

1. CUSTOMER SEGMENTS: <ul style="list-style-type: none"> • Thermal industries • All types of Small-Scale Industries • Industries that is associated with flammable substances 	6. CUSTOMER LIMITATIONS: <ul style="list-style-type: none"> • Requires analytical expertise for analyzing the Sensor data. • Requires manpower with strong technical expertise for handling the associated software. • Industry level MIME sensors for accurate sensing is required 	5. AVAILABLE SOLUTIONS: <ul style="list-style-type: none"> • Various sensors are employed for monitoring the environment. • Blynk Application and ThingSpeak tool have been used for alerting purpose. • Some works have employed GSM and GPS modules for notifying the concerned authorities, by using image processing for monitoring.
2. PROBLEMS/PAINS: <ul style="list-style-type: none"> • The fire accident if not controlled at the right time can lead to heavy financial and human loss. • Prompt appropriate action for the particular situation needs to be taken at the right time. 	9. PROBLEM ROOT/CAUSE: <ul style="list-style-type: none"> • In industries employing chemicals there are high chances of building up of harmful flammable gases. • There are chances of manual errors while operating the machineries. 	7. BEHAVIOUR: <ul style="list-style-type: none"> • Gain knowledge on the existing solutions and try to learn more on the products available in this domain. • Visit the industries to gain knowledge about the working and operation of the machineries.
a3. TRIGGERS TO ACT: <ul style="list-style-type: none"> • Real time water sprinklers for controlling the fire • Exhaust fans for providing ventilation if the concentration of the gases goes high 	10. YOUR SOLUTIONS: <ul style="list-style-type: none"> • The smart fire management system includes a Gas sensor, Flame sensor and temperature sensors to detect any changes in the environment. • Based on the temperature readings and if any Gases are present the exhaust fans are powered ON. If any flame is detected the sprinklers will be switched on automatically. • Emergency alerts are notified to the authorities and Fire station 	8. CHANNELS OF BEHAVIOUR: Online: Gather information from websites and journals about the existing models
4. EMOTIONS: BEFORE/ AFTER: Before: Tragic, Unprepared, Helpless After: Stress free, Fearless, Tranquil		Offline: Visit industries to acquire adequate knowledge about the operation and working principle of the machineries.

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