PROJECT DESIGN PHASE - I

PROPOSED SOLUTION

TEAM ID	PNT2022TMID03488
PROJECT NAME	Hazardous Area Monitoring for Industrial Plant powered by IoT

PROPOSED SOLUTION:

S.NO	PARAMETER	DESCRIPTION
1	**Problem Statement (Problem to be solved)**	To monitor the surrounding area and measure the hazardous gas level and alert the working personnel in case of dangerous level of toxicity
2	**Idea / Solution description**	Implementation of a wearable device which can collect and store the data for future use. An alert is also sent when the temperature or the toxicity level is high thereby preventing the workers from the dangerous situations.
3	**Novelty / Uniqueness**	Our solution does not need the involvement of manual labor **1.** Preventing workers from getting exposed to the hazardous surroundings all the time **2.** Monitoring the surrounding all the time using different types of sensors **3.** Alerts are sent to both the workers and the admin promptly to prevent unnecessary situations **4.** Data is collected and stored in the cloud platform for future use simultaneously
4	**Social Impact / Customer Satisfaction**	**1.** Prevention of environmental and property damage **2.** Halting fatalities and injuries to working personnel **3.** Ensuring safety of the workers as well as people **4.** Comfortable and simple wearable device **5.** User-friendly solution

5	**Business Model (Revenue Model)**	**1.** It is an advanced technique where we can prevent the lives of the workers at low cost with minimum human intervention **2.** Its accuracy will be high since it involves measurement using machines and hence maximum prevention can be achieved
6	**Scalability of the Solution**	**1.** Since our product is a wearable device, it can be supplied to as many people working in the surrounding environment **2.** It is a solution involving simple concepts hence we can change the system as per our requirements **3.** Our system is flexible and can adapt to any type of the environments **4.** We can have many devices at comparatively lower cost than other systems