

**Project Proposed Solution Template**  
**Design Phase-I**

|               |                            |
|---------------|----------------------------|
| Date          | 19.11.2022                 |
| Team ID       | PNT2022TMID36261           |
| Project Name  | Smart solution for Railway |
| Maximum Marks | 2 Marks                    |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | Smart Solutions for railways is designed to reduced the work load of the user and also the use of paper.   |
| 2.    | Idea / Solution description              | <p>A Web page is designed for the public where they can book tickets by seeing the available seats.</p> <p>After booking the train, the person will get a QR code which has to be shown to the Ticket Collector while boarding the train.</p> <p>The ticket collectors can scan the QR code to identify the personal details.</p> <p>A GPS module is present in the train to track it. The live status of the journey is updated in the Web app continuously</p> <p>All the booking details of the customers will be stored in the database with a unique ID and they can be retrieved back when the Ticket Collector scans the QR Code.</p> |
| 3.    | Novelty / Uniqueness                     | Transportation systems are complex with respect to technology and operations due to the involvement of a wide range of human actors, organisations and technical solutions. There is a need to apply intelligent computerised systems for the operation and control of such complex environments, such as computerised traffic control systems for coordinating advanced transportation.   |

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| 4. | Social Impact / Customer | These technologies have brought numerous |
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|    | Satisfaction                   | benefits for both passengers and operators. With connectivity continuing to boom and smart ticketing firmly on the government's transport agenda, there's undoubtedly more to come on this front. The industry needs to be mindful, however, of the impact that the 'appification' of rail transport is having on the relationship between operators and passengers, and take steps to ensure that the digitisation of services does not come at the expense of good customer service. |
| 5. | Business Model (Revenue Model) | Optimisation solutions allow rail operators to model scenarios and transform information and insights in to action with automated decisions for speed, accuracy and consistency, and a rapid payback and measurable ROI.   |
| 6. | Scalability of the Solution    | The implementation of digital technologies will lead to operational efficiency, cost benefits, higher customer value, and faster and better services in the railway sector. Integrated security, predictive maintenance, and asset management are a few of the new areas of technology deployment.   |