

# PROBLEM-SOLUTION FIT

## 1. Customer Segment

The passengers travelling in the train

## 6. Customer Limitations

- Health Concern
- Safety and Comfort
- Timing Concerns

## 5. Available Solution

Emergency train stopping  
Location updation in stations

## 2. Problems/Pains

- Existing ticket checking methods must be made contactless
- The train location tracking must be made more accurate
- More automations can be brought in trains

## 9. Problem Root Cause

The investment in improving railway sectors is less and also research in this area is limited

## 7. Behaviour

Directly related: The comfort and safety of people. Saves a lot of waiting time  
Indirectly related: Reduces the manpower involved and makes railways computer based

## 3. Triggers to Act

Seeing people without tickets. Making people aware of the best of automation

## 4. Emotions

Before: Frustration, Unsatisfied

After: Happy, feeling safe and secure

## 10. Your Solution

- To enable QR based ticket verification
- To track and update the live location of all the trains using GPS module
- To increase smart facilities in railways

## 8. Channels

During their journey in the train