts to find the factors that influence container interchange between carriers. The research was conducted in Sri Lanka. Researchers believe that the sample is adequate because 16 container carriers in the world top 20 list presently call port of Colombo in Sri Lanka. A series of interviews followed by a questionnaire survey have been carried out and data were analysed mainly using Chi-Square Tests. This would lead to understand the critical factors that influence container exchange and thereby develop efficient, sustainable and effective mechanism for container inventory management through container interchange. The study concluded that five factors namely, operational, legal, branding, benefits, and feasibility may influence the container interchange by carriers. There were two limitations noted in the research; the reluctance to provide information pertaining to container inventory by carriers; and the common dislike of carriers to participate in surveys due to their busy work schedules. These findings would help practitioners to expedite the process of developing a user-friendly container interchange system. In addition, this research will fill the serious gap in the present literature on container exchange and provide an incentive to further research on this topic. The container imbalance is a global issue and finding an efficient and effective solution is vital.

**Key words: container, inventory, management, shipping, maritime, exchange**