

## Project Design Phase-I Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID42321
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	2 Marks

### Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

### Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

### Template:

Project Title: Emerging Methods for Early Detection of Forest Fires

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <span style="float: right;">CS</span>	6. CUSTOMER CONSTRAINTS <span style="float: right;">CC</span>	5. AVAILABLE SOLUTIONS <span style="float: right;">AS</span>	Explore AS, differentiate
	1 . Forest Department Officers 2 . Tribal and Common People 3 . Bureau of land management	1 . Network connection for the devices. 2 . Power supply interruptions. 3 . Need of waterproof cameras. 4 . Cost of the equipments.	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.	
Focus on API, tap into BE, understand RC	2. JOBS-TO-BE-DONE / PROBLEMS <span style="float: right;">J&amp;P</span>	9. PROBLEM ROOT CAUSE <span style="float: right;">RC</span>	7. BEHAVIOUR <span style="float: right;">BE</span>	Focus on API, tap into BE, understand RC
	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.	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.	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 <span style="float: right;">TR</span>	10. YOUR SOLUTION <span style="float: right;">SL</span>	8.CHANNELS of BEHAVIOR <span style="float: right;">CH</span>	
	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.			
	4. EMOTIONS: BEFORE / AFTER <span style="float: right;">EM</span>			
	<b>Before</b> : Insecure, Unsafe worries about lives and belongings.  <b>After</b> : Confident, In control, no worries.	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.	<b>Online</b> : The chatbot or the API can connect through the internet to feed you with the current status of the forest.  <b>Offline</b> : The forest management can arrange an awareness program. The alerts can also be sent via offline messaging system.	