

Project Design Phase-I
Proposed Solution Template

Date	05 NOVEMBER 2022
Team ID	PNT2022TMID48690
Project Name	Project - Hazardous Area Monitoring for Industrial Plant powered by IoT
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">To keep an track in industrial power plant area to avoid hazardous problems in the industry to keep the surroundings and people safe during working.
2.	Idea / Solution description	<ul style="list-style-type: none">Real time location systems (RTLS) are indoor tracking systems capable of location and monitoring people and company assets operating within a defined zone covered by a radio frequency (RF) network. They work through a connected network of RF receivers and active RFID transmitters to provide precise and accurate indoor tracking services for each staff member.In industry and mining, positioning brings great benefits and by knowing the exact location of people and objects is often vital and can be achieved with monitoring system
3.	Novelty / Uniqueness	<ul style="list-style-type: none">In this the exact location information can be shared periodically and also the environmental conditions of the each and every area can be monitored.It will be also very helpful at the pandemic situation to monitor the hazardous area from a safer place.It also help to rescue the workers at the dangerous situation and guide them to safer place.

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Avoids large scale hazards in industries and saves the environment & people • By this solution we increase the safety of the workers and also the security of the workers • The workers are in the healthy and perfect environmental conditions. • And the peoples surrounded by this kind of industries or environment can be rescued before any danger caused. • Through this we can rescue the peoples get struck in mining as monitoring their positions and also help from the heavy production losses and there by provide affordable or value for money services to the customers.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • We can sell this technology to the industries and also to the small scale and large scale industries to develop their industrial security and well development. • For example like for the rescue operation we may offer our services to the team as a contract for a period of time to make revenue.
6.	Scalability of the Solution	The scalability on this model involves more demand on safety and security of workers and the companies too.so, the danger caused are get reduced by this system. And we need lesser man power to work with this kind of activities