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

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

CS

officers who wants to monitor the entire forest using the sensor 24/7

6. CUSTOMER CONSTRAINTS

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.

Requires large amount of storage to store the data.

5. AVAILABLE SOLUTIONS

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

- **Camp responsibly.**
- **Remote technologies.**
- **Check weather and drought condition.**

Explore AS, differentiate

Focus on J&P, tap into

2. JOBS-TO-BE-DONE / PROBLEMS

Which problem do you solve for your customer? There could be more than one, explore different sides.eg. existing solar solutions for private houses are not considereda good investment (1).

Permanent monitoring and data collection secure manner.

9. PROBLEM ROOT CAUSE

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.

- **Natural causes- Many forest fires start from natural causes such as lightning which sets trees on fire.**
- **Manmade causes-fire is caused when a source of the fire like naked flame, cigarette or electric sparks or source of ignition comes into contact with inflammable material.**

BE

7. BEHAVIOUR

What does your customer do to address the problem and get the job done?

The manner in which fuel ignites, flame develops and fire spreads. In wildland this behavior is influenced by weather and topography interact.

Focus on J&P, tap into

3. TRIGGERS

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

As forest officers can't be aware of the upcoming situations this detection is necessary to avoid disasters.

4. EMOTIONS: BEFORE / AFTER

E

How do customers feel when they face a problem or a job and afterwards?

Insecurity of disconnection -->Control of device makes them confident

10. YOUR SOLUTION

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.

Satellite image processing methods, Optical sensors and Digital Camera-based methods are used to detection of forest fires.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

8.2 OFFLINE

ONLINE

Forest offices will access the security servicein online mode(Web Service)

OFFLINE

Forest police will access the security servicein offline mode(call using telephone).