PROJECT TITLE: EARLY DETECTION OF FOREST FIRE USING DEEP LEARNING

Project Design Phase-I-Solution Fit Template

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Define CS,fit into CC

1.CUSTOMER SEGMENT(S) CS

Forest officer

Common people

6.CUSTOMER CONSTRAINTS CC

Satellite allows for detecting and monitoring a ran of fires, providing information about the location, du tion, size, temperature, and power output of those fires at e would otherwise be unavailable. Satellite data is al ires. critical for observing and monitoring smoke from

5.CUSTOMER CONSTRAINTS AS

Avoid burning wastes around dry grass
Obey local laws regarding open fires
Have firefighting tools nearby and handy
Monitoring weather analytics
Monitoring thermal anomalies
Monitoring water stress and temperature rises

Explore AS,differentiate

Focus on j&P,tap into BE,understand RC

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

Satellite remote sensing offers a useful tool for forest fire detection, monitoring, management and damage assessment. During a fire event, active fires can be detected by detecting the heat, light and smoke plumes emitted from the fires. This application uses real-time satellite data to detect and monitor forest fires, and understand fire patterns.

9.PROBLEM ROOT CAUSE RC

Forest fires cause lots of damage, some of them are-loss of wildlife habitat, extinction of plants and animals, destroy the nutrients rich top soil, reduction in forest cover, loss of valuable timber resource, Ozone layer depletion, loss of livelihood for tribal people and poor people, increase in global warming.

7.BEHAVIOUR BE

When the people don't have knowledge about forest fire.

Focus on j&P,tap into BE,understand RC

3. TRIGGERS TR

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

4. EMOTIONS: BEFORE / AFTER EM

BEFORE: unsafe and worries about lives and belongings

AFTER: safety and relief

10. YOUR SOLUTION

For this problem we use image processing and video analysis so by using satellite images processing we can able to find the fire at the early stage and stop spreading fire in the forest.The model is mainly build by using CNN and machine learning deep learning.

8. CHANNELS of BEHAVIOUR CH

8.1 **ONLINE**

Fire alert

Sensor

8.2 **OFFLINE**

Fire awareness program

Identify strong TR & EM