

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

