Project design phase -I

Solution fit document and solution architecture

DATE	7/10/2022
Team ID	PNT2022TMID18327
Project Name	Emerging Methods for Early Detection of Forest Fires

Solution fit document

Problem-Solution fit canvas 2.0

Purpose / Vision

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) `CS`

This project can be installed by all the central and state governments in order to detect the wildfires or forest fires rapidly.

6. CUSTOMER CONSTRAINTS `CC`

The primary constraint on the fire detection system is to detect a developing fire prior to belt ignition or as quickly as possible thereafter before the onset of rapid flames spread can begin.

5. AVAILABLE SOLUTIONS

There are many solutions exi -cam imaging,satellite imagin systems and using sensors c

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

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

The existing solutions are less efficient and consuming high power and low accuracy along with latency issues and these problems should be resolved.

9. PROBLEM ROOT CAUSE `RC`

Forest fires are the one of the random natural disaster that is too hard to identify even with the existing state of the art technology.The fact that more than 20% of complete world CO2 emissions comes from forest fires.

7. BEHAVIOUR

The behaviour refers to the ignites flame develops and fi fire starts it continu e burning and more fuels are present.

Identify strong TR & EM

3. TRIGGERS `TR`

saving wildlife
Area detection
Assessing the environmental conditions

4. EMOTIONS: BEFORE / AFTER `EM`

BEFORE:Encroachment,loss of diversity,decreased wild life
AFTER:Forest surveillance systems can be used to monitor the forest areas so that we can prevent the people and wild lives and economic damage.

10. YOUR SOLUTION `SL`

Forest surveillance using some sensors like fire,temperature,CO2 ,humidity sensors and many AI/ML and IOT derived solutions can be used to monitor the forest areas and they can alert the forest department if there is any symptoms of forest fire or any other suspicious activities.

8. CHANNELS of BEHAVIOUR

online:collect the data and ru other software plat forms.

offline: when the forest fire o will send to forest fire departr prevent the forest.