

OLS02

Benchmarking Ocean Carrier Performances in the Post-Pandemic Era

Hokey Min

Bowling Green State UniversityPerrysburg, Bowling GreenPerrysburg, Ohio, USA

Abstract

Reeling from the global supply chain crisis created by the COVID-19 pandemic, the maritime industry still faces multifaceted challenges for its survival. Those challenges include shifts in trade routes, congestion at major seaports, container shortages, volatility in fuel prices, the scarcity of skilled maritime labor, and potential technical glitches stemming from digitized maritime operations. To help the maritime industry handle these challenges, this paper identifies major drivers and deterrents that affect the efficiency of ocean carriers' performances over time using two different versions of data envelopment analysis (DEA) models and the Malmquist Productivity Index (MPI). After evaluating the operating efficiencies of multinational ocean carriers across the globe over extended periods (pre- and post-pandemic periods), we developed a benchmark standard that can guide best-in-class maritime practices.

Conference Track

Operations, Logistics and Supply Chain Management