

Title

Container Terminal Operations and Scalability: Efficiency means Quality

Abstract

Increasing containerization and competition among seaport container terminals have become quite remarkable in worldwide international trade. Operations are nowadays unthinkable without effective and efficient IT use and appropriate optimization (management science and operations research) methods. We describe and classify the main logistics processes and operations in container terminals and survey methods for their optimization. In advanced terminals automation plays a major role. However, one has to strike a proper balance regarding various degrees of automation versus manual operations. Moreover, we extend towards recent challenges going beyond pure operations but considering global competition on various levels.

Keywords

Container Terminals, Automation, Scalability, Operations
Research, Shipping Companies, Computational Logistics.