LITERATURE SURVEY

Domain   **:** Data Analytics

Project Title   **:** Traffic and Capacity Analytics for Major Ports

Project Group Name **:** Traffic and Capacity Analytics for Major   Ports 24Gp

Team Id   **:** PNT2022TMID40200

Team Members   : A.shri saran , S.balavingesh , R.bagavathi, M.arunraj

PAPER-1: PERFORMANCE ANALYSIS OF MAJOR PORTS IN INDIA: A QUANTITATIVE APPROACH.

Publication year   : January, 2016

Author   : Anindita-Mandal

Summary : The performance of 13 significant Indian ports is examined in the report with regard to important operational performance indicators. India's participation in global trade is growing as a result of its rapid economic expansion. This increases the strain on these ports, which handle a sizable amount of the commerce, to operate as efficiently as possible. The study examines the state of each port in various performance categories by conducting a systematic analysis of various performance indicators over a 10-year period (from 2003 to 2013).

PAPER-2: ENHANCING PORT ACTIVITIES USING INFORMATION AND COMMUNICATION TECHNOLOGY.

Publication year   : April,2020

Author   : Shuhong Peng, Junaid Quair

Summary : The topic of this essay is how to employ technological improvements to enhance port services and operations. The goal is to provide a comprehensive study of the limited research on smart ports with a focus on the role of ICT (Information and Communication Technology). A few of the port services that are optimised by smart port management include commodity inspection, customs clearance, transportation planning, procedures, and applications, customer service, market information exchange, and insurance provisioning. It has been

suggested to use IoT platforms to build a networked and collaborative platform that enables information sharing among various hardware and infrastructures in order to install smart applications.

PAPER-3: CONCENTRATION ANALYSIS OF CONTAINER TERMINALS IN INDIA.

Publication year   : July,2021

Author name   : K.Chandrasekhar Iyer, V.P.S.N.Nanyam

Summary : This article investigates India's container terminals' propensity for reconcentration. India's container terminals have grown by 46% in the last five years, and since 2015, they have grown by 9% annually. To take advantage of the underutilised capacity at container terminals, efforts to modernise equipment and digitise processes have been made. This has led to a rise in the use of container terminals across the nation. In terms of the growth share matrix over the underconsideration period, the Adani International Container Terminal (AICT) has emerged as the top performer. analyses India's container terminals' tendencies toward reconcentration.

PAPER-4: AN INTEGRATED BERTH ALLOCATION AND YARD ASSIGNMENT PROBLEM FOR BULK PORTS: FORMULATION AND CASE STUDY.

Publication year   : August,2015

Author name   : Jasem Al-Hammadi and Ali Diabat

Summary : As a result of the effects of globalisation during the past 10 years, maritime transportation has seen remarkable growth. The rapidly growing demand for commodities supplied by water has led to a lot of attention being paid to improving port efficiency by encouraging the efficient use of available resources. Optimization is crucial in achieving the economical goal of improving port efficiency as opposed to the pricey alternative of increasing existing capacity. The integrated dynamic hybrid berth allocation and yard assignment problem is examined in the context of bulk ports in the current research (BYAP). Key ideas are taken into account in order to construct an usable and realistic model.

PAPER-5: FROM HISTORICAL POSITIONING DATA TO UNSUPERVISED MARITIME TRAFFIC MONITORING.

Published year   : May,2017

Author Name   : Virginia Fernandez Argudas,Giuliana Pallota,Michele Vespe

Summary : Due to the high volume of maritime traffic and its consequences on the economy, ecology, safety, and security, a system that can monitor maritime traffic without supervision is required. An automated method for creating synthetic maritime traffic is suggested in this research. The primary goal of marine surveillance is to make it possible to automatically monitor, analyse, and comprehend nautical activity. To improve the MSA, the proposed technique is utilised to analyse, model, and depict large amounts of marine traffic data (Maritime Situational Awareness). Creates a network-based picture of maritime traffic by analysing past self-reporting positioning data. The representation of maritime traffic using self-reporting data has been addressed by a number of ways. They are spatio-temporal techniques and spatial-grid approaches, respectively. Anomaly identification, scenario forecasting, and real-time automated maritime traffic monitoring have been completed.