EMERGING METHODS FOR EARLY FOREST FIRE DETECTION **Project Design Phase-I – Solution Fit Template** **Team ID: PNT2022TMID29323**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Forest officer
Tribes
Common public
Wildlife agent

6. CUSTOMER CONSTRAINTS CC

Satellites allow for detecting and monitoring a range offires, providing information about the location, duration, size, temperature, and power output of those fires that would otherwise be unavailable. Satellite data is also critical for observing and monitoring smoke from the fires.

5. AVAILABLE SOLUTIONS AS

Obey local laws regarding open fires, including campfires
Have firefighting tools nearby and handy.
Use fire resistant roofing materials.
Control of air pressure of fileds,
Monitoring weather analytics,
monitoring thermal anomalies,

Explore AS,Differentiate

Focous on J&P, tap into BE, understand RC

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

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 theheat, light and smoke plumes emitted from the fires.

This application uses real-time satellite data to detect and monitor forest fires (sending alerts to mobile devices).

9. PROBLEM ROOT CAUSE RC

[1] Forest fires cause lots of damage, some of them are –loss of wildlife habitat, extinction of plants and animals,

[2] *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 ,many animal is become homeless this lead to invasion animals over village are town.*

7. BEHAVIOUR BE

When the people don't have knowledge about forest fire,
People unaware of forest importance ,wild animals destruction

Focous on J&P, tap into BE, understand RC

Identity strong TR & EM

3. TRIGGERS TR

Human-caused fires result from campfires .some construction work near forest area, major aspects use combustible near wild lands. Deforestation.

4. EMOTIONS: BEFORE / AFTER EM

Before: *consumption and eradication of everything*
A*fter: Safety and relief*

10. YOUR SOLUTIONS SL

For this problem we use image processing and video analysis so 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: fire alert Sensor

OFFLINE: Fire awareness program

Identity strong TR & EM