

# Problem-Solution Fit canvas

## Title: Emerging methods for Early detection of forest fire

Define CS, fit into CL	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> <ul style="list-style-type: none"> <li>People living in the forest and forest officers being in charge of protecting the forest.</li> <li>For officers who work in forestry department to monitor the forest.</li> </ul>	<b>6. CUSTOMER LIMITATIONS</b> <span>CL</span> <ul style="list-style-type: none"> <li>Solar energy can be used as power source for cameras can be used.</li> <li>Should have knowledge about the devices. Feature loaded device.</li> <li>Requires more storage for data.</li> </ul>	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span> <ul style="list-style-type: none"> <li>Remote technologies.</li> <li>Giving the genuine alarm.</li> <li>Satellite based system give high resolution image.</li> </ul>	Explore AS, differentiate
	<b>2. PROBLEMS / PAINS</b> <span>PR</span> <ul style="list-style-type: none"> <li>Sometimes devices may malfunction.</li> <li>Deterioration of air quality, loss of property, resources and animal.</li> <li>Unable to detect small sparks of fire in the forest.</li> <li>Camera should always be in motion.</li> </ul>	<b>9. PROBLEM ROOT / CAUSE</b> <span>RC</span> <ul style="list-style-type: none"> <li>Natural causes: The forest fire starts from natural cause such as lighting.</li> <li>Manmade causes – fire is cause when a source of the fire like naked flame, cigarette or electric sparks or source of ignition comes into contact.</li> </ul>	<b>7. BEHAVIOR</b> <span>BE</span> <ul style="list-style-type: none"> <li>Climatic change of the area should be monitored clearly.</li> <li>The manner in which fuel ignites, flame develops and fire spreads.</li> <li>Hot area should be clearly monitored.</li> </ul>	
Focus on PR, tap into BE, understand RC	<b>3. TRIGGERS TO ACT</b> <span>TR</span> <ul style="list-style-type: none"> <li>As forest officers can't be aware of the upcoming situations this detection is necessary to avoid disasters.</li> <li>To get prior information of forest fire. It would proceed misinformation.</li> </ul>	<b>10. YOUR SOLUTION</b> <span>SL</span> <ul style="list-style-type: none"> <li>Forest can be surveillance using several cameras and viewed perfectly.</li> <li>For this problem we use image processing and video analysis so by using satellite image processing we can able to find the fire at the early stage and stop spreading fire in the forest. This model is mainly build by using CNN and Artificial intelligence.</li> <li>Forest can be separated by several cameras and viewed perfectly.</li> </ul>	<b>8. CHANNELS of BEHAVIOR</b> <span>CH</span> <p>ONLINE:</p> <ul style="list-style-type: none"> <li>Forest offices will access the security service in online mode (Web service).</li> </ul> <p>OFFLINE:</p> <ul style="list-style-type: none"> <li>Fire awareness programs, also Forest police will access the security service in offline mode (call using telephone).</li> </ul>	Extract online & offline CH of BE
	<b>4. EMOTIONS</b> BEFORE / AFTER <span>EM</span> <ul style="list-style-type: none"> <li>Unsafe and worries about lives and belongings. (Before)</li> <li>Safety band relief. (After)</li> </ul>			