Problem-Solution fit canvas 2.0

1. CUSTOMER SEGMENT(S) — CS

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

Define CS, fit into

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

Explore AS, differentiate

2. 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 a growing threat to biodiversity globally. Individuals, companies and public authorities bear great economic costs due to fires.

Focus on J&P, tap into BE, understand

9. PROBLEM ROOT CAUSE — RC

Loss of biodiversity.
Loss of regeneration and reduction .

7. BEHAVIOUR — BE

The Fire Behavior Triangle. Just like there is a fire triangle, made up of heat, oxygen, and fuel, there is another triangle called the fire behavior triangle. The three legs of this triangle are **fuels, weather, and topography**. The sections below go more in depth into each of thise and their influence on fire.

Focus on J&P, tap into BE, understand

3. TRIGGERS — TR

Human-caused fires result from campfires left unattended, the burning of debris, equipment use and malfunctions, negligently discarded cigarettes, and intentional acts of arson. Lightning is one of the two natural causes of fires

Identify strong TR & EM

4. EMOTIONS: BEFORE / AFTER — EM

People who are involved directly in disasters such as wildfires or exposed to the effects of disasters may experience lots of negative emotions. Losing your sense of security, control and certainty is a major source of stress.

10. YOUR SOLUTION — SL

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

8. CHANNELS of BEHAVIOUR — CH

1. ONLINE

Helps to notify the data preprocessing information.

8.2 OFFLINE

You are offline the application shows the forest fire.

Extract online & offline CH of BE

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