



**3. TRIGGERS**

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efﬁcient solution in the news.

**TR**

**10. YOUR SOLUTION SL**

If you are working on an existing business, write down your current solution ﬁrst, ﬁll in the canvas, and check how much it ﬁts reality.

1. **CHANNELS of BEHAVIOUR CH** 
   1. **ONLINE**

What kind of actions do customers take online? Extract online channels from #7

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

cigarettes and arson

If you are working on a new business proposition, then keep it blank until you ﬁll in the canvas and come up with a solution that ﬁts within customer limitations, solves a problem and matches customer behaviour.

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 which helps in detection of fire, meanwhile it can be monitored by web application and the forest fire area can be located in order to prevent it in advance

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

forest fire detection

**4. EMOTIONS: BEFORE / AFTER**

How do customers feel when they face a problem or a job and afterwards?

**EM**

i.e. lost, insecure > conﬁdent, in control - use it in your communication strategy & design.

**8.2 OFFLINE**

What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development.

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 damage

In case of forest fire detection the information is sent to forest authorities

so that they will prevent it at ease.

Problem-Solution it canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 license Created by Daria Nepriakhina / Amaltama.com

**Explore AS, differentiate**

**Focus on J&P, tap int**

**Identify strong TR & EM**

**Focus on J&P, tap into**

Project Title : Emerging Methods for Early Detection of Forest Fires Team ID: PNT2022TMID23834

**1. CUSTOMER SEGMENT(S)**

Who is your customer?

i.e. working parents of 0-5 y.o. kids

**CS**

**6. CUSTOMER CONSTRAINTS**

**CC**

**AS**

What constraints prevent your customers from taking action or limit their choices

of solutions? i.e. spending power, budget, no cash, network connection, available devices.

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the customers when they face the problem

1.Federal agencies(forest fire management) such as National Disaster

Management Authority (NDMA) USDA's Forest Service.

or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

From previous studies the available prototype model uses common sensors like Flame sensor ,temperature sensor, gas sensor for fire detection those sensors are attached to trees animals and birds in the forest to detect the forest fire.

2.The Department of the Interior's Bureau of Indian Affairs, Bureau of

Land Management, Fish and Wildlife Service, and National Park Service.

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.

2.With any project, there are limitations and risks that need to be addressed

to ensure the project's ultimate success.

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 and the

comfortable way of migration

Popular packages encompass processes involved in the maintenance of solar panels and solar power plants. This is critical: you must try to solve the right 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 and

Oobserving. You cannot identify the customer’s problems by presenting your

i.e. directly related: ﬁnd the right solar panel installer, calculate usage and beneﬁts; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

**BE**

**7. BEHAVIOUR**

What does your customer do to address the problem and get the job done?

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 comprises the specific problem A small team is tasked with the definition of the problem. This could be research staff who assesses and analyzes the situation.
2. It describes the difference between the actual conditions and desired conditions.

**RC**

**9. PROBLEM ROOT CAUSE**

What is the real reason that this problem exists? What is the back story behind the need to do this job?

i.e. customers have to do it because of the change in regulations.

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

**J&P**

**2. JOBS-TO-BE-DONE / PROBLEMS**

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

