Project Title: VirtualEye - Lifeguard for swimming pools to detect active drowning

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID 35350

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)   `CS`

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

Poolgoer
Lifeguards
Public & private pool owners

6. CUSTOMER CONSTRAINTS   `CC`

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.

Expensive equipment (underwater cameras, monitoring system, alert system)
Too much training time for AI model

5. AVAILABLE SOLUTIONS   `AS`

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

Pool floaters
Children are always under supervision
Learn CPR
Keep rescue equipment near pool
Employing more than one lifeguard who each take shifts

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

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.

Prevent drowning and hence, deaths

9. PROBLEM ROOT CAUSE   `RC`

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.

Unintentional negligence/slow reaction on the lifeguards part or no lifeguard employed,
crowded pools with low visibility,
unsupervised beginner swimmers

7. BEHAVIOUR   `BE`

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)

Lifeguard on duty
Poolgoers looking out for each other, inexperienced swimmers always under supervision
Look for solutions for virtual surveillance of pool
First aid training programs

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS   `TR`

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

incidents of close calls of drowning, growing popularity of AI for automated tasks

4. EMOTIONS: BEFORE / AFTER   `EM`

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 & design.

Before: apprehensive, feeling out of control

After: relieved, confident in being safeguarded, reassured

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.
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.

An AI based model which when fed video input separates it into still frames and classifies whether the person in the frames are drowning or not

8. CHANNELS of BEHAVIOUR   `CH`

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

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

Online: they look for solutions for virtual surveillance of pool, first aid training programs

Offline: Lifeguard on duty Poolgoers looking out for each other, inexperienced swimmers always under supervision

Identify strong TR & EM