Project Title: Emerging Methods for early detection of forest fires Project Design Phase-I - Solution Fit Template Team ID: PNT2022TMID14485

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|  | 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. | Climatic changes and the greenhouses gases are the reasons behind the destruction. Along with this the human factor to greedily use resources also play a vital reason for the forest fires. | Existing systems uses optical sensors for detecting forest 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. |  |
|  | 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.  Resulting, air pollution can cause varying range of health issues, including respiratory and cardiovascular problems. | The reasons possible are:   1. Due to natural causes- Lightning 2. Man-made causes- Naked flame, cigarette, electric spark   Thus, continous care and monitoring is needed to preserve natural resources to save lives. | When fire is detected the sytem which is implemented to 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 recognise the fire as early as possible to prevent spread of fire which will cause further damage and it'll become difficult to control. |  |

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|  | **3. TRIGGERS TR**  What triggers customers to act? i.e. seeing their neighbour installingsolar panels, reading about a more efﬁcient solution in the news.  The unconsious behaviour towards burned cigarette left, chances of leaving the campfire remained burnt and it can cause spread due to presence of vast dry grass spread across and electric supply being disrupted. | **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 inthe canvas and come up with a solution that ﬁts within customer limitations, solves a problem and matches customer behaviour.  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 daamge caused by the fire. | **8. CHANNELS of BEHAVIOUR CH**  **ONLINE**  What kind of actions do customers take online? Extract online channels from #7  Type your text  **OFFLINE**  What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7and use them for customer development.  Online Detection: Thus the chatbot or the API can connect through internet to feed you with the current status of the forest.  Offline Detection: Thus, the forest management can send notice to the nearby residential areas or the media can bring the awareness through news,  radio. |  |
| **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. |