Project Design Phase-I Proposed Solution

Date	22 OCTOBER 2022
Team ID	PNT2022TMID32061
Project Name	Emerging Methods for Early Detection of Forest Fire
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Detect forest fires at an earlier and inform the local fire authorities.
2.	Idea / Solution description	Fire can be detected from the real-time images shared via satellite.
3.	Novelty / Uniqueness	It is difficult to predict and detect Forest Fire in a sparsely populated forest area and it is more difficult if the prediction is done using ground-based methods like Camera or Video-Based approach. Satellites can be an important source of data prior to and also during the Fire due to its reliability and efficiency.
4.	Social Impact / Customer Satisfaction	According to WHO, wildfires affected 6.2 million people between 1998-2017 with 2400 attributable deaths worldwide from suffocation, injuries, and burns, but the size and frequency of wildfires are growing due to climate change. Wildfires also simultaneously impact weather and the climate by releasing large quantities of CO2, CO and fine particulate matter into the atmosphere. Resulting air pollution can cause a range of health issues, including respiratory and cardiovascular problems. By implementing the proposed solution, people from various walks of life gets impacted and will attain customer satisfaction at its best
5.	Business Model (Revenue Model)	Exploratory data analysis report and dashboard services can be provided using subscription based model through which revenue can be generated.
6.	Scalability of the Solution	Forest fires result in various impacts on wildlife, humans and the environment. Hence the proposed solution can be scaled to detect forest fires at the early stage to prevent huge disaster.