

PROJECT TITLE : **Traffic and Capacity Analytics for Major Ports**

Project Design Phase-I - Solution Fit

Define CS, fit into

Focus on J&P, tap into BE, understand

Identify strong TR & EM

1 CUSTOMER SEGMENT(S)

CS

- 1.Main benefit will be to Central Government who runs Indian Railways
- 2.The Company which frequently uses their means of transport of their goods

6 CUSTOMER CONSTRAINTS

CC

As Indian railway is a Backbone of our economy Its so important to analyse those, It is difficult to keep track of traffics in those major ports

5. AVAILABLE SOLUTIONS

AS

There were introduced different types of Interlocking devices
Manual Interlocking : Human , Mechanical , Telematics , Relay
Automatic Interlocking : Free-wired relay , Electronic.

Outage of interlocking system could cause collision
ERTMS – common signaling and communication system
has two types

ETCS
(European Train Control System) (ATP)
GSM-R
(Global System for Mobile Communications - Railway)
Any of these solution were not efficient enough

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Port-rail connectivity is a strategic element of port development, both in economic and competitive terms and to reduce negative externalities on people and the environment

Data analytics can help reducing the congestion on rail corridors and improving port connectivity.

9. PROBLEM ROOT CAUSE

RC

- 1.Delay in transporting goods
2. Loss for Industries

7. BEHAVIOUR

BE

The Customer is the one who send their goods in train they need to know whether it will reach the place safely
They need the creditability on Indian railways which help in growth for both

3. TRIGGERS

TR

Increased traffic led to need of analyzing the capacity and traffic in major ports

4. EMOTIONS: BEFORE / AFTER

EM

4.1 BEFORE

They felt insecure about their goods

4.2 AFTER

They felt Secure and safely Transportation

10. YOUR SOLUTION

SL

Our Idea is to ask the details of their product and start destination with their given details

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

Customer can track their goods using GPS which ensure proper functioning

8.2 OFFLINE

After the product is reached their required destination Customer will be informed through a normal message which does 't required any network

Explore AS,

Focus on J&P, tap into BE, understand

Extract online & offline CH of