Project Title: Hazardous Area Monitoring For Industrial Plant Powered by IOT **Project Design Phase-I - Solution Fit TemplateTeam ID:**PNT2022TMID46726

1. CUSTOMER SEGMENT(S) CS

The customers of this product are the industrialist who works in hazardous area. Our aim is to assist, aid and help them to monitor the field parameters like temperature ,radiation remotely and to keep track of the parameters. This helps in safety of the workers.

6. CUSTOMER CONSTRAINTS CC

Installation of more number of sensors is difficult. It requires an unlimited or continuous internet connection to be accomplished

5. AVAILABLE SOLUTIONS AS

The safety of the industrialist are monitored using IoT. Analytic data and field cautions are reached & processed to control the process of monitoring. The drawbacks are high cost of maintenance and efficient only for short distance

2. JOBS-TO-BE-DONE / PROBLEMS J&P

The objective of this product is to obtain the different field parameters using sensor and alert system process it using a central monitoring system. Cloud is used to store and transmit the data by using IoT.. The workers could take decision through a mobile application

9. PROBLEM ROOT CAUSE RC

The uncertain change or unguessed conditions of hazardous events, made it difficult for the workers. These factors play a major role in making suitable substitutes for safety levels. It may be hard due to the workers negligence.

7. BEHAVIOUR BE

Using UI and IOT we can get timely report updates. Deep field analysis with key factors monitored by using gas and temperature sensor.

3. TRIGGERS TR

Workers facing issues in detecting gaseous waste. Workers struggle to predict the leakage of gas

4. EMOTIONS: BEFORE / AFTER EM

BEFORE: Lack of knowledge in hazard prone area→ Random decisions →low safety.

AFTER: Data from reliable source → correct decision →high safety

10. YOUR SOLUTION SL

Our product collects the data from different types of sensors and it sends the value to the main server. The ultimate decision is to shield the workers from the hazard prone area and safeguard their lives using mobile application

8. CHANNELS OF BEHAVIOUR CH

ONLINE: Providing online assistance to the worker, in providing depth knowledge of chemistry to manage the hazardous waste. Online assistance to be provided to the user in using the device.

OFFLINE: Awareness camps to be organized to teach the importance and advantages of the automation and IoT in the development of Hazardous area monitoring.