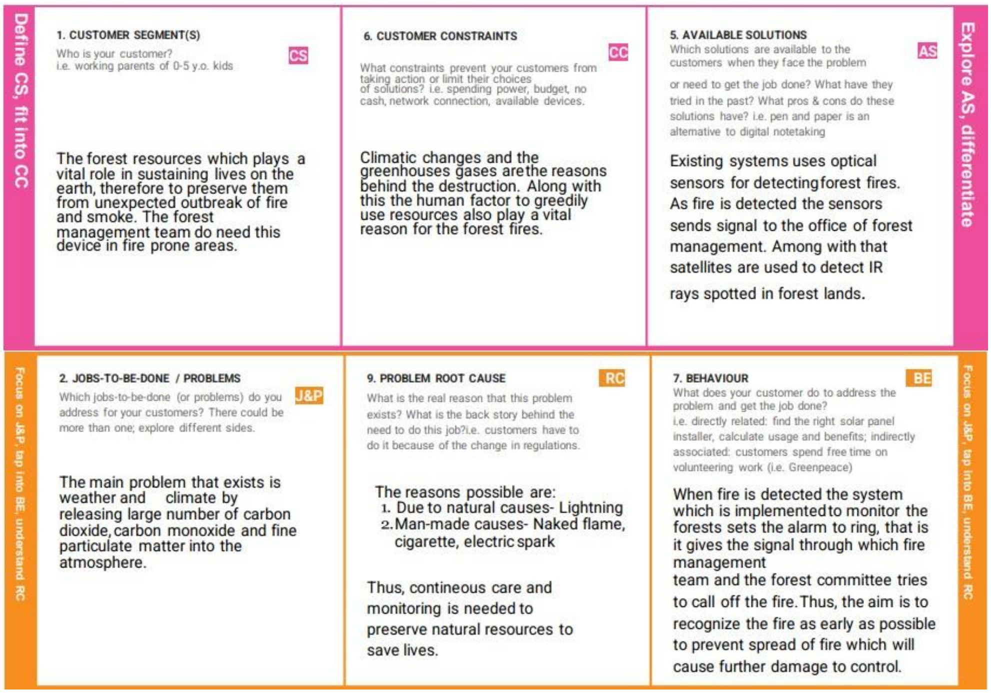
Project Design Phase-I
Problem – Solution Fit Template

Date	15 September 2022
Team ID	PNT2022TMID01563
Project Name	Project – EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE
Maximum Marks	2 Marks

Project Title : Emerging Methods for early detection of forest fires **Project Design Phase-I – Solution Fit Template TEAM ID :** PNT2022TMID01563



Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

The forest resources which plays a vital role in sustaining lives on the earth, therefore to preserve them from unexpected outbreak of fire and smoke. The forest management team do need this device in fire prone areas.

6. CUSTOMER CONSTRAINTS CC

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

Climatic changes and the greenhouses gases arethe reasons behind the destruction. Along with this the human factor to greedily use resources also play a vital reason for the forest fires.

5. AVAILABLE SOLUTIONS AS

Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

Existing systems uses optical sensors for detectingforest fires. As fire is detected the sensors sends signal to the office of forest management. Among with that satellites are used to detect IR rays spotted in forest lands.

Explore AS, differentiate

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

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

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

The main problem that exists is weather and climate by releasing large number of carbon dioxide, carbon monoxide and fine particulate matter into the atmosphere.

9. PROBLEM ROOT CAUSE RC

What is the real reason that this problem exists? What is the back story behind the need to do this job?i.e. customers have to do it because of the change in regulations.

The reasons possible are:

1. Due to natural causes- Lightning
2. Man-made causes- Naked flame, cigarette, electric spark

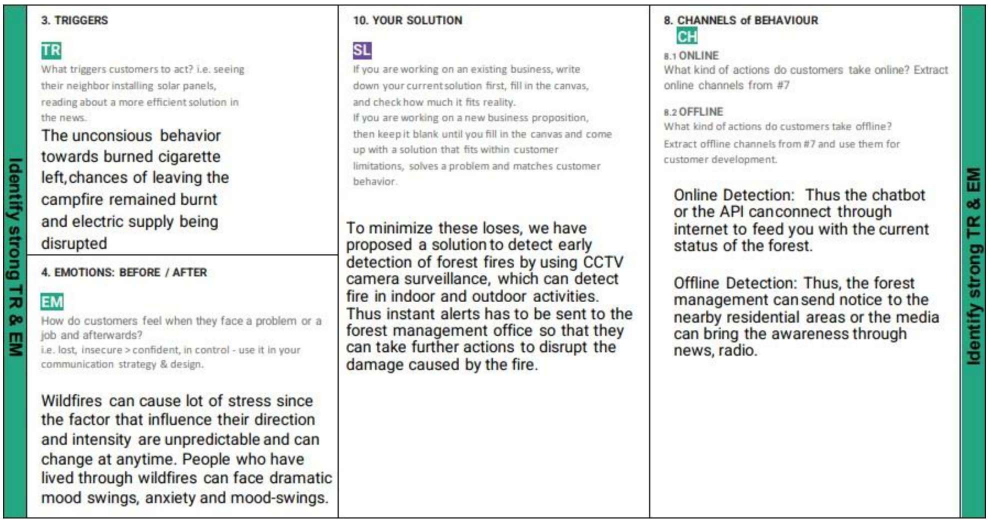
Thus, contineous care and monitoring is needed to preserve natural resources to save lives.

7. BEHAVIOUR BE

What does your customer do to address the problem and get the job done?
i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

When fire is detected the system which is implementedto monitor the forests sets the alarm to ring, that is it gives the signal through which fire management
team and the forest committee tries to call off the fire. Thus, the aim is to recognize the fire as early as possible to prevent spread of fire which will cause further damage to control.

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



Identify strong TR & EM

3. TRIGGERS

TR

What triggers customers to act? i.e. seeing their neighbor installing solar panels, reading about a more efficient solution in the news.

The unconsious behavior towards burned cigarette left, chances of leaving the campfire remained burnt and electric supply being disrupted

4. EMOTIONS: BEFORE / AFTER

EM

How do customers feel when they face a problem or a job and afterwards?
i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

Wildfires can cause lot of stress since the factor that influence their direction and intensity are unpredictable and can change at anytime. People who have lived through wildfires can face dramatic mood swings, anxiety and mood-swings.

10. YOUR SOLUTION

SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behavior.

To minimize these loses, we have proposed a solution to detect early detection of forest fires by using CCTV camera surveillance, which can detect fire in indoor and outdoor activities. Thus instant alerts has to be sent to the forest management office so that they can take further actions to disrupt the damage caused by the fire.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Online Detection: Thus the chatbot or the API canconnect through internet to feed you with the current status of the forest.

Offline Detection: Thus, the forest management cansend notice to the nearby residential areas or the media can bring the awareness through news, radio.

Identify strong TR & EM