Project Design Phase-II

Customer Journey Map

Date	19 October 2022
Team ID	PNT2022TMID14761
Project Name	Emerging methods for early detection of forest fires
Maximum Marks	4 Marks

Customer Journey

SCENARIO

Browsing, booking, attending, and rating a local city tour

Entice

How does someone initially become aware of this process?

Enter

What do people experience as they begin the process?

Engage

In the core moments in the process, what happens?

Exit

What do people typically experience as the process finishes?

Extend

What happens after the experience is over?

Steps

What does the person (or group) typically experience?

- A source of ignition is anything that has the potential to start a fires .
- Keep tracking of climate changes.
- consumers have accepted the product in the market and customers are beginning to truly buy in .
- Market for the product is expanding and competition begins developing.
- To avoid risk for animals.
- Detecting fire and identify where it started.
- Fire has spread over much if not all the available fuel . Temperatures reach their peak .
- Resulting in heat damage . Oxygen is consumed rapidly
- Usually the longest stage of a fire. Putting an end to the fire .
- They characterized a significant decrease in oxygen or fuel .

Interactions

What interactions do they have at each step along the way?

- **People:** Who do they see or talk to?
- **Places:** Where are they?
- **Things:** What digital touchpoints or physical objects would they use?

- forest officer
- forest area
- web camera
- Interact with video frame camera for collecting images.
- Identify the fire
- Detect forest fire
- After detect forest fire, forest fires will be extinguished.

Goals & motivations

At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

- Fire removes low Growing understrush Clears the forest floor of debris
- Opens it up to sunlight Nourishes the soil
- Gain love towards nature.
- Fire frequencies determine the over storey of conferous composition Besides developing a natural space among the stands .
- It plays a role in recycling nutrients from the ground. – layer vegetation and litter to the over storey trees.
- Thereby counteracting the infertile substrates and arrested decay.

Positive moments

What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

- More precise It control spark timing It improve engine efficiency It improve efficiency and performance.
- The major factor that influence the fire growth are fuel arrangement ceiling height, length/ width ratio, more insulation, size and location of openings, heating- ventilation-air conditioning operation
- Detection of fire pattern.
- They kill harmful insects. They clear away diseased trees.
- They make way for new trees. The ashes add nutrients to the soil.

Negative moments

What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

- No matter the cause , wildfires still require three components to ignite and eventually spread: fuel , heat and oxygen . These components are commonly referred to as the fire triangle.
- wildfire emit co2 and other green house gases.
- Wildfires can disrupt transportation, communications, power and gas services, and water supply.
- They also lead to a deterioration of the air quality, and loss of property, crops, resources, animals and people.
- Human carelessness is the biggest factor contributing to wildfires.
- Fire detection systems has many limitations, such as the limited amount of energy, the energy required for data processing.
- The short range of communication and limited computations, the complexity of ML algorithms when executing on sensor nodes.

Areas of opportunity

How might we make each step better? What ideas do we have? What have others suggested?

- high-resolution static cameras fixed on the ground.
- unmanned aerial vehicles (UAVs
- Helpful for future