# <u>PROJECT DESIGN PHASE – I</u>

# **Problem Solution fit**

**Team ID: PNT2022TMID13934** 

**Project Name**: Smart Solutions for Railways using IOT

## 1. CUSTOMER SEGMENT(S)

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES

CL

## 5. AVAILABLE SOLUTIONS PROS & CONS

Passenger

CS, fit into

PR, tap into BE, understand

Government

Customer can access only to book a seat through application using mobile phones or pc from anywhere.

Online web application to book the train tickets

QR code is generated once ticket is booked.

In web application we can be able to track the live location and arriving time of the train.

### 2. PROBLEMS / PAINS + ITS FREQUENCY

PR

9. PROBLEM ROOT / CAUSE

RC

7. BEHAVIOR + ITS INTENSITY

Most of the People are traveling without booking their ticket

No Proper Guidance in the Online booking Website

No live status updation about the train in which the passengers are traveling

To spend long time to book a ticket in station

Passengers are not properly verified before entering into train

Detects the motion of the passenger and tally that count with the Number of tickets booked.

# 3. TRIGGERS TO ACT



Proper checking of their respective ticket before entering the platform.

GPS Tracking is set available to track the location of the train.

## 4. EMOTIONS BEFORE / AFTER



Before - Irritated, Confused

After – Satisfied.

### 10. YOUR SOLUTION



Passenger need to be at the railway station 15 minutes prior for authenticate themselves with generated QR code to get access for their journey and with the same QR code passenger can verify their details with ticket collector or checker. From this railway management can prevent the ticketless travel.

### 8. CHANNELS of BEHAVIOR



They can able to track the location of train

#### OFFLINE

Scan the QR code in the ticket to verify the information.

Based on the passenger counts the automated doors are opened.

Identify strong TR & EM