# **PROJECT DESIGN PHASE -1**

# PROBLEM SOLUTION FIT

Date	30 SEPTEMBER 2022
Team ID	PNT2022TMID16033
Project Name	Smart Solutions for Railways using IOT
Maximum Marks	2 Marks

# **Problem Solution Fit:**

#### 1. CUSTOMER SEGMENT(S)

All Indian Railways Passengers

### 6. CUSTOMER CONSTRAINTS

Only one QR can be generated for one ticket. Customers are not allowed to recreate QR code.

### 5. AVAILABLE SOLUTIONS

Currently tickets are verified manually by cross checking ticker no, name etc...

Train location can find manually

### 2. PROBLEMS

Smart Solutions for railways is designed to reduce the work load of the user, also the use of paper and to improve the usability of ticket maintenance.

#### 9. PROBLEM ROOT CAUSE

The main root cause is to find originality of the ticket by verifying manually and also finding train current location.

### 7. BEHAVIOUR

This method will perform actively in ticket counters and it also used to find location of the train.

Verification of the ticket will become easier.

## 3. TRIGGERS

Users may trigger while booking a ticked, get a QR code, tracking train location.

# 4. EMOTIONS : BEFORE / AFTER

**Before:** Customers may feel difficult in finding train details **After:** They can easily find train details, locations etc.

## 10. YOUR SOLUTION

Our project is to develop user friendly webpage and to generate QR code for each ticket and also find the location of the train by using that QR code.

## 8. CHANNELS OF BEHAVIOUR

**Online:** By booking tickers in online by entering all the data's of the passengers will be stored in database. Code is to find the location of the train.

**Offline:** Verification of the tickets will be easy to find the originality.