## 1.CUSTOMER SEGMENT (S)

Project Title: Forest fire detection methods

One of the ways fires are detected is by lookout stations. These are situated at a location with extensive visibility and have associated structures manned by a lookout observer whose prime purpose is to locate and report wildfires.

### **6.CUSTOMER CONSTRAINTS**

From the place of lignition, the direction of spread, speed, extent and shape of fire depend upon wind, inflammable material and topography.

#### **5.AVAILABLE SOLUTIONS**

In recent history and even the present day, several forest fire detection methods have been implemented, such as watchtowers, satellite image processing methods, optical sensors, and digital camera-based methods2, although there are many available solutions in forest fire detection.

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## 2. JOBS-TO-BE-DONE/PROBLEMS

Loss of valuable timber resources. degradation of catchment areas. loss of biodiversity and extinction of plants and animals. loss of wildlife habitat and depletion of wildlife

### 9. PROBLEM ROOT CAUSE

One of the biggest causes of natural forest fires is lightning. Lightning in places of dry vegetation causes a fire. These fires mostly occur in remote locations away from human presence. In some cases, volcanic activities lead to fires. With the advancement of technology, these types of fires are predicted well in advance and firefighters create a buffer zone to manage the fire, root cause

### 7. BEHAVIOUR

Cotrolling burning, fire weather forecasts and estimates of fuel and moisture, watch towers, optical smoke detection, infrared, spotter planes.

#### 3. TRIGGERS

Human-caused fires result from campfires left unattended, the burning of debris, equipment use and malfunctions, negligently discarded cigarettes, and intentional acts of arson. It is possible to detect forest

# 4. EMOTIONS:BEFORE/AFTER

Check with fire officials before attempting to return to your home.

Use caution when re-entering a burned area - flare ups can occur.

#### **10. YOUR SOLUTION**

Vital data would be needed for bushfire prevention planning and it can come from a range of sources.Here is a list of potential sources,Eg Satellite images by gathering and analyzing data with AI.

## 8. CHANNELS OF BEHAVIOUR

The proposed system detects the forest fire at a faster rate compared to existing system. It has enhanced data collection feature.