Project Design Phase-1 Proposed Solution Fit

Proposed Solution Fit:

1.CUSTOMER SEGMENT(S)

CS

- Techniques based on convolutional networks are the most used and have proven to be efficient solving such as problem.
- However, they remain limited in modeling the long-range relationship between objects in the image, due to the intrinsic locality of convolution operators.

6.CUSTOMER CONSTRAINTS

CC

- climatic changes and the greenhouse effect are some of the consequences of such destruction.
- Interestingly, a higher percentage of forest fires occur due to human activities.

5.AVAILABLE SOLUTIONS

AS

 Existing detection methods such as satellite and optical systems can cover large areas; satellite systems identify infrared signatures, while optical systems look for smoke plumes.

2.JOBS TO BE DONE/PROBLEMS

J&P

- Every year, there are an estimated 340,000 premature deaths from respiratory and cardiovascular issues attributed to wildfire smoke.
- The increasing frequency and severity of wildfires pose of growing threat of biodiversity globally.
- Individuals, companies and public authorities bear great economic costs due to fires.

9.PROBLEM ROOT CAUSE

RC

- Forest fires start from natural causes such as lightning which set trees on fire.
- High atmospheric temperatures and dryness

7.BEHAVIOUR

ВΕ

The fire reacts to the interaction of fuel,weather, and topography-"fire behavior triangle." The four parameters used to describe fire behavior rate of spread, fireline intensity,flame length and flame height.

3.TRIGGERS

TR

EM

- Natural causes
- Human activity

10.OUR SOLUTION

SL

To minimize these losses.early detection of fire and an autonomous response are important and helpful to disaster management systems.Early fire detection framework using convolutional neural networks for CCTV surveillance cameras, which can detect fire in varying indoor and outdoor environments.

8.CHANNELS of BEHAVIOUR

СН

8.1 ONLINE

Helps to notify the data processing information.

8.2 OFFLINE

Remote sensing is used to detect forest fires.

4.EMOTIONS BEFORE/AFTER

- Before:Loss of valuable timber resources.
- After:Allowing seedlings released by the fire to sprout and grow.