**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID44624 |
| Project Name | Project - Sign with smart connectivity for better road safety |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The problem statement for road safety today road disaster and harrowing of value lives in road accident is commonly in india . keeping this view arranging "Road safety awareness program " in different places. |
|  | Idea / Solution description | Oizom Weathercom is a smart device to be used at accident-prone zones on the roads and highways. The intelligent road sensors monitor critical parameters like road visibility, road surface temperature, and rainfall in real-time. Oizom Polludrone needs to be installed at crossroads, tunnels and multi-level parking facilities to monitor vehicular emission. Weathercom and Polludrone push the real-time data obtained to the Oizom cloud. The top-speed limit is calculated based on weather speed index. The dynamic speed limit is then served to the drivers in the form of push notifications through maps, and Visual Messaging Displays. Effective vehicular route management is performed in case of higher pollution levels. Tunnel and parking ventilation are automated based on the pollution level. |
|  | Novelty / Uniqueness | Using new technology such as smart traffic light and traffic control systems, artificial intelligence, the use of telematics and automotive technology can contribute to prevent and reduce the number of road related accidents and improve road safety. Mobile network and fast data transmission solutions can be used, for instance, to collect data on vehicles on the road and condition of roads, as well to provide real-time weather information and warnings. Ultimately with the objective of reducing accidents.  Attended by over 80 government officials, experts and business leaders from China and the Asia-Pacific region to exchange best practices and ideas on how technology can be applied to enhance road safety. The conference focused on China's road safety and innovative digital solutions to reducing traffic casualties. |
|  | Social Impact / Customer Satisfaction | Integrating weather and road condition monitoring into Intelligent Transport Systems (ITS) helps in reducing road accidents by 12-16%. Air quality monitoring on the roadways and tunnels ensures human exposure to vehicular emission is within the permissible limits. Automation of the ventilation manages the air circulation and improves the air quality inside tunnels and multi-level parking facilities. |
|  | Business Model (Revenue Model) | RoadSafe is a knowledge transfer facilitator designed to demonstrate a commitment by our sponsors and partners to road safety and to involve themselves with professionals by working together to provide a safer road environment. Our core activity will demonstrate this commitment. Our reputation rests on having good communication, with the road safety community and other key stakeholders is essential to RoadSafe. Resources will therefore be concentrated on:  Representation  Developing the web site  A twice monthly RoadSafe News  Organising regular expert meetings  Developing a series of events and conferences in association with partners to promote improved road safety at work.  Developing a sound relationship with the media  Through active participation in public road safety events  Through private influence. |
|  | Scalability of the Solution | Identify localities with the majority of accidents by periodic analysis;  Systematically eliminate safety deficits on the basis of detailed inspections;  Determine efficiency of realised measures by periodic analysis;  Remove the most serious safety deficits identified by the inspections;  Systematically find solutions from the most dangerous roads to less severe ones;  Prioritise detailed inspections for individual road sections;  Educate administration and maintenance personnel performing the periodic inspections according to the Road Act and its implementing regulations directing to deal with safety deficits and deficits;  Include reconstruction of intersections and road sections with high accident rate as a priority in the action plan for investment measures;  and Conduct the safety inspections of the road network periodically. |