

**Project Title:-Emerging Methods For Early Detection
Of Forest Fires**

Project Design Phase-I - Solution Fit Template

Team ID PNT2022TMID29475

<div>Who is your customer? i.e. working parents of 0-5 y.o. kids</div> <div>officers who wants to monitor the entire forest using the sensor 24/7</div>	<div>6. CUSTOMER CONSTRAINTS</div> <div>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.</div> <div>Requires large amount of storage to store the data.</div>	<div>5. AVAILABLE SOLUTIONS</div> <div>Which solutions are available to the customers when they face the problem</div> <div>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</div> <div>❖ Camp responsibly.</div> <div>❖ Remote technologies.</div> <div>Check weather and drought condition.</div>
<div>2. JOBS-TO-BE-DONE / PROBLEMS</div> <div>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 considered a good investment (1).</div> <div>Permanent monitoring and data collection secure manner.</div>	<div>9. PROBLEM ROOT CAUSE</div> <div>What is the real reason that this problem exists? What is the back story behind the need to do this job?</div> <div>i. e. customers have to do it because of the change in regulations.</div> <div>❖ Natural causes- Many forest fires start from natural causes such as lightning which sets trees on fire.</div> <div>❖ 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.</div>	<div>7. BEHAVIOUR</div> <div>What does your customer do to address the problem and get the job done?</div> <div>The manner in which fuel ignites, flame develops and fire spreads. In wildland this behavior is influenced by weather and topography interact.</div>
<div>3. TRIGGERS</div> <div>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</div> <div>As forest officers can't be aware of the upcoming situations this detection is necessary to avoid disasters.</div> <div>4. EMOTIONS: BEFORE / AFTER</div> <div>How do customers feel when they face a problem or a job and afterwards?</div> <div>Insecurity of disconnection -->Control of device makes them confident</div>	<div>10. YOUR SOLUTION</div> <div>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.</div> <div>Satellite image processing methods, Optical sensors and Digital Camera-based methods are used to detection of forest fires.</div>	<div>8. CHANNELS of BEHAVIOUR</div> <div>8.1 ONLINE</div> <div>8.2 OFFLINE</div> <div>ONLINE</div> <div>Forest offices will access the security service in online mode(Web Service)</div> <div>OFFLINE</div> <div>Forest police will access the security service in offline mode(call using telephone).</div>

