

Critical Factors for Berth Productivity in Container Terminal

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Abstract

Globalization has led to the increasing importance of port performance and the awareness of the high-value industry for container terminals leads competitiveness of container terminals to keep high fiercely. In regard to competitive factors of container terminals, the most important point among several factors is seemed to be the speed of container loading and unloading on quayside. In container terminals in Asia, the berth productivity is an important concept in measuring performance and also shows big differences even though its condition is similar to each terminal.

The objective of this paper is to compare the Korea and China mega-container terminals to find the relationship and order of critical factors for berth productivity, which is dependent upon the capability, quantity of quay crane, transfer vehicle, and so on.

For this purpose, this research has researched related literatures and collected data about Korea and China major container terminals. Furthermore, this research tested sensitive analysis to evaluate the extent of berth productivity by changing independent variable. And then this research has established the regression model to evaluate which factor has had the biggest impact on productivity. The results of this study will give terminal operators guideline to improve berth productivity.