Project Design Phase-I Proposed Solution

Date	09 OCTOBER 2022
Team ID	PNT2022TMID16776
Project Name	IOT Based Smart solutions for railways

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Keep track of passengers and schedule their journey accordingly • Information about the route cancellation of tickets ,departure time , arrival time ,number of trains available and other such information. • Store and retrieve information about the various transactions related to rail travel. • Mostly railway gates are operated manually by labours this can be digitalized by automatic gate system.
2.	Idea / Solution description	• . Smart sensors can be used to track important assets, manage passenger flow, and enable predictive maintenance. • IoT devices can also monitor the driver's behaviour and can inform about the driving style and idling time. • The railway gates are operated by automatic gate system.
3.	Novelty / uniqueness	The uniqueness of our proposed paper is that it helps railways successfully manage passengers safety ,operational efficiency and passenger experience.

4.	Social Impact / customer satisfaction	Information regarding train arrival and departure time, no of trains available, train current location makes the customer more satisfied.
5.	Business Model (Revenue Model)	It is the cheapest mode of transportation and attracts many customers.
6.	Scalability of the Solution	• Iot sensors, vibration and temperature sensor, rail crossing sensors , rail friction sensor , obstacle detecting sensor. • These sensors are used for safety and greater reliability .Thus by this proposed solution we can avoid rail line crossing deaths ,monitor rail friction , detect obstacles and track maintenance.