Project Title:Emerging methods for early detection of forest fire Project Design Phase-I - Solution Fit Template Team ID: PNT2022TMID38040



**1.CUSTOMER SEGMENT:**

Forest administration Forest officers Common people

Need to monitor the forest 24\*7

Huge datastore is needed to manage data

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Prescribed fires in fire-prone temperate forests to reduce emissions of biomass from the historic rate of wildfire losses.

* Fire control practices in Amazonian forests to avoid unintended fires that degrade the forest (such as fire breaks at forest edges).



When burning fuel is exposed to oxygen from the air, a chemical reaction occurs that releases heat and generates combustion.The manner in which fuel ignites, flame develops and fire spreads. In wildland

this behavior is influenced by weather and topography interact.

* Lightning
* Spontaneous combustion of dry vegetation
* Volcanic activities
* Carelessness while Smoking or using mosquito coil or candles or camp- fires
* Arson or intentional
* Tribal ritual/tradition

Permanent monitoring and detect forest fire accurately

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|  | **3. TRIGGERS**  Initial smoke will trigger the forest officer to take the step at earlier stage | **R** | **10. YOUR SOLUTION** | **SL** | **8.CHANNELS of BEHAVIOUR H** |  |
| Image processing,video processing,neural  network are used for the early detection of |  | **8.1 ONLINE**  Monitoring the forest through survelliance camera |
| forest fire |  | **8.2 OFFLINE**  Take survey from existing video clips |
| **4. EMOTIONS: BEFORE / AFTER** | **EM** |  |  |  |
| Frustated due to poor netwrok connection And misprediction of forest fire |  |  |  |  |