Project Title: EMERGING METHODS FOR EARLY FOREST FIRE DETECTION

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Forest officers ,tribal peoples, Common people

6. CUSTOMER CONSTRAINTS — CC

Satellites allow for detecting and monitoring a range of fires, providing information about the location, duration, size, temperature, and power output of those fires that would otherwise be unavailable.

5. AVAILABLE SOLUTIONS — AS

Avoid burning wastes around dry grass.
Have firefighting tools nearby and handy.
Use fire resistant roofing materials.
undertake technical checkups regularly.
Monitoring weather analytics,
monitoring thermal anomalies,
monitoring 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 usefultool for forest fire detection, monitoring, management and damage assessment. During a fire event, activefires can be detected by detecting the heat, light and smoke plumes emitted from the fires. This application uses real-time satellitedata 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, destroys the nutrient rich top soil, reduction in forest cover, loss of valuable timber resources, 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

Identify strong TR & EM

3. TRIGGERS — TR

Human-caused fires results the burning of debris, equipmentuse and malfunctions, and intentional acts of arson.

4. EMOTIONS: BEFORE / AFTER — EM

Before : Feel unsafe and worries about lives and belongings

After : safety and stress free

10. YOUR SOLUTION — SL

By using satellite image processing we can able to find the fire at the early stage and stop spreading fire in the forest.This model is mainly build by using CNN and machine learning and deep learning

8. CHANNELS of BEHAVIOUR — CH

ONLINE: Alerting sensors

OFFLINE: By conducting fire awareness program

Identify strong TR & EM