EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE

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Monday

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Overview

Forest fires are a major environmental issue, creating economic and ecological damage while endangering human lives. There are typically about 100,000 wildfires in the United States every year. Over 9 million acres of land have been destroyed due to treacherous wildfires. It is difficult to predict and detect Forest Fire in a sparsely populated forest area

Goals

1. We can find forest fire early to avoid vulnerability and upcoming disaster.
2. Early Warning system to alert the officers and people to save lot of lives.
3. It is real time detection of forest fire.

Specifications

HARDWARE SPECIFICATION

The hardware requirements may serve as the basis for a contract for the implementation of the system and should therefore be a complete engineer as the starting point for the system design.

Ram	: 8GB Ram or more
Processor	: Any Processor
GPU	: 8GB or more
Hard Disk	: 10GB or more
Speed	: 1.4GHZ or more

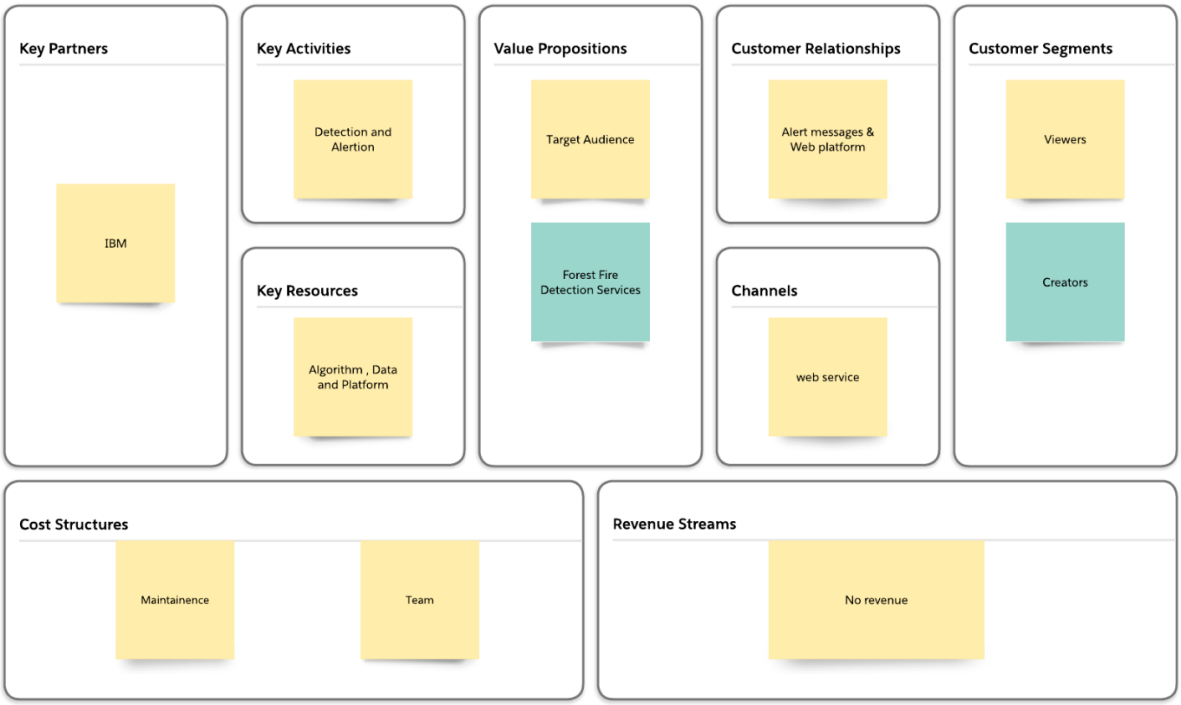
SOFTWARE SPECIFICATION

The software requirements give detailed description of the system and all its features.

- ➜ Python
- ➜ Keras
- ➜ Tensorflow
- ➜ OpenCV
- ➜ Numpy
- ➜ Pandas

- ➜ Visual studio code
- ➜ Python-Flask
- ➜ IBM cloud
- ➜ Keras-tuner

BUSINESS MODEL



SOLUTION

- ❖ **Fetch data from cctv and drones**
- ❖ **Image Preprocessing**
- ❖ **Image classification using CNN**
- ❖ **Video Analysis**
- ❖ **If fire detected send alert messages**

CONCLUSION

Forest fires are a major environmental issue, creating economic and ecological damage while endangering human lives. Our project aims to overcome this issue ,in order to reduce loss of life, damage and reduce vulnerability.