

LITERATURE SURVEY

Date	19 September 2022
Team ID	PNT2022TMID12562
Project Name	Project - Traffic and Capacity Analytics for Major Ports

Team Members:

KALAIVANI C (717819P315)

DHANUSHIKA P (717819P307)

KALAIVATHI M (717819P316)

TARUN SUNDAR K (717819P342)

Paper 1: A systematic Analysis of Port Capacity Literature: Trends and Future Research Avenues

Publication year: 31 January, 2021

Author name: Secil-Guelmez

Journal name: Journal of maritime transport & logistics

Summary:

The continuous growth in the world economy, technology, and the population still shapes the industrialization patterns. This massive progress has also shaped the international transportation requirements. Ports, as the one of the important infrastructure in international transportation and supply chains, have been pushed by these changes in terms of structuring their capacities to satisfy the demand. To do this, this study adopted a systematic literature review and content analysis together. The result of this study showed that the most attractive topics are service level and performance in main category.

Paper-2: Performance analysis of major ports in India: A quantitative approach

Publication year: January, 2016

Author name: Anindita-Mandal

Journal name: International Journal of Business Performance Management

Summary:

The paper examines the performance of 13 major ports of India in respect of key operational performance indicators. Following rapid economic growth India's share in international trade is escalating. This puts increased pressure on these ports, which handle a substantial portion of the trade to perform with optimal efficiency. The study presents a systematic analysis of different performance indicators for a 10 year time period (2003 to 2013) using a variety of statistical methods and evaluates status of each port in different categories of performance.

Paper 3: Analytics for Decision Making at Ports

Publication year: October ,2015

Author name: Mrinal Kumar Dasgupta

Journal name: publishing India

Summary:

Ports serve as an important link in global supply chain. The Indian Union has endeavoured to invest on major ports of the country to meet up to the global standards. The major ports lost its share to the minor ports under the state governments. This paper an attempt has been made to identify the dimensions of port performance and the causality between the dimensions. It chooses to take average turn roundtime (ATRT) as an indicator of port performance. The paper proposes an analytical framework to identify the causality that would aid the decision makers.

Paper-4: Towards Analytics-Enabled Efficiency Improvements in Maritime Transportation: A Case Study in a Mediterranean Port

Publication year: 21 June ,2019

Author name: Pierluigi Zerbino

*Journal name: Department of Energy, Systems, Territory and
Construction Engineering*

Summary:

The current digitalization trend, the increased attention towards sustainability, and the spread of the business analytics call for higher efficiency in port operations and for investigating the quantitative approaches for maritime logistics and freight transport systems. Process mining enabled enhancements in the overall export time length, which might improve the vessels' turnover and reduce the corresponding operational costs, and supported the potential re-design of performance indicators in process control and monitoring.

Paper 5: Dimensions of the Port Performance: A Review of Literature

Publication year: 25 August ,2020

Author name: Bucak, U., Basaran

Journal name: Journal of ETA Maritime Science

Summary:

The port performance has frequently been studied in the academic literature, and the first studies on the subject are focused on financial or operational dimensions. However, today, port performance has become multi-dimensional due to the changing roles of the ports to its stakeholders, and the fact that local competition has been replaced by global competition through continuously developing routes, etc. Within this study, it is aimed to determine each dimension of the port performance concept which had been handled as a multi- dimensional process in recent years in literature. So, the concept of port performance had been divided into four basic dimensions which are operational, financial, sustainable, and logistics.