### VSB Engineering College,karur-639111

### Project Design phase - I

#### **Problem Solution fit**

#### Project name:

# 6.Customer constrains:-

# The primary constraint on the fire detection system is to detect a developing fire prior to belt ignition, or as quickly as possible thereafter before the onset of rapid flame spread can begin

#### 5. Available solutions

Team Id: PNT2022TMIDxxxxxx

Ionization smoke detectors (the most common in home use) detect the particles in smoke. As smoke passes through the chamber, the particles are ionized. These particles may then be detected by charged plates in the detector

# 2. Traditional Methods

1.Terrestrial Systems

by following some segments

1.Customer segments:-

3. Deep Learning Methods

these are the segments which they used in their early days

In the early days for detecting the fire hazards

#### 2. Jobs to be done:

When the fire alarm system detects smoke, heat, or water movement, it alerts occupants of the building using both audible and visible alarms. These alarms will be bright, loud, obnoxious, and impossible to ignore, which help mobilize individuals to follow your evacuation plan.

#### 9. Problem route cause:-

Fire alarm systems are in place to do two major things; detect fire and alert occupants of the fire while giving them enough time to vacate the area.

Dirty Smoke Detectors

Dirt.
Dust.

Lint.

Small Insects.

#### 7.Behavior.-

fire alarm system warns people when smoke, fire, carbon monoxide or other fire-related emergencies are detected. These alarms may be activated automatically from smoke detectors and heat detectors or may also be activated via manual fire alarm activation devices such as manual call points or pull stations.

### 3. Triggers:-

Automatic initiating devices – automatic initiation devices trigger the fire alarm system automatically when a fire happens. These devices include heat, flame and smoke detection. When heat, flames or smoke is detected, the devices send a signal to a central control panel that activates the system

## 10.Solution:

Hence electronic circuits can be designed for the fire based alarms and they provide very high efficiency and can be used for the security reasons. Early fire detection is best achieved by the installation and maintenance of fire detection equipment in all rooms and areas of the house or building.

#### 8.Channels of behavior:-

Fire alarm control panel.
Initiation devices.
Pull stations.
Smoke detectors.
Duct detectors.
Heat detectors.
Beam detectors.

#### 4.Emotions:-

we should handle our emotions in the mature way .if you have undergone with an emotion it will be the end for you.so holding the emotion whatever happen just be calm and try to overcome it .we should avoid over emotion in hazard's time.	