

TRAFFIC AND CAPACITY ANALYTICS FOR MAJOR PORTS

Problem Statement

- ✓ The Indian Railways has a capital base of about Rs. 1 lacs crores and is often referred to as the lifeline of the Indian economy.
- ✓ As it includes transportation of bulk freight and long-distance passengers, traffic and congestion on rail corridors becomes a major challenge.
- ✓ Data analytics can be applied to visualize freight transportation and congestion on rail corridors across major railway ports to get better insight of the working of port network and to improve the port connectivity.

Project Objectives

- ✓ To plot different charts for the given problem and develop efficient dashboard through IBM Cognos Analytics.
- ✓ To visualize distribution of capacity and traffic for major ports.
- ✓ To improve the efficiency in transportation of freights and passengers across major ports based on rail corridor congestion analysis.
- ✓ To easily track the ports and improve port connectivity.

Project Outcomes

- ✓ To develop analytics dashboard that can be used to track the freight movement patterns across major ports.
- ✓ It can be used to visualize the capacity and to ensure less traffic on the ports.
- ✓ It helps predict delays at the ports due to congestion and makes supply chain efficient.

Project Flow

- ✓ IBM Cloud account creation
- ✓ Working on IBM Cognos Analytics – understanding ports data, loading data, processing data and plotting different visualization plots
- ✓ Building models to predict congestion in ports for the users.
- ✓ Creating meaningful dashboard.