

Template:

Project Title: Emerging Methods for Early Detection of Forest Fires

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID26362

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS 1 . Forest Department Officers 2 . Tribal and Common People 3 . Bureau of land management	6. CUSTOMER CONSTRAINTS CC 1 . Network connection for the devices. 2 . Power supply interruptions. 3 . Need of waterproof cameras. 4 . Cost of the equipments.	5. AVAILABLE SOLUTIONS AS 1 . Creating an alarm system for nearby stations. 2 . Remote sensing methods such as satellites. 3 . Send notifications via digital media. 4 . Monitor the change on a regular basis.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P 1 . The cameras should be always on motion. 2 . Active fires should be detected using fire. 3 . The detection sensors should be on all the time. 4 . Detecting small sparkles of fire is difficult. 5 . The main problem is climate change.	9. PROBLEM ROOT CAUSE RC 1 . Forest fire causes a lot of damages. 2 . Extinction of plants and animals. 3 . Main cause of fire are human actions and lightning. 4 . High temperature always results in forest fires. 5 . So it can be either man made or natural.	7. BEHAVIOUR BE 1 . Always checking and monitoring the forest temperature. 2 . Checking the campfire and other causes frequently. 3 . Monitoring the climate change often. 4 . Sharing the information regarding the fire detection and prevention.	
Identify strong TR & EM	3. TRIGGERS TR 1 . Need for protecting the wildlife. 2 . Not knowing when the fire starts. 3 . Reading about the effects of forest fire. 4 . Knowing the importance of forest.	10. YOUR SOLUTION SL 1 . Forests can be monitored using several cameras. 2 . using the methods for image processing and video processing. 3 . Enabling the video surveillance method on larger forest areas to make the process easy. 4 . Deep learning methods can be used to find the amount of fire. 5 . Instant alerts can be sent to the forest department.	8.CHANNELS of BEHAVIOR CH Online : The chatbot or the API can connect through the internet to feed you with the current status of the forest. Offline : The forest management can arrange an awareness program. The alerts can also be sent via offline messaging system.	Identify strong TR & EM
	4. EMOTIONS: BEFORE / AFTER EM Before : Insecure, Unsafe worries about lives and belongings. After : Confident, In control, no worries.			