Problem-Solution fit canvas 2.0

Project title: Emerging Methods for Early Detection of Forest

Team id: PNT2022TMID32061

1. CUSTOMER — CS

1. The Department of the Interior's Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, and National Park Service.

2.Federal agencies(forest fire management) such as National Disaster Management Authority (NDMA) USDA's Forest Service.

6. CUSTOMER — CC

1.The triple constraint theory says that every project will include three constraints: budget/cost, time, and scope. And these constraints are tied to each other. Any change made to one of the triple constraints will have an effect on the other two.

5. AVAILABLE SOLUTIONS — AS

Explore AS,

From previous studies the available prototype model uses common sensors like:

Pros of existing solutions:

1.The forest fire area can be detected and can be located precisely.

Cons of existing solutions:

1.Complicated to manage.

2.Sensor attached to the animals and birds will affect their habitat.

Focus on J&P, tap

2. JOBS-TO-BE-DONE /

The process provides broad and detailed customer insights that are superior to typical market research methods and critical to developing better solutions for customers. It helped us understand a new space and identify the underserved needs so we could enter a new market in a differentiated manner.

9. PROBLEM ROOT — RC

1. The first step when performing root cause analysis is to analyze the existing situations. This is where the team identifies the factors that impact the problematic event. The outcome of this step is a statement that comprisesthe specific problem A small team is tasked with the definition of the problem.This could be research staff who assesses and analyzes the situation.

7. BEHAVIOUR — BE

Focus on J&P, tap

Popular packages encompass processes involved in the maintenance of solar panels and solar power plants. This is critical: you must try to solve theright problem. Don't try to solve a problem the customer sees as low priority or unimportant. Identify the right problem by asking the right questions. You cannot identify the customer's problems by presenting.

Identify strong TR &

3. TRIGGERS — TR

Human-caused fires are the result of abandoned campfires unattended, burning debris, equipment use and malfunctions, discarded due to negligence cigarettes and arson

4. EMOTIONS: BEFORE / AFTER — EM

BEFORE: Encroachment through loss of diversity, reduced wildlife

AFTER :Forest surveillance systems can be used to monitor stress in the forest so we can prevent human and wildlife and economic

10. YOUR — SL

In case of forest fire detection the burning substances are primarily identified as sceptical flame regions using a division strategy to expel the non-fire structures and results are verified by a deep learning model. The technology used to locate a forest or a bush fire is based on the concept of deep learning and YOLO algorithm. This deep learning model is deployed on a UAV

8.CHANNELS of BEHAVIOUR — CH

8.1ONLINE

Collect the date and form a dataset in order to compare the flames regions for forest fire detection

8.2 OFFLINE

In case of forest fire detection the information is sent to forest authorities so that they will prevent it at ease.