

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

<b>Date</b>	24/09/2022
<b>Team ID</b>	PNT2022TMID06928
<b>Project Name</b>	Industry – Specific Intelligent Fire Management System
<b>Maximum marks</b>	2

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

<b>S.No</b>	<b>Parameter</b>	<b>Description</b>
1	Problem statement	The Smart fire management system helps to detect the changes in the environment using gas sensor, flame sensor and temperature sensor and deals with the aftermath caused by any breakdown in the workspace.
2	Idea / Solution description	1)If the temperature readings crosses the threshold exhaust fans are powered ON. 2)If flame is detected sprinkles will be switched ON. 3)Alarm will be turned ON to alert the employees. 4)Message will be sent along with the location to fire station incase if the flame is uncontrollable.
3	Novelty / Uniqueness	Usage of liquid Nitrogen. Liquid nitrogen will immediately vaporize causing a cooling effect and makes the site deprived of oxygen. Using water sprinklers after liquid nitrogen can put off even intense fire effectively.
4	Social impact / Customer satisfaction	1)Harmful gases can be purified and released into atmosphere 2) Cause of impact can be traced from the sensor data that can be analyzed to prevent future accidents.
5	Business model (Revenue model)	1)This is used to calculate the probability of ignition and spread of fires across a landscape. 2)This outcome allows for a better understanding of how changes in one aspects of management can affect other aspects of management.
6	Scalability of the solution	1)This can be implemented in all type of industries. 2)This design can be administered in restaurants which deals with high usage of fire and gas