# **Project Title:** Natural Disasters Intensity Analysis and Classification using Artificial Intelligence

## **Project Design Phase-I - Solution Fit Template**

#### Team ID: PNT2022TMID26770

## 1. CUSTOMER SEGMENT(S)

Who is your customer? i.e. working parents of 0-5 v.o. kids

- Government
- NDRF
- Meteorologist
- Climatologist
- Seismologist
- People who have affected by disaster

## 6. CUSTOMER CONSTRAINTS

CS



What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available

- Cost
- Inaccessibility to the Internet
- Communication breakdown
- Limited resources
- Uncertain climate change

## 5. AVAILABLE SOLUTIONS



Explore AS,

differentiate

Which solutions are available to the customers when they face the

problem 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

- By protecting forests and coral reefs, we can lessen the likelihood of landslides, hurricanes, and rising sea levels.
- Neglecting other underlying issues that may be causing this
- recognizing the contrast between indirect and direct impacts
- outcomes that are precise and effective lessen severe harm

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

J&P

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

Although intensity is significant, it is not always simple to recognize it. It is difficult to identify the causes of natural disasters. For instance. earthquakes are difficult to detect but can be used to detect tsunamis. Although plate tectonic theory is supposed to be able to detect it, it is not always reliable.

#### 9. PROBLEM ROOT CAUSE

RC

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

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

Moon activities

Plate Tectonic movement

Mining

Global warming

Ocean currents

instability in the lower atmosphere.

#### 7. BEHAVIOUR



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

done? 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)

Discover the root reasons to be able to prevent it.

П Offering training programs for professional growth

Gaining adoption skills and reconstructing one's life

Avoid and neutralize the causes of calamity.

Acquiring information about disaster relief

Gaining a better understanding about what to do and what not to do in the event of a disaster

#### 3. TRIGGERS



ΕM

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

If people who live in disaster-prone locations learned about the items that allow them to foresee danger before it occurs, they would buy them at any price. To be safe, other people will also want to possess it.

#### 10. YOUR SOLUTION



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.

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 behavior.

# To assist AI in tracking and foretelling the influence of diverse environmental conditions and their effects, we want to include reinforcement learning algorithms. This lets the rescue crew take quick and efficient action in addition to minimizing the damage.

#### 8. CHANNELS of BEHAVIOUR



Σ

꼰

strong

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

#### OFFLINE

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

#### ONLINE:

- In an effort to learn more about the calamity or how to avoid it, they seek out technical assistance or professional advice online.
- If they are feeling down about the situation, they seek professional help.
- They strive for more specific information regarding the disaster's effects.

They participate in relief efforts or develop initiatives to lessen the effects of imminent disasters or prevent them altogether

# 4. EMOTIONS: BEFORE / AFTER

How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy &

Even if their lives may have been idyllic before the accident, they may now be unhappy, frightened, furious, or afraid because they have lost their loved ones, their jobs, or their homes. Additionally, this undermines their confidence. However, if they are aware of it ahead, even if they may be afraid, they will be confident and prepared to face and rebuild.

